Managing Change in the 21st Century:

*The Journey towards a New World of Work - A Rebalancing Act of Managerial and Knowledge Worker Power, Roles and Mental Models at Microsoft*

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Preface

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Foreword

The research presented in this master thesis is part of an extensive research project, called ‘Digital Workstyles: The New World of Work’, initiated in December 2006 by RSM Erasmus University and Microsoft the Netherlands. The aim was to create a better understanding of new organizational contexts or work environments and ways of working, enabled by information technology. RSM Erasmus University was requested to research the change process that was taking place at Microsoft to create and adopt a new organizational context and ways of working called the ‘Digital Workstyle’, to find companies in similar circumstances and to provide evidence of higher productivity, flexibility, satisfaction and innovation. The change within Microsoft the Netherlands was a pilot for the organization to explore the potential of organizing according to the ‘New World of Work’, ‘Digital Workstyle’ and ‘People-Ready’ visions of Bill Gates and Microsoft Corporate and is expected to be rolled out globally.

Since 2007 research is conducted by the faculty of Business Administration at RSM Erasmus University, Departments of Marketing, Strategic Management and Business and Information Management. The initial research included 3 case study organizations; Microsoft the Netherlands, Rabobank and the Dutch trade union De Unie. This enabled a diversity of perspectives and increased insights in the commonalities and differences of new organizational contexts and ways of working in different organizations. A research model was designed that laid down the relevant dimensions of organizational contexts for knowledge work in today’s environment. The model served as a tool to measure the extent to which these dimensions are already integrated and what dimensions, if changed, will create the highest impact on increasing or decreasing productivity, satisfaction, flexibility and innovation (Van Baalen et al., 2008).

I was assigned to the Microsoft case study. I received unlimited access to the office, a Microsoft account and e-mail address, access to all internal information and participated in numerous meetings that were associated with the change. The only difference with being a regular employee was that I participated at all decision-making levels of the organization from individual team meetings up to those of top management. This fostered my understanding of the differences of participation and influence on the change at each level within the organization. There seemed to be different opinions throughout the organization about expected, perceived and actual roles and effects of actions and inactions during this change. A better understanding of these roles and actions and their effects on changing organizational context and working practices was therefore believed to create high value for future similar change efforts within Microsoft or other organizations. This inspired me to focus my research on the roles and actions throughout the organization at the three different levels of top

1 These visions (New World of Work, Digital Workstyle and 2b People-Ready) will be further discussed at Chapter 6 – The Microsoft Case Study. Also further information can be found in two whitepapers (Microsoft, 2005a) and Microsoft (2006a).
management, middle management and front-line knowledge worker. I focused on the effects of roles and actions on mental models, since these models guide behavior and thus ultimately change. Although interesting and valuable, this appeared to be a highly complex topic. It kept me intrigued and busy for many months as there was so much to learn from literature on the topic, the developments of people within the organization, the subsequent actions and roles they adopted along the change process and incremental development of the organization as a whole.

At the end of this study I contemplate that the vision of driving the change that I have seen at Microsoft can in many ways be considered to be a break from the past. First of all, a break from most literature that still considers change as a top-down effort and secondly a break from Microsoft’s own culture. Microsoft the Netherlands tried to break free from the top-down approach that it usually practices and designed and implemented a transformational and organic change together with its workforce. Being able to see the rules of business-as-usual change was highly intriguing. Many questions arose and clear theoretical answers or best practices were still rather absent. New balances in decision-making and new roles were looked at, who would drive the change if it would not happen top-down? What were the roles and actions of whom, how and when to communicate this, how to let all the different perspectives on change circulate throughout the organization and integrate them in the vision and, very important, how to let employees understand they were expected to be involved in order to co-create the change and motivate and inspire them?

It is believed that this research provides relevant insights into the new roles and actions which drive change by influencing mental models of today’s and tomorrow’s knowledge workers. These new roles and actions are increasingly seen within contemporary knowledge worker organizations, especially in those where a shared believe is growing that motivation of employee initiative and input is beneficial to the overall success of the organization (a.o. increase in productivity, innovation, satisfaction, flexibility) and therefore this behavior is increasingly motivated and supported. Furthermore, this research supports understanding the difficulties that may be encountered when these roles and actions change. In addition, it will increase awareness about the important effects of clear communication throughout the organization during this process and of boundary setting activities. Important, since freedom in roles and actions is increased and navigating the new space can become highly complex and unfocused if there are no boundaries at all or they are not shared throughout the organization. Also, it is believed that managers who are entering a change related to shaping a new organizational context or new ways of working, after having read this study, will feel more confident about the challenge ahead and this study therefore can serve as an inspiration to start.

Last but not least, I hope to give some insights back to the organization and the individuals I have met during my research at Microsoft who have given so much of their valuable time and energy. I want to wish them luck on their journey to People-Readiness and personal growth.
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Writing this thesis would not have been possible without the priceless trust and support of the General Manager of Microsoft the Netherlands, Theo Rinsema, who confidently allowed me to become part of the organization and to participate in all meetings and events related to my research, even though in some of them highly confidential information was discussed or internal tensions and emotions were shared. Most grateful I am for his patience, consideration and the ‘Room for Growth’ he gave me to focus on my personal life when I needed it. In addition, to have given me the opportunity to attend and build understanding of one of the most intriguing and impressive change efforts undertaken by an organization in the world today.

I am also grateful for the willingness and interest of Microsoft’s CEO, Steve Balmer and COO, Kevin Turner to visit the Netherlands and to share their personal thoughts and insights about the ‘New World of Work’ and ‘2bPR’ visions that are researched in this study. In addition, I would like to thank Dan Rasmus and Kevin Sauers of Microsoft Corporate for sharing their expertise, their reflections upon these visions and for providing insightful information about related (research) activities taking place at the global level and at Microsoft Corporate.

I am especially thankful to all the members of the 2bPR Steering Committee for allowing me to share their visions, dreams, emotions, thoughts and doubts during 2bPR and their personal journey: Florien van der Aar, Ilco van der Bie, Gonnie Been, Ineke Hoekman-van Hassel, Marret Leloux, Janneke Patje, Robbert Tempels and Toby Willson. Since this study especially focuses upon the change of mental models within the organization, I would like to express special gratitude to Gonnie Been, project leader of the “Our Journey –Mental, Culture and People” group for sharing her passion, in-depth knowledge and insights. As organizational coach of this thesis, special thanks goes to Dik Bijl, who shared with me the highly interesting insights of his own research, words of wisdom at the right moments and showed his deep understanding of the organization and change to come when he visionary pre-concluded one of the main conclusions of this research before I even started. And to Daphne Faber and Ilco van der Bie, coordinators between RSM Erasmus University and Microsoft, who helped me tremendously to explore the organization, its policies and people in the crucial beginning of my research.

In addition, I would like to thank all MT members, People Managers, experts and employees within Microsoft who helped me in understanding the various dimensions of Microsoft, of the change process and the roles, relations and responsibilities of various people within the organization by attending the 2bPR meetings, training, providing time, sending me important documents, internal jokes and by sharing their sometimes very interesting visionary ideas of what Microsoft should be like in the future. Thank you, amongst all others I spoke to (in)formally, Nisrin Abzik, Angelina Best, Eduard Beck, Mariska Boogaard, Pieter Burghouts, Andre Ekas, Rob Elsinga, Ed Folge, Richard de

On the side of RSM Erasmus University, writing this thesis would not have been possible without the priceless guidance, trust and support of my coach, Dr. Raymond van Wijk. I am highly appreciative for the exceptional support he has given in the process of my thesis, I know not many others could or would have done the same. I am grateful to have received the chance to have a coach with such highly developed skills of asking the right questions, helping to structure thoughts and focusing my research topic and attention. I am highly grateful for his support in areas beyond the content of my thesis, especially for lending a listening ear when I had personal concerns next to my thesis. This has been a more helpful support than you sometimes knew. I would also like to thank my first co-reader, Dr. Peter van Baalen. For his interesting and visionary deliberations about the research project during the team meetings, being interested in the topics I was writing about and his time. And my second co-reader, Dr. René van der Eijk, for the extreme flexibility to read my extensive thesis just days before the end presentation, his motivating enthusiasm for the topic at hand and for the new look and questions he brought. And of course I would like to thank the other members of the research team: Frank Go, Eric van Heck, Marcel van Oosterhout, Robbert Engels, Ferdinand Kieboom, Marcel Legerstee and Vincent Vermeulen. And the external experts who reflected upon the ‘New World of Work’ and ‘2bPR’ visions of Microsoft with their own ideas and experience: Peter Kustermans and Mariken de Jong of Nextstrategy, Walter Roelofs en of Interpolis, Fred and Maddy Kloet of Villa FM and Louise Lhoust of Veldhoen and Company.

Last but definitely not least, as they know, I would like to thank my family, beloved ones and all the friends who supported me during the writing of my thesis, with good advice, distraction, supporting words and all the other things they tried to make finishing this research easier for me and to cheer me up for some other things happening in life.

Thank You for All, Wieteke

*I expect to pass through this world but once. Any good, therefore, that I can do or any kindness I can show to any fellow creature, let me do it now. Let me not defer or neglect it for I shall not pass this way again ~ Stephen Grellet

*If one dream should fall and break into a thousand pieces, never be afraid to pick one of those pieces up and begin again ~ Flavia Weedn

*Nothing is permanent, except change ~ Heraclites of Efese
Dedication

To my parents, my rolemodels, who have taught me all that is really important in life
To my youngest brother, who loves and cares unconditionally and I can always build upon
To my oldest brother, who has opened my eyes to see a world and life beyond my own
To my friends and beloved ones, who are such beautiful persons that I am glad to be in their lives

And above all to my grandmother

† June 21 2009

I have always loved you and will miss you forever
Executive Summary

Knowledge is one of the most valuable resources in today’s economy (Grant, 1996) and its creation is highly influenced by the organizational context in which it takes place (Nonaka et al., 2006; Blackler, 2002). In laying down a research agenda for new knowledge creation Nonaka et al. (2006) mention that investigating not only the determinants of effective organizational contexts for knowledge creation, but as well the role of management in shaping this context is highly important, “empirically underexplored, although theoretically relevant”.

Several researchers indicate that the organizational context consists of three spaces: the physical, virtual and mental or social space (Go and Fenema, 2003; Mantovani, 2002; Nonaka et al., 2006; Veldhoen and Company, 2005; Porras and Robertson, 1992). Due to the rapid increase in development and use of new technologies (changes in the virtual space) and their promises for increasing, amongst others, productivity, innovativeness, employee satisfaction and flexibility (Van Baalen et al., 2008), a better understanding of how the organizational context is shaped is highly valuable (Bartlett and Ghoshal, 1994b, 1996; Nonaka et al., 2006; Van Baalen et al., 2008). Especially since an increasing number of organizations engage in changing the organizational context to better support new ways of working and digital workstyles2 (flexwork, videoconferencing, blogging), but theory remains scarce (Nonaka et al., 2006).

The mental space is often considered the most essential, fundamental and difficult to change (Schein, 1985; Nonaka et al., 2006). A highly interesting development in this mental or social space is the changing role of management (Bartlett and Ghoshal, 1993, 1994a, 1995a, 1995b, 2002). Particularly since increasing empowerment of knowledge workers (Labianca, 2000) has not only an enormous effect on the mental space in which knowledge workers operate, but as well on the process of changing the organizational context (Bartlett and Ghoshal, 1994b, 1996). Management traditionally played a highly essential role in organizational context creation. “The organizational context is created and renewed through tangible and concrete management actions” and creation of the organizational context is the “central task of general managers” (Bartlett and Ghoshal, 1994b). But the traditional view of top-down change and its effectiveness in knowledge worker organizations is increasingly substituted by bottom-up and co-created change by employees and even other groups in society (Nonaka and Takeuchi, 1995; Nonaka et al., 2006; Malone, 2004; Prahalad and Ramaswamy, 2003).

This trend is expected to continue, since empowerment is believed to be crucial for increasing productivity (Grant, 1996; Van Baalen et al., 2008; Wellins et al., 1991). Recent research from Van Baalen et al. (2008) at, amongst others, Microsoft the Netherlands, showed that from 34 knowledge

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work context dimensions empowerment competence (β=0,32; 0,46; 0,30) and empowerment impact (β=0,14; 0,20; 0,17) highly correlated with productivity. In addition, as a very striking result, these 2 dimensions were the only ones out of the 34 dimensions measured that correlated with productivity throughout all 3 case organizations researched (Microsoft, Rabobank and trade union De Unie). Along the same line, Balogun and Johnson (2004) indicated “future research on schema (mental model) changes occurring in strategic and organizational change settings could usefully pay more particular attention to the effects of social engagement and the roles in it of senior managers, middle managers, and others”.

To address the gaps in literature this study aimed to identify the (new) roles and actions, at the level of top management, middle management and knowledge worker, that influence mental models during the creation of a new organizational context (physical, virtual and mental) and adoption of new ways of working throughout the organization.

The empirical research took place between February 2007 and July 2008 at the Dutch subsidiary of Microsoft Corporation. During this period this kind of change appeared to be very complex, as many of the mental models held within the organization were challenged at the same time. The change of mental models to adopt new ways of working was supported by a change in the physical space (a new building) and the virtual space (new IT-tools, IT-training and availability of scenarios with best practices). In an organization that was used to top-down communicated change, management and employees were asked to participate in the change, to organically co-create the environment: a change of the mental/social space. This meant employees had to cope with changing their mental models concerning how the change would affect their daily work, but as well about what their own roles and actions would be during the change.

To make this effort successful management needed to unlearn the top-down, “command and control” method of change design and implementation (Malone, 2004), knowledge workers needed to learn a more participative role. This rebalancing act was highly complex, as employees were not used to this responsibility. In addition, management often fell back on their old management style decreasing trust of knowledge workers that they really had an influence on the change. This in turn decreased the amount of energy knowledge workers put in, sometimes disappointing management in the lack of enthusiasm or responsibility taken (Floyd and Wooldridge, 1992; Floyd and Lane, 2000; Wagner, 1994).

Beyond evidence from literature, this study shows that middle management and knowledge workers indeed increasingly co-create the organizational context and new ways of working. And that old mental models of both management and knowledge workers, if not taken into account, have the potential to slow down this process considerably. In addition, this study subscribes literature that indicates a decreasing importance for top management and middle management to direct and
control and an increasing importance to facilitate and inspire (Malone, 2004), for example through role modeling. This latter role has remained largely unidentified in most strategizing, organizing and change studies until date (Moberg, 2000; Jaussi, 2003; Buunk et al., 2007; Gibson, 2003; Chung, 2000; Lockwood and Kunda, 1997; Sims, 2002), and if researched, has been mostly done in sociological and psychological studies, but appeared highly influential in co-creating the organizational context and adoption of new ways of working at Microsoft the Netherlands and therefore offers valuable insights on this particular role for management.

By comparing practice with theory and including the lessons learned from this research a theoretical and conceptual framework about roles and actions from top management, middle management and knowledge workers and their interaction is proposed, particularly directed to mental model change when creating a new organizational context and new ways of working. Three new and/or changed roles receive particular attention: role modeling, intermediating and coordinating. Eight roles, previously described in literature are confirmed: recognizing, championing, synthesizing, ratifying, facilitating, implementing, experimenting and adjusting. In addition, suggestions are formulated, based upon the lessons learned from the case study, to improve future organizational change efforts of this kind and successful continuation of the change effort in the case study organization. These suggestions mainly focus on how to support and inspire the interaction between horizontal and vertical layers throughout the organization (which is defined at the end of this study as the Organizational Loop of Interaction) in a way that positively influences the speed and quality at which mental models change. And, in this perspective, the findings and recommendations of this study show how organizations can attain ‘fitness’ – the capacity to learn and change to fit new circumstances – that enables optimal alignment between organization and the surrounding world and thus highest gains for productivity (Beer et al., 2005) by realigning the roles and actions of its people.
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Chapter 1: Introduction and Problem Definition

1.1 Introduction

“Imagine organizations where bosses give employees enormous freedom to decide what to do and when to do it. Imagine that workers are allowed to elect their own bosses and vote directly on important company decisions. Imagine organizations where most workers aren’t employees at all, but electronically connected freelancers living wherever they want to. And imagine that all this freedom in business lets people get more of whatever they really want in life—money, interesting work, helping other people, or time with their families. These things are already happening today and—if we choose—they can happen even more in the future” ~ Malone, 2004.

1.1.1 A Changing World of Work and Ways of Working

Business reality in the 21st century has become a “global environment of rapid and unpredictable change” (Cravens et al., 1996) increasing the complexity of challenges that organizations and employees face today. Recent technological and social developments have had an enormous impact on organizations and working practices (Bartlett and Ghoshal, 1994b, 1996; Beer et al. 2005; Chou and Wang, 2003; Orlikowski and Barley, 2001; The future workspace, 2005; Malone, 2004; Microsoft, 2005a; 2006a; 2007). Organizational strategies, structures, products and services become outdated at increasing speed (Forte et al., 2000; Hedlund, 1994; Jarvenpaa and Ives, 1994; Monge and Contractor, 1997; 2003). And new working practices, like telework, virtual teams, videoconferencing, knowledge creation through wiki’s, amongst others, practically develop faster than employees and managers are able to adapt to and integrate them in their daily work (Appelbaum and Batt, 1994; Devine et al. 1999; Osterman, 2000; Parker et al., 2001). Companies are no longer thought of as ‘finely tuned machines - operations with predictable processes and outcomes that can be pre-directed - but increasingly as complex organisms, living in vibrant and evolving ecosystems’. In essence, “how we work, where we work, when we work, and what we do for work has changed more in the last two decades than at any time in history” (McKinsey, 2007).

The development and smart use of information and communication technologies has enabled fast exchange and integration of organization-wide knowledge and decentralized decision-making (Hagel and Brown, 2007; Kendall, 1999; Nault, 1998; Venkatesh, 1992). The low cost and portability of computers, together with the ubiquitous availability of the internet, has enabled new working forms like working away from a designated office (‘geographic virtuality’) and exploiting the difference in time zones by moving work around the world (‘temporal virtuality’) (Parker et al., 2001). Even the workplace itself has become a focus of innovation, including open-workspaces, flexible workplaces, artistic objects and creative use of spaces and colors to inspire today’s knowledge worker and increase their satisfaction and productivity (Chan et al. 2000; Chan and Beckman, 2007; Parker et al., 2001; Moore, 2005; Vischer, 1995; Schaffers et al., 2006). In today’s economy, knowledge and social networks have become highly valued assets (Susan et al., 2003). And since knowledge workers hold
these assets, they have become a scarce resource. In addition, due to their capabilities to connect globally (Susan et al., 2003; McKinsey, 2007), power and decision-making rights have increasingly shifted from management to employees, changing the roles and actions of management and knowledge workers and their contract with organizations (Mraovic, 2003; Lawler and Finegold, 2000; Rubery, 2002).

1.1.2 Alignment of the Organization to a Changing World
To sustain a competitive advantage in this changing world and the way work is done and value created, organizations need to overcome inertial forces embodied in an organization’s established strategy, structure and culture and close the gap between existing core competencies and the evolving basis of competitive advantage in the industry (Burgelman, 1991, 1994; Huff et al. 1992; He and Wong, 2004; Slater and Narver, 1995; Yu, 2004; Lewin and Volberda, 2001). Recent research on ambidexterity shows an increasing importance for organizations to successfully balance exploitation and exploration (He and Wong, 2004; Tushman and O’Reilly, 1996). In this perspective, Beer et al. (2005) mention, ‘to operate effectively in today’s environment, organizations not only need to ‘fit’ or align themselves with their environment, strategies, capabilities and leadership skills’, but on top of this, “need to attain ‘fitness’ – the capacity to learn and change to fit new circumstances”, since this ‘fitness’ implies optimal alignment and thus highest gains for productivity.

Several researchers corroborate that a (1) ‘fit’ organizational context (Beer et al., 2005) and (2) new ways of working hold the promise of increasing productivity, innovativeness, employee satisfaction and flexibility (Van Baalen et al., 2008). Therefore a better understanding of how the organizational context and new ways of working are created and how the change process is designed that enables people to adapt is highly valuable (Van Baalen et al., 2008; Vermeulen, 2007; Bartlett and Ghoshal, 1994b, 1996; Nonaka et al., 2006). The complexity of the topic, the high potential for future gains and the interest of the business community ensure this attention will not fade soon.

Balancing organizational and environmental change although is not easy and even less when it needs to take place faster than ever before (Moss et al., 1992; Purser and Petranker, 2005; Weick and Quinn, 1999; Orlikowksi, 1996; Tsoukas and Chia, 2002; Balogun and Johnson, 2005). Much research has focused on the barriers disabling and slowing down organizational change (Leonard-Barton, 1992; Fiol, 2001; Levitt and March, 1988; Cohen, 1991; Cohen and Bacdayan, 1994; Bennebroek Gravenhorst et al., 1999). Leonard-Barton (1992) mentions, “recurring shortfalls in the process are often traceable to the gap between current environmental requirements and a corporation’s core capabilities”. Due to environmental change, core competencies become core rigidities; and deeply ingrained values, skills, managerial systems, and technical systems that served the company well in the past become increasingly inappropriate sets of knowledge (Leonard-Barton, 1992). “Technology makes it possible to work time and place independent, companies although are not yet organized in a
way that they can support this next to management and employees not yet capable of working this way either.

1.1.3 A New Organizational Context, Ways of Working and Mental Models

An increasing number of organizations engage in changing the organizational context and proposing and supporting new ways of working and digital work styles (flexwork, videoconferencing, blogging) to better enable knowledge work and increase the ability of knowledge workers to work time and place independent. This is interesting for researchers since theory on these topics is claimed to be scarce (Nonaka et al., 2006). Research that is done about the organizational context (Go and Fenema, 2003; Nonaka et al., 2006; Veldhoen and Company, 2005) often indicates the organizational context to consist of three spaces: a physical (office or other work environment), a virtual (on-line portals, e-mail) and a mental space or social space (culture, routines, mental models). To adopt new ways of working and shape new organizational contexts the mental space is believed to be the most important, as without mental change behavioural shifts within organizations and changes and innovation in the other two spaces (physical and virtual) are unlikely to occur (Eden and Ackerman, 1998; Gardner, 2004; Orlikowski and Gash, 1994; Noble, 1986; Senge, 1990; 1992; Tsoukas, 2005).

When looking at the mental space one can derive it is a plethora of interacting, overlapping and conflicting mental models or schema. These models are used to filter complex information and repackaging it into manageable pieces of information that enable daily decision-making and guide the way people act (Mathieu, 2001; Craik, 1943; Bartunek, 1984; Taylor and Crocker, 1981; Westbrook, 2006; Johnson-Laird, 1986). Most people although are not consciously aware of how mental models influence their thinking and actions. Changing them therefore is a complex and serious effort often containing a long process of trial and error (Weick and Quin, 1999). Essentially mental models change through a process that has been labelled by various researchers as sensemaking and sensegiving (Gioia and Chittipedi, 1991; Smircich and Stubbart, 1985; Weick 1979, 2005). Different occurrences trigger sensemaking and sensegiving processes to start (Balogun and Johnson, 2005) that influence the mental models within an organization. At its essence, change can be seen as a cognitive reorientation of the organization (Gioia and Chittipedi, 1991) that happens through a shifting interplay of deliberate and emergent processes (Mintzberg and Waters, 1985; Tichy, 1983).

1.1.4 New Roles of Management and Knowledge Workers in Mental Model Change

“If decentralization becomes increasingly desirable in business, then we’ll need to manage in new ways. But most of us still have—deep in our minds—models of management based on the classic centralized philosophy of “command and control.” To be successful in the world we’re entering, we’ll need a new set of mental models. We need to shift our thinking from “command-and-control” to “coordinate-and-cultivate” ~ Malone, 2004.

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3 Interview Henny van Egmond, 2008, Programme Manager Rabo Unplugged, Rabobank. Partner organization in overall research.
In laying down a research agenda for new knowledge creation Nonaka et al. (2006) mention that it is highly important to not only investigate the determinants of effective organizational contexts for knowledge creation, but as well the role of management in shaping this context, since both themes are “empirically underexplored, although theoretically relevant”. Especially when considering that “integration of individuals’ specialized knowledge is the essence of organizational capability in the knowledge economy” (Grant, 1996) and this process is highly influenced by the context in which it takes place (Nonaka et al., 2006), its high relevance can be understood.

Several other researchers (Bartlett and Ghoshal, 1994; Balogun and Johnson, 2005) corroborate that new research is needed. “Existing theory is stretched too thin in accommodating emerging changes in the fundamental assumptions that underlie how managers think about the task of organizing and shaping the organizational context” (Bartlett and Ghoshal, 1994). Especially since current changes in the world have had a profound impact, not only on the structure, strategies and processes of organizations and working practice, but as well, on the roles and relationships of individuals (Bartlett and Ghoshal, 1994). “The work of managers is being altered by the changes taking place in contemporary organizations” (Balogun, 2003) and thus the work of employees as well.

Much research shows the role of management and knowledge workers within organizations is changing and “managerial actions” considered effective in the past are increasingly recognized to be ineffective in current practice (Bartlett and Ghoshal, 1993, 1994a, 1995a, 1995b, 2002; Nonaka et al., 2006; Mom et al., 2007; Drucker, 1993a; Gioia and Chittipeddi, 1991; Balogun, 2003; Balogun and Johnson, 2005; Campion et al., 1993; Lawler et al., 1992; Parker et al., 1998; Kirkman and Rose, 1999; Cohen et al., 1996). The knowledge worker of today is able to work autonomously and increased performance is expected when empowered (Campion et al., 1993; Lawler et al., 1992; Parker et al., 1998). It is not clear although how exactly the increasing level of power and responsibilities of knowledge workers affect the process of shaping new organizational contexts and ways of working. What roles and actions still effectively influence these changes? And what new roles and actions are emerging?

Management traditionally played a highly essential role in organizational context creation (Bartlett and Ghoshal, 1994b; Nonaka et al., 2006). “The organizational context is created and renewed through tangible and concrete management actions” and shaping the organizational context is the “central task of general managers” (Bartlett and Ghoshal, 1994b). But although creating the organizational context is still believed to be ‘one of the main tasks of management’ employees are increasingly involved (Bryan and Joyce, 2007; Jansen and Mom, 2005; Price, 1997; Gartner, 2006; Vischer, 1995). Gartner (2006) indicates “the knowledge worker of 2005 will strongly individualise his own work environment and define himself which tools he or she needs”. Vischer (1995) mentions “increasingly space is handed over to the empowered employee: the designer today functions as facilitator, but the users themselves determine when the work environment best suits them”. And an
increasing amount of research indicates that an informed and empowered workforce, if involved, can
generate the same effectiveness for corporate renewal change initiatives as it does for new service
and product innovation (Jansen and Mom, 2005; Prahalad and Ramaswamy, 2003) and that this path
is underexplored and underutilized (Bryan and Joyce, 2007).

‘The emerging changes in the fundamental assumptions that underlie how managers think about the
task of organizing and shaping the organizational context’ (Bartlet and Ghoshal, 1994) will although
not be easily changed as they are "second-order changes" (Bartunek, 1984) involving a fundamental
alteration in the “social construction of reality” (Berger and Luckman, 1967) and mental models
(Johnson-Laird, 1980; Lundberg, 2005) held within the organization. Some research has examined the
effects of roles and actions of management and knowledge workers on the social construction of
reality and mental models during organizational change (Johnson, 1990; Gioia and Chittipedi, 1991;
Tsoukas and Chia, 2002; Balogun and Johnson, 2005; 2006), but few research exists that examines
these roles and the effectiveness of actions when roles and actions are being questioned themselves.
Little research shows what supports and what inhibits management and knowledge workers in
fulfilling their roles and actions successfully during change and what happens if roles change, are
unclear or improperly defined (Biddle and Thomas, 1966; Biddle, 1979; Floyd and Lane, 2000; Kahn et

Balogun and Johnson (2006) indicate “we need to reconceive the way we approach the management
of top-down change in organizations. Assumptions of senior manager control over change need to be
replaced with recognition of the role of change recipients in creating change. The lack of attention to
the role of others in change has led few to challenge the implication often given in literature that if
enough attention is paid to planning, change implementation can be “managed” in a top-down
fashion with new practices falling naturally out of senior manager edict”.

1.2 Problem definition

Most existent organizational contexts in organizations (physical, virtual and mental context) and
ways of working do not yet optimally support efficient and effective collaboration, knowledge sharing
and knowledge creation, especially not if one regards the potential of information and
communication technology and highly talented knowledge workers to support these activities.

Change programs are initiated to challenge this problem. But traditional management theories and
mental models do not provide enough insights into the respective roles and actions of top
management, middle management and front-line knowledge workers in managing change today,
especially not if one regards that change programs have become less and less top-down managed,
but instead individual knowledge workers are empowered to influence not only the change program
outcome, but as well the intervention process itself.
1.3 Research questions

To solve this problem, the following research questions need to be answered:

1.3.1 Main research question

“What are the roles and actions of top management, middle management and front-line knowledge workers in influencing mental models enabling creation and adoption of a new organizational context and ways of working in contemporary knowledge worker organizations?

Figure 1: Schematic Representation of Research Question

1.3.2 Sub research questions

1. Can there be defined phases in the change process?
2. Do roles and actions differ in between the different phases?
3. Are the roles, actions and phases found in the case study comparable with literature? If different, what has changed?
4. What are the implications of this research for practitioners and organizational change management theories?

1.4 Research Objectives

The world and nature of work have changed. The main objective of this research is to identify the roles and actions of management and knowledge workers that influence the shift in mental models during the process of alignment of an organization to these changes. The insights created in this research can be used to better understand current roles and actions of management and knowledge worker in different phases; from the moment it is decided to adjust the organizational context and ways of working, to creating the vision for change, the design of change interventions, communication, implementation and adoption.
1.4.1 Academic Objectives

The main academic objective of this research is to generate a conceptual framework that can be used to promote our understanding of the roles and actions of management and knowledge workers that influence mental models during change. This framework, combining theories of sensemaking and sensegiving in organizational change (Balogun and Johnson, 2005; Gioia and Chittipedi, 1991) and new knowledge creation (Nonaka and Takeuchi, 1995) is believed to provide an interesting tool for analysis of the central evolutionary processes of renewing organizational context and ways of working and related mental model shifts. The approach adopted will be both theoretical and empirical and seeks to demonstrate the applicability of the framework and the contribution it can make.

The other academic objectives of this research closely match with gaps in literature related to our framework (see chapter 2). Regarding new knowledge creation theory Nonaka et al. (2006) call for more empirical research investigating the factors of ‘ba’ (the shared physical, virtual and mental organizational context for knowledge work) and the role of management in shaping this context. Nonaka et al. (2006) indicate these themes are “theoretically relevant”, but “empirically underexplored”. The unique case-study of Microsoft the Netherlands provides a very special perspective on both themes.

In that way this study is an effort to add value to a topic that once created and legitimized the field of strategy research: the roles and actions of management (Bartlett and Ghoshal, 1994; Galunic and Eisenhardt, 1993). ‘Historically the roles and task of management were a central concern of strategic management research and teaching, in more recent work although, as strategy became just another “functional imperative” (Galunic and Eisenhardt, 1993), the link with management has eroded’ (Bartlett and Ghoshal, 1994). More research is especially important since recent changes have altered these roles and the effectiveness of actions and therefore new insights are needed (Bartlett and Ghoshal, 1993). “As we have shown in an earlier article (Bartlett and Ghoshal, 1993) existing theory is stretched too thin in accommodating emerging changes in the fundamental assumptions that underlie how managers think about the task of organizing and shaping the organizational context” (Bartlett and Ghoshal, 1994).

In line with our conceptual model (see chapter 2), roles and actions will be researched at three levels (Nonaka and Takeuchi, 1995) and therefore extend theories on the role and actions in strategizing and organizing at the level of top management (Floyd and Lane, 2000; Gioia and Chittipedi, 1991; Nonaka and Takeuchi, 1995), middle management (Balogun and Johnson, 2005; Floyd and Lane, 2000; Floyd and Woodridge, 1992; Nonaka and Takeuchi, 1995) and front-line knowledge worker (Floyd and Lane, 2000; Nonaka and Takeuchi, 1995).
In addition, Doz and Chakravarthy (1992) underscored that research within the strategic management field must become more relevant to practice. They called for research that focuses on corporate strategy processes and that is action-research oriented. “Strategy process research must help the firm adapt to changes in its environment and to renew itself proactively. Yet, the research to date on the strategy process has been rather static and too narrowly focused. The complexity of doing research on the complete transformation of companies has led many process researchers to fall back on steady state research into relationships between individual administrative systems and measurable outcomes” (Doz and Chakravarthy, 1992). This study, by building upon prior research and due to the longitudinal data-gathering (17 months) taking place over multiple phases of the change process in a unique situation, tries to avoid these critics. In addition, Doz and Chakravarty (1992) indicate “due to the difficulty to get access to higher management there has been an inability to research the decision-making processes at this level” (Doz and Chakravarthy, 1992). For this research I have been allowed to access all information and attend all management meetings related to the change, including those of higher management. Therefore, this research enables theory extension with real life empirical data that are rarely accessible.

1.4.2 Managerial Objectives

Many anecdotal stories exist about the future of work and related interventions to reach this future. However, the challenge is to support these anecdotes with thorough analysis to distinguish myth from fact. In that perspective, this research, through the continuous iteration between theory and practice provides a theoretical analysis of the real life developments at the case company able to serve as reliable feedback to the organization for future use. This is relevant since Microsoft the Netherlands is only the first subsidiary that has engaged in the change of organizational context and ways of working and other subsidiaries are expected to follow. Secondly, a thorough analysis will support Microsoft the Netherlands in developing thought-leadership in the area of managing this kind of change and increase the value of future sharing of their expertise with partners and clients.

Also by testing previously developed theories though a real life case, recommendations from literature could be taken into account during the empirical data gathering, which was especially helpful to guide the interview process. The integration of insights from both theory and practice served to provide a solid analysis of past decisions and interventions and overview of recommendations for future decision-making to the management of Microsoft the Netherlands concerning the roles and actions and effects on mental models in the creation and adoption of a new organizational context and new ways of working.

Furthermore, the study provides insights into a whole set of typical characteristics of the change process. It shows which group (of persons) takes leadership during the change or has the potential to
have an influence at what phase of the change. It also portrays what expectations exist throughout
the organization on the roles and actions of others. In addition, this study draws attention to a
different view of change, not top-down, not bottom-up, but a change that is co-created by top
management, middle management and the front-line knowledge worker in mental (individual and
social) and virtual interaction processes. In a world where front-line knowledge workers possess the
capital of the firm and ‘empowerment to impact’ the organization is recognized as one of the main
contributors to productivity of the knowledge worker (Van Baalen et al., 2008) understanding these
processes is crucial. Insights into this topic are expected to be very helpful to management in
organizations where empowerment is increased and management and front-line knowledge workers
are engaged in a balancing act of power, as Malone (2004) mentions going from “command-and-
control” to “coordinate-and-cultivate”.

In the case study, actions and interventions (workshops, narratives, training) have been taken into
account to provide a second-order analysis into roles (Van Maanen, 1979). Insights into these actions
and roles provide management and others with knowledge about contemporary practice, the
ideology behind it, and how new knowledge creation and sensemaking and sensegiving is triggered
to spiral through the organization and the influence of which groups. This can inspire other
organizations in their quest for shaping a new organizational context and new ways of working
supported by information technology.

Last but not least, it is believed that managers who are entering or considering to enter a strategic
organizational change process related to shaping a new organizational context or new ways of
working, after having read this study, will feel more confident about the challenge ahead and this
study therefore can serve as an inspiration to start.
1.5 Research Structure and Design

This thesis is divided in 7 chapters. In the first chapter I have provided the motivation for this research. In chapter 2 relevant literature is presented. Chapter 3 explains the conceptual framework and chapter 4 the research methodology. In chapter 5 the case study at Microsoft is presented. Chapter 6 portrays the analysis of the empirical data collected and chapter 7 the limitations, recommendations and conclusion.

Figure 2: Research Structure and Design
Chapter 2: Theoretical Background and Conceptual Model

It is important to delineate in advance the borders in which research takes place, as “contextualization makes theoretical models more accurate and interpretation of empirical results more robust” (Inkpen and Dinur, 1998). Therefore, in this section, I will briefly introduce research on the WHAT, the HOW and the BY WHOM of the change process that has been analyzed in this study.

The change process at the case-study organization focused on creating a new organizational context and working practices. Therefore, to provide insights on the what, literature is introduced about the organizational context (the physical, virtual and mental context) and the relation with knowledge work. In addition, since change in the mental context is the focus of this research, more insights are provided about the elements of this specific context. Then, to provide insights in the how, research on strategic and organizational change and new knowledge creation is introduced and a conceptual model of change, based upon previous research, is developed. Finally, to provide insights in the by whom, an overview is provided of literature about the “changing” roles and actions of management and knowledge workers in today’s networked knowledge worker organizations.

2.1 The WHAT of Change – Context, Workstyle and Mental Models

2.1.1 ‘Ba’ - The Organizational Context for Knowledge Work

“You cannot manage knowledge like you cannot manage love, patriotism or your children. But you can set up and environment where knowledge evolves” ~ Larry Prusak in Schut, 2003.

Nonaka et al. (2006) indicate the work of knowledge workers, knowledge sharing and creation, to be highly influenced by the organizational context in which it takes place. Since knowledge workers have different needs from their environment then workers in the industrial era had, this organizational context has changed considerably and is expected to change even more in the future (Businessweek, 2007, Bryan and Joyce, 2007; Malone, 2004; Nonaka et al., 2006; Von Krogh, 1998).

Since knowledge is highly context dependent, the organizational context is often recognized as the most important element for new knowledge creation (Nonaka, 1994; Nonaka et al., 2006). Understanding then how to successfully shape the organizational context is crucial, since the organizational context influences the way work is done, enabling or disabling ways of working and work styles (Veldhoen and Company, 2005), and thus directly impacts firm competitiveness and knowledge worker productivity (Bryan and Joyce, 2007; Nonaka et al., 2006). Slater and Narver (1995) claim that it can maximize organizational learning and enable the organization to create superior customer value in dynamic and turbulent markets. Bryan and Joyce (2007) indicate “corporations should put the same energy used to launch new products and processes into their organizational design efforts. Since that is where the money is, the opportunities lie and it is the key to surviving and prospering in the 21st century”. In addition, co-evolutionary theory predicts that the
capability to successfully shape the organizational context will become even more important, since the increasing pace of change in the world demands organizations to innovate at the same speed (Huygens et al., 2001; Lewin and Volberda, 1999).

Nonaka and Konno (1998) defined the organizational context for knowledge creation as ‘*ba*’. *Ba* is a Japanese concept that roughly translates into the English ‘space’ or ‘context’:

“*Ba* is a shared space for emerging relationships. It can be a physical, virtual or mental space, but all three have knowledge embedded in *ba* in common, where it is acquired through individual experiences, or reflections on others’ experience”. To participate in *ba* means to become engaged in knowledge creation, dialogue, adapt to and shape practices in physical or virtual space, and simultaneously transcend one’s own limited perspective or boundaries in mental space (Nonaka et al., 2006).

Several other researchers (Andriessen and Vartiainen, 2006; Go and Fenema, 2003; Hernes, 2004; Mantovani, 2002; Lawrence et al., 1999; Nonaka and Konno, 1998; 2004; Nonaka et al., 2000b; Nonaka et al., 2006; Veldhoen and Company, 2005) use the division of physical, virtual and mental/social context to explain organizational context.

### 2.1.2 Dimensions of ‘Ba’ – Physical, Virtual and Mental Contexts

The necessity of effective information sharing in the learning organization demands that systematic or structural constraints on information flows be dismantled (Woodman et al, 1993). According to the knowledge creation theory these constraints on information flows exist across several ‘spaces’ or shared contexts for knowledge creation; physical space such as the office, meeting rooms, virtual space, such as a computer network and mental or social space such as common goals to foster interactions, culture and routines (see f.e. Nonaka et al., 2001).

#### 2.1.2.1 Virtual Space

“Thanks to information technology, we now can have the best of both worlds—the economic and scale efficiencies of large organizations, and the human benefits of small ones: freedom, motivation, creativity, and flexibility” ~ Malone, 2004.

Changes in the virtual space have had tremendous impacts on the design and needs of the physical and mental space (Nonaka et al., 2001; Mantovani, 2002). To be effective, decisions about space planning need to be integrated with decisions about technology (virtual space) and guidance and support for a cultural change for knowledge workers (mental space) (Veldhoen and Company, 2005).

Information and Communication Technologies (ICTs) have liberated employees from time and space constraints. Work-space alternatives can replace the proliferation of partitions, cables, computer

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4 The concept was originally developed by the Japanese philosopher Nishida (1970, 1990) and later refined by Shimizu (1995).
screens and enclosed offices typical in today’s offices (Vischer, 1995). As individual cubicles are being replaced with various spaces tailored to occupants’ needs, work-space alternatives such as telecommuting, “flexi-place” programs, “hoteling”, and mobile offices are becoming a reality (Holtham and Ward, 2000; Halford, 2005).

“Whereas the corporate vision and the organizational culture provide the knowledge base from which to ‘tap’ tacit knowledge, technology taps the explicit knowledge in the organization” (Nonaka and Takeuchi, 1995). Chou and Wang (2003) identified several ways in which information systems can facilitate and support the shared context for knowledge creation. Friedman (2005) claims in his best-selling book ‘The World is Flat’, that PCs, fiber-optic cable and software, referred to as the ‘flat-world platform’, increased the pace of change in the world and revolutionized the way the world works and the practice of working. “By using computers, e-mail, fiber-optic networks, teleconferencing, and dynamic new software, it is now possible for more people than ever to collaborate and compete in real time with more other people on more different kinds of work from more different corners of the planet and on a more equal footing than at any previous time in the history of the world” (Friedman, 2005). And the OECD (2000a) mentions “current changes affect the way in which organizations interact in the economy, with networking, co-operation and the fluid flow of knowledge within and across national borders gaining in importance”.

For long ICTs have been seen primarily as providing room for automation (Hagel and Brown, 2007) and for documenting and exchanging explicit knowledge throughout the organization or beyond in global electronic networks (Choo, 1998a; 1998b; Nonaka and Konno, 1998; Nonaka et al., 2006). But today more and more ICTs are developed that can play a broader role than only supporting automation or the exchange of explicit knowledge. "For the past couple of decades, the primary focus of IT investment in the enterprise has been to standardize and automate business processes. Over the next couple of decades, the real opportunity will be to amplify practices by supporting collaboration on demand – helping people both within and across enterprises to connect more flexibly and richly with each other around real business needs" (Hagel and Brown, 2007 ⁵). Microsoft (2005a) poses “already, information work solutions are becoming more deeply integrated with network infrastructure... and expanding to provide richer communication and collaboration channels for teams and organizations”.

The low cost and portability of computers, together with the ubiquitous availability of the internet, has enabled new working forms like working away from a designated office (‘geographic virtuality’) and/ or moving work around the world thereby exploiting the difference in time zones (‘temporal virtuality’) (Parker et al., 2001). The continuous expanding ‘flat-world platform’ thus continues to enable more and more people to link across distance, time, cultures, departments and organizations

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⁵ John Hagel’s blog, http://www.edgeperspectives.typepad.com/
thereby creating “anyone, anytime, anyplace” alternatives to the traditional “same time, same place, functionally-centered, in-house forms” of organizational experience (Johansen, 1994; O’Hara-Devereaux and Johansen, 1994).

2.1.2.2 Physical Space

“For new offices, design is definitely about human offices, it is about supportive environments that hold people, support people, engage people and inspire people on a long-term basis. In some sense, it is actually empowering people to make decisions about how they want to work throughout the day” ~ Architect of the new office of Microsoft the Netherlands, Sevil Peach (2006)⁶.

“With work itself changing, the organizational structures changing, the character of the workforce changing, and the tools used to do work changing, the physical spaces in which work occurs must change as well” (Chan and Beckman, 2007). As indicated new ICTs enabled the spatial reconfiguration of work and opened up possibilities for work to take place across multiple locations (Halford, 2005). This resulted in ‘alternative workplaces being increasingly prevalent, combining flexible work practices, open landscape settings and a variety of acceptable working locations, especially for technology-enabled workers’ (Bean and Hamilton, 2006). Today “many corporate workers spend less time in a traditional office than they did twenty-five years ago, spending more time working from home or in non-territorial office arrangements in which offices are shared and used on a temporary basis” (Elsbach and Bechky, 2007). And many workers expand their office territory to include airplanes, airports, and coffee shops as temporary offices (Moore, 2005).

In 2005 Schaffers distinguished four types of working environments, using dimensions of mobility (frequency of changes in location) and work location.

Figure 3: Mobile working environments categorization (Schaffers, 2005)

Although this division enhances our understanding of workplace evolution, Schaffers (2005) indicates currently “any categorization of workspace is limited”. There is a lot of innovation in work

⁶ Quote of Sevil Peach, Architect and Designer, in Microsoft Corporate Movie 2006
environments and technology going on at the moment and the development of new concepts in the near future is very likely (Chan and Beckman, 2007; Elsbach and Bechky, 2007; Schaffers, 2005).

Although mobile workers seem to work anywhere, anytime these days, the traditional physical office remains important (Chan and Beckman, 2007). Accounts of home working show that whilst ICTs may enable us to override space, places are not interchangeable (Kompast and Wagner, 1998) since “where work is done makes a difference to working practices and to organizational and personal relationships” (Halford, 2005). Vischer (1995) remarks “although space, buildings, and architecture are not the first things a company thinks about when it is “transforming work”, yet these are basic to the evolving concepts of what work means”. The “combination of increasing work in off-site work arrangements and occasional, but continued appearances in traditional office arrangements has significant implications for the meaning of time spent in the office” making the office “a more important location for symbolic, learning, and creative interactions” (Elsbach and Bechky, 2007).

In 2000 Holtham and Ward (2000) indicated that physical space is the most neglected resource in contemporary knowledge management, this trend though is reversing and both research (Chan and Beckman, 2007) and organizations are catching up (Moore, 2005). A direct result of the trend to refocus on the office space is that “the design and décor of offices has taken on a renewed importance for corporate managers”, and “beyond simple notions of size and comfort, office design has gained attention for its ability to meet the emerging needs of workers who spend fewer, but perhaps more important, hours in the office” (Elsbach and Bechky, 2007). Decision makers increasingly see that no space change should be made simply to reduce square footage or dollar costs: “every change represents and opportunity to increase worker effectiveness by improving work-space quality” (Vischer, 2005). Increasingly space is handed over to the empowered employee: the designer today functions as facilitator, but the users themselves determine when the work environment best suits them” (Vischer, 1995).

Curtis et al. (2002) indicate there is still a lot of work to do to adapt the office to today’s workers as “the current physical space we work in is still often poorly adapted to the task of capturing, organizing, and exploiting knowledge”. But increasingly academics and practitioners are focusing on finding solutions to align physical space to optimally support knowledge work. As strategic workspace planning is believed to be a facilitator for driving reengineering of work processes, business transformation, encouraging teamwork, help flatten hierarchies, and instigate other organizational changes (Vischer, 1995; Yavetz and Rafaeli, 2005; Elsbach and bechky, 2007). And Vischer (1995) mentions “by developing ways of making employee effectiveness and morale a priority criterion for space planning and design, managers can play a more forceful role in helping people derive maximum advantage from their physical work space”.
2.1.2.3 Mental or Social Space

The mental space is recognized to be heavily influenced by current technological innovations and related social changes (Bartlet and Ghoshal, 1993; 1994; Nonaka et al., 2006). According to Friedman (2005) the 'flat-world platform' (virtual space) changed the way we work and connect and by doing this provided a leeway for empowering the individual (mental space). Mraovic (2003) mentions “information technologies are not mere technical facts, but primarily they are social catalysts. By penetrating into the core of life and mind, computer networks expand the maneuverable space available to human actors, providing us with a new form and meaning of the concept of human agency”. Computer-mediated communication makes it possible to “connect and disconnect minds” not only face-to-face in physical environments, but also in a global information- and social space (Go and Fenema, 2003) increasing the access and availability of information. ICTs, in this perspective, are able to provide “revolutionary ... a potential change of legitimacy in the sense of opening space for the individual to defy dominating coalitions of power and become an equal participant in the cyberspace discourse” (Mraovic, 2003).

Technological and social innovations moved value creation in the world differently within the agricultural economy, industrial era and most recently the knowledge and network economy (Bell, 1973; 1976; Grant, 1996; Foray and Freeman, 1992; Andersen et al. 2000; OECD, 2000a, 2001). The importance of knowledge and networks in the current economy increased the importance of knowledge workers forcing a mindset change within organizations whom increasingly need to dedicate time and resources to the well-being of their employees and job satisfaction (Souza-Poza and Souza-Poza, 2000; Rubery, 2002; Goetzel et al., 2002) in a scarce market for talent (McKinsey, 2007; Micheals et al., 2001; Earle, 2003). In addition, research attention increases on knowledge worker productivity (Drucker, 1999; 2000; 2006; Brynjolfsson, 1993; Brynjolfsson and Hitt, 1998; Brynjolfsson and Yang, 1996) and determinants of the mental or social space are increasingly recognized to be crucial for optimal knowledge creation and thus higher productivity (Goetzel et al., 2002; Nonaka et al., 2006; Von Krogh, 1998; Zárraga and Bonache, 2005; Nonaka et al., 2001). It for example appears that (tacit) knowledge creation is more effective when relationships exhibit a high degree of care (Von Krogh, 1998; Zárraga and Bonache, 2005) and the mental space fosters “love, care, trust, and commitment” (Nonaka et al., 2001).

Of the three spaces of organizational context, the mental context is believed to be the most important (Nonaka et al., 2001; Eden and Ackerman, 1998; Gardner, 2004; Senge, 1990; 1992; Tsoukas, 2005). As without mental change behavioural shifts within organizations are unlikely to occur (Eden and Ackerman, 1998; Gardner, 2004; Senge, 1990; 1992; Tsoukas, 2005). In addition, change within the mental space highly influences and interacts with the demands and effects of changes in the other two spaces of organizational context (the virtual and physical space) and thus the creation and adoption of new ways of working that increase productivity (Orlikowski and Gash,
Research has shown, for example, that the introduction of new technologies (a change in the virtual space) is often not effective to increase productivity if employees are not able or supported to change their mental models and behaviour to adopt and use these technologies effectively in their daily work (Thompson et al., 1991; Brynjolfsson, 1993; Brynjolfsson and Hitt, 1998; Brynjolfsson and Yang, 1996). In addition, it is recognized that “cognitive processes such as categorization, stereotype construction, and social identification can make electronic environments even more strongly sensible to social norms than face-to-face communication (Mantovani, 2002). In essence, it is more and more realized that productivity of knowledge workers will largely depend on the stretch of people’s mental “limited perspective or boundaries” (Nonaka et al., 2001).

2.1.3 Elements of the Mental Context and the Type and Difficulty of Change

“Humans live in two worlds - the world of events and things (the territory) and the world of words about events and things (the map)” ~ Weick, 1990

Due to the fact that the mental context is (1) heavily influenced by current developments in the world, (2) has a high influence on the virtual and physical context and the creation and adoption of new ways of working, and (3) due to its importance for change to happen at all, the mental context has been chosen as focus of this study and therefore a more in-depth review of literature will be given in the following paragraphs. First, a definition of mental models is given, then it’s believed relationship with behavior, the difference between individual and shared mental models, their constraints and the types of mental model change processes are explained.

2.1.3.1 Mental Models

As it is assumed that reality is fundamentally mind-dependent (Kant, 1781; Weick, 1990) understanding the mental space of organizational context is crucial if we want to understand organizational change (Ericsson, 2001) and creation and adaptation towards new organizational contexts and working practices (Veldhoen and Company, 2005).

The idea that individuals have mental models (see appendix 1 for an overview of mental model definitions) that serve as internal representations of the world or aspects of the world is not new (Johnson-Laird, 1980, see f.e. Mead, 1934, 1962, 1964; Blumer, 1969; Knorr-Cetina, 1981). Already in 1943 Craik wrote: “If the organism carries a “small-scale model” of external reality and of its possible actions within its head, it is able to try out various alternatives, conclude which is the best of them, react to future situations before they arise, utilize the knowledge of past events in dealing with the present and the future, and in every way to react in a much fuller, safer, and more competent manner to the emergencies which face it”. Recently this conceptualization is receiving more systematic form (Carley and Palmquist, 1992; Weick, 1979, 1995, 2001; Balogun and Johnson, 2005).

A main contributor has been Johnson-Laird’s extensive work on mental models (1983) and increasing research attention towards schemata and frames (Fiske and Taylor, 1984; Goffman, 1963, 1974;
Minsky, 1975; Schank and Abelson, 1977) especially associated to the sensemaking grammar of Weick (Balogun and Johnson, 2005). Turner and Bélanger (1996) note that the terminology surrounding mental models is confusing because the same language is used in different ways by members of different disciplines (see also Wilson and Rutherford; 1989, Westbrook, 2006). Westbrook (2006) comments that these various disciplines increasingly intersect as technological horizons expand. Terms that have been developed associated to the mental model construct are various and exist at multiple levels (f.e. individual, team, organization, network) and are often used interchangeably (Carley and Palmquist, 1992) to denote cognitive structures in general (Fiske and Taylor, 1991). Most of the times, a specific form of representation is not implied by the general terms used for the mental model construct (Ericsson, 2001). The definition of mental models and schemata is often divided into a descriptive (what they are) and an explanatory part (for what they serve and how) – (See appendix 1).

In most definitions mental models, schema, or schemata are explained to be a person’s construction of reality (Westbrook, 2006). Craik (1943) defines them as “small-scale models of reality”, Johnson-Laird as (1983) “working models of the world”, Carley and Palmquist (1992) as “internal representations” and Morray (1997) as “a homomorphic mapping from one domain to the other”. Fiske and Taylor (1991), besides describing them as “our active construction of reality”, claim them to be “cognitive structures”. In this definition many researchers join, describing mental models as “organized knowledge structures” (Mathieu, 2001), “active, knowledge seeking-structures” (Neisser, 1976), “conceptual frameworks” (Westbrook, 2006), “internal cognitive structures” (Jacob and Shaw, 1998), and “clusters of thematically related knowledge” (Thordike, 1984).

The explanatory part of the mental model definition focuses upon the several different purposes mental models serve and how. Essentially mental models are data reduction devices (Bartunek, 1984) simplifying chaotic and complex environments (Clark, 1943; Taylor and Crocker, 1981; Westbrook, 2006) serving successful interaction of individuals with their environment (Mathieu, 2000). Mental models simplify the environment since they enable the storage and organization of information in abstract ways and not just as a collection of original situations, encounters or exchanges (Hastie, 1981). In this way individuals can structure limited sets of logical options for interaction (Clark, 1943). Reger et al. (1994) comment ‘a person uses a schema to integrate prior knowledge and current data. Schema influence how new information is encoded, how old information is remembered, and how inferences are drawn in the event of missing information, focusing the perceiver on current information that is consistent with prior knowledge’. And thus on the basis of prior schemata individuals can make better sense of new situations or exchanges (Taylor and Crocker 1981).

Several researchers comment on the sub purposes that mental models serve, as we mentioned before, essentially mental models serve successful interaction with their environments. Mathieu
(2000) mentions three sub purposes to enable this successful interaction: (1) they help people to describe, (2) to explain, and (3) to predict events in their environment. These purposes are almost unanimously agreed upon by most researchers that integrate mental models in their studies (see also Rouse and Morris, 1986; Johnson-laird, 1983). Carley and Palmquist (1992) add that people use mental models of the world to (4) evaluate choices and (5) frame discussions when making decisions or talking to others. Other researchers focus more on the inside-out purposes that mental models serve like (6) decision-making and (7) action-taking (Taylor and Crocker, 1981; Johnson-Laird, 1983; Fiske and Taylor, 1991) or the outside-in aspects of mental models; (8) remembering (Rumelhart and Ortony, 1977), (9) interpreting and (10) understanding (Johnson-Laird, 1986); crucial first steps before inside-out interaction can take place.

In this thesis the term mental models will be defined as: “organized knowledge structures” (Mathieu, 2001) that are internal “small-scale models of reality” (Craik, 1943) and thus “data reduction devices” (Bartunek, 1984) enabling the simplification of chaotic and complex environments (Clark, 1943; Taylor and Crocker, 1981; Westbrook, 2006) serving “much fuller, safer, and more competent” interaction (Craik, 1943) of individuals with their environment (Mathieu, 2000).

2.1.3.2 Mental Models, Behaviour and Actions

Schon (1983) has argued that managerial thought and managerial action cannot be seen as separable: management is characterized by thought or “reflection in action”, the continuing interweaving of cognition and action. As Weick (1983) has argued: ‘when managers act, their thinking occurs concurrently: there is a “presumption of logic” in meeting a situation, so action is natural and the thinking (in action) in turn endows the action itself with greater meaning’. This notion of enactment (Weick, 1979) argues that present decisions are taken on the basis of past experience and that past experience is confirmed by present action reducing the uncertainty and ambiguity of decision making and making it manageable. Schon (1983) argues similarly that managers own a repertoire (mental model) of examples, images, understandings and actions that when making sense of a situation otherwise perceived as unique, it is now seen as something already present in the repertoire and this facilitates decision-making and action.

Argyris and Schon (1974, 1978) explain the difference between thinking and acting by introducing the notions of ‘espoused theory’ and ‘theories in use’: where ‘theories in use’ relate to actual behavior, ‘espoused theory’ to that which is communicated. ‘Espoused theory’ or that which is communicated can differ from ‘theories in use’ for two reasons; engaging into social responsible appearance (mental model is different from communication, but this is realized and on purpose) or being engaged into changing mental models and behavior according to a new vision (mental model is different from communication, this is more or less realized, but the intention of the communicator is closing the gap between what is communicated and behavior).
2.1.3.3 Individual and Shared Schemata

According to recent research it is important to view mental maps as not only existing on the individual, but as well the group and organizational level (Senge, 1990). Gioia (1994) mentions that for long “the predominant treatment of the notion of sensemaking (and sensegiving), while allowing for social influence, emphasizes the cognitive and individual elements of interpretation and enactment (Bartunek et al., 1999; Gioia and Chittipeddi, 1991) suggesting a cognitive focus on the individual as a ‘meaning maker’”. Mental models although are, in part, a consequence of the range of socially constructed and recognized elements that any group develops and partly a result of how any given individual organizes the information for their own use (DiMaggio, 1997).

This means that every person has its own set of mental maps, but that this mental map is drawn from a limited “bank of options” that are generated by common expectations, collective experience, and shared professional practice. The commonality of this bank is influenced by the “microculture” of the group or organization, but also by the broadly shared professional or “macroculture” and the industry (Abrahamson and Fombrun, 1994). Werhane (2008) indicates “schema we employ are socially learned and altered through religion, socialization, culture, educational upbringing, and other experiences, they are shared ways of perceiving”. More and more researchers share this perspective that emphasizes the social construction of meaning (Balogun and Johnson, 2005). In 1995 Barrett et al. established discourse as the core of the change process, Weick et al. (1979, 2005) introduced the sensemaking grammar and Gioia and Chittipeddi the concept of sensegiving (1991), all supporting the socially constructed perspective of meaning. Barret et al. (1995) contended that “through patterns of discourse we form relational bonds with one another; that we create; transform, and maintain structure; and that we reinforce or challenge our beliefs”.

Thus organizational interpretations cannot be separated from individual mental models and vice versa (Daft and Weick, 1984); they are just cognitions on a different social amalgamation level. Individual mental models inform organizational interpretations, whereby organizational action is completed by individuals as part of an ongoing social process. This action is not based on an individual mental map, but on an underlying congregate cognitive structure (Bougon, 1992). “The extent of homogeneity of the mental models within an organization is a matter of debate (Saffold, 1988): there may be organizations with a highly homogenous paradigm at least at a managerial level (Johnson, 1987) and others with multiple subcultures (Van Maanen and Barley, 1984); it may be that, whilst difference occur within a organization, managers within that organization tend to subscribe to a more common set of assumptions than between different organizations; and that managers across organizations within an industry tend to subscribe to a more common set of assumptions – the industry ‘recipe’-(Spender, 1980; Grinyer and Spender, 1979) than those out side that industry” (Johnson, 1990).
2.1.3.4 The Constraints of Mental Models
As we have previously described mental models serve as guides for our reasoning processes – learning, understanding, problem solving – they guide the interpretation of the different signals and information we receive each day to make decisions and take action (Westbrook, 2006; Mathieu, 2000). They are the first screen through which new information must pass and they function as selective mechanisms and filters for dealing with experience (DiMaggio, 1997; Ford, 1996; Giddens, 1984; Meyer and Rowan, 1977; Werhane, 2008). In this way they improve the efficiency and quality of interaction with our environment (Johnson-Laird, 1986).

But their functioning can also constrain successful interaction. Werhane (2008) contemplates “our views of the world, of ourselves, of our culture and traditions and even our values orientation are constructions – all experiences are framed, ordered and organized from particular points of view”. The main reason why mental models or “small-scale models of reality” (Craik, 1943) exist in the first place is the fact that we are not able to possess complete knowledge. This means our mental models, or points of view, are always “incomplete, sometimes distorted, narrow, single-framed” (Werhane, 2008).

To cope with complex environments individuals strongly build on their mental models, the danger is that this believe is sometimes that strong that people often do this without direct reference to the accuracy or the level of completeness of these mental models (Westbrook, 2006). Research indicates that mental models can be reinforced by a coincidence that makes a choice appear to be the result of correctly applying the model rather than simple coincidence (Besnard et al., 2003). Being “structurally unitary and autonomous”, mental models impose its constraints on the original and not vice versa as a “reality of its own” (Fischbein et al., 1990). DiMaggio (1997) furthermore indicates that people pay more attention to information that is relevant to their current mental models and are less likely to have correctly remembered information that what is inconsistent with them. “In focusing, framing, organizing, and ordering what we experience, mental models bracket and leave out data, and emotional and motivational foci taint or color experience”. Several authors declare that the more widely shared the individual mental models are, the more likely it is that challenging information will be rejected and/ or reinterpreted (Giddens, 1984; Meyer and Rowan, 1977). This is often described as group think (Janis, 1982) which implies the negative consequences of shared mental models inhibiting the team’s behavioral repertoire to be renewed (Gersick and Hackman, 1990) as the team “militates against the dissent and creative abrasion” (Leonard-Barton, 1995) necessary for innovation and a productive outcome.

Thus when individuals use their mental models as a way of making sense of new information or ideas from their environment, they can lead to efficiency, creativity and innovation, but also seriously inhibit it (Ford, 1996). As these models are situationally bound by social context, personal situation, affective influences (Westbrook, 2006) and prone to prior experiences “sometimes, then, we are
trapped within an organizational culture that creates mental habits that preclude creative thinking” (Werhane, 2008).

The most imminent factor for seriously inhibiting creativity and innovation is the fact that individuals and teams are sometimes reluctant for changing their mental models or giving them up even when faced with disconfirmatory information (Bartunek and Moch, 1987; Fiske and Taylor, 1991). Then sometimes core beliefs are preserved through false inference of causality, overestimating facilitating reasons to utilize such beliefs and diminish inhibiting reasons (Kiesler and Sproull, 1982; Tversky and Kahneman, 1983), discounting disconfirming evidence and focusing on powerful facilitating reasons to support current practice (Kiesler and Sproull, 1982; Kozielecki, 1981); even when their owners are able to spell them out and recognize the need for changing them (Argyris and Schon, 1978). This is often because these mental models are “emotionally comfortable and deeply familiar” (Westbrook, 2006) and/ or people are unaware of them and thus their incorrect application. “People generally hold mental models without the self-awareness needed to easily verbalize their nature or recognize the need for alterations” (Westbrook, 2006).

2.1.3.5 Types of Mental Model and Schemata Change
Although mental models have a tendency to endure, research has shown they are able to change (Isabella, 1990; Labianca et al., 2000; Poole et al., 1989). Neisser (1976) mentions mental models evolve “within a continuous perceptual cycle of exploration, sampling and modification”. As main influences for change most researchers mention (1) the act of applying the model (Westbrook, 2006; Neisser, 1976) and (2) the actions and communication of managers or colleagues (Balogun, 2003, 2005, 2006; Balogun and Johnson, 2004; 2005; Bartlett and Ghoshal, 1993, 1994b, 1995a, 1995b, 1995c, 1996, 1998; Gioia and Chittipedi, 1991; Westbrook, 2006). In this research the main focus is on the second effect, how management and colleagues’ actions and communication affect the change of mental models, their own and those of colleagues. The processes by which these mental models change will be discussed in the next chapter. In this paragraph we want to shortly provide an overview of what kind of different schema changes have been previously discussed in literature.

Although scholars know more about the ways that schemata are maintained than about how they change (Fiske and Taylor, 1991) researchers have advanced several models for schema change (Westbrook, 2006). In these models schema change is often seen either as a departure from the old situation (substitution effect) or as an addition to the old (addition effect). Rumelhart (1980) and Turner (2001) connect schema change to learning and distinguish three types: (1) accretion, (2) tuning and (3) restructuring (Ericsson, 2001). In accretion, schemata are instantiated but not generated. In the second type, tuning, existing schemata are tuned to better fit the data. This is in accordance with the bookkeeping model that features incremental fine-tuning of schemata via each new piece of discrepant information so that change occurs gradually (Rothbart, 1981; Weber and Crocker, 1983). In the third type, restructuring, schemata are newly created and change occurs less
Gradually. Bartunek (1984, 1993) proposes a conflict model, according to which changes in schemata occur through dialectical processes and the interaction of old and new ways of understanding result in a new synthesis. Rumelhart (1980) and Turner (2001) describe this as “schema induction, where an organized combination of schemata becomes a new identifiable schema, also known as contiguity learning” (Ericsson, 2001). Labianca et al. (2000) emphasize that schema change occurs through the eventual replacement of the old schema with the new during schemata comparison phases that occur at the individual level and result in the social negotiation of shared organizational schemata. Their findings support the conversion model (Rothbart, 1981; Weber and Crocker, 1983), according to which “schemata can change massively and suddenly in response to dramatic or salient instances that deviate from prior experience; change here is an immediate, all-or-none process” (Ericsson, 2001). This is described by Rumelhart (1980) and Turner (2001) as “pattern generation” or “learning by analogy” (Ericsson, 2001). These divergent findings of studies on schema change suggest that different models may result from differing change contexts and several models may take place at the same time in different parts of the organization (Ericsson, 2001).

2.2 The HOW of Change - Cognitive Sensemaking and Sensegiving

To sustain a competitive advantage organizations need to overcome inertial forces embodied in an organization’s established strategy, culture and structure and close the gap between existing core competencies and the evolving basis of competitive advantage in the industry (Burgelman, 1991, 1994; Huff et al. 1992). In stable markets change develops gradually and management and employees have considerable time to adapt. In recent years although in many industries the pace of the market has sharply increased. Several researchers (Zajac et al., 2006; Rajagopalan and Spreitzer, 1996; Van de Ven and Poole, 1995; Dodgson, 2003; Freeman and Perez, 1988; Hendry, 1996) indicate there is a need to better understand the dynamic processes of change to align the organization to survive in this increasingly dynamic and turbulent world. This more urging need for understanding has surged research efforts in the strategy- and organizational theory fields resulting in new and deeper insights on, amongst others, change (f.e. Burke, 2002; Lewin, 1951; Pye and Pettigrew, 2006), sensemaking and sensegiving (f.e. Balogun and Johnson, 2005; Gioia and Chittipedi, 1991), organizational learning (f.e. Roome and Wijen, 2005; Slater and Narver, 1995), new knowledge creation (f.e. Nonaka and Takeuchi, 1995; Nonaka et al., 2006), mental models (Johnson-Laird, 1983; Fiske and Taylor, 1984; Turner and Bélanger, 1996; Westbrook, 2006), non-intended outcomes of change (f.e.. Balogun, 2006) and important criteria for adaptation (f.e. Vermeulen, 2007).

In this thesis the focus is on the roles and actions of management and knowledge workers that influence mental models during organizational change directed at the creation of a new organizational context and ways of working. To support the analysis of these roles and actions over time a conceptual model is developed that integrates recent insights from sensemaking, sensegiving and new knowledge creation theory based upon previous research about change (Baloguna and
Johnson, 2005; Gioia and Chittipedi, 1991) and roles at the level of top management, middle management and knowledge worker (Nonaka and Takeuchi, 1995).

2.2.1 An Overview of Change Research
Change is currently viewed as either planned or unplanned, as either evolutionary or revolutionary, and as either surface (e.g. business system) or deep (e.g. culture) (Burke, 2002). If an organization changes and at what pace depends on both external environmental factors like stability of the industry and competitiveness of the market as well as internal environmental factors like existent culture and competencies of the organization (Mintzberg, 1983). Although, in general, it is agreed that every organization changes and “everything about organizations and their environments seems less stable, more fluctuating and dynamic” (Lundberg, 2005).

Strategic change (strategizing) and organizational change (organizing) are sometimes used interchangeably (Whittington, 2003). Though they are narrowly related, they are different concepts. Pye and Pettigrew (2006) mention: “the purpose of both strategizing and organizing ultimately is to change behaviors of people, rather than being ends in themselves”. Strategic change or strategizing although is directed externally towards the market (where do we want to go) and organizational change or organizing is directed internally towards the organization as subject (how shall we organize our resources to get us there and beyond) (Pye and Pettigrew, 2006). Since this study is directed towards identifying roles and actions that influence mental models and thus behavior both strands of literature can be used. The focus of this study although is on organizational change or organizing, as our case company engages itself in a change of the internal organizational context and ways of working to increase productivity, flexibility, satisfaction and innovation (Van Baalen et al., 2008).

One of the early fundamental models of change was provided by Lewin (1951) and identified three stages of change: unfreezing, transition and refreezing. In the phase of unfreezing, it is realized old working processes do not respond to market demands anymore. The unfreezing can be triggered by a crisis (re-active) or by the analysis of the organizational environment (pro-active). In the transition phase, the organization and employees adapt to the new conditions by developing new strategies or ways of working. In the refreezing phase, the organization and employees take action and new structures and working practices are accepted and implemented. Even though Lewin’s model has been a common research tool in the field of organizational development, it has also been criticized. Amongst others Moss et al. (1992), Purser and Petranker (2005) and Weick and Quinn (1999) claim that Lewin’s model is a linear and static explanation that does not completely correspond anymore to the complex reality of today. And an increasing number of researchers indicate the need to transcend research on episodic change and explore the dynamic processes of change (Orlikowksi, 1996; Tsoukas and Chia, 2002; Balogun and Johnson, 2005).

“Recent analyses of organizational change suggest a growing concern with the tempo of change, understood as the characteristic rate, rhythm, or pattern of work or activity... Episodic attempts at
organizational change have proven to be unable to keep pace with continuous change” (Weick and Quinn, 1999).

“At the macro level of analysis the flow of events that constitute organizing can look like repetitive action, routine, and inertia speckled with occasional episodes of revolutionary change. But if one looks closer, the micro-level view suggests ongoing adaptation and adjustment. Although these adjustments may be small, they may also tend to be frequent and continuous across units, which means they are capable of altering structure and strategy” (Purser and Petranker, 2005).

An important development is that change is increasingly considered as not only a shift in structures and processes, but also as a cognitive and emotional organizational reorientation (Barr, 1998; Barr et al., 1992; Gioia and Chittipeddi, 1991; Reger et al., 1994; Zajac et al., 2006). This made many research efforts shift from the study of organizational structures and systems to the analysis of the interaction processes through which organizations are constituted, reproduced and changed over time (Weick, 1995; Nonaka and Takeuchi, 1995; Nonaka et al., 2000; Nonaka, 1988; Volberda, 1999; 2001). And an increasing number of researchers recognize that our knowledge of change processes can be enhanced if we focus on the way individuals create meaning and make sense of their organizational life (Ericson, 2001; Newton and Johnson, 1998). Ericson (2001) poses “when an organization is facing dramatic change, shared and individual meanings are challenged and exposed to reconstruction. Thus, if we are to understand organizational change it is necessary to understand the meanings that prevail among the organizational members, as well as the processes whereby these meanings change and coincide”.

2.2.2 Sensemaking, Sensegiving and New Knowledge Creation

Two concepts used to describe organizational change and organizing have been particularly influential: the sensemaking grammar suggested by Weick (1979; 1995; 1999; 2001) (Balogun and Johnson, 1995; Gioia and Chittipeddi; 1991; Nonaka et al., 2006; Orlikowski, 1996; Purser and Petranker, 2005) and the knowledge creation theory by Nonaka et al. (2006). It is increasingly acknowledged that integrating (in)formal support for sensegiving, sensemaking and new knowledge creation activities into the organization increases the mental and cognitive capacity of the organization and thus the capacity to take action and change (Weick; 1995; Gioia and Chittipeddi; 1991; Balogun and Johnson; 2005) or as Beer et al. (2005) mention “to find ‘fit’ with the environment and attain a ‘fitness’ condition that links learning and action on a continuous base”.

The concepts of sensemaking and sensegiving and new knowledge creation directs organization scholars’ attention from the content of organizational activities to the implicit rules, mental models and schemata involved in organizing (Gioia and Chittipeddi, 1991; Balogun and Johnson, 2005) and
cognitive reorientations during change (Gioia and Chittipeddi, 1991; Gioia et al., 1994; Gioia and Thomas, 1996; Isabella, 1990; Nonaka et al., 2006).

2.2.2.1 Sensemaking and Sensegiving
Weick, in his work on “sensemaking” (1979, 1995, 2005, 2006), explores how meaning is constructed by individuals resulting in concrete actions that are in line with the status quo or initiate change. As the meaning of information and knowledge, inherent to human activity, is generated, negotiated, and transformed by human interaction and understanding (Westbrook, 2006) a crucial point of departure in studying sensemaking processes is that organization members spend a lot of time negotiating among themselves an acceptable version of what is going on before acting (Weick, 1979). Making sense of processes or activities in the organization is done by fitting them into interpretative schemata or mental models of meaning that have previously been developed (Weick, 1995). And thus by engaging into sensemaking and sensegiving social interaction activities interpretive schemata of individuals and the organization as a whole are changed and thus the actions within the company (Westbrook, 2006).

Weick (1995) proposes seven characteristics of sensemaking. First, sensemaking is closely linked with identity. It “occurs within the process of maintaining a self that is learned and formed in social interaction” (Bean and Hamilton, 2006). A process rife with tensions associated with insecurities and driven by previously formed emotional attachments to stories, events and symbols being part of the current and old mental models of individuals and the group (Balogun and Johnson, 2006; Eisenberg, 2001; Weick, 1995). Second, sensemaking is retrospective, meaning that actions occur and then explanations are created. Third, sensemaking enacts sensible environments. In other words, actions, together with sensemaking, create environments that subsequently become available for creating the social reality within which individuals operate” (Bean and Hamilton, 2006). The fourth characteristic is that of its social nature. “Sensemaking is, importantly, an issue of language, talk and communication”, essentially “organizations are talked into existence (Weick, 1995). “The ongoing nature of sensemaking is the fifth characteristic of the process. Weick noted that people “chop moments out of continuous flows”, or bracket certain perceptions, which in turn, binds their sensemaking to these extracted cues, even though the process continues through time. The sixth characteristic is that individuals focus upon, and are focused by, those extracted cues selected and bracketed from the ongoing process. Finally, plausibility, rather than accuracy, drives the sensemaking process” (Bean and Hamilton, 2006).

Within the cognitive perspective on change it is acknowledged that the success of change will depend not only on an organization’s ability to implement new structures and processes, but also on the organization’s ability to convey the new mission and priorities to its many stakeholders (Smircich, 1983; Gioia and Chittipeddi, 1991). Watson (1994) states “human beings, who join work organizations with all sorts of interests, wants, needs of their own, will not be drawn together into the sort of
positive cooperative effort typically required in modern organizations by systems and rules alone. To contribute initiative and give commitment to a broader purpose shared with others, the work needs to be made meaningful to people”. Therefore Gioia and Chittipeddi (1991) extended the sensemaking grammar by establishing the concept of sensegiving that captures the active role of stakeholders in formulating the organizational reshaping.

Sensegiving is different from sensemaking, in that the person trying to give sense is attempting to influence other people to perceive and interpret certain actions and events in particular ways. In their study of strategic change processes, Gioia and Chittipeddi (1991; 1994) found that:

(...) ‘sensemaking’ has to do with meaning construction and reconstruction by the involved parties as they attempted to develop a meaningful framework for understanding the nature of the intended strategic change. ‘Sensegiving’ is concerned with the process of attempting to influence the sensemaking and meaning construction of others toward a preferred definition of organizational reality”.

In this perspective sensemaking can thus be defined as a conversational and narrative process through which people create, maintain and reconstruct their intersubjective world or mental maps that define the way they act (Brown, 2000; Gephart, 1993, 1997; Watson and Bargiela-Chiappini, 1998). And sensegiving as ‘calling into question obsolete interpretive schemes, framing new interpretative schemes in understandable and evocative terms, providing guidance for action towards the incipient change and attempting to influence the sensemaking and meaning construction of others towards a preferred redefinition of organizational reality” (Gioia and Chittipedi, 1991).

Several researchers confirm change processes to be social processes of interaction where sensemaking and sensegiving are interchangeably used (Balogun and Johnson, 2005; Gioia and Chittipedi, 1991). According to Gioia and Chittipedi (1991) an intended change initiative starts with a process of ‘sensemaking’ defined as “construction and reconstruction by involved parties as they attempt to develop a meaningful framework for understanding the nature of the intended strategic change”. They state that following this interpretive work of CEO or top management, some initial abstract ‘vision’ of the changed organization evolves which can be disseminated to stakeholders and other constituents (Gioia and Chittoapedi, 1991). Balogun and Johnson (2005) indicate this process of sensegiving and sensemaking to circle throughout the organization several times altering mental schemata. As such sensemaking encompasses a wide range of activities undertaken by individual within groups to help themselves interpret what the events they are experiencing mean for them and the implications for the way they should behave. There are many channels through which concepts and ideas can reach a “sensemaker”, both spoken and written, and both formal and informal. Existing research shows that during change, a broad range of sensemaking activities are engaged in by “sensemakers” encompassing all types of communication, be it verbal, written or symbolic, both
formal and informal (Isabella, 1990; Luis, 1980; Weick, 1995). Familiar sensemaking practices include conversations, utterances, documents and storytelling, gossip, metaphor (Boje, 1991, 1995; Gephart, 1991, 1997) or symbolic actions such as when they refer to the behaviors of others that are observed (Isabella, 1990; Luis, 19080; Weick, 1995, 2001; Zajac and Fass, 2006).

**Sensemaking and Sensegiving Phases**

Balogun and Johnson (2005) divide the change stages as (1) old schemata, (2) triggers, (3) social sensemaking and sensegiving processes of interaction, and (4) emerging schemata and (5) new schemata.

Figure 4: Sensemaking and Sensegiving Phases (Balogun and Johnson, 2005)

The 2nd stage of this process is further subdivided by Gioia and Chittipeddi (1991) as beginning with the (1) envisioning phase, progressing through the (2) signaling and (3) re-visioning phases and finishing with the (4) energizing phase.

Figure 5: Sensemaking and Sensegiving Phases (Gioia and Chittipedi, 1991)

It might be difficult to distinguish so distinctly between different phases, as triggers enter the organization every second in the turbulent world of today, it is also difficult to distinguish clearly between times when only sensemaking is taking place or only sensegiving. Theoretically, one can distinguish between these processes. In practice, however, it is most often the case that people
engage in sensegiving processes based on their sensemaking processes and vice versa at a continuous base (Soderberg, 2003).

2.2.2.2 New Knowledge Creation

Although cognitive theories come in many varieties, all are predicated on the basic assumption that individuals actively construe the environment based on existing beliefs and knowledge structures (Markus and Zajone, 1985). Asch (1952) and Neisser (1976) already indicated the interplay of cognition and ‘reality’ where cognition leads to action and reaction (Ford et al., 2003). Weick’s (1979) notion of enacted environments epitomizes this perspective (Smircich and Stubbart, 1985). By acting on the basis of existent knowledge and schemata, people often “construct, rearrange, single out, and demolish many ‘objective’ features of their environment” and thereby “put things out there that they then perceive and negotiate about perceiving” (Weick, 1979). Believes and ‘reality’ are thereby in an ongoing dialectical relationship, which means that people ‘enact’ their environments (Weick, 1979) objectifying their cognitive assumptions and reality (Daft and Weick, 1984; Pondy and Huff, 1988; Rajagopalan and Spreitzerm, 1996; Reger et al., 1994).

Nonaka et al. (2006) propose the knowledge creation theory to provide an interesting lens to analyze the “vital processes of innovation, change and renewal”, arguing that for organizational change to take place new knowledge needs to be created (Nonaka and Takeuchi, 1995). Balogun and Jenkins (2003) corroborate this view: “change is not about communicating explicit knowledge; it is about the generation of new knowledge”. Over the last 15 years organizational knowledge creation theory has developed rapidly in academia and been broadly diffused in management practice (Nonaka et al., 2006). Nonaka et al. (1996) define organizational knowledge creation as “the process of making available and amplifying knowledge created by individuals as well as crystallizing and connecting it to and organization’s knowledge system”. “In other words, what individuals come to know in their work and/ or life benefits their colleagues and, eventually, the larger organization”(Nonaka et al., 2006).

Nonaka et al. (2000) propose the model of knowledge creation to consist of three elements (i) the SECI process, explaining knowledge creation through the conversion of tacit and explicit knowledge; which happens during the previously described social interaction sensemaking and sensegiving processes (ii) ‘ba’, the shared context for knowledge creation consisting of a physical, mental and virtual space; and (iii) knowledge assets, the inputs, outputs and moderators of the knowledge-creating process.

According to Nonaka and Takeuchi (1995) knowledge within the organization ‘becomes’ or ‘expands’ through the four-stage SECI conversion process. Socialization aims at sharing tacit knowledge among individuals. Externalization aims at articulating tacit knowledge into explicit concepts. Combination aims at combining different entities of explicit knowledge. And Internalization aims at embodying explicit knowledge into tacit knowledge. In knowledge conversion, personal subjective knowledge is
validated, connected to and synthesized with others’ knowledge (Nonaka and Takeuchi, 1995). This knowledge creation can be regarded as moving up through different organizational levels, from the individual to the communities and the larger networks, and it spans sectional, departmental, divisional and organizational boundaries (Swan et al. 1999). Nonaka and Takeuchi (1995) describe new knowledge creation to be a social process happening between top-, middle-management and front-line knowledge worker both via vertical- and horizontal communication or sensegiving processes (Gioia and Chittipedi, 1991).

Figure 6: Knowledge Creation Loop in Knowledge Creation Theory (Nonaka and Takeuchi, 1995)

Although Nonaka and Takeuchi (1995) argue that for organizational change to take place new knowledge needs to be created, the other way around is not necessarily true. Several scholars (Fiol and Lyles, 1985; Huber, 1991; Roome and Wijen, 2005; Simon, 1969; Sinkula, 1994; Slater and Narver, 1995) indicate that new knowledge creation provides the potential to influence behavior and thus create change, but it does not guarantee change. “Implementation is not a necessary element of the process, as learning refers to the evolution of cognitive capacities, which may or may not lead to action” (Roome and Wijen, 2005). “At its most basic level, organizational learning is the development of new knowledge or insights that have the potential to influence behavior” (e.g., Fiol and Lyles, 1985; Huber, 1991; Simon, 1969; Sinkula, 1994: in Slater and Narver, 1995). New knowledge creation in this perspective may, but also may not lead to action and may, but also may not lead to improved performance. Thus, although organizational learning and new knowledge creation do not always lead to action, change or improved performance, without these processes change is unlikely to occur.

“Change resulting from learning need not be visibly behavioral. Learning may result in new and significant insights and awareness that dictate no behavioral change. In this sense the crucial element in learning is that the organism be consciously aware of differences and alternatives and have consciously chosen one of these alternatives. The choice may be not to reconstruct behavior but, rather, to change one’s cognitive maps or understandings”, Friedland (1983).
“(...) learning does not always increase the learner's effectiveness, or even potential effectiveness. Learning does not always lead to veridical knowledge. Sample data are not always representative and new findings sometimes overturn what was previously known to be true. Entities can incorrectly learn, and they can correctly learn that which is incorrect. Finally, learning need not result in observable changes in behavior”, Huber (1991).

2.3 The BY WHOM of Change – Roles and Actions during Change

2.3.1 Roles and Actions in Organizations

Graen (1976) argues that all work of organizational members is accomplished through roles. In this thesis a combined definition from Ahn and Sandhu (2000) and Katz and Kahn (1978) of roles will be used as ‘sets of responsibilities, actions and behaviors, associated with a particular working activity, that others expect of individuals and that the focal person himself acts upon’. Roles serve a essential guiding function enabling group members to make more efficient use of each other’s personal store of problem-relevant information (Gibson, 2001). Most research about roles concerns the family situation or role conflicts between work and family roles (Greenhaus and Beutell, 1985), in this thesis though the sole focus is on roles within the working environment.

Katz and Kahn (1979) explain that the process, by which expectations of members of a role set are linked to the behavior of the focal person, can be described in terms of role episodes. The role episode begins with the role expectations held by members of the role set for the focal person; these are activities, which they require of him in order to perform their own roles or to maintain their own satisfactions. The next step in the role episode is the sending of expectations or communication of role requirements intended to influence behavior. The second half of the role episode is related to the perceptions and behavior of the focal person. He receives, with greater or lesser distortion, the role expectations sent to him. “It is received role, which is the immediate source of influence and motivation of his behavior” (Katz and Kahn, 1979). Finally, the focal person acts; he behaves in role, showing some combinations of compliance and some noncompliance with the expectations of his set. The members of his role set observe and evaluate the behavior in relation to their expectations and needs, and the cycle moves into the next episode.

One important aspect of this role-making process is that roles are often ambiguously and incompletely specified (Graen et al., 1973). Role ambiguity is a condition in which members lack a basic understanding of either the activities they are responsible for, the function they play in the group, or potentially how the group fits into the larger context (Rizzo et al., 1970). Without leadership and facilitation, roles are often ambiguous (Gibson, 2001). To decrease role ambiguity and increase conforming actions roles may be formalized (Biddle and Thomas, 1966; Biddle, 1979; Floyd and Lane, 2000; Kahn et al., 1964; Van de Vliert, 1981). Managers and knowledge workers have roles in their daily jobs and roles in strategic and organizational change processes. Floyd and Lane (2000)
identify these as primary and secondary roles. Similarly Edwards (1990) identified 12 clusters of primary role chief executive officer behavior and indicated only four to be particularly important in implementing strategic change (Edwards, 2000). Primary roles are often defined in detail in job descriptions and evaluated during performance reviews. Secondary roles, on the contrary, are often not formalized and therefore non-conformance due to ambiguity or role conflict is more likely to happen (Floyd and Lane, 2000).

2.3.2 Role Levels - Top Management, Middle Management and Knowledge Worker

Several concepts of management are given in current literature and often there is made a distinction between different layers. It is argued that all layers are important but that each actor has a different role (Balogun and Johnson, 2005; Gioia and Chittipedi, 1991; Kanter et al., 1992; Mintzberg; 1983; Moss et al., 1979; Nonaka and Takeuchi, 1995).

Mintzberg (1983) divided management in three levels; strategic apex, middle line and operating core. Moss et al. (1979) described the middle line as stretching from those with supervisory responsibilities of first-line employees to managers below top management. As explained, Nonaka and Takeuchi (1995), in their new knowledge creation theory, as well make a three-fold distinction, but then including the front-line knowledge worker. This distinction of top management, middle management and knowledge worker is also used by organizational change theorists (Balogun and Johnson, 2005; Gioia and Chittipedi, 1991; Kanter et al., 1992) and will be used for the analysis of this study.

The diverse roles and actions at the three levels are the focus of this study. Before extracting a more in-depth overview of these roles and actions from the case-study the general definitions as defined by Nonaka and Takeuchi (1995) and Kanter et al. (1992) are given first. Nonaka and Takeuchi (1995) define top managers as “knowledge officers”, “responsible for managing the total organizational knowledge-creation process at the corporate level”. Middle managers as “knowledge engineers”, “responsible for converting tacit knowledge into explicit and vice versa, thereby facilitating the four modes of knowledge conversion; externalization, socialization, combination and internalization”. And co-workers or front-line knowledge workers as “knowledge practitioners”, being “responsible for accumulating and generating both tacit and explicit knowledge. Kanter et al. (1992) defined firstly, change strategists, such as top managers, who create a vision and influence the direction of any given change; secondly, change implementers, who enact the vision; and finally, change recipients who interpret and try to make sense of the changes induced on them - or fail to adopt the change plans.

2.3.3 A Rebalancing Act of Managerial and Workers’ Roles and Actions

Current changes have a profound impact, not only on the processes and strategies of organizations, but in particular, on the roles of individuals and their relationships with these organizations (Bartlett and Ghoshal, 1994). “The work of managers is being altered by the changes taking place in
contemporary organizations” (Balogun, 2003), adequate adaptations in management theory although still lack behind (Bartlett and Ghoshal, 1994; McKinsey, 2007; Nonaka et al. 2006).

‘Since the introduction of the factory assembly line theories of management have focused on predefining the ideal outcome, creating performance measures that push employees to reach that goal and plan accordingly’ (i.e. Ford, 1914; Smith, 1776; Taylor, 1911). In addition, efficient managers were seen as those who set the course and very carefully defined, monitored, and drove performance (McKinsey, 2007). ‘Moreover, it was believed that a vision set by the leaders could be ‘programmed’ into the many organizational members through accurate explanation and presentation and that, after having been programmed with the right direction, organizational members would act accordingly’ (Nonaka et al., 2006). Guth and Macmillan (1986) claimed that in order for middle managers to understand, accept and implement strategies top managers needed to communicate self-explanatory messages regarding these strategies’ rationale and goals.

According to Nonaka et al. (2006) these views are not a true representation of current reality anymore and do not conform to current organizational knowledge creation theory. Nonaka et al. (2006) assure that leadership in today’s knowledge worker organizations “cannot exercise control by implanting an accurate depiction of a direction in ‘hundred of heads’ and expect them to follow”. And many researchers and practitioners agree with this perspective (Drucker, 1993; Bartlett and Ghoshal, 1994; Gioia and Chittipedi, 1991; Balogun and Johnson, 2005; Campion et al., 1993; Lawler et al., 1992; Parker and Wall, 1998). Today knowledge has been accepted to be a dispersed resource in the organization owned by each individual knowledge worker. In this perspective Grant (1996) mentions “the trend towards ‘empowerment’ takes account of the nature of knowledge acquisition and storage in firms: - if each employee possesses unique specialized knowledge and if each employee has access to only part of every other employee’s knowledge base – then…. the task is to devise processes that permit integration of the specialized knowledge held throughout the organization – not just in the boardroom, but on the shop floor as well”. And it is recognized that managers must distribute knowledge throughout the firm to achieve competitive benefits in today’s world (Jones and MacPherson, 2006).

Drucker (1993) indicates that knowledge workers need to be managed differently than factory assembly line workers; there is another level at which decision-making can take place. Also, the knowledge worker of today is able to work autonomously and increased performance is expected when empowered (Campion et al., 1993; Lawler et al., 1992; Parker and Wall, 1998). Management in the knowledge worker organization is not expected anymore, even discouraged, to invest valuable time in controlling and directing employees (Malone, 2004). Instead of controlling, facilitating the work of knowledge workers has become an important aspect of managerial responsibility, instead of directing, co-creating visions. Malone (2004) indicates the new role of management to be cultivating
and coordinating. Traditional concepts like top-down management and management control are increasingly questioned and substituted by new practices (Nonaka et al., 2006; Malone, 2004) like bottom-up management (Nonaka, 1988; Mom et al. 2007), servant leadership (Greenleaf, 1970; Greenleaf and Spears, 2002; Keith, 2007) and self-managing teams (Kirkman and Rose, 1999; Cohen et al., 1996). “Good management is no longer simply making good decisions yourself, but creating the conditions for others to make good decisions on their own” (McKinsey, 2007).

2.3.4 Empowerment and Changing Roles of the Knowledge Worker

“...Especially in this time of globalization and the network revolution, behavior at the individual level will be the key factor in shaping the evolution of the entire human species. Just as one particle can alter macroscopic organization in nature, so the role of individuals is more important now than ever in society,” ~ Prigogine, 2000.

The contract between organization and worker is changing providing more power to the individual worker (Lawler and Finegold, 2000; Rubery, 2002). Previously workers were considered substitutable, jobs were scarce and workers were often already grateful to have a job. Since today knowledge workers largely possess the unique resources creating wealth in the economy and the capital of the firm is not owned anymore by an elite, this has changed. This wealth creation is suggested to derive from three unique resources that constitute knowledge (also called intellectual capital) namely: (1) human capital, (2) social capital and (3) organizational capital (Subramaniam and Youndt, 2005)⁷. Knowledge workers personally own both the first and the second and largely influence the third. Secondly, due to the growing dependence of the economy on knowledge, demand for knowledge workers is higher than supply. And this trend is believed to continue for the coming years (CBS, 2007; McKinsey, 2007).

McKinsey (2007) researched this and claimed, ‘although it has been nearly 50 years since Peter Drucker (1953) coined the term ‘knowledge worker’, never before employees who think for a living have been more important— or more in demand’ and ‘increasingly prove to be a key source—if not the key source—of competitive advantage’. The McKinsey Technology Initiative found that “more than 70% of new jobs created since 1998 require significant abstract thinking and judgment skills”. This increase in demand poses the shortage of high-skilled talent as a global problem (McKinsey, 2007). In a 2005 McKinsey research 73% of global executives felt that lack of access to high-quality talent would be a key constraint on growth over the next five years, and 41% of CEOs said their

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⁷ Human capital is the total of knowledge, skills and capacities of the individual knowledge workers within the firm. Training and coaching is thought to increase this resource (Schultz, 1961; Snell and Dean, 1992). Social capital is the total network of relationships of knowledge workers within the organization, people who trust each other and socially interact over time (Burt, 1992; Gupta and Govindarajan, 2000). Organizational capital is the supporting organizational structures, knowledge repositories, systems and culture of the firm, potentially increasing social capital of the firm and knowledge flows by linking relevant knowledge workers and individual knowledge (Davenport and Prusak, 1998; Walsh and Ungson, 1991).
biggest operational challenge in 2006 was finding, hiring, and retaining qualified employees, compared with only 27% in 2005 (McKinsey, 2007). Productivity, innovativeness, flexibility, to a large extent, depend on the individual knowledge worker (Van Baalen et al., 2008). Organizations increasingly need to take care of their reputation as good employer to attract promising new knowledge workers and to keep them. In this perspective, knowledge workers’ call for more influence within their organization does not go unnoticed.

2.3.4.1 Knowledge Worker Empowerment

Today’s organizations empower their knowledge workers as this is believed to enable the organization to provide faster reactions to the market (Campion et al., 1993, Lawler et al., 1992; Parker et Wall, 1998). “No longer can the brain of the corporation reside at the top of the organization; instead, it must permeate throughout it. Too many decisions must be made in too many unique situations for any one person—or even a tiny subset of managers—to make them all” (McKinsey, 2007). And “by tapping into what are often underutilized talents, knowledge, and skills, businesses can substantially increase net income per employee and manage the interdepartmental complexities and barriers that prevent greater achievement and profits” (Bryan and Joyce, 2007).

Parker (2001) indicates that flexible forms of work design, such as empowerment, are increasingly appropriate in organizations seeking to compete in turbulent markets. Although the term “empowerment” is a fairly recent definition, organizational researchers have traditionally studied such empowering management practices as changing the organizational structure to allow workers to have a greater say in their jobs (Kanter, 1979; Neilsen, 1986; Pfeffer, 1982). Along this line, Labianca (2000) defined empowerment according to relative decision-making powers, “empowerment involves the development of a shared organizational schema for how decisions are made in an organization-specifically that organizational decision-making will be shared among hierarchical unequals”. And Bartlett and Ghoshal (1996) indicated “empowerment is legitimized only when those given responsibility are also given access the resources they need to implement their newly delegated decisions”.

More recently researchers increasingly argue that empowerment should be described in terms of motivational processes, and not in terms of relative power or decision-making abilities of organizational members (Bartunek, 1984; Donnellon et al., 1986; Gioia, 1986; Gioia and Chittipeddi, 1991; Gray et al., 1985). A theoretical development currently popular is the concept of psychological empowerment (Conger and Kanungo, 1988; Spreitzer, 1995; Thomas and Velthouse, 1990). This approach does not focus on the objective features of the job but focuses on whether an individual perceives himself as empowered. The state of psychological empowerment is defined as a motivational state involving an assessment of meaning, impact, competence, and choice (or self-determination) (Labianca, 2000).
Despite increased organizational efforts to empower employees through mechanisms such as participation in decisionmaking, empowerment projects frequently encounter resistance from employees and are often unsuccessful (Griffin, 1988; Locke and Schweiger, 1979; Wagner, 1994). And the substantial changes needed in collective sensemaking of the organization to let empowerment succeed are more and more recognized (Bartunek, 1984; Donnellon et al., 1986; Gioia, 1986; Gioia and Chittipeddi, 1991; Gray et al., 1985). Explanations for these failures have focused on structure (the form of the change), process (the implementation of the change) (Cotton et al., 1988, Cotton, 1993, Lawler, 1988, Neumann, 1989), context (Neumann, 1989) and roles (Balogun and Johnson, 2005), which are therefore the focus of this study.

2.3.5 Top-Down, Bottom-Up, Middle-Up-Down Change - Who is the Boss?

Although knowledge workers increasingly affect decisions and change within the company, strategic and organizational change is still often seen solely from a top-down perspective (Schaafsma, 1997) with change recipients often viewed as “resistant, foot-dragging saboteurs” (Balogun, 2006). This “rationalistic, objective tradition within the strategy field, which views strategic action primarily in top-down terms with an implication that practice flows naturally from policy” is increasingly questioned although (Balogun and Johnson, 2005). As managers seek to create greater organizational flexibility in response to environmental turbulence, responsibility, power, and resources are dispersed throughout the organization (Schilling and Steensma, 2001; Dopson and Stewart, 1990; Kanter, 1989; Thomas and Dunkerley, 1999). Middle managers and knowledge workers become increasingly influential within contemporary organizations (Burgelman, 1983; Floyd and Wooldridge, 1997; Huy, 2002) and change increasingly takes place in a bottom-up and middle-up-down fashion instead of top-down (Nonaka and Takeuchi, 1995). As Balogun and Jenkins (2003) indicate, change in contemporary organizations cannot be reified as something ‘done’ to individuals since individuals today play an intrinsic role in shaping change.

For understanding the different ways of managing change the definitions of top-down, bottom-up and middle-up-down management of Nonaka and Takeuchi’s (1995) are presented. They describe top-down change as:

“The classic hierarchical model. It has its roots in Max Weber and Frederick Taylor and reaches its culmination in Herbert Simon. The top-down model conceives of knowledge creation within the confines of the information-processing perspective. Simple and selected information is passed up the pyramid to top executives, who then use it to create plans and orders, which are eventually passed down the hierarchy. Information is processed using division of labor, with top management creating the basic concepts so that lower members can implement them. Top management concepts become the operational conditions for middle managers, who will decide on the means to realize them. The middle managers’ decisions, in turn, constitute the operational conditions for front-line employees, who will implement the decisions. At the front-line level, execution becomes largely routine. As a consequence, the organization as a whole executes a huge amount of work and information. A top-down organization is shaped like a pyramid, if we visualize the dyadic relations between top vs. middle managers and middle vs. front-line employees. An
implicit assumption behind this traditional model of organization is that only top managers are able and allowed to create knowledge. Moreover, knowledge created by top managers exists only to be processed or implemented, therefore it is only a means, not an end. The concept that top management generates should be void of any ambiguity or equivocality. In other words, the concepts are anchored in the premise that they have a singular meaning. As such, the concepts are strictly functional and pragmatic. It is this deductive transformation that enables workers with limited information-processing capacity to deal with a mass of information”.

And bottom-up management as:

“Mirror of top-down management. Instead of hierarchy and division of labor, there is autonomy. Instead of knowledge being created at and controlled from the top, it is created at and, to a large extent, controlled by the bottom. A bottom up organization has a flat and horizontal shape. With hierarchy and division of labor eliminated, the organization might have only three or four layers of management between the top and the front line. Few orders and instructions are given by top managers, who serve as sponsors of entrepreneurially minded front-line employees. Knowledge is created by these employees, who operate as independent and separate actors, preferring to work on their own. There is little direct dialogue with other members of the organization, either vertically or horizontally. Autonomy, not interaction, is the key operating principle. Certain individuals, not a group of individuals interacting with each other, create knowledge”.

Nonaka and Takeuchi (1995) although claim that these organizational models do not optimally support knowledge creation and therefore introduced the middle-up-down model. “Leadership is distributed in the organization that supports the flow of knowledge from the middle to the top and down to the rest of the organization” (Nonaka and Takeuchi, 1995). And neither top-down nor bottom-up methods are effective, since:

1. the core processes for creating organizational knowledge take place intensively at the group level and both models largely ignore these processes. “Successive rounds of direct and meaningful dialogue within the group, for example, trigger externalization. Through these dialogues, team members articulate their own thinking, sometimes through the use of metaphors or analogies, revealing hidden tacit knowledge that is otherwise hard to communicate” (Nonaka and Takeuchi, 1995).

2. in both models knowledge is formed primarily in the minds of individuals and not amplified or refined through interaction. In the Top-down model this non-amplified nor refined fate of a few top managers can become equal to the fate of the firm. In the Bottom-up model “the preeminence and autonomy given to an individual make knowledge creation much more time-consuming, since the pace with which creation takes place is dependent on the patience and talent of the particular individual” (Nonaka and Takeuchi, 1995). And,

3. the important bridging role of middle management is not taken into account in these models.

Balogun (2006) indicates “the assumptions that top management controls change need to be replaced with recognition of the role of change recipients in creating change” as “recipients are
equally, if not more, influenced by the lateral and largely informal processes of communication between themselves in their day to day work”. Recent studies suggest we need to reconceive the way we approach the management of top-down change in organizations. And, to properly manage change, we need to better understand the role of micro organizational social processes and the impact of those outside the top management team on change (Jarzabkowski, 2004; Johnson et al., 2003; Balogun et al., 2003).

As explained, highly educated knowledge workers do not fit anymore into the top-down approach of change or centralized decision-making processes of the past (Nonaka and Takeuchi, 1995; Jones and MacPherson, 2006; Nonaka et al, 2006, Bartlett and Ghoshal, 1993, 1994b, 1995a, 1995b, 1995c, 1996, 1998). “Within pluralistic organizations with multiple objectives and diffuse power bases, a collective leadership is needed to effect substantive change, and different management layers all have a different responsibility in making change successful” (Denise et al, 2001). “Managing” change is then an active and ongoing process as much to do with aligning the understanding between top management and others as with the deployment and monitoring of actions” (Balogun, 2006). And formal, top-down communications and interventions needs to be balanced with efforts of top management to engage more actively with those lower down in organisations, and particularly middle managers, to create a shared idea of what needs to be achieved. These new insights have urged practitioners and researchers to reconsider the flows of knowledge creation and decision-making and the effects of roles and actions at different levels of the organization in strategizing and organizing (Bartlett and Ghoshal, 1994b, 1996, Floyd and Lane, 2000).

Soderberg (2003) mentions “it must be emphasized that in so far it is possible to give sense in organizational change processes, sensegiving is not initiated by the upper-echelon members alone. It is rather in the interaction or negotiation between different organizational actors that some beliefs or interpretations are exchanged and new ones adopted”. As Kanter et al. (1992) state, “change is extraordinarily difficult, and the fact that it occurs successfully at all is something of a miracle. Change is furthered, however, if and when an organization can strike a delicate balance among the key players in the process. No one person or group can make change ‘happen’ alone - not the top of the organization mandating change, not the middle implementing what the top had ordained, and not the bottom ‘receiving’ the efforts... No matter how carefully the leaders prepare for change, and no matter how realistic and committed they are, there will always be factors outside of their control that may have a profound impact on the success of the change process. Those external, uncontrollable, and powerful forces are not to be underestimated, and they are one reason why some researchers have questioned the manageability of change at all”. Many contemporary organizational development methods therefore advocate building a shared vision (Ackoff, 1981; Drucker, 1997; Kotter, 1995; Porras and Collins, 2002; Senge, 1990), which suggests “a possible
escape from past-bound planning by the top as the emphasis is on bringing future goals and intentions into being by all actors within the organization” (Petranker, 2005).

This requires a change in organizational interpretive schemes (Bartunek, 1984; Gioia et al., 1994)—the shared assumptions that govern the way the members of an organization conceive of their organization and their environment. It requires as well a shift in individuals’ schemata (Bartunek and Moch, 1987; Labianca et al., 2000; Poole et al., 1989). And a shift in research, “researchers cannot appreciate the role of middles in organizational restructuring unless it is recognized as involving a process of cognitive reorientation entailing accompanying changes to the informal side of organizations” (Porras and Robertson, 1992; McKinley and Scherer, 2000; in Balogun and Johnson, 2004).

2.4 Conclusion and Conceptual Model

For this study a conceptual model has been developed that conceptualizes the WHAT, HOW and BY WHOM of mental model change. By conceptualizing the most important determinants of mental model change it is possible to view and explain the transformation over time of these determinants in the conclusion of this report, f.e. about the increasing importance and influence of knowledge workers represented in the conclusions about BY WHOM. Three previous research models on sensemaking, sensegiving and new knowledge generation and roles at different levels on these processes have been combined (Balogun and Johnson, 2005; Gioia and Chittipedi, 1991; Nonaka and Takeuchi, 1995) to build a grounded overall framework for mental model change throughout the organization (top management, middle management and front-line knowledge worker) and over time (old schemata phase until emerging and new schemata phase). For in-depth insight in the separate models see section 2.2 and 2.3.

The main objective of this study was to identify roles and actions of change agents throughout the organization that affect and change mental models and behavior over time. The three models have been chosen carefully due to the value of their overlap, their individual separate nature and the recognized importance of their contribution to current knowledge on mental model change and roles of change agents. The new knowledge creation loop of Nonaka and Takeuchi (1995) has been chosen for several reasons. Nonaka et al. (2006) proposed the knowledge creation theory to provide an interesting lens to analyze the “vital processes of innovation, change and renewal”, arguing that for organizational change to take place new knowledge needs to be created (Nonaka and Takeuchi, 1995) a view increasingly corroborated by other researchers (Fiol and Lyles, 1985; Nonaka and Takeuchi, 1995; Nonaka et al., 2006; Balogun and Jenkins, 2003). “Change is not about communicating explicit knowledge; it is about the generation of new knowledge” (Balogun and Jenkins, 2003). This view is supported throughout this study. In addition, new knowledge creation theory has another important linkage. The case study’s change process focused upon a change of
physical, virtual and mental context of the organization to improve the environment for knowledge work (the WHAT of CHANGE of this study). New knowledge creation theory defines exactly the same elements of the organizational context for knowledge sharing and creation (physical, virtual and mental) and therefore inclusion in the conceptual model relates valuable insights for this study (Nonaka and Takeuchi, 1995). Even more, Nonaka et al. (2006) urged focus of future empirical research upon the elements of organizational context for knowledge creation and the role of leadership and management in shaping this context (the BY WHOM of CHANGE of this study).

Then, to explain for the use of the sensegiving and sensegiving models this study first of all refers to Balogun and Jenkins (2003). They report two levels of communication for change – the first explaining the concepts of the changed organization via explicit communication of knowledge, the purpose of most change communication, and second enabling individuals to work out the implications for themselves and the way they work with others on a day-to-day basis. “It is this second aspect that is neglected and where concepts from knowledge generation can help” (Balogun and Jenkins, 2003). These two levels of communication link to recent sensegiving and sensemaking literature whereby the first level of communication (of explicit knowledge) is referred to as sensegiving, the second level of communication is referred to as sensemaking. And it is exactly this second aspect of communication that is of interest for this study, as top-down sensegiving is expected to decrease in importance in the future and during the development of the change at the case-study company and bottom-up sensemaking is expected to increase in importance.

In addition, recent sensemaking and sensegiving research categorized several phases of change and linked these phases with insights in the roles and actions of top management, middle management and knowledge worker that affect sensemaking, sensegiving and change over time. Because of the complementary view of recent sensemaking and sensegiving research on the roles of change agents that affect mental models over time and to provide in-depth insights based upon prior grounded research two studies have been chosen to complement the knowledge creation loop of Nonaka and Takeuchi (1995) within the conceptual model. Balogun and Johnson’s (2005) sensemaking and sensegiving research categorized several high-level phases of schemata change and focused mainly on the roles and actions of middle management on mental model change. Gioia and Chittipedi’s (1991) sensemaking and sensegiving research categorized four phases of schemata change, subcategorizations of the second phase of Balogun and Johnson (2005), and focused mainly on the roles and actions of top management in the change of mental models, complementing the middle management view of Balogun and Johnson (2005).
Figure 7: Conceptual Model of Sensemaking and Sensegiving Phases by Phase and Role Level

Balogun and Johnson, 2005
Empirically validated on TM, MM and KW
Main focus MM

1. Old Schemata
2. Aligning Schemata
3. Emerging Schemata
4. New Schemata

Gioia and Chittipeddi, 1991
Empirically validated on TM

Envisioning Phase
Signaling Phase
Re-visioning Phase
Energizing Phase

Nonaka and Takeuchi, 1995
Empirically validated on TM, MM and KW

Top Management (TM)
Middle Management (MM)
Front-Line Knowledge Worker (KW)
Chapter 3: Research Methodology

“By clarifying the researcher worldview, the general strategy or plan of action and use of particular methods or techniques one can better understand the choices made for the research design and evaluate their appropriateness” (Crotty, 1998) (see appendix 2). Therefore the following chapter is particularly directed to explain these aspects. First, section 3.1 presents my research perspective and methodology. In section 3.2 an overview is given of the data sources and data gathering process. Section 3.3 discusses how the data analysis has been structured and executed. And section 3.4 concludes by showing how trustworthiness, validity and reliability have been taken into account. An overview of limitations of the study is provided in chapter 6.

3.1 Research Perspective and Methodology

This study investigates the roles and actions of management and knowledge workers that influence mental models of organizational members during change. Several researchers indicate that traditional survey methods and even in-depth interviews cannot adequately reveal the nature and sequence of changes taking place during the development and revision of mental models (Gioia and Chittipedi, 1991; Gioia et al., 1994; Balogun and Johnson; 2005). Instead it is suggested that research approaches designed to investigate such processes must be non-intrusive, longitudinal and capable of tracing unfolding changes (Frederickson, 1983; Mintzberg et al. 1976; Whyte, 1943; Gioia and Chittipedi, 1991; Gioia et al., 1994). To grasp the complex evolution of change and research that focuses on how change recipients make sense of (change) events and eventually adapt their mental models, an alternative paradigm is proposed (Burrell and Morgan, 1979; Guba and Lincoln, 1994; Kuhn, 1970), one mainly qualitative and 'interpretive' in nature (Gioia et al., 1994; Brown, 1994, 1995; Isabella, 1990, Rabinow and Sullivan, 1979).

For these reasons, the findings and conclusions of this study will be reported on the basis of a longitudinal, processual, qualitative casestudy (Eisenhardt, 1989; Pettigrew, 1992; Van de Ven, 1992, Yin, 1994) and data gathering and methods of analysis based upon the socially constructed, interpretative sensemaking perspective (Weick, 1979, 1995, 2001; Gioia et al., 1994).

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8 “A paradigm is a set of basic beliefs that represents a worldview, defines the nature of the world and the individual’s place within it, and guides action...It contains the investigator’s assumptions not only about the manner in which an investigation should be performed (i.e., methodology), but also in how the investigator defines truth and reality (i.e., ontology) and how the investigator comes to know that truth or reality (i.e., epistemology)”, (Guba and Lincoln, 1994).
3.1.1 Qualitative Research

“In qualitative research, the tyranny of numbers is abandoned for the enigma of words. It is often seen as rooted in a non-tangible domain, fundamentally experiential and intuitive. Qualitative work is in constant, dynamic flux, but moving toward some end-point in an evolutionary way. There are efforts by the mind to concretize meaning and the qualitative dimension has an integrative function for the researcher. Unity provides context and meaning and it is toward such unity that the researcher is striving. Qualitative efforts make use of that part of the person concerned with meaning, truth, purpose or reality—the ultimate significance of things” ~ Hiatt, 1986.

The qualitative research approach has been chosen since this kind of research enables the in-depth and specific understanding of experiences and interpretations of people (Eisenhardt, 1989) and richness in insights and closeness to real practice (Reynolds and Cavanagh, 2005) that are necessary to understand the influence of roles and actions on changes in mental models, the focus of this study.

Despite the advantages that good qualitative research offers for this research it as well is believed to be difficult and easily prone to researcher bias or subjectivity (Hamel et al., 1993; Reynolds and Cavanagh, 2005; Verschuuren and Doorewaard, 1999); reasons that have given leeway for dominant use of the quantitative approach in the past (Jansen and Peshkin, 1992). More recently although this has been changing and criticism on the quantitative approach has severely intensified (Reynolds and Cavanagh, 2005). A sense has developed that quantitative positivistic research approaches are too narrow and limiting, too focused on the specific and measurable, to account for the real range of existent complex dynamics of human phenomena (Carspecken and Apple, 1992; Denzin and Lincoln, 2001). These are exactly the reasons why this research follows the qualitative approach and tries to mediate it’s limitations (see chapter 5) by taking appropriate measures (see section 3.4). In addition, it is believed that applying methodological precautions that assert research rigor are able to offset most of the criticisms of qualitative research and even result in general applicability (Yin, 1989).

3.1.2 The socially constructed, interpretive perspective and ethnographic research

The assumptions by which this research has been approached are common to the socially constructed, interpretive perspective (Rabinow and Sullivan, 1979; Gioia et al. 1994). Broadly stated, this means that study turns on the assumption that all knowledge, human understanding and action and therefore all meaningful reality as such, is contingent upon human practices, being constructed in and out of interaction between human beings and their world, and developed and transmitted within an essentially social context (Crotty, 1998; Berger and Luckman 1967; Weick, 1979; Bean and Hamilton, 2006; Rabinow and Sullivan, 1979). Understanding and action, therefore, depend upon the meaning assigned to any set of events (Daft and Weick, 1984) by people participating in that set of events. Thus organizational reality and meaning are socially constructed (Berger and Luckman 1967; Weick, 1979) and unavoidably subjective, constrained by the context of goals that the participating human actors
seek to achieve (Gioia et al., 1994). Truth, in this perspective, is always contestable, as it is not real, but socially negotiated (Gergen, 1999; Senge, 1990).

“Understanding and action, including strategic action, thus derive from the framework of meaning ascribed by the organization’s members” (Gioia et al., 1994). This implies that:

1. the studies of interpretation and meaning systems and the processes whereby those systems are altered are of fundamental importance to the study of change (Gioia et al., 1994). The change at Microsoft is thus looked at as a change of mental models altered by sensemaking and new knowledge creation processes;

2. the researcher-respondent relationship is “subjective, interactive, and interdependent” and “the values of researcher, respondents, research site and underlying theory cannot help but undergird all aspects of the research” (Guba and Lincoln, 1989);

3. the research product and interpretations is always context specific; and

4. that understanding any such subjective organizational phenomena requires that the researcher be grounded in the organization’s culture and be involved in interaction with informants who are experiencing the strategic change effort, which suggests an ethnographic approach (Gioia et al., 1994).

That the ethnographic approach was used means I was involved in ‘an ongoing attempt to place specific encounters, events, and understandings into a fuller, more meaningful context’ (Tedlock, 2000). Gioia and Chittipedi (1991) explain “the ethnographer typically enters a new cultural (organizational) domain with little familiarity about its inner workings. By trying to suspend a priori assumptions, the researcher attempts to understand the social world by first discovering the conceptual lenses that the members of the organization use to see and interpret their experience. As a researcher using the ethnographic approach I tried to immerse myself in the social context being studied by attending events, meetings, experiencing the change myself and working amongst Microsoft employees at the Microsoft office. In addition, I attempted to “avoid implicit hypothesis testing by first experiencing, which allows inductive reasoning to prevail” (Gioia and Chittipedi, 1991).

“Every interaction and experience constitutes data to be interpreted as a member of the organization and as a researcher; the ethnographer thus relies on prolific record-keeping” (Gioia and Chittipedi, 1991). Pathas (1971) explains “methodologically it implies that the actor’s view of actions, objects, and society has to be studied seriously. The situation must be seen as the actor sees it, the meanings of objects and acts must be determined in terms of the actor’s meanings, and the organization of a course of action must be understood as the actor organizes it”.
3.2 Data Gathering

3.2.1 Case-Based Research
Yin (1994) defines a case study 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”. Case studies are used to trace linkages through time (Yin, 1994), contextual investigation of research phenomena (Yin, 1994) and analysing “information too difficult or expensive to quantify, such as subjective opinions and value judgements” (Eisenhardt, 1989). Selection of case(s) and thus the design of the case (single or multiple, holistic or embedded) is crucial (Yin, 1994; Eisenhardt, 1989). Because of the explanatory nature of this study, the access to a unique, revelatory case and the level of detail in the data that was required the choice was made to use the embedded single case study design. This type is considered to be the most appropriate for capturing contextual richness and complexity (Dyer et al., 1991) and for testing, extending and/or developing theory (Eisenhardt, 1989; Sutton and Straw, 1995; Yin, 1984; 1994) if resources are limited (Eisenhardt, 1989).

Yin (1989) indicates single-case studies are especially interesting “if the case represents a critical case for testing theory, the case is an extreme or unique case, the case provides a revelatory case for exploring certain aspects of phenomena previously inaccessible to scientific investigation, or a study is conducted of explorative nature”. This is believed to be the case in this research. Several other companies being in the same kind of change processes were visited, but, were not believed to render crucial information that could not be found in the single case. And although a single-case study approach cannot offer generalizability in the statistical sense, it can represent a significant contribution to knowledge (McHugh, 2000). An in-depth case study can make up for the lack of generalizability by revealing a greater depth of understanding of the set of events under analysis (McIvy, 2003). Using a single case-study design in this sense enabled an increase in the quality and quantity of data obtained (Yin, 1994).

Several reasons were believed to make the case a critical, revelatory case (Yin, 1989, 1994). First of all, the case-company spent more time and resources in exploring the topics at hand and implementing them within the organization than other similar companies. Secondly, the company was recognized to be in a frontrunner position to support knowledge work in the modern and digital economy in many of the dimensions of organizational context and working practices (Van Baalen et al., 2008) and this was the reason why organizations in similar situations needed to adapt their mental models in the first place. And last but not least, the General Manager from Microsoft the Netherlands granted full access to the office of the case-study company, all (management) meetings, conference calls, employee databases, people and materials that concerned the change process under investigation. There were not established any restrictions or expectations that hindered the research. This provided
many opportunities to access informants and information, formal legitimacy for the research and a
direct band of trust with many employees. In this way it was possible to acquire a distinctive vantage
for studying the processes by which the change were initiated within Microsoft the Netherlands. It
provided very interesting research material very difficult to access in other similar settings making it
possible to exploit a phenomenon rarely accessible to scientific investigation (Doz and Chakravarthy,

Furthermore, the single casestudy at Microsoft the Netherlands was an embedded- or within-case
strategy, since only one process or decision-making chain in the case-study company was taken into
account; the process of changing mental models to adapt to a new organizational context and ways of
working, referred to within the company as 2bPR. To put this into perspective 2bPR was only 1 out of 7
business priorities for the case-study company in FY08\(^9\) (for more information about the case-study
company and 2bPR see chapter 5). Embedded single case-studies are ideally suited to include more
than one level of analysis (Yin, 1989). In this research the focus was on tracking the effect from roles
and actions of top management, middle management and knowledge workers on their own mental
models and that of colleagues. The level of analysis was defined at the individual and group level. A
last but particularly important strength of the case study method is that it allows a combination of
various types of data collection methods, which enables the researcher to capture “the complex reality
under scrutiny” (Saunders et al., 1997). These methods are described in the following section.

3.2.2 Research Process and Methods
The data gathering process took place between February 2007 and July 2008 over a period of 17
months. The change had started around 2 years before. When I arrived work just started on how to
communicate the changes that 2bPR would bring to the broader organization. My ambition was to
generate knowledge from theory and empirical fieldwork in combination. To appropriately elicit and
examine individuals’ lived experiences of 2bPR I used desk research and the ethnographic methods
(Ellis and Berger, 2002) of participant observation (Putnam, 1983) and reflexive interviewing as the
primary empirical sources in the fieldwork. Since they provide an insider’s account of a situation
(Burgess, 1984) they are a powerful means of data collection for interpretive studies (Balogun, 2003).
In total I used five primary sources of data:(1) the transcripts of the meetings in which I participated;
(2) the tapes and notes of interviews; (3) all documentation relating to 2bPR; (4) my field notes, in the
form of a diary; and (5) my own “self-debriefing” notes consisting of reflections on the proceedings of
2bPR.
Several researchers indicate the importance of avoiding a priori assumptions in interpretive
ethnographic studies (Gioia and Chittiped, 1991). Therefore I tried to avoid direct bias towards the

\(^9\) Fiscal Year 2008
thoughts and believes of the participants in the change, postponing the phase of analysis for the first months of the research. This allowed me to gain more knowledge to better understand and thus interpret the views of participants in the process based upon their own words and actions (Gioia and Chittipedi, 1991; Gioia et al., 1994). Ericsson (2001), in this perspective, comments, 'the effort to be open-minded during the fieldwork implies letting the studied organization talk to you, and not forcing your framework on the subjects studied'. During this first time period a team of top managers and middle managers (the steering committee) developed a blueprint and rationale for 2bPR and the content and means for interventions (training, events and communication) by continuously extracting information from the organization through formal and informal dialogues with employees. I have tried to represent the informants' experiential structure and subjective understanding by transcribing in the terms they used representing their level of meaning (Rabinow and Sullivan, 1979; Weber, 1947; Gioia et al., 1994). And I tried to maintain the interpretations and experiences of the informants in the foreground in my research reporting.

In September 2007 a companywide event was organized to express the importance of 2bPR. The idea of the events was to increase understanding of 2bPR and to accelerate the adaptation of mental models of employees within the organization to the new way of working. After this moment I started to structure the content from the literature that I had gathered. Literature and theories were found that came close to the reality occurring at Microsoft. In this way I defined my research questions and build the conceptual model (see chapter 2) that I used from October 2007 on to structure further data gathering from my field research.

September 2007 to April 2008 was a designated transition phase where interventions were directed towards mental model adaptation towards the newly created organizational context and new ways of working. Parallel to these developments, new technologies were developed and a new office was build to support the new ways of working. During this period I was present at many formal meetings and interventions, thus participating in the change, and I had many interviews and informal talks with people to grasp their views and in November 2007 conducted my first set of interviews. End of April 2008 the new building was opened and I went working in the new office to observe the reactions and to hold my final interviews until July 2008.

During the whole time there were also regular progress meetings between Microsoft and the RSM Erasmus University research group; this enabled the discussion of the progress at the case-study company beyond the immediate focus of this study, and feedback on the ideas of this research.
3.2.2.1 Method – Desk Research

Literature on the topics of change, knowledge creation, sensemaking and sensegiving, organizational context, mental models, management roles and empowerment have been collected and read to increase existent knowledge of the researcher. Secondly, documentation such as copies of relevant internal memos, briefings and workshop documents and meeting minutes were collected. This provided data triangulation (Denzin, 1989; Eisenhardt, 1989; Jick, 1979) on the change interventions as well as information actually given to staff. Internal documents were retrieved from the company databases, e-mails or media department of the case-study company. In addition, RSS feeds were installed to read news on the case.

3.2.2.2 Method – Participant Observation

Ethnographic research is often characterized by participant-observation. During this research my role was that of participant observer, what Evered and Louis (1981) label an “insider” who participates in the ongoing activities of the group. As a participant observer I adopted the simultaneous dual role of active participator in the organization’s activities and observer of those activities (Spradley, 1980). The nature of the participant-observer role gives meaning to Morgan’s (1983) argument that research should be treated as a process of engagement. The participant-observer’s role allows to get as close as possible to the data and gives access to the change process as it is happening (Ericsson, 2001). ‘In this way I had direct experience with the knowledge structures of the participants; it provided information, meanings, and perspectives unattainable otherwise’ (Gioia et al., 1994).

As a participant-observer I employed conventional ethnographic analysis techniques and used my membership in the organization as well as language used by participants in my interviews, notes, and documentation to infer the meanings, experiential understanding and subjective interpretations associated with the 2bPR experience (Huff, 1983; Gioia et al., 1994). The interactions and experiences constituted data for this research and as a participant observer I therefore used extensive record-keeping to gather those data for further analysis. Being immersed in the setting made it possible to share experiences with the participants, which provided a ‘context for interaction,’ enabling deeper exploration (Angrosino and Mays de Perez, 2000). Simply put, the method of gaining access and observing involved becoming a Microsoft employee myself. I was granted continued and unlimited access to the office; was included in the 2bPR database and all mailinglists and in this way was knowledgeable about and invited to all relevant meetings and events related to the change. In this way I could draw data for my analysis from every visit to the office. In addition, I used similar technology tools and employed them both in and away from the new facility, just as Microsoft employees used to do. Engaging the people that I met with my own stories of experience of the transition to 2bPR resulted in enhanced rapport throughout the study.
During the whole change process my most valuable participation was mainly in formal meetings. My primary contact was with the steering committee and with middle managers and knowledge workers in meetings that members of the steering committee organized. I analyzed 45 events and meetings and have participated in most of them (average meeting time 2 hours). These events and meetings took place at different hierarchical levels in the organization (see appendix 3 for full overview). They enabled me to observe how employees interacted with each other and to hear the stories and gossip they exchanged. This provided detailed and intricate descriptions of the important issues and behavior patterns of the people involved in these meetings, which in turn enabled an understanding of the meanings and behavior of the people in the organization. Time in the field also included shared social time with some of Microsoft’s workers, like lunches or coffee. Each of these people provided extra time for interaction. Communication about 2bPR with several organizational members took place in person, by e-mail or telephone, before, during and after meetings and events concerning 2bPR. Given my established relationships, many participants spoke freely. This provided important observation and background data on the nature of the organization improving later interpretation (Gioia and Chittipedi, 1991; Balogun and Johnson, 2004).

Participants in the formal meetings held a wide variety of positions; steering committee members, top managers, middle managers, employees in technical positions, sales- and marketing, human resources, assistants, they were all participating at one moment in time. Most of them did not have in-depth knowledge of the concepts of strategic planning and strategic and organizational change. Thus, the steering committee was in the position of constructing the reality with which it would try to deal (Weick, 1977; Gioia et al., 1994). In this sense, following the steering committee was viewed as a close-to-ideal setting for studying the roles and actions during the strategic change in a previously unstudied context (Gioia et al., 1994). The informants outside the steering committee provided both original and triangulation data (which I used to explore convergence with the steering committee’s observations). These secondary informants also served as sources of divergent interpretations, which I explored in subsequent interviews.

3.2.2.3 Method – Interviews
In total 23 people took part in one-to-one in-depth reflexive (semi-)structured interviews at two stages in the change process and many people were asked questions in informal conversational interviews (see appendix 5 for full overview). To increase the validity and reliability of information used for the analysis most of the interviews were audiotape recorded and completely transcribed (Yin, 1984). Those that were not taped were documented by interviewer notes. All formal and informal interviews were conducted at the Microsoft office.

One-to-one in-depth 1 hour reflexive structured interviews took place with 7 employees at the
middle of the research process in November 2007 (see appendix 6 for interview script). Interviewees for the first set of interviews were self-selected during the 2bPR event in September 2007 by leaving their contact information. Interviewees were knowledge workers and middle managers, no top manager participated at this stage. The main reason for these initial interviews was to better grasp the individual thoughts of Microsoft employees concerning the change, to further define the direction of this research and to write the first version of the case-studies’ narrative. Before the interviews, interview protocols were set up with pre-defined questions. Since the research questions were formulated according to theory and literature that were part of my conceptual model, this round of interviews was also used to test the appropriateness of the conceptual model and quality of the interview script for further use. I.e. a better understanding of what answers the interviews could generate and thus what answers I would have to extract from further observations and my final reflexive interviews in June 2008 was generated. These first interviews were executed by me and two other researchers from RSM Erasmus University10.

The second round of interviews took place in June 2008 and 15 people participated in 1.5 – 2 hours reflexive semi-structured interviews (see appendix 7 and 8 for interview scripts). My informants were mainly the key players during the strategic organizational change process; the steering committee, top managers, middle managers and some front-line knowledge workers (both positive and negative about the change). The reason to include higher and middle management was twofold. First of all, they are the main focus of this research, recommendations will be mainly directed to better serve the way they execute and guide change in the future. Secondly, according to Baer and Frese (2003) higher and middle management receive most information from a wide range of departments since they play a major role in forming and moulding these processes by determining the types of behaviour that are expected and supported. Therefore, they are a critical and very valuable source for evaluating processes occurring within the organization. To triangulate the information received from management and to gain more understanding in how the interventions were perceived and how much influence came from whom Microsoft employees were interviewed as well (Yin, 1989). Interviewees for the second round of interviews were selected by the researcher who at that time had built the skill to understand what knowledge different people would have within the organization concerning 2bPR. Secondly, key persons in the steering committee were asked to propose potentially interesting interviewees that had been positive and negative. Furthermore, organizational charts were used to find some more middle managers with a view toward having most departments and functional areas represented.

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Kvale (1996) mentions that at the most basic level, interviews are conversations, but unlike conversations in daily life, usually being reciprocal exchanges, professional interviews involve an interviewer in charge of structuring and directing the questioning (see appendix 5). The first interviews were initiated by using the standardized open-ended interview approach (Patton, 1990). In this format, the interviewer adheres to a strict script, and there is no flexibility in the wording or order of questions. The major drawback is that the interviewer has little flexibility to respond to the particular concerns of the individual, and there is no guarantee that the questions asked tap into the issues that are most relevant (Patton, 1990). Indeed, it was noticed that sometimes a deviation from the standardized protocol was necessary to keep the interview informal and relaxed and that valuable insights were given by participants when probed for more in-depth answers. Therefore a shift was made to the interview guide or semi-structured approach (Patton, 1990) for the second round of interviews. In this format, the interviewer has an outline of topics or issues to be covered, but is free to vary the wording and order of the questions to some extent. The major advantage is that the data are systematic and comprehensive, while the tone of the interview still remains fairly conversational and informal. In this way, the emergent themes of each interview could influence the investigative structure of following interviews, thus allowing in-depth exploration and elaboration of emerging themes as the study progressed (Brown and Gioia, 2002). Furthermore by using the semi-structured design, participants could become fully engaged and I could probe for their ideas and additional information about the change process and to gain information on the different perspectives and responsibilities of the employees undergoing the change (Ellis and Berger, 2002). A drawback was that it became more difficult and very time-consuming to compare and analyze my data.

In the interviews mainly reflexive questions were asked. The interviews were designed to let the informants engage in reflection and let them become conscious about previous events and their interpretation to provide rich, descriptive data. By allowing participants to enter into conversations that ranged widely, their personal stories, language, framing elements and emergent understandings of 2bPR came to the fore. Using reflexive interviewing provided a means to learning about the participants’ actual experiences and interpretations (Ellis and Berger, 2002) as it helped elicit informants’ stories, essential for understanding sensemaking processes (Ellis and Berger, 2002; Weick, 1995). In line with my focus on mental models and sensemaking, the questions were designed to elicit the thought processes of Microsoft employees, giving insight into how they were interpreting the design of change interventions and how they experience them and their impact. These personal stories transformed the lived experiences into understandable and meaningful knowledge for the research at hand (Ellis and Bochner, 1992).

In addition, I executed some informal conversational interviews (Patton, 1990) with various Microsoft
employees while being in the office. This type of interview may occur spontaneously in the course of field work, and the respondent may not know that an "interview" is taking place. Questions emerge from the immediate context, so the wording of questions and even the topics are not predetermined. The major advantage is that the interview is highly individualized and relevant to the individual. Thus, it is likely to produce information or insights that the interviewer could not have anticipated. Many important insights, that guided the “thick description” writing and the direction of this research, where retrieved from these small on the floor interviews.

3.2.2.4 Data Collection Conclusion

Although data were elicited in several ways—through desk research, (participant)-observation and interviews—all these mechanisms provided comparable qualitative data on the participant-observers’ interpretations of the change process. More than 2000 pages of transcribed interviews, meetings notes, field notes, internal documents and presentations, e-mail exchanges, press coverage, and information from company web pages, brochures, and similar documents supplied context information were captured and used on top of the extensive desk research of academic literature. Given the established research relationship, especially the many informal conversations over the time period of 17 months added to the depth of the investigation into the 2bPR experience and changes in mental models. The fact that I was immersed in the change process allowed me to cross-check the incoming data on an almost daily basis. Given my insider status as a participant-observer member of the steering committee I was able to fill gaps in the data. Taken together, access to all these multiple data sources permitted a detailed grounded, thick-description of the phases and roles and actions of top managers, middle managers and knowledge workers in adapting mental models (Gioia, 1994) to be believed to provide a highly interesting picture.

3.3 Data Analysis

The literature review, observations and interviews have been used in a continuous iterative data collection and analysis process (Miles and Huberman, 1994; Balogun, 2003) over a period of 17 months (Feb 2007 – July 2008). This means that the first observations and interviews (until December 2007) were used to define the direction of the research; the second round of literature review, observations and interviews (from December 2007 until June 2008) was used to clear any doubts or questions regarding previous observations, documents and media and was used as input for the final analysis. In this second phase a conceptual model was build combining sensemaking and sensegiving and new knowledge creation models. This conceptual model (chapter 2) allowed structuring the qualitative analysis and extracting roles and actions of top- and middle management and knowledge worker from the complexity of the case-study.
Agar (1980) mentions that the initial report for analysis of an ethnographic effort is usually a journalistic narrative or story, often rendered mainly in the words of the organizational members. The researcher only later attempts to derive an explanatory framework to put the story into a more theoretical perspective by means of a second-order analysis (cf. Van Maanen, 1979). The case-study was written in January 2008 (Van Baalen et al., 2008), the second-order analysis was done many months later to allow for a more objective consideration of the data.

3.3.1 Preparing the Data

All notes of observations, interviews and the researcher’s diary were put in one folder. Every document started with the name of the meeting, date, time and participant name.

3.3.2 Classifying the Data

In the first stage of analysis I made a first-order analysis (Van Maanen, 1979) using standard ethnographic analytical techniques to discover themes and patterns in events and informants' accounts. I focused on the construction of narrative (Langley, 1999; Pentland, 1999; Pettigrew, 1990) and wrote a change story or thick description (Lincoln and Guba, 1985) where I described the change process through the eyes of the research participants (Balogun and Johnson, 2005) by pulling together the accounts from observation, interviews and documentary evidence. This narrative integrated the interpretations and experiences of the informants and the ethnographer (Gioia et al., 1994). The intent was to capture the ebb and flow of change interventions and activities and the employees’ interpretations of these events. I examined the data to find comments about the roles and actions in the design and execution of change interventions and the impact on mental models.

In parallel, I made repeated readings of the verbatim transcripts from the meetings, the interviews and my observation notes. During these readings, I examined and categorized the data from the tapes and transcripts (Glaser and Strauss, 1967; Strauss and Corbin, 1990). Categories for actions and roles and effects on mental models perceived by Microsoft employees were derived from their comments at meetings, events and interviews, as data collection progressed. The categories developed were primarily consisting of the actions the managers and employees were involved in or reflected upon of others: these included various types of communication activities, coordination, training, planning, team building and negotiating. Using the method of constant comparison (Conrad, 1982; Glaser and Strauss, 1967; Strauss, 1987), wherein data from the many different sources (multiple informants, observations, interviews) or from different points in time are repeatedly reviewed, compared, coded, categorized and studied to discern major categories, dimensions, themes, or processes a set of terms developed (Agar, 1986; Miles and Huberman, 1984; Spradley, 1980; Bean and Hamilton, 2006).
As this process progressed, I then examined the data for more detailed emergent classifications and patterns (Miles and Huberman, 1984; Taylor and Bogdan, 1984). It could already be seen that the activities coded were part of wider categories that were comparable to the actions and roles found in previous research (Floyd and Lane, 2000). Tentative dimensions emerged, which began to serve as guides for more focused data gathering and analysis (a process termed *theoretical sampling* (Gioia et al. 1994; Glaser and Strauss, 1967), especially used during my final interviews.

### 3.3.3 Identifying Associations in the Data

Second-order analysis moves to a more theoretical level, wherein the data and first-order findings are examined for underlying explanatory. This mode of analysis seeks to provide further insights that might be relevant for domains beyond the immediate study (Van Maanen, 1979). As part of this analysis I examined the ethnographic data from a theoretical perspective to try to discern deeper patterns and dimensions of understanding. Such patterns are not necessarily apparent to organizational members, but are essential if the study is to be made meaningful to other researchers be important for the conceptualization of the management of change (Brown and Gioia, 2002). Through the process of “constant comparison” (Conrad, 1982) over time and across informants, I engaged in a “second-order” analysis, seeking convergence into higher-order categories and themes (Van Maanen, 1979). After I had some good sense of the emergent themes and had achieved “theoretical saturation” (Glaser and Strauss, 1967), I consulted literature to compare the emerging categories and themes that had surfaced. Most emerging categories and themes were found back in literature. One emerging category, “role modeling”, though continuously mentioned, was not easily found back in literature. For this reason in the final interviews I tried to get more insights into the content of this role concerning actions and which layer showed this behavior, was expected to show this behavior, what actions were linked to it and what impact the role had on the mental models of members within the organization.

I identified areas of convergence and divergence across informants and also developed questions for the final interviews to determine the categories and themes along which informants agreed and disagreed. As the study evolved, I moved back and forth between analyzing the data, enhancing my theoretical sensitivity by searching relevant literature and engaging in “theoretical sampling” (Glaser and Strauss, 1967) by collecting additional data on the emerging categories and themes. I especially conducted theoretical sampling in my final interviews; I asked questions and aimed at elaborating or clarifying convergence or divergence on my emergent categories and themes over time and across informants.

In addition, I consulted with the informants to seek their validation or revisions of my observations, interpretations, and conclusions (Lincoln and Guba, 1985; Spradley, 1979). While I
recognize that particular individuals may have particular ways of seeing things, I was looking for shared themes. Because of their rich commentary and my desire to capture the essence of their experience in their own words, I have included many representative quotes in the text of the findings. Overall, the methodology was designed and used not to confirm or refute hypotheses, but to test the conceptual model designed and to provide a thick description of events, in a way to allow for understanding how mental models change over time and whose roles and actions influence this change. The existing data and narrative were used to verify and construct a typology of actions at the three different levels of top management, middle management and front-line knowledge worker, using the second-order constructs and dimensions that emerged from the study to define the roles at these levels.

3.4 Validity and Reliability

The value of the research approach of this study is that I could take a broad, in-depth look at the organization and change process and compare practice with academic theory using methods that enabled rigorous analysis. The conclusions can therefore be seen as a solid representation of the deeper structures behind the interpretations and actions that were spread throughout the organization during the change. This research approach although has its limitations as well. In this section I show how it has been tried to off-set these limitations and I discuss the trustworthiness, validity and reliability of this research.

This research meets many of the criteria laid down by Lincoln and Guba (1985) for the trustworthiness of qualitative data. I had a prolonged engagement with the research site and data were collected in real time. Multiple methods and sources of data collection were used. Research participant feedback was requested. And a thick description of the findings and notes were shared with the case-study organization.

I addressed concerns of validity, or the “degree of approximation of ‘reality’” (Johnston and Pennypacker, 1980), (does the research measures what is wanted to be measured?) (Black and Champion, 1976; Kerlinger, 1964) by integrating tools to avoid different types of validity (Maxwell, 1992). And the same was done to increase reliability (the degree of consistency with which instances are assigned to the same category by different observers or by observers on different occasions). The central issue of descriptive validity, which concerns the initial stage of research; the data collection, is factual accuracy in the informational statements that describe what was observed and experienced. The choice of language and selection of ‘relevant data’ are the greatest threat to validity (Winter, 2000). “The sociological observer must exercise sufficient discipline on himself to ensure that it is indeed the actor’s meanings that are recorded in his notebook and not merely his own” (Mitchell, 1977). Thus “to take, to the best of his ability, the standpoint of those studied” (Denzin, 1978).

Therefore I have taken notes of meetings copying the exact words of the participants.
Secondly, I have taped and summarized the first interviews and taped and transcribed verbatim all final in-depth interviews.

The very personal, conversational nature of interview situations highlights many of the basic ethical issues of any research or evaluation method (Patton, 1990). While much of the value of qualitative interviewing lies in its flexibility and openness, it remains extremely important to think through the process and provide the basic structure and framework which will make the study useful and worthwhile (Straus and Corbin, 1998). My final interviews were semi-structured; this offered the interviewee enough room to direct the interview and answers according to his or her own thinking patterns, but enough guidance to retrieve the answers I needed. Furthermore, critics of qualitative methods question the ability of people to formulate thoughts and the unwillingness of interviewees to provide accurate information (Verschuuren and Doorewaard, 1999). Highly valuable in this regard was that I had built a relationship with many of the participants over the past months and they confirmed they trusted my integrity before starting the interview. Otherwise I explained them the purpose of my interview and questions and ensured them I would keep their information confidential. In addition, I used my own personal researcher diary notes from my observations as a reference.

Interpretive validity is especially mentioned as problematic in case study research. It has been a source of criticism because of potential investigator subjectivity. Yin (1994) proposes three remedies to counteract this: using multiple sources of evidence, establishing a chain of evidence, and having a draft case study report reviewed by key informants. Therefore through multiple data collection methods the grounding of theory will be strengthened by triangulation of evidence (Eisenhardt, 1989). Since construct and interpretative validity is a potential risk in this research all the above triangulation methods have been used, including four sources of evidence; literature, internal documents, media and individuals. Triangulation also took place by in-depth interviewing multiple individuals at different levels within the organization and in different functional areas. Furthermore the interview transcripts and draft case study report were send to the key informants and insights shared. By the integration of feedback interpretive validity and construct validity were build in.

Generalisable validity is split in internal and external validity (Maxwell, 1992; Winter, 2000). External validity deals with knowing whether the results could be generalized beyond the immediate case. Some of the criticism against case studies in this area relate to single-case studies. The value of its dependence on small samples is often believed to render it incapable of generalizing conclusions (Hamel et al. 1993; Yin, 1984; 1993; 1994). However, that criticism is directed at the statistical and not the analytical generalization that is the basis of case-studies which supports theoretical generalization (Yin, 1989). Specification of the research population will constrain extraneous variation and will sharpen external validity (Eisenhardt, 1989). I tried to provide an extensive insight into the specifics of the case study organization to inform readers about the generalization of findings from this
case study by writing a thick description. One purpose of supplying a "thick description" in the first-order analysis is to provide readers with enough background to determine the generalizability of the findings to other settings (Van Maanen, 1979; Labianca, 2000). Internal validity is a concern only in causal cases (Yin, 1989), this is not the case in this research.

Reliability is achieved in many ways in this case study. One of the most important methods is the development of a case study protocol and a database with research findings (Eisenhardt, 1989). Since the database is most reliable if the researcher has taken notes of observation moments or interviews at the moment they occurred (Eisenhardt, 1989) I did this at all times. Furthermore, to increase both validity and reliability for my interviews the seven stages for designing and implementing an interview study from Kvale (1996) have been followed (see appendix 5). All in-depth interviews were taped. The first interviews were summarized by three researchers including the most important insights, the latter in-depth interviews were all taped and transcribed verbatim and findings were shared with the participants.
Chapter 4: Case Study, Empirical Findings and Analysis

This chapter provides insights into the case study organization, specifically into the dynamics of the change program that has been the focus of this study, the “to be People-Ready (2bPR) change journey”. This change journey was directed towards creation of, and adaptation to, a new organizational context/ work environment for knowledge work (what Microsoft defines as People-Ready businesses) in order to better support new ways of working (such as Microsoft’s Digital Workstyle) enabling employees to operate successfully in today’s fast-paced, digital and globally connected world (Microsoft’s New World of Work)\(^{11}\). In addition, this chapter sheds light on the roles and actions of management and knowledge workers that influenced the mental models within the organization during this change and, by providing a thick description (Van Maanen, 1979), on the generalizability of conclusions to other organizations and situations.

The case study description is based upon observations made in between February 2007 and July 2008, interviews, magazines, press releases, Microsoft White Papers and internal documents of Microsoft and experts who have been involved in the change.

4.1 Microsoft Corporation\(^{12}\)

The case study organization Microsoft Corporation is an American multinational computer technology corporation. It develops, manufactures, licenses, and supports a wide range of software products for computing devices (Reuters, 2006). In 2006, global annual revenue was US$51.12 billion, and profits US$14.07 billion with 79,000 employees in 102 countries (Microsoft Corporation, 2007 Annual Report). Microsoft is headquartered in Redmond, Washington, USA. It was originally founded in 1975 by Bill Gates and Paul Allen and rose to dominate the home computer operating system market in the mid-1980s. The company released an initial public offering (IPO) in the stock market in 1986, which made 4 billionaires and an estimated 12,000 millionaires from Microsoft employees (Bick, 2005; Bray, 2005; Chapman, 2005).

The Microsoft Windows operating system and the Microsoft Office suite of productivity software are its best selling products. These products have achieved near-ubiquity in the desktop computer market and therefore make Microsoft's original mission “a computer on every desk and in every home, running Microsoft software” a goal near fulfillment. Next to providing software products, Microsoft is involved in consulting and product support services, and trains and certifies computer system integrators and developers. Furthermore, the company markets both computer hardware products such as the Microsoft mouse and home entertainment products such as the Xbox, Xbox360, Zune, and MSN TV. Microsoft possesses footholds in other markets by holding assets. Moreover, online offerings


\(^{12}\) Adapted from Van Baalen et al. 2008, written by Wieteke Dupain, Marcel Legerstee and Vincent Vermeulen.
and information are delivered through its Windows Live, Office Live and MSN portals and channels (Microsoft Corporation, 2005 Annual Report). Microsoft’s current mission is “to enable people and businesses throughout the world to realize their full potential” (Microsoft Corporation, 2007 Annual Report).

Within Microsoft, people are helpful and behave pro-actively to reach targets and to support each other. The GM of Microsoft the Netherlands (2006) remarks “relationships within Microsoft [the Netherlands] are informal, there does not exist a lot of hierarchy, but it is usual to work hard... Employees have a strong entrepreneurial mindset here”. From a managerial perspective, it is perceived important to empower individual knowledge workers, by giving them the freedom to direct their work tasks and define the place and time to work themselves. Employees use the latest Microsoft products inside the company in an effort to test them in “real-world” situations, which is internally known as “eating your own dog-food”. Known for what is generally described as a developer-centric business culture, Microsoft has historically given customer support over Usenet newsgroups and the World Wide Web, and awards Microsoft MVP (Most Valuable Professional) status to volunteers who are deemed helpful in assisting the company’s customers.

In January 2007 Microsoft was ranked to have the world’s best corporate reputation by the Harris Interactive/ Wall Street Journal Reputation Quotient survey, citing strong financial performance, vision and leadership and workplace environment rankings. Microsoft has been target of criticism as well, with its suggested monopolistic business practices as the most known reason. And in the past the U.S. Justice Department and European Committee, amongst others, have sued Microsoft for antitrust violations and software bundling. In September 2007 the European court rejected the company’s appeal of a landmark 2004 antitrust ruling, and upheld a $605 million fine against the world’s largest software maker.

Microsoft the Netherlands was founded in 1986 and is part of Microsoft EMEA, which stands for the European, Middle East and African region and has around 600 employees. In 2006, Microsoft the Netherlands launched 6 Business Priorities, 5 for business growth and the 2bPR priority. In this way all day-to-day business growth priorities where connected to personal growth (a more detailed explanation of 2bPR follows in section 5.2). The official launch of the 2bPR Business Priority in the Netherlands was the Annual Meeting in January 2007. From this moment on several interventions have been developed and executed to integrate all aspects of the 2bPR vision into the organization. This included, amongst others, a company-wide day off with dialogue sessions and quizzes about 2bPR, personal profiling, training and moving to a new office.

13 http://www.usdoj.gov/atr/cases/ms_index.htm
4.2 Background: NWoW, People-Ready Business and the Digital Workstyle
In May 2005 Microsoft Corporation released the White Paper “Digital Workstyles: The New World of Work”. This paper provided an overview of trends affecting work, workers and work environment and the role of ICT in an economy where knowledge is the most important asset of organizations and institutions. The New World of Work (NWoW) is a vision of Bill Gates and Microsoft Corporate on how the work environment will evolve in the future and the influence of ICT on this change (Appendix 11). The nature of the concept NWoW implies it is an evolving vision where no real end-state exists, it is a scenario of a possible and likely future to which organizations and employees should adapt.15

The NWoW is described as a ‘world that is more fluid, less centralized and less certain about old assumptions and old models... A world that becomes more interconnected through systems and networks, where walls that isolated workers from information, organizational objectives, and each other will continue to fall... A world ruled by the information worker’.16

Throughout 2006 and 2007 Microsoft developed the believe that to remain competitive and increase productivity of the information worker in the NWoW organizations should:
1. Adopt new ways of working (the Digital Workstyle)
2. Adapt the organizational context or work environment to fit these new ways of working and the demands and needs of workers in the NWoW (become People-Ready Businesses)

4.2.1 New Ways of Working (the Digital Workstyle)
According to Microsoft several questions can be asked to find out if an organization has already adopted the Digital Workstyle:

- Do you have the information that you need to make an intelligent, informed decision every time you need to make one?
- Can you work with groups around the world and exchange ideas as though you were all in the same room?
- Can you interact with customers, solve problems, and create loyalty and satisfaction with instant answers and up-to-the-minute information, all with a few mouse clicks?
- Are you able to work as efficiently and effectively on the road as you can at the office?

Table 1: The Digital Workstyle, Are you Ready (Microsoft, 2005a)

In 2007 several experts at Microsoft the Netherlands and RSM Erasmus University defined the Digital Workstyle as: ‘a workstyle, where workers have and make use of the nearly on-site (office) levels of service and capabilities regardless of location. Integration between data, desktops, and collaboration between users and departments is widespread. Collaboration happens through Video, Instant Messaging, Document Sharing and other capabilities, which already exist today’. The Digital Workstyle ‘enables workers in finding and sharing information, working together, creating information, developing insights, taking action, driving business processes by utilizing extensive digital tools in the day-to-day work. The workforce that adopts a Digital Workstyle is always on and always connected -- using new tools to work more efficiently and effectively and help people organize and prioritize their work and personal lives’.17

15 Microsoft, 2005a; 2007. In-depth information on Microsoft scenarios was given by Dan Rasmus from Microsoft Corporate.
16 Microsoft, 2005a
At the global level Microsoft Corporate became increasingly involved in future work style investigations, especially focusing on how to support the information worker to become more productive (Appendix 9). Drucker (1999; 2000) had urged ‘today, management’s most important contribution is to increase productivity of the knowledge worker as was done with manual worker productivity in the 20th century’, since this will be the only way to drive economic success in the 21st century. To better understand the intricacies of knowledge worker productivity Microsoft started cooperation with experts (e.g. Brynjolffson) and leading universities (e.g. RSM Erasmus University). And, in addition, initiated a worldwide research effort to measure the amount of time that information workers use for different activities (e-mail, telephone, paperwork, talking face-to-face)18 (see appendix 9) based upon the idea of activity-based-working. “Activity-Based-Working is a working style, not related to the individual, but related to the activity that an individual chooses to do. It is a harmonious working style based on an optimum collaboration between the elements people, technology and physical facilities and for each activity, meaning: You have the optimal facility; You have the necessary colleague within reach; You have the right information easily available; You have the right technological tools; and, You have the right means of communication”19.

Through ongoing and extensive global research efforts Microsoft build a better understanding of work styles and initial understanding of the kind of work environment that support these work styles providing input for the envisioning of People-Ready Businesses. “[Microsoft’s] Workplace Advantage team has identified seven distinct work styles that can be used to characterize the general requirements of our employees. These work styles are based upon Microsoft job families… we hope it will bring important insights on how to create optimal work environments for information workers.”20

4.2.2 New Organizational Context or Work Environment (the People-Ready Business)
In February 2006 Microsoft Corporate published the White Paper “People Ready”. In this White Paper the people-ready business was explained: a new work environment that enables ‘optimum collaboration between the elements people, technology and physical facilities’21 in a way that better supports the various upcoming work styles found in the activity-based-working research (specifically the Digital Work style). Microsoft concluded that people are an organizations central concern, since “not businesses make decisions, close deals, invent new products, or find inefficiencies; instead, people do”22 and “businesses in today’s world only prosper when people inside the company prosper”23. This increased focus on people and the believe that businesses should better support people’s work style and particularly to make better use of technology for problem solving, collaboration, serving customers and capturing new opportunities was highlighted in the 2006 Annual Report. “‘People Ready’ is the Microsoft philosophy of business success: An organization is best able to

20 Interview Kevin Sauer, Microsoft Corporate.
grow and succeed when it recognizes that people are its most important asset and empowers them with the right tools and technologies to drive the business forward.\(^{24}\)

Also in 2006 Microsoft Corporate (Redmond) started pilot projects concerning the creation of new physical work environments in several of its departments, which appeared to be very successful: "Workplace advantage is a program designed to empower Microsoft employees to succeed in their daily work lives. It empowers employees because they have the ability to have their workplace be much more closely aligned with the kind of work that they need to do on a daily basis rather than having a one size fits all strategy for the workplace. The kinds of strategies we are using workplace advantage for can generate productivity improvements of between 5% and 35% depending on the individual elements you measure."\(^{25}\) Initial successes and the importance Microsoft Corporate contributed to better insights motivated interest of subsidiaries worldwide. And, in 2007, RSM Erasmus University and Microsoft the Netherlands developed a research model and framework that enabled attribution of changes in the antecedents of knowledge worker environments to increased productivity, innovation, satisfaction and flexibility (Van Baalen et al., 2008).

Although Microsoft acknowledged that "each business is unique" and therefore "there is no prepackaged solution to instantly make a business ‘people-ready’" Microsoft still believed several principles to characterize People-Ready Businesses\(^{26}\):

- A **people-ready business** is a “destination workplace.” The most talented and successful people and businesses seek opportunities to work at or with this company.
- A **people-ready business** maximizes the satisfaction levels of all its constituents—customers, employees, and the critical partners and vendors on whom its success depends. It is a balanced organization that does not neglect one vital constituency for another.
- A **people-ready business** tempers its management’s “force.” A people-ready business balances management oversight and control, teamwork, and the constant improvement and innovation that come from empowered employees who live their lives on the front lines of the company.
- A **people-ready business** is characterized by vision: the ability to see and act on both opportunities and problems.
- A **people-ready business** is focused on insight and action. It is characterized by employees who have insight into opportunities and problems, and the ability to act on them.
- A **people-ready business** is marked by speed and flexibility. It is as concerned with removing barriers to success as it is to driving success. It is agile and adaptable in a business environment of constant change.
- A **people-ready business** is optimized for performance at the individual level. Individuals have the freedom to focus on adding value to shareholders and customers, rather than being constantly distracted by unnecessary tasks, bureaucracy, and processes.

| Table 2: People-Ready Business (Microsoft, 2006a) |

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4.3 The People-Ready (2bPR) Journey at Microsoft the Netherlands

This section specifically focuses upon the change program at Microsoft the Netherlands starting in 2005. The initial envisioning of the “2bPR change journey” has been based upon the People-Ready, Digital Workstyle and New World of Work visions developed by Bill Gates and his team at Microsoft Corporate. Microsoft the Netherlands, in this regard, has been a pilot country and front-runner for complete integration and refined development of these visions in practice before worldwide roll out.

The conceptual model, presented in chapter 2, was used to guide the case description of Microsoft’s “2bPR change journey” and served as a tool to systematically identify roles and actions at the level of top management (TM), middle management (MM) and front-line knowledge worker (KW) (Nonaka and Takeuchi, 1995) during the different phases of change (Balogun and Johnson, 2005; and Gioia and Chittipedi, 1991). This approach is believed to provide clarity to the discussion and conclusions of this study and, in addition, enables to test and empirically validate the model that was developed.

Since the analysis was done at Microsoft the Netherlands the actions and roles of “top management” will refer to the Country Management Team (CMT) and after establishment as well the Steering Committee (SC) of Microsoft the Netherlands, not to top management of Microsoft Corporate (see limitations and future research, section 6.2).

4.3.1 Old Schemata Phase

*Old GM comes In*

During the old schemata phase at Microsoft the Netherlands management and employees acted mainly in a pre-programmed way, according to old mental models and cognitive patterns. This meant, amongst others, that most Microsoft employees did not use or understand all the technology they owned in-house. There were no widespread dialogues about using or creating more effective working, collaboration and communication practices, nor were these dialogues coherently framed to inspire employees to change. Several events,
sensemaking triggers, increasingly influenced sensemaking of top management (TM) of Microsoft the Netherlands, the General Manager (GM) and Management Team (MT). This increased sensemaking based upon recognizing the ineffectiveness of current practice led in 2006 to the decision to initiate the “2bPR change journey” in order to stimulate internal dialogue about more effective working practices and to change the organizational context or work environment of Microsoft the Netherlands in a way that would better support new ways of working.

Among the first effective sensemaking triggers for Microsoft the Netherlands were the two White Papers published by Microsoft Corporate in 2005 and 2006: “Digital Workstyle: The New World of Work” and “The People-Ready Business”. Microsoft Corporation, by (1) illuminating key trends and changes in knowledge work and the role of technology, and (2) urging its businesses ‘we should not forget that the ability to adapt and innovate is fundamentally a human talent and thus empowering people to work more efficiently and effectively in the “digital workstyle” of the new world of work should be at the center of any organization’s strategy as it addresses the coming era of rapid change and increasing global integration’, triggered sensemaking of organizational members by surfacing gaps between current practice and future developments.

Furthermore, while the concepts of the “Digital Workstyle”, “New World of Work” and “People Readiness” were developed and communicated on a worldwide scale, Microsoft the Netherlands was discussing several issues highly related to these themes. These included, amongst others, a planned relocation to a new office, designing this new work environment in a way that would optimally fit Microsoft’s knowledge worker needs and new ways of working, initiatives to improve the use and understanding of Microsoft technology within the company and most importantly a feeling that information and communication technologies were changing working practices considerably, but without mentality change and cultural change their potential was underutilized. (See appendix 10 for a more complete overview of sensemaking triggers).

The end of the old schemata and beginning of the envisioning phase was clearly influenced by a new GM coming into office in July 2005. “Theo coming in as GM was a first and very important step for 2bPR to be initiated. As manager BMO Theo already started some internal changes, but as GM he could really bring this a level further and let 2bPR become the large and high-impact change program as we know it today. Theo as GM has really been the driving force behind this and I feel that has been very important” ~ Middle Manager.

“Without [our GM] we would not have been here [at the new office] and we would not have changed our organization and work style that profoundly and actually rather successfully as we now did. His leadership was a crucial element of that change” ~ Knowledge Worker.

28 Balogun and Johnson, 2005.
32 Based upon interviews with the GM, several managers and knowledge workers of Microsoft the Netherlands. 2007 and 2008.
To define a new strategic direction for Microsoft the Netherlands an overall assessment was made of important internal themes of Microsoft the Netherlands, visions of Microsoft Corporate and external events. This assessment triggered realization by the new GM and MT that the old organizational context and several old working processes no longer responded to market demands and internal needs of the organization and individual employees and that old mental models and behavior inhibited adaptation. The GM of Microsoft the Netherlands remarked: "Everyone at Microsoft has a laptop and smartphone which vibrates if an e-mail comes in – also at 22:00 at night. Easy, as we can work whenever we want. But the disadvantage is that we still have the mentality that fits the era of the Industrial Revolution: we have the idea that we have to be at the office during the day. In addition, there is a new pressure to be available at night and in the weekend... We especially noticed this was needed when we reviewed the yearly satisfaction surveys of Microsoft employees where they expressed a decreasing appreciation of the work-life balance within the company. This was a clear indicator that a mentality change was important to better prepare employees and management within Microsoft to the new ways of working and to optimally design the work environment to support this as well".

Also on the level of middle management (MM) and front-line knowledge workers (KW) it was recognized that the world and possible ways of working were changing and there was a need for the organization to move along and align people within the organization. Many MMs and KWs showed extensive understanding of the organizational changes that were needed to realign the organization to market and internal needs. Some managers and employees even remarked to be glad that TM finally recognized the need for change and acted upon improving the situation by initiating the "2bPR change journey". “Maybe it is because I am a technology freak, but there should be more of them here. As I am thinking about cloud computing, SaaS, CoPs and networks, some people inside this company do not even know how to set up a conference call. How can we then set strategies and drive innovations in the technology market? We will not make it this way” ~ Knowledge Worker.

“I knew I had to talk with my team at some moment. As technology is available and becomes more accepted some people just expected to call in on meetings. I found that OK, but other people in my team got frustrated, they did not feel comfortable. Before we discussed this I saw it become an issue” ~ Middle Manager.

“Technology enables me to work in weekends, and sometimes at night. I do not do it too often, but I do... And yes, I feel guilty going to the supermarket or drycleaner during the week, so I actually don’t do it. I still have the feeling that between 9 and 17 I need to show that I am working. I know it’s ridiculous... I actually even think I am a little less productive this way” ~ Knowledge Worker.

In addition, TM increasingly recognized the potential of MM and KWs to recognize change and contribute valuable information, often by means of innovative ICT use. Increasing dissatisfaction with work-life balance by Microsoft employees, for example, was measured through a companywide survey and served as one of the important sensemaking triggers for top management to decide upon the initiation of the 2bPR change journey.

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Intermediair, 2008.
The interaction processes leading to the 2bPR change journey and reflections of management and KWS upon these processes showed an increasing recognition for change and divergence by employees throughout the organization. In addition, TM stimulated these processes by increasing the influence it had on their decision-making processes. Although MM and KWS became a more important influence in the recognition for change the old schemata phase still only ended when enough sensemaking triggers had reached TM and they concluded change was needed and ratified this decision by the redirection of organizational resources and attention.

4.3.2 Alignment of Schemata through Social Processes of Interaction

The conceptual model defined a second phase of sensemaking and sensegiving as the alignment of schemata phase, where new schemata emerge through social processes of interaction (Balogun and Johnson, 2005). To provide a detailed overview four sub phases were defined: The 1. envisioning phase, 2. signaling phase, 3. re-visioning phase and 4. energizing phase (Gioia and Chittipedi, 1991).

4.3.2.1 Envisioning Phase

A New World of Work and Losing Control

The first observable actions that led to the end of the old schemata phase and marked the beginning of the envisioning phase at Microsoft the Netherlands happened at the end of 2005 after TM decided that Microsoft the Netherlands would build a new office. For this occasion TM started interacting with Microsoft Corporate and several other stakeholders\(^{34}\) to discuss the influence of Microsoft Corporate’s visions, trends in the world, new insights on work styles, knowledge worker productivity and other related themes on the design of the new office. During these interactions top management tried to make sense of all information to define a coherent idea of how the office of the future had to be designed.

The envisioning process that followed started through the sensemaking and interpretive work of TM and was highly influential for meaning construction of TM and organizational members. The vision that was developed, in this perspective, functioned as a unifying force and a sensegiving tool throughout the change process that was later initiated. The first formal envisioning activity of Microsoft the Netherlands happened at the end of 2005 after TM decided that Microsoft the Netherlands would build a new office. For this occasion TM started interacting with Microsoft Corporate and several other stakeholders\(^{34}\) to discuss the influence of Microsoft Corporate’s visions, trends in the world, new insights on work styles, knowledge worker productivity and other related themes on the design of the new office. During these interactions top management tried to make sense of all information to define a coherent idea of how the office of the future had to be designed.

\(^{34}\) Microsoft Corporate, Microsoft Activity Based Working team, Veldhoen&Company, Sevil Peach Gence Associates
The Netherlands, facilitated by Veldhoen and Company, focused upon defining the expected impact of developments and trends in the NWoW on the needs and demands of future work styles.  

<table>
<thead>
<tr>
<th>Observed developments and trends</th>
<th>Expected impact on work style</th>
</tr>
</thead>
</table>
| **Accelerating globalization**  
( Clients work increasingly global) | - Dispersed teams work for global clients across time zones  
- Increased emphasis on virtual collaboration and communication  
- Need for adequate flexible support and amenities for staff and visitors |
| **Intensified competition**  
( More alternatives available to customers) | - Continuous improvement needed  
- Reduce time to market  
- Increased quality of output  
- Professional cost efficient organization |
| **From supply to demand market**  
( Clients demand dedicated business solutions) | - Focus from technology to business or client driven  
- Need to be more responsive to market demand  
- Improve emotional appeal for brand and products in order to bind customer  
- Tighter link with partners / third parties that service clients  
- Need different knowledge, skills and motivation |
| **Increasing pressure from clients**  
( Higher expectations to fulfill, in less time) | - Improve customer focus (need more information on client needs, desires and wishes)  
- Enhance involvement of customers |

Table 3: Impact of Development and Trends on Work Style (Veldhoen and Company, 2005)

Through several social processes of interaction and continuing developments in the world and at Microsoft Corporate, it became clear that the physical workplace was only one dimension of the organizational context or work environment that would influence successful facilitation of future work styles in order to increase information worker productivity and satisfaction. The GM of Microsoft the Netherlands remarked: “Several things coincided; we had to move… Bill Gates had written the NWoW… more and more conversations were going on by people around the role of technology, where do we have difficulties with as organization, our clients? Slowly we started to get a feeling that this was a bigger theme. Initially we thought we were planning a considerable investment in a new building, but at the end we found out that we had to understand questions as:… How do you define work? How is our work-life balance at Microsoft the Netherlands?… Can you improve the productivity of the organization? How does a new building fit in? From an economical perspective, but also from an emotional perspective… That made clear that the building had to become something special, but it was just a small part of a bigger process where it would be even more about leadership and management style, the competency to cooperate effectively within the organization and the role of technology in these questions”.

Along this line TM of Microsoft the Netherlands defined an integrative approach towards work style development which was, supported by Veldhoen and Company summarized as: ‘any ‘workstyle’ or ‘specific way of working’ is determined by the organizational context consisting of three ‘environments’: (1) the social/ mental environment, (2) the physical environment and (3) the virtual environment. These three environments are related, which means changes made in one environment

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36 Interview, June 2008. Theo Rinsema, General Manager of Microsoft the Netherlands.  
37 MT was facilitated by Veldhoen and Company, 2005  
38 As can be seen in the literature overview of this study, this division is also commonly used by academics. For more insights on literature about the organizational mental, physical and virtual context see Chapter 2.
might have consequences for other environments’ (see appendix 12 for more information). A workstyle is thus considered effective when:

1. the mental, physical and virtual environments are aligned (‘fit’) (a people-ready business),
2. they are congruent with business needs and demands (with the NWoW).

In addition, nine guiding ambitions of the Microsoft work style were designed to serve as guidance throughout the change program:

<table>
<thead>
<tr>
<th>Enables our employees to realize their potential</th>
<th>Nine Guiding Ambitions of the Microsoft workstyle</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Offers freedom to be yourself within the Microsoft Community</td>
<td></td>
</tr>
<tr>
<td>2. Provides an inspiring environment that provides a sense of belonging and encourages collaboration, creativity, and mutual trust</td>
<td></td>
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<tr>
<td>3. Encourages our employees to share knowledge and expertise</td>
<td></td>
</tr>
<tr>
<td>4. Enables our staff to work any where, at any time, with any tool</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Enables our clients to realize their potential</th>
<th>5. We practice what we preach</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Inspires clients to put technology to work</td>
<td></td>
</tr>
<tr>
<td>7. Attracts and invites clients to live the Microsoft Experience</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Enables Microsoft to realize it’s potential</th>
<th>8. Provides efficient use of facilities, high performance and productivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Accommodates sustainable growth</td>
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Table 3: Nine Guiding Ambitions (Microsoft, 2006)

Different dialogues and brainstorms of TM in the first half of 2006 finally led to the decision to initiate the high-impact change program, the “2bPR change journey”. With the aim to create a new physical, a new virtual and a new mental organizational context that would support adoption of new ways of working and work styles that better suited today’s environment and knowledge worker. During these sessions the overall challenge was defined as “to develop a change program that will enable managers and employees to internalize the required behavior (to adopt the Digital Workstyle and adapt to the NWoW)” 39.

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39 Microsoft, Feb/ May 2006. Information from internal memos – endnotes send by GM to MT and participants after the sessions
Through TM some initial abstract vision of the changed organization evolved which was ready to be disseminated to stakeholders and other constituents. The first interactions and envisioning attempts only included the view of TM. A shift although was visible after it was envisioned and decided that the NWoW demanded an exceptional and new change philosophy, in comparison with the old schemata within the organization. In this way, TM agreed “to take leadership by being a role model and coach of the change”, but that the change program would be (1) managed organically, instead of being rigorously planned and (2) co-created by top management (TM), middle management (MM) and front-line knowledge workers (KWs) throughout the organization, instead of being a top-down controlled process alone⁴⁰ (See appendix 16 for initial visualization of this approach).

“That was what I truly believed in, the whole idea of building this new vision, for our organization and the way we work, together not just top-down” ~ Top Manager.

“As we had to admit we also do not exactly know where we are going, we needed an organic process... The world has become too complex, changes too fast. We are actually continuously building a bridge while we are already walking on it. We needed to recognize that management is not able anymore to have complete oversight and wisdom. They need to learn to better integrate knowledge from throughout the organization. This means there is as well a need for a different management style; to move away from a controlling management style towards one of freedom and trust. In general, but then of course especially for 2bPR. We cannot credibly convey the 2bPR vision of empowerment, but then not manage the change already in a different way” ~ Steering Committee Member.

“We tried to find out how to balance the roles and input to 2bPR in a two way direction, a balance where top-down and bottom-up processes would optimally coincide” ~ Steering Committee Member.

“For the bottom-up direction several ideas were discussed like the creation of change communities..., the use of “quartermakers”, the role of people managers, who to give a headstart in knowledge and how, organizing meetings with our people [middle management and front-line knowledge workers] and let them decide upon the outcomes in the three worlds, the required working scenarios, required training etc” ~ Steering Committee Member.

“We had this top-down direction and in addition we tried to think of and develop parallel bottom-up initiatives. Sometimes we first thought we [MT and Steering Committee] would do it but then later on in the process we thought it would be better to let people within the organization define the outcome and we would only be a facilitator of this process” ~ Steering Committee Member.

This two way direction for creating change was new for TM of Microsoft the Netherlands. Not all TMs were directly in favor of the new approach or felt comfortable. And some personal mental models of TM were stretched considerably by the new vision. “I have thought multiple times what am I doing, this is completely new territory and out of my comfort zone. I would have quit if [our GM] had not supported me” ~ Steering Committee Member.

“The route we set for our MT was quite challenging. I find myself comfortable with a strong feeling of control. The world changes although and absolute control is increasingly difficult to possess. Therefore we need to adopt new leadership and management styles of empowerment and increased self-steering. That is the vision, but then letting go of control is and remains unnatural and scary and then to do it voluntarily was very difficult...” ~ General Manager.

⁴⁰ Microsoft, Feb/ May 2006. Information from internal memos
“I find myself quite comfortable with this kind of “Akela” management style. Standing in front of the troops and telling them now we go 5 minutes straight, 3 minutes to the right... And then suddenly you have to co-create?” ~ Top Manager.

“At some moment I walked outside and called [a relative] crying, ‘what am I doing here, there is no direction, essentially they tell me they do not know where we are going, where did I end up...’ ~ Top Manager.

Several MT sessions and brainstorms took place to agree upon guiding concepts and decrease anxiety for the change and support adaptation. Agreements were send to MT members after each session:

1. The MT needs to internalize the behavior and competencies of the new way of working;
2. Needs to take the lead in facing the change;
3. Change communities will be formed around MT members;
4. By doing this opinion leaders will be confronted with the new leadership style and sustain that new culture;
5. MT and opinion-leaders need to proof how technology enables people. Be*Do*Say;
6. The MT and Steering Committee need to make 2bPR more concrete by describing behavior, values and work style principles and decide upon the decision making process;
7. The MT agrees upon letting employees maximize in sharing the process, (f.e. by blogging), but with ‘sufficient’ control-levels to keep the storyline coherent;
8. And agrees to ensure that in phase bèta 1 [see figure 11] there will be more co-creation instead of explicit guidance.

Figure 11: Co-creation - From Management Team (MT) to Change Communities (CC) and the Collective

Although it was believed the vision for change had to develop organically and be co-created throughout the organization TM still set initial objectives as parameters and measurements of success of the “2bPR change journey”: (1) really internalizing our mission (Realizing Potential) and vision (New World of Work), (2) increase collaboration within our company and with our customers, partners and co-creators, (3) be the most admired employer in the Netherlands, (4) be a showcase for productivity, (5) be a showcase for work-life balance, (6) be a showcase of The New World of Work and (7) ensure sustainable future growth (>10% YOY) with limited cost-increase (<5% YOY) (Microsoft, 2006c). (See appendix 13 for more info on the goals and context for change and appendix 14 for more info on the co-creation phases of figure 11).

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41 Akela = Dominant wolf and troop leader in Jungle Book from Rudyard Kipling (1984) and Mowgli, Walt Disney animation.
42 MT February 2006, Written Information from the GM
43 MT May 2006, Written Information from the GM
The Vision of Organic Co-creation and Empowerment – The Top Sharing the Coordination Role

Based upon the vision of organic co-creation TM delegated responsibility in several ways. The first action was the establishment of a Steering Committee (SC) for the 2bPR change journey as formal mechanism of empowerment. This SC was established June 2006 and consisted of TM (the GM and several MT members), MM and, in some occasions, front-line KWs and experts44 (see the signaling paragraph for more details) and functioned as a coordination mechanism for integration of sensemaking and sensegiving to influence and extend the vision for the 2bPR change journey and emerging mental schemata and outcomes.

The SC connected TM, MM and KWs and provided MM and KWs a platform to get innovative proposals to TM and to provide information on the change. Several MMs and KWs provided important information about the current state of Microsoft and its organizational context. Increasingly MM and KWs throughout the organization were engaged in a common process of making sense of a vision shared by all members of the organization. And the results presented from the deliberations of MM and front-line KWs gave input to the SC to further define the vision, design change interventions and better understand the implications of the change for the business. Expanding on the MMs’ role in the envisioning phase, they were both synthesizing information and championing alternatives to the SC beyond the normal hierarchical lines. In addition, through the format of the project groups the championing and synthesizing roles could also be taken by front-line KWs. The SC in this sense opened up room for employees throughout the organization to contribute to the envisioning process and later the re-visioning and energizing. “It was very important at that stage to get the view of managers outside of the MT as well and to let these people run meetings and projects to further develop the vision and implementation of 2bPR” ~ Top Manager.

“It was not from day one that the MT had a clear picture about the vision, how to frame and signal the vision and create a new organizational context and workstyle. Instead, these concepts developed gradually where the MT and SC aggregated and reflected upon signals and ideas coming from the organization and the world around us” ~ Top Manager.

Three project leaders, one for each organizational context (physical, virtual and mental), were asked to envision and design a project plan for further development of the visions that were until then only developed by Microsoft Corporate and TM (GM and MT) and a plan for implementation. These plans included perspectives on the envisioning of the groups and clarified roles, interdependencies and outcomes: “To define how the Virtual World will look like for Microsoft Netherlands, we will describe how different people with different roles will do different kind of work. We will develop so called ‘persona’s’ (archetypes) and ‘scenario’s’ (activities)… Dependencies towards the Physical and Mental world are huge: Managing dependencies needs to take place in the Steering Committee (where the majority of the stakeholders is represented) and in the so called Focus Groups where representatives of the organization will take place to implement the Virtual World. The representatives (or ‘change agents’) will have the tooling to define the dependencies and how to deal with them… a successful implementation of the Virtual world
(work-environment) depends on the level of acceptance within the organization and therefore especially on the involvement of the management to actively stimulate a new way of working and on both the Mental and the Physical projects to create the right environment and stimuli45. In addition, just like in the old schemata phase, ICT enabled KWs to directly influence the envisioning of TM and SC as well by providing the opportunity to blog about 2bPR or provide opinions through company-wide surveys.

4.3.2.2 Signaling and Re-visioning Phases I

The signaling and re-visioning phases were characterized by broader communication of tacit and explicit knowledge (Nonaka and Takeuchi, 1995). Signaling (the vision for) change to the wider organization was done in many ways: formal, informal, company and business unit meetings, gossip, stories, published interviews with Microsoft leadership about 2bPR and the New World of Work, presentations, visualization, role model behavior, coaching, in multiple groups, at multiple layers of the organization and at different times (See appendices 17 and 18 to see some of the summary tables or visualisations of interventions to signal change developed during 2bPR). When sensemaking triggers were constituted by new practices that were not yet understood by employees, this created a noticeable insecurity within the organization and a lot of questions arose. Feelings of uncertainty were about the process of the change and the personal and social consequences of the change (see also Buono and Bowditch, 1993). By way of sensegiving, especially from the GM, MT and SC, knowledge entered the organization and was not only a pre-requisite to the ability of influencing the outcomes of changes, but knowledge about the motives for change also reduced uncertainty and created readiness for the change during the signaling, re-visioning and energizing phases. In addition, the possibility of uncontrolled rumors spreading throughout the organization resulting in a high variety of personal interpretations was largely avoided by sending many fragmented and several strong sensegiving signals into the organization directly from the beginning (see also Larkin and Larkin, 1996).

**Fragmented Signals of Change from the Top**

The envisioning phase at Microsoft did not end abruptly but gradually as an increasing number of sensegiving signals were send into the organization that triggered sensemaking and re-visioning of

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45 Internal document, Visual World First Conceptual Plan
organizational members by questioning existing mental models and behavior. The signaling phase started when TM (GM and MT, and later the SC) send sensegiving signals into the organization in a highly fragmented way mainly through vertical processes of personal interaction and means of mass communication. Fragmented and informal signaling was done from TM to their business units and on a one-by-one basis. Through these interactions several people received direct information and were coached by members of the MT about the change that was coming at the same time that these MT members themselves developed their understanding of the vision for change and were changing their personal behavior. In this way, mainly at the top of the organization, part of the signaling and re-visioning phase already took place concurrently while the envisioning phase had not yet ended.

“2bPR began 2 to 3 years ago for me… I was shocked to find out that some people were not even aware where we were going. Now I understood [a SC member] when she was talking about accelerating the change…” ~ Middle Manager.

You directly see which MT members are enthusiastic about 2bPR and able to integrate the concepts. This is directly linked, on a 1-on-1 basis, to the integration [success or failure of 2bPR] in the Business Unit ~ Top Manager.

Increasingly small elements of the vision were signaled, discussed and re-visioned via the SC, its project groups and “quartermakers”. In this way a growing number of employees encountered sensegiving signals and started social processes of interaction where they tried to make sense of the differences between what was communicated and existent mental models. And new shared meanings, ways of thinking and behavior were triggered within different groups and individuals at different times.

**Strong Signals of Change from the Top – Institutionalization of Formal Mechanisms**

The signaling phase officially took off mid 2006 when TM communicated the establishment of formal mechanisms of empowerment for the coordination and implementation of 2bPR (SC and “quartermakers”). Especially the firm legitimization of a structural component of the organization such as the SC was a very powerful symbolic signal that conveyed to stakeholders that the new vision instigated by the new leadership was institutionalized into the organization.

“The formation of the Steering Committee was an important signal that change would come. I was glad several MT members participated in the Steering Committee. And especially that [the GM] agreed to coordinate and head the Group. In this way all information that came to the project leaders from throughout the organization directly reached him and several other members of the MT. This direct link was seen as very important. In addition, [the GM] heading the Group was a clear signal to the organization of the importance of 2bPR” ~ Steering Committee Member.

[The MT] did not want it to be a top down enforced change, it would not work. Doing coordination together [including MM] in the Steering Committee was a strong signal of the change that we wanted… Finally the idea was that as much people as possible within the organization should contribute to the change. And that they knew they could” ~ Top Manager.

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46 Change agents, selected role models and opinion-leaders throughout the organization, see later this section for more in-depth insights
The establishment of the SC was ratified by the GM through a document that provided initial guidelines on the ‘why, what and how’ of the 2bPR journey and functioning of the SC. The document signaled several parts of the vision directly and several indirectly. Indirect signaling of the envisioned change outcomes in the mental context (changed leadership, management style and empowerment) for example happened through already expressing the way the change would be managed in empowerment terms: ‘the Country Leadership Team (CLT) is end-responsible for 2bPR, meaning making sure that the total transformation takes place. The CLT delegates the operational and daily management of the transformation to the Steering Committee, which consists of a subset of the CLT and the project managers of the three project groups’. Also “the financial responsibility is within the project groups and is controlled by the Steering Committee”.

In September 2006 the first Steering Committee meeting took place, after then every couple of weeks (see appendix 3). During the first meeting top management (GM and several MT members) and new members (MM and KW) engaged in several processes of sensemaking and sensegiving. The GM and MT members tried to direct the change by signaling their vision through presenting background information on the previous decision-making processes regarding 2bPR. The different project leaders presented their draft project plans based upon consultations with TM, MM and front-line KWS. “The Steering Committee was very helpful in establishing and accelerating information and knowledge flows throughout the organization” ~ Top Manager.

“By being able to discuss the issues raised or concepts agreed upon by the Steering Committee, with your own team, but also with colleagues throughout the organization in between those meetings, we were able to integrate the ideas of people throughout the organization in how we defined outcomes for the change, the interventions during the change etc.” ...

~ Steering Committee Member.

Another strong signal perceived by the organization was the communication of 2bPR at the Microsoft Annual Meeting in January 2007. This was the first time 2bPR was communicated to the whole organization. Microsoft’s TM and SC members communicated the change philosophy of “organic and co-created change” and signaled that input from employees was expected. In addition exact goals, expectations and timelines were not communicated. Organizational members were not used to this kind of management and reactions ranged from insecurity, disinterest and distrust in management’s capability to lead the change to curiosity and excitement.

“I think it is really cool, I feel we are gonna make a huge change”

“If I can really get more freedom in my work I am sure it will benefit me and my team”

“It is all quite vague, I am not really sure where we are going to, do they [TM and SC members] know themselves?”

“I don’t care as long as I have my parking place close to the office”

In addition, communication and behavior from TM and especially the GM were perceived as highly clear and visible signals into the organization. Over the course of the “2bPR change journey”

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47 Internal document, June 2006, The Transformation with Codename 2bPR
48 Since these quotes were collected randomly directly after the presentation job positions of these Microsoft employees are unknown, probably most of them were KWS.
communication from the GM was followed by many Microsoft employees quite closely. Three kinds of sensegiving signals from the GM were reflected upon by Microsoft employees that evidently influenced the change of mental models and behavior throughout Microsoft the Netherlands and themselves. The first category of sensegiving signal were associated with communication of the vision and the changing and progressing insights of the GM over the course of the 2bPR change journey upon this vision. The second category of sensegiving signals were associated with the communication of personal difficulties the GM encountered himself when implementing the behavioral changes that the vision required; the difficulties of his change in leadership and management style, of letting go of control, effective adoption of new ways of working, the Digital Workstyle etc. These signals had the effect that Microsoft employees felt psychologically safe to experiment with their own behavioral change. And, in addition, that it was better understood when TM, especially the GM, communicated a vision that was still different from their behavior. The third category of sensegiving signals were the observable behavioral changes of the GM that he successfully implemented in line with the vision, like his changing leadership and management style and working routines. “Over the course of 2bPR you saw [the GM] changing the way he managed his work style by starting to use blogs and other technology, that was crucial for the change, even now when some MT members didn’t” ~ Knowledge Worker.

There was nothing more crucial than the role model behavior of TM, especially [the GM] on adopting the changes they communicated themselves ~ Knowledge Worker.

That [the GM] really believed in this and that he was willing to reflect upon his behavior was really inspiring and crucial for the change to take place” ~ Steering Committee Member.

He [the GM] believed in me, gave me freedom…” ~ Steering Committee Member.

Sensegiving signals of the GM were encountered in person at meetings, lunch, presentations or via means of communication such as blogs, e-mails and several magazines and newspapers. “A lot of people do not have problems to work a couple of hours on a Sunday, but have problems to go to the cinema on a Monday. [To give space to your employees] it must then be accepted within an organization to sometimes leave early on a normal weekday. [2bPR] goes much further than teleworking” ~ General Manager.

“What will place and time independent working mean for the way we work, the way we cooperate, the way in which organizations are led, the way a leader leads and a manager manages? The crux is with us people. I can tell or write for hours about this journey [2bPR]. So interesting, and so valuable. But what have we learned until now? A looot. From the falling and the rising. And we still learn every day. On many different areas. A few things that cross my mind.

First of all, virtual cooperation seems ideal. But apparently there exists a physical minimum. A minimum for face-to-face encounters that are necessary to still cooperate effectively. This differs per team, per type of project or assignment. If the physical minimum has been found, then the virtual optimum is known as well. Because in the rest of the time you can work wherever you want. And at every moment you want. The most difficult meetings, regarding format, are the ones that combine virtual and physical. A few people sitting together, and a few that call in, or are present via videoconferencing. In a lot of cases are the virtual attendees seen as interruption when they say something. It requires additional agreements to let this work. And familiarization.

~ Interview Theo Rinsema, General Manager of Microsoft the Netherlands, 11-12-2007, Volkskrant Banen
Then leading. For how many managers is control the most important means? If, in addition, the physical presence of the employee is important for the manager as well, it is very difficult for the employee to arrange her/his workhours flexibly. In the New World of Work the manager shall have to change as well. This of course corresponds with other developments; the globalization and individualization of society requires different organizational forms with different steering principles; from commanding to self-steering; from operational control to giving personal space (and of course assess and evaluate on the created output)\textsuperscript{50} – General Manager.

**The Loop of Interaction – Formal Mechanisms of Empowerment**

At Microsoft the idea behind the co-creation of change was partly based on Homan’s (2005) theory of “clouds of meaning”\textsuperscript{51}, where opinion-leaders throughout the organization are connected to envision the change together and individually effectuate and inspire change in their following or network (so-called “petri dishes”). Along this line the SC was set up to coordinate the change and design interventions and events that would influence sensemaking, sensegiving and knowledge sharing and creation throughout the organization and strengthen and accelerate the loop of interaction and change between TM, MM and front-line KWSs and throughout the organization. In addition, several other groups were identified as potentially important change communities and change ambassadors; People Managers (50-70 people), “quartermakers” (30-40 people), buddies, floorwalkers and staff@MSFT (735 people) and for each group different roles, communications objectives, key messages and resources were set (see appendix 15).

**SC Project Groups ‘Physical-Our Place’, ‘Virtual-Our Tools’ and ‘Mental-Our Journey’** – The three SC project group leaders of the physical, virtual and mental groups were empowered to find out how to successfully envision and implement their part of the 2bPR grand strategy to reach alignment to the ‘New World of Work’ and facilitate adoption of new working styles. According to the vision of co-creation as much knowledge and opinions of employees as possible had to be integrated into the development of the vision and implementation. The SC targeted this mission by providing presentations to all Business Units, setting up focus group meetings, brainstorms, 1:1 conversations, amongst others to collect input in order to be able to\textsuperscript{52}:

1. Further develop the vision for their part of the organizational context as part of the overarching visions;
2. Understand what interconnections there were with the other two organizational contexts;
3. Develop content that, if communicated, would facilitate Microsoft employees to adapt to the changing organizational context, to become part of the change and to more easily adopt new work styles;
4. Develop interventions to facilitate these processes as well.

People throughout the organization were invited. Normally TM was not present, but often MM and front-line KWSs and most input was generated bottom-up. Through these interactions the vision, implementation path, material and training were further developed in a way that appealed to

\textsuperscript{50}Internal information, Blog of the General Manager of Microsoft the Netherlands, Theo blogt 16-6-2007 \textsuperscript{51}Betekeniswolken \textsuperscript{52}Based upon meetings of SG. Spring 2007.
Microsoft’s employees and created the highest an impact on the organization. In addition, by involving an increasing number of Microsoft employees knowledge was build about the change and slowly more people within the organization started reflecting upon their own works style, communicating with colleagues and their managers and sometimes even already changing their mental models and behavior.

<table>
<thead>
<tr>
<th>Physical</th>
<th>Virtual</th>
<th>Mental</th>
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<tr>
<td><strong>Main Aim</strong> – Physical context that optimally facilitates each specific knowledge worker activity.</td>
<td>Be<em>Do</em>Say, “Be-do-say is important to realize the potential of ourselves within Microsoft, but as well it enables us to sell it to the customer with higher credibility. Why would clients buy our products if not even all Microsoft employees are using them?” Project Leader Virtual.</td>
<td>Enable colleagues to internalize the required behavior to bring 2bPR to a success and to adopt new ways of working. Be<em>Do</em>Say and Give Space, Take Space. &quot;Technology is available. We have to adopt our habits to boost productivity&quot; Friedman (2005)53.</td>
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| Decision-making Themes – Design of the entrance, type of working places, type of meeting points for knowledge exchange, furniture, coffee corners, restaurants, parking places, hospitality management, teleworking | Which tools to use when, which tools not available, integration of tools, scenario’s for work, persona’s, influence and interdependency of ICT on physical and mental contexts | How to change mental models, what events and communication is effective, what training is needed, where does mindset differ from behavior, how to increase feedback, culture, values, norms, rules of engagement |

| Most Important Changes/ Old to New Mental Models – From individual workplaces to shared ownership; Specific workplaces for specific work activities (f.e. concentration room; meeting spaces); Enabling working everywhere, anytime | Better facilitation to reach Microsoft’s mission of realizing potential by understanding criteria that influence successful creation of software and that enable integration in behavior and work style: 1) Employees better enabled to understand optimal use of Microsoft products. 2) New Microsoft’s products and processes should be designed around human activity and effective communication patterns. | New mental models and behavior. Changed leadership and management style – from “command and control” to “coordinate and cultivate”54. Empowerment to influence 2bPR decision-making. New working routines. New communication patterns and behavior. Better use of ICT and increase of virtual/ digital work style. |

| Main Inputs – Microsoft Activity Based Working research55; Veldhoen and Company research (2005); Interaction with Microsoft Corporate and Financial Division; Architect Sevil Peach | Microsoft Activity Based Working research; Scenario brainstorming and development sessions; Outlook integration efforts; Feedback from interaction with partners and clients | Continuous sensemaking and sensegiving throughout the organization and from clients and partners signaled back to SC and Mental Group Leader |

| Main outcomes – The New Office; Better support for working outside the office | Scenarios; Training; New software development | Room for Growth Day; Change in mental models and behavior (culture); Higher adoption of Digital Workstyle; Changed leadership and management styles; Improved self-steering and self-insight |

| Design Flaws – Before the move to the new building the urgency and tangibility of this theme decreased the in reality needed attention from the other two contexts. | Several training still considered old-fashioned – no complete integration with mental needs; 1:1 coaching still mainly voluntarily, instead of related to KPIs or MYCRs56. | Mainly at the beginning, mental sensemaking and sensegiving considered to be a closed activity, driven by only a few. Improvements recognized later on. |

Table 4: The Work of the Steering Committee57
The interdependency between the groups was increasingly recognized, especially between Virtual and Mental and more meetings were organized together. An example of themes discussed between Virtual and Mental were the scenarios, for example “Effective Meetings” or “Effective E-mail”. During co-organized brainstorms future working scenarios were developed that would serve as a guide to Microsoft employees on best practices of technology use in combination with expected behaviors.

Several scenarios are under development to uncover the optimal use of our tools for our most common activities... To become a People-Ready business more insights should be generated in... activities, best practices should be found and eventually new tools within the 2bPR scope should be designed to produce immediate efficiency gains... We arrived at these scenarios by using the data from measuring work activities to find topics for brainstorms. The shared knowledge and experience from these brainstorms was used to develop the scenarios and eventually design new tools” ~ Knowledge Worker.

While brainstorming about these scenarios several important sub issues were discovered where Microsoft employees agreed they had changed from the previous traditional work environment, but where mentality or behavioral adaptation lacked behind, conference and video calling being amongst the most important.

“Callers are often still seen as intruders. They break up the meeting. The person leading the meeting or other attendees do often not yet have the skills or experience to effectively interact with these persons” ~ Knowledge Worker.

“We need to be more clear when it is possible to call into a meeting and when not. I mean if we have a brainstorm like now, I actually do not believe it is effective to have someone calling into the meeting. During brainstorms you often have these kind of mindflows around the room. We should make differences in the kind of meetings” ~ Knowledge Worker.

The persons present thought: I have faced traffic this morning, but apparently you did not believe this meeting was important enough. By communicating these things and by making rules about calling in – for example not from your car – mentality changes”, General Manager.

Through the formally designed intervention and interaction moments knowledge was exchanged and generated that adjusted the initial expected results of 2bPR and the vision on how to implement. Execution of this process was left to the three project group leaders, MM and front-line KWs. Input and outcomes of formal and informal social interaction processes between the 3 strategic groups, management and Microsoft employees were evaluated monthly at SC Meetings and presented at MT meetings. If a special topic needed more discussion, an extra SC meeting was planned, or managers, employees and experts were invited to present. When influential decisions needed to be taken more rapidly these were presented to TM during MT meetings for final approval and guidance. Input for the re-envisioning in this way came from TM, MM and KWs and the information was assembled and coordinated during formal and informal moments of interaction throughout the organization. Through these sessions, MM and front-line KWs became more involved in the sensemaking and sensegiving processes that guided the direction of the change that was developing at Microsoft the Netherlands.
“I really liked to participate, it almost felt now as if I had personally created the whole building and I designed all the new tools. I was so proud when we moved there” ~ Knowledge Worker.

“Within our group [Virtual] we had many brainstorms and meetings, established wiki’s and received good input from many colleagues that finally formed the scenarios, workstyle test and many more input to the change. We were a very pragmatic group and therefore a lot was done” ~ Knowledge Worker.

“I directly adopt all new technology, it is my passion. But it is very frustrating then to work with people that do not adapt and actually frustrate complete meetings or conference calls because they do not understand how to use technology or to communicate when not being in one room with you… This brainstorm about effective meetings was really inspiring. New technology gives so many new options for communication” ~ Knowledge Worker.

The Quartermaker Sessions – Quartermakers were defined as “colleagues with a clear view and with their own following (petri-dish) who are considered opinion-leaders and frontrunners in the organization” and “change agents that consist of peer recognized as well as critical employees”. They were chosen from within the organization based upon their nomination as role model, their support for 2bPR and willingness to contribute and to become a change leader. The “quartermaker” sessions were organized end of 2006 and were of a mixture of sensemaking and sensegiving on the 2bPR visions, specifically the vision of the Digital Workstyle and empowerment exchanged by top management and the selected “quartermakers”.

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### Sensemaking and Sensegiving Signals of Top Management [GM and SC]

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<th>This is about breaking dogma’s:… The goal of today is to come from an abstract level to concrete actions. Have we consciously chosen for an organic way? Yes. It is scary to let go, but it is the only way from the culture that 2bPR demands. We are all committed, ambitious, highly educated people. The future is uncertain; the goal the same. It will be a adventure journey for everyone. I invite you to do it with me.</th>
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<tr>
<td>Personal productivity is only one thing (can you work with the software). What I try to touch is the interaction between mental models/organizational culture and technology. With which frequency do we have to be together to have enough trust that we as well can work together virtually? What is the physical minimum? What is the optimum?</td>
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<tr>
<td>This project is important for Microsoft. I now have the feeling that it is in safe hands: that it has been transferred to a bigger group instead of only a small project group [the steering committee]. Lets start with sharing experiences!</td>
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### Sensemaking and Sensegiving Signals of Middle Management and Knowledge Workers

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<th>Do we think that technology does what we think it should do? No, we think that it does not enable us yet to realize the mental world. A carpenter has a toolbox and learns to work with it. We have laptops with software programs, but do we learn how to work with it: &quot;you get a link and help yourself&quot;. &quot;We are not even able to take advantage of all technology we have ourselves. With all we have we could do som much more then we do now, but we do not do it. [2bPR] Initiatives are now very marketing related. We do not need training, classes etc, we need instruments to bring knowledge to our own work situation.</th>
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<tr>
<td>There is a barrier. When I cannot be there because of the children and I call in, I prepare by email. But I notice this does not work optimal, we are also not yet able to do this. If we take a look at the increase in traffic and other restrictions to mobility, we will have to in the future. But there are a lot of defense mechanisms, barriers etc.</td>
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The Loop of Interaction - Envisioned Empowerment and Clashes with Old Mental Models

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59 Homan (2005)
60 Kwarterma·ker (de “(m.)): 1 militair die vooruitgezonden wordt om voor onderdak te zorgen. 2 iem. die belast is met de voorbereiding, de organisatie van iets geheel nieuws
The work that was done by the SC and the transformational leadership style of the GM of Microsoft the Netherlands ensured the organization progressed through the 2bPR change journey rather successfully and organizational members were increasingly engaged in sensemaking and sensegiving that was related to 2bPR and adopted new mental models and behavior. The change although was radical on many aspects and had to affect and alter deeply ingrained mental models and behaviors of employees. This meant old mental models and behavior (theory-in-use) clashed continuously with new mental models (espoused theory) (Argyris and Schon, 1978). In addition, since the formal mechanisms of empowerment were initiated at a time when the old mental models and old behavioral routines were still quite prevalent these mechanisms did not operate optimally directly from the beginning which sometimes inhibited or frustrated progress. This intensified through the new approach of co-creation – where largely bottom-up development and top-down leadership role modeling and reinforcement were rebalanced.

The Steering Committee Courageous’ Fight of Rebalancing Power and Ownership – Although the SC had received ownership and project groups throughout the organization had engaged in designing the change interventions, leadership was still expected to role model and reinforce and communicate the vision and change throughout the organization. At several instances although the new empowered approach appeared to encounter new opposition as the organization encountered lacking ownership or in-depth knowledge of TM for the co-created developments. In addition, several MM and KW throughout the organization questioned in how far TM was already living the vision themselves, especially the one of empowerment and were often stuck themselves in their own old mental model of not taking initiative or responsibility for driving progress of the change. MM and KW did not always feel informed and many suggested increased use of technology could have solved the communication and knowledge gap.

“The current plan relies completely on a top-down approach for implementation of the scenarios. Their success is thus completely dependent upon MT commitment. The MT although is not enthusiastic about a leading top-down role” ~ Internal Status Report61.

“That the Steering Committee was formed was a good first step. The way they operated although, especially in the beginning, was quite distant and up in the clouds. It was quite difficult if you were not close to them to understand what they were up to. I am not sure about others, but many of the decisions they took did not really reach me. This improved later on. But I believe if you really want input from throughout the organization more communication on the process should happen directly from the beginning. Technology can be easily used for that...” ~ Knowledge Worker.

“I heard that I could contribute, but really did not know the topics; they were not communicated to me. I could have gone to [one of the SC members]. But this was too much of a hurdle.” ~ Knowledge Worker.

“I am not sure why they [SC] did not establish wiki’s and send out e-mails to ask for contributions and ideas on specific topics. Or did they do that...?” ~ Knowledge Worker.

“Yes we [MM and KW] could decide about the coffee, but strategy? Not really…” ~ Middle Manager.

“I believe we [SC] could have communicated better on the process. But you are so involved in already quite a major mental and behavioral shift for yourself and figuring out how to communicate what you are going through towards others that the final communication and implementation then sometimes suffers”, Steering Committee Member.

**Quartermakers – A Promising Start** – Although the “quartermaker” session itself was considered a succes, action points were made concrete and several quartermakers volunteered to drive key programmes within 2bPR, the formalization of this group as change leaders and role models did not effectuate in the period that followed. Again the willingness to empower was there, but behavior on both sides was still according to old mental models. This resulted in a design flaw of incomplete transfer of responsibility and empowerment and lacking legitimization and support by resources and information from TM and lacking initiative and push from MM and KWs.

A SC member remarked: “If I reflect back upon what we decided, that the quartermasters would be the ones leading the change, because they had been nominated for their frontrunner position, I think the approach did not work… Maybe we should have supported them better, didn’t we give them enough material to work with?”

Quartermakers confirmed this assumption: “We received the opportunity/ responsibility to further develop this vision of 2bPR and to inspire peers throughout the organization, we although did not get the resources” Middle Manager.

“The idea of quartermakers was great. The implementation not. Not that they [MT and SC] did not want to make it successful, we [Microsoft the Netherlands] are just not used to organize things this way. Organizationally everything is really strict. No financial results? Then it is on top of everyone’s work and well… In addition, they communicated empowerment, but did not share the information we needed on a consistent base. No unwillingness. You really saw they believed it and the first session was a very inspirational start. But again, they had never done this before and so there was no continuation” ~ Knowledge Worker.

“Actually I think not the right people were selected, some of them yes, others? No, there would have been a lot of people I would have seen to be more suitable as a role model” ~ Knowledge Worker.

**The Unrealized Ambition of Closing the Loop – The People Managers Gap in the Middle** – The same tension of willingness and espoused theory (Argyris and Schon, 1978) for new mental models, but behavior still according to old mental models was evident with the empowerment efforts regarding People Managers. In December 2006 a slide was posted on the closed on-line portal for the Steering Committee called ‘Closing the People Managers Gap’. It recognized a “possible information disconnect of People Managers” that could create a “slow down due to information lack when ‘quartermaker’ activity starts”. Several activities were listed to close the gap all dependent upon MT communication and role model behavior and experience and the start of a cross sub People Managers leadership dialogue was suggested. During several Steering Committees this topic passed without real clear intervention. Increasingly, People Managers started noticing the information lack, especially when some of their team members engaged in the ‘quartermaker’ sessions and Steering Committee Project Groups.

“I need to coach them but they know more than me” ~ People/ Middle Manager.
“I feel not up-to-date. There are things going on here and I get questions and I don’t know how to answer them” ~ People/Middle Manager.

“I actually suggested [to a SC member] that I would like to share my experience as I had started MBTI in the sub and was working with my team on other topics related to 2bPR, but there was no real reaction” ~ People/Middle Manager.

“The people managers on the other hand [compared with Quartermakers] received a very small role in the beginning, we defined their attitude as something like trusting the quartermakers to lead the way in the transformation and we expected them to motivate their team by experimenting and changing their own leadership style. With hindsight we should have given these people managers a much larger role” ~ Steering Committee Member.

“With some people managers I am not impressed, I mean I actually sometimes understand the SC and MT that they do not let this group do it. If they get a more prominent place. I do not say they shouldn’t, but then you have to reconsider some of them. And have better selection or criteria in the future” ~ Knowledge Worker.

Last Minute Re-Alignment for 2bPR Energizing Phase and Event Theme

Although the struggle of rebalancing new roles, power and mental models with old schemata was recognized by the SC and several organizational members it took considerable time to design interventions that facilitated improvement. And it became the theme of the first main intervention as part of the Energizing Phase – The Room for_Growth Day themed – Take Room, Give Room. This day aimed at bringing together all Microsoft employees for sensemaking, sensegiving, knowledge exchange and creation to inspire and accelerate awareness of mental models and behavioral change.

In addition, considerable attention was paid to update MM and TM about the impact of re-visioning on 2bPR that had been coordinated by the SC in a fragmented way throughout the organization.

“Training before the event was done at two levels: MT level and People Managers. We had recognized we had not given them enough information before. But believed it was crucial to give them this head start before organizing a big event to let the whole organization discuss 2bPR... Since the idea was that management should lead by example and coaching....” ~ Steering Committee Member.

People Managers Meetings62 – During August 2007 several People Manager meetings took place. The meetings were an introduction for some People Managers, for others a refreshment to the 2bPR visions, the role expected of people managers during the Room for_Growth Day and afterwards and to the schedule and format of the Room for_Growth Day. “As People Manager you are expected to play an active role. Today we give you a head start and we ask you to take concrete action for one of the sessions of September 6 [Room for_Growth Day]” ~ SC Member.

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62 Internal Presentation, People managers training, 23-08-2007
During the discussion and question round it was noticed that knowledge about 2bPR differed highly throughout the group of People Managers. And the differences between the understanding of the concept for the SC members presenting and the People Managers was even higher. Much insecurity existed, many questions were posed and only a few seemed to understand the issues better. In the “people managers” meetings the changes and expected results from the teams were discussed. These meetings served as sensegiving and signaling processes, but as well as moments enabled people managers and their teams to express their thoughts and concerns with each other and make sense about the impact. It also enabled feedback to the steering committee and top management and were necessary to lower the level of insecurity and motivate “People Managers” to move beyond anxiety to the opportunities presented. Almost surprisingly several of the few People Managers that had been aware of 2bPR, but had been skeptic before started to play the role of 2bPR ambassadors and refute the skepticism of colleagues:

“I really don’t know what I should do with the concept. Can I just get some clear guidelines on what you expect. What should I discuss with my team? I mean I am not gonna give them a vague story I even myself do not get”.

“What about KPIs. OK if I decide I want to have time with my team to discuss this, not on the RfG Day but afterwards or before, then a question is when? We have our targets, so if I have to make time available for this, do I then get this reflected in a new performance appraisal?”

“I was just like some of you quite sceptic about the concept and did not really know what to think about it. But that has been months ago and the more I think about it, the clearer it gets. 2bPR is not a change that has clear goals as it regards self development and adapting your work style to better suit your personality and life and thus become more productive. I don’t know what goals I should set, not even for myself, how then for my team. But instead of demanding clear goals form the SC or MT for this vision, just like my team did, I am not in the mindset that I like the vagueness, it gives a lot of room for interpretation that fits me, that is People-ready”.

MT Training – In August also MT members took part in training aimed at updating them about the progress on 2bPR, to remind them of their role in the change (role model and reinforcement) and to provide support to perform this role during the upcoming Room for_Growth Day. Every MT member gave a short reflection on 2bPR since the start more then a year ago. The concept and processes of mental models were explained related to the experience of MT members. In addition, further insights were given in the role of MT members during the Room for_Growth Day to lead fishbowl dialogue sessions that aimed at starting and accelerating mental change of individuals within the organization. And the MT was informed about the role of People Managers during the day. The SC member leading the workshop reminded the “organic and co-created” approach:

To Think About:
- Change is stressful. By nature, we’d rather stand still.
- It’s good for people to stand still for a moment, think the change over and define their position.
- That’s why we’re asking you to get yourself mentally prepared, to recognise your own “still moment” and to be able to actively name it.
- Be aware that if you have the power to get moving on the 6th of September
- And
- You make the 1st positive step towards the new work, you will thus create “Energy” for your environment

-
“As envisioned 2bPR is an organic process. We aim to integrate the input from our colleagues in how we will implement 2bPR into the organization and this input develops only over times as it flows back and forward throughout the organization. Although this way of organizing the change brings many difficulties it ensures a common understanding about 2bPR that we believe will improve the outcome of this process and will provide crucial insights in how Microsoft employees believe they can successfully internalize the required behaviour to adopt a Digital Workstyle” ~ Steering Committee Member.

4.3.2.3 Energizing Phase – Room for_Growth Day

**Building Tension – Tests, Gossip and Shared Experiences**

During Spring and Summer 2007 the main focus of the SC and the different project groups was upon the design of the company-wide event in September (the Room for_Growth Day) and intervention, training and communication cycles before and after the event that served as signals to the organization of the change to come, to inspire and energize employees to take an effort to change and to let the whole organization surface mental models and have dialogues about what would be expected and how far to change.

“The Room for_Growth day is the outcome of all the work and thinking done by employees throughout MS during the last couple of months, and of us as SC to assemble these thoughts and give them back to the organization in a more structured way” ~ Steering Committee Member.

“The Room for_Growth day is meant to discuss the 2bPR journey, the outcomes we expect and the different roles and actions that are expected from all Microsoft employees in this journey” ~ Steering Committee Member.

“I worked on the work style test and scenarios, the outcomes will support the dialogue we will have [during the Room for_Growth day and afterwards] about each other’s work style and the way we cooperate. The idea is that sharing best practices and agreeing upon some procedures will improve the way we work” ~ Knowledge Worker.

To prepare Microsoft employees for the Room for_Growth (RfG) Day and increase tension, excitement and energy several communication and intervention materials were designed by the SC and project groups. Through several tests and measurements (personality survey, workstyle test, homework) everyone received a personal 2bPR explanation and homework questions (“f.e. think about the reason(s) for you personally and Microsoft that is the foundation for this change (possibilities/resistors”) to reflect upon before coming to the RfG Day. These functioned as attention-focusing stimuli and supported prior sensemaking and social interaction processes of sensegiving before the RfG Day took place by providing employees common and shared experiences. Although a small minority as well
communicated to not appreciate several interventions and questioned their necessity, even this negative questioning increased the overall level of stories and gossip and had a positive effect on pre-sensemaking bringing real questions and difficulties to the foreground. And excitement increased for the majority of employees. The content of messages was also targeted on increasing the readiness for change and acceptance of change. By leaving open to what people should change and to what extent, although again bringing the more negative attitude and feeling of uncertainty, actual direct resistance did not occur and employees throughout the organization mentioned to be open for the experience. Based upon their learning style the Diplomats\textsuperscript{63}, for example, received a paper:

*The new way of working, in which life and work often overlap, will maybe be for you the most natural. For others it will really be a turning point. Therefore you can help them. By inspiring them, by being an example. By showing them how it should be or can be, by talking about it. And by getting them back on track might they fall back on old patterns. You can do that, as no other. And we hope, well actually, secretly we count on you, that especially you will make a stand for it."

In addition the SC and project groups defined several targets, expected outcomes and the format of communication for the RfG day:

<table>
<thead>
<tr>
<th>Targets of RfG Day</th>
<th>Expected Outcomes of RfG Day</th>
<th>Format of the RfG Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start or continuation of an individual journey to become and think 2bPR and to become enabled for success in the New World of Work</td>
<td>An answer to why we as Microsoft should start 2bPR and why it is important for our business growth and our personal growth</td>
<td>To balance self-experience with teaching</td>
</tr>
<tr>
<td>Start of mass-dialogue with colleagues (also the day and afterwards through blogs, wiki/s)</td>
<td>An answer to why people are asked to activate themselves</td>
<td>Pragmatic, hands-on</td>
</tr>
<tr>
<td>Start to improve own (working)processes (according to insights of activity-based-working research)</td>
<td>An answer to what is expected mentally</td>
<td>Let Microsoft employees internalize information by using dialogue</td>
</tr>
<tr>
<td>First dialogue, what does this mean for your team?</td>
<td>An answer to what is expected virtually</td>
<td></td>
</tr>
</tbody>
</table>

Table 5: RfG Day (Microsoft, 2007)

*Room for Sensemaking and Sensegiving throughout the Organization – The Room for Growth Day*

On the RfG Day employees entered the building in the morning and received a pass with explanations of different “Rooms/ Spaces” that they could enter or experience during the day (see table 7) (for a visualization of the curriculum of the RfG day see appendix 19). This signaled the theme “give room, take room” based upon the struggle between old and new mental models and old and new power bases. The RfG Day opened with an introduction by the GM in which he looked back to the past year and forward to the year to come. From mentioning successes of FY07, “subsidiary of the year”, “21% growth”, he moved towards the explanation of how to become even more successful in FY08 and connecting business growth to personal growth. “For the next fiscal year there

\textsuperscript{63} The Diplomats were one of 4 learning types. Based upon these types different materials were distributed.
are 6 priorities: consumers, small enterprise, The Next Web, open source standards, category products and... 2bPR. In all these are priorities people are central: our customers, our partners, our colleagues and they enable us to grow, as individual, as team, as organization. Today we will discuss growth, room for growth... The growth of our business and related the growth of us as people. And not only personal growth, but as well growth in the capacity to cooperate. And before getting off-stage finished with an assignment for the day to face the day with an open mind: “Look around today and ask questions. How will you develop yourself? Do you use our technology well? What way will you from now on cooperate and communicate?”

And again strong sensegiving signals were send into the organization by the GM and TM of the 2bPR vision of empowerment and co-creation: “Each one of us really has an impact on how we will develop as organization, as team and as individual. Where do you get this opportunity? To co-create the future of an organization. No blueprint, no consultancy club advising and guiding us, just us” ~ Top Manager

“Today we want to send a message that we move from top down directing to self-steering”, General Manager.

The RfG Day was one big experience where most Microsoft employees left energized and inspired. Aims had been to emotionally and rationally challenge all employees (TM, MM and KW) to question and surface existing mental models and behavior and reflect upon their own personal growth and the way their behavior connected to the bigger picture. Sensegiving and sensemaking circled throughout the organization many times during the RfG Day altering mental schemata. And a wide range of activities were undertaken to interpret what the events they were experiencing meant for them and the implications for the way they were expected to change and behave. The dialogue sessions were especially crucial for TM, MM and KWs to become aware of the perceptions, feelings and attitudes of others and interpret their meanings and intent and highly appreciated. Several anxieties that had existed within the organization were taken away by TM that tried to answer all questions.

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65 Microsoft, August, 2007. 2bPR Movie.
The fact that everyone at every level was attending and communicating created a strong feeling of connectedness and trust. In addition, this was fostered by the setup of the dialogue sessions with rules for listening and interaction. Every individual experienced the day differently, and inspiration and skepticism existed to a larger or smaller extent, but the RfG Day exactly showed this reality and made people aware that these differences existed. Through continuing communication it was confirmed that these differences on commitment and on personal preferences were accepted, but that for better cooperation competence throughout the organization it was essential to communicate these differences to colleagues in a way that they could reckon with it or provide valuable support. Throughout the day people increasingly recognized their mental models and preferred behaviors that differed from those of colleagues. Acknowledging everyone’s personal talent, goals and possibility to stretch for personal growth worked mainly inspiring even solved some barriers that had existed before on trust and respect.

“It was really insightful to talk with my team about the way we cooperate. It made me realize my own assumptions and question them. I will need some time and my team as well to understand them. But at least we are working on them. We did not question those things at all before” ~ Middle Manager.

“When he told us about his problems we realized we had not been very sensitive. The dialogue during the RfG Day was crucial... It really had an impact on how I will confront this kind of situation in the future and the way we cooperate as a team” ~ Middle Manager.

“I feel empowered” ~ Knowledge Worker.

“I never truly realized that my communication was just not effective or less effective with some people with different personalities. I believe it will increase my effectiveness to learn ~ Knowledge Worker.

“I really liked to talk about those topics. We normally never do. I think it was very valuable. I hope it will increase” ~ Knowledge Worker.

4.3.2.4 Signaling and Re-visioning Phases II
To be People-Ready or not to be People-Ready – Triggering Self-Activation

The days after the RfG Day a lot of reflections, dialogues, rumors and stories circled through the office. The effects of the energizing event and phase had clearly affected the mental models within the organization. Sensegiving metaphors and symbolic language passed into daily use. “This coffee is not 2bPR” to joke about the quality of coffee, or “what an anti-People-Ready
“There was this enormous positive energy throughout the organization. More understanding of – ‘ah’ it is about that. And I still can decide a lot, actually more, a real feeling of empowerment. And they will invest in me. And ‘jeee’ what a cool things are we gonna do together”. Steering Committee Member.

“WOW, I would like to have these days every day, it was really, very, well... inspiring” ~ Knowledge Worker.

“Well I have to admit it was actually a very good day, although I think some people are hyping it now a little too much, but well maybe I am just a little bit more a down-to-earth person”, Middle Manager.

Change participants indicated the sessions with MT and People Managers to have been the most valuable. In these sessions the vision and concepts of 2bPR had been shared cross-team and division and within existing teams and the groups had engaged into sensemaking and sensegiving increasing knowledge sharing and social networks beyond the usual colleagues. Directly after the RfG Day it was noticed that employees started to analyze and compare actions and behavior with the signals and messages shared throughout the RfG Day to identify aligned or non-aligned behavior, especially of management: “We had a very interesting team discussion at the RfG Day... We are still not sure about what impact it will have... What I believe is the most important is that our manager really listened to us and already changed some things in the way we work” ~ Knowledge Worker.

“I do not see the changes yet. They [MT] communicate empowerment and co-creation. But you notice when they reflect upon the RfG Day that their questions are closed. Great day, huh? They are still not open for sincere critique or reflection“ ~ Middle Manager.

“The RfG Day was really inspiring. But it will only have a real impact if behavior changes. It was a good idea to talk about mental models. Because some of our managers talk about empowerment, but do not live the message. I now better understand it takes time to adapt for them, for me. [Our GM] really lives the changes and talks about why it is sometimes difficult for him as well, that is important” ~ Knowledge Worker.

“I believe the vision of 2bPR is great. I wonder although if management is able to become People-Ready? Especially some. Communicating empowerment is one, letting go of control and really doing it is a second. I don’t see it yet. Not my manager” ~ Knowledge Worker.

Several other symbolic changes, in order to support continuation of sensemaking and sensegiving, were implemented. The newsletter send out after the RfG day was restyled to better focus upon the journey of Microsoft towards becoming a People-Ready organization. A new specially dedicated 2bPR on-line portal was designed, launched and linked to the main intranetpage. And messages from the GM, key actors and “quartermakers” were published through various communication channels (magazines, on the newly designed on-line portal, e-mail and blogs) directed to potential sensemakers within the organization aimed at changing the conversations and informal knowledge sharing within the organization. Most messages designed to appeal to emotion and self-activation; focused upon growth of the individual and the organization, upon the opportunities of action and change and/ or upon the difficulties of changing habits and organizational routines. And often topics were chosen and
communicated in a way that was highly linked to daily practice of Dutch knowledge workers in the Netherlands in general (traffic jams), where change would bring a solution, or written in a style that appealed to the mainly marketing sales oriented work force of Microsoft the Netherlands. In addition, during the company meeting, successful leaders were invited that role modeled a great sense and the importance of self-insight and achieving great success through mental challenge and stretch and taking unsecure paths: “According to [the GM] managers must make a huge turn and give employees freedom and learn how to trust them. And pay attention that ambitious employees also quit their work. “Fifteen years ago it was not possible to work after office hours. Today only self-control or control of a partner determines if someone stops working. The limits have faded”. According to Microsoft the future is working whenever and wherever you want. “Only human-beings still need to cope with these technologies” ~ General Manager quoted\(^66\).

“The workfloor will change the coming 5 years faster than the past 5 years. Take care you are not becoming a victim of the work process, indicate your limits” ~ Kevin Turner, Microsoft’s COO, quoted\(^67\).

“Our mission is: “Realizing Potential”. We want that everyone in this world can develop their talents and realize their dreams with our technology. How will we achieve this? By growing. And to be able to grow fast we need a shared vision. A vision that answers all the questions of today and tomorrow. We call our vision “to be People-Ready”... People-ready organizations are open for what touches and moves people and are a source of inspiration and confidence... What do we expect from you? That you learn and share, so we all know more. That you listen and tell, so we all become better. And that you grow, so we all grow ~ 2bPR Portal\(^68\).

In 2006 traffic in the Netherlands has increased with 6% and will eventually rise in 2007 with around 10%... What block us to use technology optimally? There is an opportunity for higher productivity. And probably also vitality, since being in traffic jams does not really make you more happy... First of all, look in the mirror. Finally it is you who decides to be in these traffic jams. With good reasons probably: since it is not common practice within the organization, or because... Managers in the Netherlands, start your adventure journey today towards managing on output instead of presence. Give your people freedom to design their already busy work-life balance optimally. Help them to move from “to work” to “working”. And be a good example for yourself. The first profit from digital communication was speed and efficiency. We now enter the era in which less e-mail traffic will lead to increased productivity and faster processes. Are you ready?” ~ Blog of General Manager\(^69\).

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**Room for Growth – Self Activation Signals by MT, SC and MM**

“Ever made a journey without knowing where you were going? ... normally you plan your journey towards an endgoal. That makes 2bPR (to be People Ready) so special: it is a journey from which the destination is unknown... How then can you still become People Ready?” [You cannot] “Since there is no destination. You – hopefully - keep on growing”.

According to [an MT member and an SC member] this is not confusing, but liberating instead. “You get all room to change, to improve and to renew yourself. And you can decide yourself how you want to reach this. You make your own choices and decide upon your own pace.” “You cannot be 2bPR. It is more a kind of attitude. To be open for personal growth. There are some “proces accelerators”... our new office, the coaching modules now offered and of course our own technology. We have to use our technology as much as possible and really live through our products as organization”, [MT Member].” If we

\(^{67}\) General Manager in Volkskrant Banen, 11-2007.  
\(^{68}\) Retrieved 2008-03-17  
\(^{69}\) Blog Theo Rinsema, 2bPR portal, 13-11-2007
do not do it ourselves we cannot be authentic to others”.

But most growth needs to come from within. “A mental change through better self-insight is really important”, says [an MT Member]. “Then come the real questions: Who am I? Where do I get energy from? What are my barriers?” HR uses for this the MBTI-method* which helps you to analyse your personal preferences and to get better insights in yourself and others.

“The essence is self-steering”. That is not easy for everyone. “We notice still quite a lot of people are awaiting and want that the organization completely facilitates them”. We believe: take your own initiative to realize your dreams.”

Number 1: 2bPR is not about hard targets. But it is definitively possible to measure the success. “We want to be number 1 on reputation, customer satisfaction and employee satisfaction”, says ‘an SC Member, MM]. “And finally is 2bPR of course also meant to achieve higher returns. We can reach that by working smarter and by doing that be more efficient and effective.

With 2bPR we are frontrunner on transparency, selfsteering and authenticity. Important modern social themes that have derived from the big social changes such as globalization and technological innovation. “A revolution that we have co-developed”, says [an SC member, MM]. And that has consequences for us all. “In the world of today we are less and less in control, and therefore we must increasingly trust upon outselves and the other. For this reason it is important to know yourself. If you want that and how you do that, is your own decision. And that – fortunatly – is an eternal journey.”

Table 7: Sensegiving of 2 SC Members in Internal Newsletter (Microsoft, feb 2008)

Support for Growth; Self-Reflection, Get to Know Yourself, Your Colleagues

All these different signals were spread throughout the organization to inspire personal change and growth within employees of Microsoft the Netherlands. To support and guide personal and team growth Human Resources facilitated teams and their managers in several training and finally developed a cohesive path for People Managers to implement to affect change of the mental models within their team (see appendix 20). The main training everyone was expected to engage into was a psychological training to gain self-insights (MBTI). In addition, various other training, developed by MM and KW during the first signaling and re-visioning phase, were meant to support self-activation, self-reflection, skills and scenarios that would support the “Digital Workstyle”. Especially the self-reflection and team dialogues through MBTI were highly appreciated. Several teams and managers mentioned the dialogues to be very helpful for increasing trust and commitment in the team and improved cooperation. Although some scenario training received negative feedback and quality control was recognized crucial for further development.

“The MBTI session I did with my team really helped in building understanding of each others strengths and weaknesses and cooperation potential” ~ Middle Manager.

“We [HR] received many requests for 2BPR as it was considered a highly beneficial tool” ~ Top Manager.

Some of the scenario training were not adequate. We did not make time to have quality control of all training because so many new were developed, but we should have done ~ Steering Committee Member.
Another Evolving Mechanism of Empowerment?

In addition, top management announced another mechanism that was aimed to facilitate MMs and KWs throughout the organization to influence the direction of the organization in the future; a employee council, OOR: “OOR, that is the chance to co-direct the greatest company in the world. There you are updated. You know what happens in the organization and think of what to do with it. Co-thinking, co-building, co-deciding and co-facilitating to implement those decisions that help us as human-beings and organization with our growth. Within OOR you can join as colleague on the things that you feel responsible for, or where you think you can make a difference”.

Again old mental models and thinking was evident when the announcement was made and not many candidates stood up for election. Since within the old mental model the believe reigned that power was not distributed, thus influence from MM and KW limited and therefore participation in OOR not very influential. When the elections for OOR were announced skepticism was still highly evident that this body would not become influential in the future. Several candidates and MMs and KWs subscribed this skepticism although by behaving and reacting in different ways.

“Why do not more candidates stand up? My guess. Because they do not believe their real concerns will be taken into account. Can we influence Microsoft Corporate? We can still not decide if we play hockey or football, only how we arrange the players in the field” ~ Middle Manager.

“I am a candidate because I believe OOR is a very good initiative, I believe I have a lot to say and because I believe I am a good representative for others. Yes there is skepticism about the influence of OOR. But if you do not support this we are going nowhere. And we need to change, that is my responsibility as well. And standing for election is the first step” ~ Knowledge Worker.

4.3.2.5 Energizing Phase – Move to a New Building

The second energizing phase developed around the move to the new office of Microsoft the Netherlands in May 2008.

Just like working towards the previous energizing phase around the RfG Day, again most SC meetings focused upon preparation of communication and knowledge sharing interventions before and during the move to build up excitement and let people mentally prepare. The vision was signaled through various messages that related the change of work environment (physical context) to a change in mindset (mental context) supported by technology (virtual context) to trigger sensemaking: “At March 28 2008 we will move to a new office... A change of work place, but above all a change in mindset; a new way of thinking and cooperating. When do you work at the office, when at
home? How will you attend a meeting, physical presence or online? And how do you keep a team together if you do not always see each other anymore?70

“The new office truly represents the physical showcase of the context in which Microsoft’s employees are best thriving. It represents 2bPR and shows the optimal physical space to let people work and connect, no matter if they do that in person or via the tools we have available” ~ Steering Committee Member.

The move was postponed several times. This had a two-sided effect on mental models within the organization; on the one hand it created more tension and insecurity within the organization, on the other hand it increased gossip, stories, discussion and laughter positively effecting organizational bonding, communications and trust building between divisions, teams and individuals. “I actually hoped something really radical would happen like being without an office. Then you have to work 100% virtual, that challenge and feeling for a week for our whole company... I think it would have been a very interesting experiment. I proposed it to several of my colleagues and we already had started thinking about an emergency plan. Too bad this idea was not shared by the SG and MT [laughter]” ~ Steering Committee Member.

“There was a lot of talk about the move, especially when it was postponed. You had something common to talk about with everyone. Everyone was curious. In some way you interacted a little more with people you normally do not interact with that much” ~ Knowledge Worker.

“I really felt excited, I was so curious how it would look like, how I would feel. And if it really would help me in improving my workstyle, or if I would be lost in the new building” ~ Knowledge Worker.

In addition, although the importance of interrelatedness of the three environments had been recognized the high risk of the move and the urgency of the new office meant this context increasingly took over the agenda of SC meetings. This slightly blocked continued development of the other two contexts. And several interconnections were not discussed nor recognized as less focus groups and meetings took place to extract valuable information from the organization and prepare the move and experience from the Virtual and Mental mundane reality of employees. This caused several incontinuities after the move. “I believe we should have balanced it better. Now were [some SC members] sometimes in a SC meeting where they did not get much room to contribute... And after the move we had no plans of what to do next. We had only focused upon the building and thus the physical world. We lost momentum there, because everyone was really into this change attitude” ~ Steering Committee Member.

The move finally took place in May 2008 and had an enormous influence on the sensemaking and sensegiving activities of organizational employees. Especially the first days many positive impressions and feelings surfaced and since the situation was new for all organizational members energy and excitement circled throughout the organization. Many employees were looking for answers, new structures and rules when making sense of the new and unknown situation and new behavior that was expected of them in the new office. The searching behavior and openness for adapting to the new

70 On-line 2bPR/ Room for_Growth portal, 13-02-2008
design of the office and new ways of working made this stage crucial for management to show role model behavior. “The first day entering the new building was so unreal. It looked even better than I had imagined.

The following days were a little different. We had these instructions, but still you were looking for your manager and your colleagues if they had more indications of what to do exactly, you were really re-finding your daily practice” ~ Knowledge Worker.

“Several people easily found their fixed flex-desk. In other words, they did not use the new office according to the 2bPR vision of activity-based-working. But some managers corrected this directly or were just moving themselves and showing to their team what was expected. This was very effective” ~ Steering Committee Members.

“That I [the GM] gave up my personal office was a very clear signal of the change that was expected. It was also perceived very radical by most of our clients and partners when we told them [laughing] ~ General Manager.

“According to 2bPR I tried to sit together with my team to discuss how they would like to work in the new building in order to extract as much information from them and make sure that as a team we would best cooperate and facilitate each other ~ Middle Manager.

4.3.3 Emerging Schemata Phase - Change Outcomes

During the whole 2bPR journey several people increasingly aligned their mental models towards a different form of working (individually) and cooperation.

This was noticed in different ways. In some occasions, through observable changes in behavior. In several instances, through a change in the content of communication within the organization. In most occasions, employees communicated what had changed for them by engaging into self-reflection during especially ‘designed interviews’ for this purpose and group discussions. Some communicated nothing had changed for them. “I am the younger generation, we are more used to integrate all kinds of technologies into our work and cooperate quite easily either virtually or physically, I considered myself rather ‘2bPR proof’ from the beginning”. Beyond already being or considering themselves ‘2bPR proof’, for other nothing changed as they had not (yet) seen the added value of changing their mental models and behavior, they were not aware of the fact they had actually changed. In addition, several change participants communicated they themselves had changed, but others around them had not. “I mean a lot of us naturally like the concepts of 2bPR, personal growth, more freedom, higher productivity. The implementation by management although could have been brought more consistent. Some managers I see never talk about it, and finally bottom-up is fine, but not enough,
you need this top-down confirmation and interest as well” ~ Middle Manager. The majority although, even skeptiici on many of the topics and the way the change had been managed, indicated that 2bPR had facilitated their learning and had meant a change in mental models and often behavior.

Two types of mental model changes were especially mentioned; a mental model change on interpersonal cooperation and management and a mental model change on personal adoption of new ways of working and a change of work style facilitated by better integration of information technology.

“Yes [I have new mental models] and 2bPR strongly facilitated this. Maybe this sounds strange, but through the focus, you have no other option. ... an example, last week.. a company.. people still need to clock their time, have a minimum of 10 conversations at the client, otherwise they are a bad salesperson. Microsoft has been the same for a long time... If you would still do that, it would not correspond at all with that what you want. And then... back to the element of the change of control versus trust within 2bPR. 2bPR facilitates talking about these issues, to agree as a team and organization that we will do it differently, understand how and then just as well design it differently” ~ Middle Manager

“You can call, yes you can call differently now [because of information technology], but you can still call. You can meet, yes you can now have meetings in different ways, but you can still meet. It is not technology that made the difference in 2bPR. We already had technology. It was the change of mindset to reconsider how to use technology better in your own work style and for cooperation, especially to better understand your personal preferences and best practices and scenarios for cooperation”. ~ Middle Manager

“I am not that absolutely passionate by technology as other people here. To be honest I even have a kind of allergy to start using new technology. My job is about quality, improving processes... This meant that before 2bPR I did not completely realize the influence of digitalization and how it would be able to shape the future of work. In this perspective, 2bPR has been essential for me and I believe a lot of my non-technology colleagues to not only better understand the potential of our products, but as well the difficulties of starting to use new technology in your daily work. You need to reconsider your leadership style, the way you work, cooperate, from where you work... you need to change your work style, that is really influential. For some outcomes of 2bPR I really had to reconsider how I thought and make huge steps to change my behaviour, I am still not always there. But at the end I believe 2bPR will make us more successful in the work we do; for ourselves, but also for our clients and partners... “ ~ Top Manager

2bPR and moving towards new ways of working opened up a personal change journey for me. Primarily better understanding and integrating technology in my work style. Although I notice other behaviours now need to change as well. I have been a manager for over 15 years. But in this new constellation I notice that people ask more of me, not yet sure what the exact reasons are for this...maybe because the physical contact is not there anymore automatically...I just notice and feel my role as manager changes. I get different impulses and requests for coaching, reflecting, content, cohesion and cooperation, I will have to redefine my role and think about where the frictions or new interactions come from and what to do with them ~ Top Manager
Chapter 5: Conclusion - Completing the Loop of Interaction: Organization & Boss 3.0

In 2005 Microsoft the Netherlands began a journey of change to prepare the organization and its employees for success in the New World of Work (NWoW), envisioned by Microsoft as - ‘a world that is more fluid, less centralized and less certain about old assumptions and old models... A world that becomes more interconnected through systems and networks, where walls that isolated workers from information, organizational objectives, and each other will continue to fall... A world ruled by the information worker’.

Today, the change can be characterized as a dramatic change, initiated by its leadership in time of great opportunity (Microsoft, 2005a) in expectation of compliance or parallel development by other players in the market (Huy and Mintzberg, 2003). Microsoft the Netherlands scrutinized and adapted its complete organizational context (physical, virtual and mental/ social contexts) (Go and Fenema, 2003; Mantovani, 2002; Nonaka et al., 2006; Veldhoen and Company, 2005; Porras and Robertson, 1992) to support employees in better understanding themselves and the way they work, in order to enable them to increase personal effectiveness and efficiency and become better cooperators in an increasingly digital and globalized world. The most dramatic and impactful change was the rejuvenation of the organization’s collective mental context (Huy and Mintzberg, 2003) which, according to prior research (Bartlett and Ghoshal, 1993, 1994a, 1995, 1996, 1998; Balogun and Johnson, 2005; Gioia and Chittipedi, 1991; Nonaka et al., 2006) and corroborated throughout this study, is highly influenced by the roles and actions of management and knowledge workers throughout the organization.

Two main objectives were set for this research, based upon previous research indicating that recent changes in the world not only influenced organizational contexts to change, but as well the roles normally shaping these contexts and new insights were therefore needed and considered highly valuable (Bartlett and Ghoshal, 1994, 1995, 1996, 1998; Floyd and Wooldridge, 1992, 1997; Floyd and Lane, 2000; Hart, 1992; Nonaka, 1994; Nonaka et al., 2006; Wooldridge and Floyd, 1990; Nonaka et al., 2006). The first objective became to identify the roles and actions that influenced mental models during the change at Microsoft the Netherlands and compare differences of roles and actions at three levels: top management (TM), middle management (MM) and knowledge workers (KWs) and between phases of change over time. The other main objective was to develop, test and empirically validate a conceptual model that would (1) closely resemble the reality of change at Microsoft the Netherlands about the interaction between these groups and the phases of change and their influence on mental

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71 Microsoft, 2005a
72 Several other organizations have been identified to go through related kind of changes at the moment. Until today the RSM Erasmus University research took place at and recognized the Rabobank, TNT, de Unie, Kamer van Koophandel, Interpolis, amongst others.
models and (2) provide a powerful tool of analysis for the change process, identification of changes in roles and actions over time and their interrelatedness, this became the so-called “Organizational Loop of Interaction”.

The two objectives that were set for this study have been met. The conceptual model has been developed, based upon solid previous academic theory (see chapter 2) and empirically validated (see chapter 4). By using the theoretically developed conceptual model roles and actions during the transformation could be systematically analyzed. In addition, in-depth insights, needed to answer the research questions of this study, could be found and provide interesting input for the discussion and recommendations. Although conceptual models are, due to the nature of academic research, only approximations of reality (Ericsson, 2001), the model appears to be highly aligned to the reality of change that evolved at Microsoft the Netherlands. Since no striking differences were identified between the conceptual model developed at the beginning of this study (see figure 7) and reality, it can be concluded that the model is a very useful tool for analysis and insightful conceptualization for practice and is therefore believed to be an important contribution to academic literature as well as practice. The results, the roles and actions of TM, MM and KWs identified as most important during the change to influence mental models at the case-study company, are visualized and summarized in figures 17 to 21 of this chapter.

5.1 Sensemaking and Sensegiving Phases

The conceptual model (see figure 7) and findings of this study show support can be given to the sensemaking and sensegiving phases described by Balogun and Johnson (2005) and Gioia and Chittipedi (1991): 1) Old Schemata Phase; 2) Aligning Schemata Phase with subphases a) Envisioning Phase, b) Signaling Phase, c) Re-visioning Phase, and d) Energizing Phase and 3) Emerging and New Schemata Phases. Although, as Balogun and Johnson (2005) already mentioned, phases indeed cannot be strictly defined.

In this study it was seen that especially the signaling and re-visioning phases showed increasing convergence, mainly due to the changing power balance and increasing co-creational fashion of change in knowledge worker organizations in the NWoW. Signaling and re-visioning happened more and more at the same time with employees throughout the organization at the level of TM, MM and KWs (e.g. the fish bowl sessions of the R_fG Day) to talk about a new reality together. Secondly, this case study extends the model of Gioia and Chittipedi (1991) by showing multiple sequences of signaling, re-visioning and energizing. The multiple sequences gave the organization and its employees the opportunity to deeper embed the change within the organization and adapt daily routines to the changes more gradually over time and together.
In addition, sensemaking and sensegiving processes between TM, MM and front-line KWs took place reciprocally within each of the phases. When management gave sense to KWs these KWs simultaneously made sense out of the information and vice versa. This confirms Roleau’s (2005) statement that sensemaking and sensegiving processes are by definition reciprocal of nature, horizontally as well as vertically.

5.2 Roles and Actions to Influence Mental Models

The empirical data of this study appeared to closely resemble the extensive review of prior role literature (f.e. Ansoff, 1987; Bourgeois and Brodwin, 1984; Bower, 1970; Burgelman, 1983a,b; 1991; Hamel and Prahalad, 1989; Hart, 1992; Mintzberg, 1983; Schendel and Hofer, 1979; Wooldridge and Floyd, 1990; Quinn, 1980), especially the research and categorization done by Floyd and Lane in 2000 that resulted in a summary of behaviors and ten strategic (secondary73) roles. Therefore, in a later stage of this study, the Floyd and Lane study (2000) was taken as a basis for comparison for the roles and actions found in this study in order to theoretically strengthen the value of the final conclusions and conceptual model and to extend insights of the research done before. This study gives a more detailed insight to the categorization done by Floyd and Lane in 2000 and previous studies with regards to differences in emphasis on roles and actions at different layers (Top Management, Middle Management and/ or Knowledge Workers) in different phases of change (Balogun and Johnson, 2005; Gioia and Chittipedi, 1991) and changed and/ or new roles. Also it supports the findings of Balogun and Jenkins (2003) that change in contemporary organizations cannot be reified as something ‘done’ to individuals, since individuals today play an intrinsic role in shaping change by making sense and giving sense to the usually still top-down directed explicit communication, and, in addition, that change depends on new knowledge generated throughout the organization, not only at the top (Nonaka et al, 2006).

73 A difference is made between primary and secondary roles. See chapter 2.
Figure 17: Overview and Comparison of Old and New Roles before and after the “2bPR Change Journey”

**Old Schemata**
(Before new GM and “2bPR change journey”)
Mostly congruent with Floyd and Lane (2000)
Although MM secondary roles (gray) only slightly evident

- TM = Recognizing
- MM = Championing
- MM = Synthesizing
- MM = Implementing
- MM = Facilitating
- KW = Experimenting
- KW = Adjusting
- KW = Conforming

**Emerging and New Schemata**
(After 2nd energizing phase – Move to the new office)
Start 3rd signaling and re-visioning phase
New and changed roles (blue) in comparison with old schemata

- TM = Recognizing
- TM = Rolemodeling
- TM = Rolemodeling / (MM) - Coordinating
- TM = Ratifying
- MM = Championing
- MM = Synthesizing
- MM = Implementing
- MM = Facilitating
- KW = Championing
- KW = Synthesizing
- KW = Experimenting
- KW = Adjusting
- KW = Conforming

*TM = Top Management, MM = Middle Management and KW = Front-line Knowledge Worker*
Highly interesting differences emerged out of the comparison between the roles and actions found in Floyd and Lane (2000) and the roles and actions found in the case-study, especially when comparing the roles and actions in the old schemata phase with the roles and actions in the new schemata phase (see Figure 17). The behaviors and roles defined by Floyd and Lane (2000) highly correlate with the behaviors and roles in the old schemata phase at Microsoft the Netherlands. In the emerging and new schemata phase although several of these roles have disappeared, changed or new ones are found. Many of these new roles increasingly emerge in recent research. This study thus corroborates the view expressed in this research that roles and actions of TM, MM and KWs have changed and are changing in significant ways and that this change is expected to be even more profound in the future (Bartlett and Ghoshal, 1993, 1994a, 1995, 1996, 1998; Floyd and Wooldridge, 1992, 1997; Floyd and Lane, 2000; Hart, 1992; Nonaka, 1994; Wooldridge and Floyd, 1990; Nonaka et al., 2006).

In the new schemata phase of the case study company only eight of the ten roles found by Floyd and Lane (2000) remain: “recognizing”, “ratifying”, “facilitating”, “implementing”, “experimenting”, “adjusting”, “synthesizing” and “championing” (see Figure 17, roles in black). Two former roles, “directing” and “conforming”, disappeared almost completely. Due to the change from a “command and control” management style to a “coordinate and cultivate” management style and empowerment of MM and KWs the “directing” role of TM transformed more into a role of “facilitating”. Furthermore, the “conforming” role of KWs became almost non-existent. Then several roles and their influence changed considerably, especially the upward influencing roles of MM and KWs; increasing importance was dedicated by TM to the “synthesizing” and “championing” roles of MM and KWs and of MM to these roles of KWs during the change journey at Microsoft. In general, during the 2bPR journey at Microsoft the Netherlands, a convergence was seen of roles on change (secondary roles) between TM, MM and front-line KWs where these roles became more similar to each other towards the end of the journey, which is in line with the empowerment literature summarized in chapter 2 (Gioia and Chittipedi, 1991; Balogun and Johnson, 1996; 2005). Also, three “new” roles were identified that did not appear in the categorization of Floyd and Lane (2000): “role modeling”, “intermediating” and “coordinating”.

This study specifically finds evidence for a decreasing influence when TM and MM want to direct and control (Malone, 2004) change and try to influence mental models throughout the organization in

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74 The roles and actions and interrelationships from Microsoft Corporate HQs to the local subsidiary are still mainly based upon the old mental model of “command and control”.

75 Recent research has already paid some increasing attention to the new roles identified at the case study company.
this way and an increasing importance for facilitating change and showing role model behaviour. “Role modeling” has remained a largely unidentified role in most strategizing, organizing and change studies until date (Moberg, 2000; Jaussi, 2003; Buunk et al., 2007; Gibson, 2003; Chung, 2000; Lockwood and Kunda, 1997; Sims, 2002), and if researched, has been mostly done in sociological and psychological studies, but appeared highly influential in creating the organizational context and adoption of new ways of working at Microsoft the Netherlands. “Intermediating” of middle management did appear in many prior studies, increasingly being mentioned as a highly important role and championed by several middle management researchers (Huy, 2001; Floyd and Wooldridge, 1992; 1997; Balogun and Johnson, 2005). And, the “coordinating” role by top management, middle management and knowledge workers together (through a task force or steering committee as important platform for knowledge integration during change) as well received increased research attention lately, for example Nonaka and Takeuchi (1995) and Gioia et al. (1994). Insights in these new roles and actions are considered to be highly valuable by respected researchers (Bartlett and Ghoshal, 1993, 1994a, 1995a, 1995b, 2002; Nonaka et al. 2006) and practitioners and they are therefore more extensively explored in the discussion and recommendations of this study in the next chapters.

The conceptual model, beyond enabling comparison of the roles and actions of management between the old schemata and new schemata phase (see figure 17), provides highly interesting insights in how the roles and actions differ during the different phases that together comprise the ‘alignment of schemata phase’ in between the old and emerging and new schemata phases (Balogun and Johnson (2005); namely the envisioning phase (Figure 18), the signaling phase (Figure 19), the revisoning phase (Figure 20) and the energizing phase (Figure 21) (Gioia and Chittipedi, 1991).

During the *envisioning phase* the KW roles of “experimenting”, “synthesizing” and “championing” and the MM roles of “intermediating”, “synthesizing” and “championing” took place concurrently with TMs “recognizing” role. TMs role of “ratifying” the change by formal decision had already been taken place during the old schemata phase.

During the envisioning phase two aspects of the change were envisioned: (1) the content of the change (the WHAT of change) and (2) the way the
change would be managed (the HOW and BY WHOM of change). Since not only the mental models regarding the WHAT of change were altered during the “2bPR change journey”, but as well the HOW and BY WHOM of change, a dramatic shift and rebalancing act of roles and actions throughout the organization complicated the “2bPR change journey”. The second change meant, amongst others, the establishment of a formal mechanism of empowerment (Steering Committee) and increased the roles of especially MM to “coordinating” the change together with TM. In addition, TM paid increasing attention to the upwards influencing roles of MM and KW. The influence of KW and MM throughout the organization and the effects of their roles on the “recognizing” role of TM were increased by establishment of formal mechanisms of empowerment, the SC and ‘quartermaker’ group, by the organization of envisioning sessions including KW and MM, and by the innovative use of information and communication technologies to extract information from throughout the organization (survey’s, blogs) and by asking around for input. In this way MM and KWS influence increased to impact the vision, although finally still only TM (later including the SC as well) decided what to recognize and what not and what to integrate into the main sensegiving signals send back to the organization about the vision during the signaling phase.

During the **signaling** phase the main direction of sensegiving signals was top-down from TM to MM to KWS. Although through the SCs “coordinating” role, especially the SCs project groups, including MM and KWS, sensegiving signals already spread at the MM and KW level of the organization as well. Strong sensegiving signal were send by TM through their “ratifying” and “facilitating” roles. This complemented the influence of the SC and its project groups by instigating MM “intermediating”, “implementing” and “facilitating” roles. The main signals from KWS during this phase were send through their “adjusting” role, signaling approval or non-approval of the vision that was signaled by TM and MM.

The **re-visioning** phase was characterized by the same roles as the envisioning phase, except that KWS were engaged in “experimenting” with the signaled vision and “adjusting” at the same time. Furthermore, the influence and strength of roles differed from the envisioning phase. During the envisioning phase the main power and influence was still at the level of TM, during the re-visioning
phase this power and influence had been increasingly delegated to MM and KWS and the direction of re-visioning was increasingly decided upon by organizational members throughout the organization. Main power derived from those participating in the formalized mechanisms of empowerment (the SC project groups) or by having received formalized roles as ‘quartermakers’ or ‘buddies’. In addition, MM gained significant influence through their span of control and ability to send sensegiving signals during the re-visioning sensemaking and sensegiving processes of their team. Through better knowledge about the basics of the vision, format of the change and familiarity with their role in the change process MM started to act more confident in their roles.

The **energizing** phase was characterized by dense processes of social interaction where sensemaking and sensegiving circled throughout the organization with increased speed. In this phase all organizational members were involved in the change and engaged in the same processes of interaction. In addition, at the level of TM, MM and KWS all roles were evident during short-time intervals. Analysis shows that for preparation and the building of tension and energy in these phases information technology and interaction through virtual communication are highly effective as mass communication tool. The essential part of these phases although consisted both during the Rf_G Day and the move to the new building of shared experiences in a common physical space. Physical presence for these experiences appeared to be crucial to enable the density and speed of circulation of knowledge, sensemaking and sensegiving, to enable TM, MM and KWS to perform all roles needed to change and influence mental models at the same time to have the highest effects.

![Roles in the re-visioning phase](image)

![Roles in the Energizing Phase](image)
Chapter 6: Discussion – Completing the Loop of Interaction: Organization & Boss 3.0

During the different phases of change not only significant alterations of existing roles were found, but as well new roles. Insights in these new roles, why they develop, are increasing in importance and how to facilitate their development and use are especially considered to be highly valuable by researchers (Bartlett and Ghoshal, 1993, 1994a, 1995a, 1995b, 2002; Nonaka et al. 2006) and practitioners and therefore these roles are more extensively explored in the following discussion. In addition, many of the recommendations will focus upon strengthening the development and use of these new roles as well.

6.1 THE WHY: Rebalancing Roles from “Planned & Top-down” to “Organic & Co-Created” Change

The philosophy behind the “2bPR change journey” at Microsoft the Netherlands, although driven by its leadership (Huy and Mintzberg, 2003), was an “organic” process of “co-created” change; an alteration from the more ingrained model of “planned and top-down” managed change. In this new philosophy old roles and actions of Top Management (TM), Middle Management (MM) and front-line Knowledge Workers (KWs) lost their effect.

Management of Microsoft the Netherlands believed that to cope with the increasing pace of change in the world, and co-evolving pace of organizational realignment (context and work styles), an “organic” change approach was better suited than the more traditional form of “planned and deliberate” change (Lewin, 1953). Analyzing the way decisions were made, during the various interaction processes of the “2bPR change journey”, corroborates the growing body of research that claims Lewin’s model (1951) of planned, deliberate change is a too linear and static explanation, not corresponding anymore to the complex reality of today’s global and networked knowledge worker organizations in dynamic markets (Hill and Levenhagen, 1995), unable to explain the dynamic processes of continuous change (Orlikowski, 1996; Orlikowski and Hofman, 1997; Tsoukas and Chia, 2002; Balogun and Johnson, 2005; Moss et al., 1992, Purser and Petranker, 2005; Weick and Quinn, 1999). Along this line, this study, provides support for the assertion by Orlikowski and Hofman (1997) that contemporary organizational transformation must be viewed from “improvisational” models where flexible approaches aid in coping with ambiguity and allow for adaptation to a less certain environment.

At the macro level of analysis it was possible to categorize the flow of events and change of mental models that constituted the transformation process at Microsoft the Netherlands in phases consisting of repetitive roles and actions, but only afterwards, not upfront. In essence, it were the...
dynamic processes of small social interactions between all of its organizational members on a daily, even hourly basis, only possible to analyze at the micro-level view that influenced the ongoing adaptation and adjustment or caused “temporary” inertia in the 2bPR change journey (Purser and Petranker, 2005). Notwithstanding that more efficiency oriented organizations are more likely to pursue and benefit from formalized, detailed and precise models (Smeltzer and Fann, 1989), the “organic” change approach used at Microsoft appeared to be highly effective in the development of mental models able to cope with the insecurity and complexity this organization faces in its environment. It allowed both anticipated changes and unanticipated reactions, like innovations that arose as the organization better understood the complexity of the transformation, to be taken into account (Orlikowski and Hofman, 1997; Clarke et al. 1997; Gioia et al., 1994).

Also, by analyzing the transformation of the interaction processes through which the organization was constituted, reproduced and changed over time (Weick, 1995; Nonaka and Takeuchi, 1995; Nonaka et al., 2000; Nonaka, 1988; Volberda, 1999; 2001; 2003) this study corroborates the growing belief that change is not only a shift in structures and processes, but foremost and especially a cognitive and emotional organizational reorientation (Barr, 1998; Barr et al., 1992; Gioia and Chittipeddi, 1991; Reger, et al., 1994; Zajac et al., 2006). Furthermore, the analysis confirms that alignment to current developments in the world not only requires the organizational context to change, but as well the roles, relationships and interaction processes that support these cognitive and organization reorientations, i.e. the ways in which these contexts are shaped (Balogun and Johnson, 2005; Balogun, 2006; Mraovic, 2003; Bartlett and Ghoshal, 1993, 1994, 1995, 1996, 1998; Balogun and Johnson, 2005; Balogun, 2003). Several researchers suggest the decreasing disparity between capacities and skills of management and KWs and thus distribution of power and responsibility to be the main factors for these changes (Bartlett and Ghoshal, 1993, 1994, 1995, 1996, 1998; Mraovic, 2003; Rubery, 2002). Along this line, Balogun and Johnson (2005) suggest ‘we need to reconceive the way we approach the management of top-down change in organizations, and, replace the assumption of senior manager control over change with recognition of the role of change recipients in creating change’.

The “2bPR change journey” provides a clear example of the increasing active and important role that MM and KWs can play during change (Ericson, 2001). TM of Microsoft the Netherlands engaged into reconceiving the more familiar top-down change approach, before and during the envisioning phase of the “2bPR change journey”, resulting into acknowledgement that in today’s world complete foresight and knowledge is impossible and a strong and continuous connection to the front-lines of the organization therefore will be a strong prerogative of future success. In this way, it was
envisioned that a planned and top-down change of the “2bPR change journey” would be ineffective. Therefore the vision of a “co-created” new organizational and mental model reality by all organizational members instead of a top-down managed process (Bryan and Joyce, 2007; Balogun and Johnson, 2005) was developed to complement the philosophy of “organic” change. The “co-creation” format was believed to enable integration of the intellectual capacity and experience of KWs at Microsoft the Netherlands (Bryan and Joyce, 2007; Grant, 1996) by supporting knowledge to move down the line and bottom-up in several loops of interaction before decisions were taken at the top. Secondly, this approach aimed at decreasing resistance that, due to the growing influence and power of KWs within Microsoft and beyond, was expected, especially if their views would be neglected or not appreciated (Coch and French, 1948).

Analyzing the “organic” and “co-creational” approach of the change process at Microsoft the Netherlands confirms several of the positive effects that had been expected and for which reasons this change approach was chosen. The “organic and co-created” change approach, amongst others, decreased resistance to the change (Coch and French, 1948), increased flexibility of the organization and speed of interaction (Nonaka and Takeuchi, 1995) and build understanding and experience of how to optimize integration of talent and insights throughout the organization (Bryan and Joyce, 2007; Grant, 1996). In addition, it anticipated behavioral change of espoused outcomes - empowerment, personal growth, increased cooperation competence and self-steering capacity, mainly by providing room for experimentation to adapt mental models related to the outcomes of change already during the change itself.

Further, analysis of the interactions suggests that the collective management of the change in a teamed environment instead of the hierarchical, “command and control” mode (Clarke et al., 1997; Orlikowski and Hofman, 1997) was especially effective for the kind of radical and anticipatory change that took place at Microsoft the Netherlands, since these changes were the least possible to be pre-planned (Clarke et al., 1997; Orlikowski and Hofman, 1997) and required strong commitment of key stakeholders affected by the change (Goodman and Dean, 1982). In addition, the case study suggests the “organic and co-created” change approach to be appropriate when organizations are faced with increasing time pressures for change, growing power and influence of knowledge workers, when operating in complex global environments and when there is a need for greater knowledge worker cooperation. Further, that “co-creation” is inseparably connected to the “organic” flow of change. Since change was co-decided and not enforced, this meant readiness had to be agreed upon, formally

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76 Espoused outcomes expressed by Microsoft the Netherlands in interviews, SC committees and/or internal documents
or informally, by the majority of the work force. This readiness could not be planned, which is different from the “planned, top-down” approach where change progresses along preset timelines and along hierarchical levels in a multi-step process (Lewin, 1951). And where, if change milestones are not met in time, change is often enforced upon the workforce; the reasons for the resistance to change often neglected, even if they are correct or bring valuable insights.

Initial expectations and assumptions of TM about the increasing importance and role of MM and KWS were confirmed early in the “2bPR change journey” and brought increasing support for the vision when the change progressed. Analysis of the case study shows outcomes of interventions in one component did not necessarily influence or guarantee corresponding changes in other components, as they were mediated by inter-recipient sensemaking and sensegiving processes throughout the organization, most of them informal day-to-day interactions (Balogun and Johnson, 2005). As Balogun (2006) already noticed in an earlier study ‘senior management control over outcomes appeared tenuous because of the way change recipients edited senior management plans’. And although creating the organizational context remained ‘one of the main tasks of management’ at Microsoft the Netherlands (Bartlett and Ghoshal, 1994b), the involvement and influence of employees increased substantially during the change (Balogun, 2003; Balogun and Johnson, 2005; Bryan and Joyce, 2007; Jansen and Mom, 2005; Price, 1997; Gartner, 2006; Vischer, 1995).

6.1.1 Effects of Rebalancing Roles: Associated Tensions

Reorienting the change approach from a “planned, top-down” to an “organic and co-created” mental model, while at the same time reorienting the physical and virtual organizational context (Hardy, 1994) and mental models regarding ways of working, required efforts to not only legitimize the new social order represented by the change (Zucker, 1987), but as well how the legitimization process itself occurred (Scott, 1991). Management and KWS had to cope with changing their mental models concerning not only how the change would affect their daily work, but as well about what their roles and actions would be during and after the change, as they were changing simultaneously. Roles and levels of influence changed as a moving target while the transformation of the organizational context and “2bPR change journey” progressed (Nonaka and Takeuchi, 1995; Balogun and Johnson, 2005). Van Maanen and Schein (1979) and Jones (1986) propose role orientation as a continuum with conformity to established roles and procedures at one end and innovation in defining and enacting roles at the other (Allen, 1990). This is confirmed by the analysis of this study; new roles developed and existing roles changed when power and responsibility were delegated down the line enforcing a move by management from a “command and control” to a “coordination and cultivation” management style and mental model (Orlikowski and Hofman, 1997; Malone, 2004) and by MM and
KWs from an “adjusting and conforming” to a “self-steering and contributing” style and mental model. This resulted in a continuous rebalancing act of power and responsibility as a two-directional vertical process and role stability and innovation as a two-directional horizontal process; TM and MM being more or less successful in letting go of control and empowering MM and KWs to influence the change process and visibly taking the opinion of lower levels into account; and MM and KWs more or less accepting responsibility, increasing efforts to reflect upon the themes of discussion and contributing their insights to higher levels.

In 2005 Balogun and Johnson already indicated increased research attention on sensemaking is needed as “the rhetoric of change in the structure or culture of organizations is that it increases market flexibility, but for this to be the case, managers need to be able to alter their patterns of interaction to keep pace at the same time”, but question the feasibility of such alterations due to the simultaneous requirement of cognitive reorientations (Balogun and Johnson, 2005). The case study at Microsoft the Netherlands shows it is feasible to alter the organizational culture and “mental context” while at the same time being involved in personal “cognitive reorientations”, but as well surfaces its strong tensions and challenges. The case study shows that beyond the need in today’s environment for the “organic and co-created” change approach and its advantages that ‘the emerging changes in the fundamental assumptions that underlie how managers think about the task of organizing and shaping the organizational context’ (Bartlet and Ghoshal, 1994) are not easily changed and engaging into such change processes is complex for several reasons.

First of all, expectations and agendas differed between TM, MM and KWs. Strategizing, organizing and shifting power relationships in roles are embedded in political dynamics of influence and negotiation with an inherent potential for conflict as different actors promote their particular versions of reality and needs to target audiences (e.g. Benford, 1993; Coles, 1998; Haines, 1996). The concept of framing imply boundaries that reveal certain aspects while keeping others out of sight (Williams and Benford, 2000) and highlights the inherently strategic and political nature of meaning construction and presentation (Hensmans, 2003). Further, due to the co-creational approach, managers were expected to become involved in supporting the cognitive reorientation of the team(s) they lead and manage, while they were at the same time still going through their own personal cognitive reorientation. In addition, the newly empowered behavior of MM and KWs sometimes clashed with the comfort zone or prior privleges of superiors. This often depended on the managers’ personality, but in many instances TM and MM indicated to not feel comfortable with team members that had a head start in the change, while MM was still expected to coach and lead the team. Several managers within the case study indicated the difficulties of stretching their leadership style from one
side of the continuum to the other under such time pressure. In addition, readiness for change was not the same along the organization. And employee evaluation of change was not only affected by organizational leaders’ attributes, opinions, or actions (Chakravarthi, 1974; Leonard-Barton, 1985), but also depended upon each individuals’ personal interests, needs and skills. Implementing change with this high implementation complexity (Leonard-Barton and Deschamps, 1988) was a process of internal diffusion, involving numerous individual “secondary adoption decisions even after management had passed along the “authority decision” (Leonard-Barton and Deschamps, 1988). Along this line, Vermeulen (2007) for example identified several personas (M1-M7) at Microsoft the Netherlands that indicated the different levels that individuals had already more or less adopted the “Digital Workstyle” that was part of the vision and mental model change during the “2bPR change journey”.

Furthermore, to reach success at the end of the “2bPR change journey”, the vision was that management had to unlearn the top-down, “command and control” method of change design and implementation (Malone, 2004) and knowledge workers had to learn a more participative role. This meant that sometimes KWs were ready for empowerment, but management was not, and/or vice versa. In the beginning employees were not used to the responsibility they received and the self-steering and pro-active attitude and contribution to the change that was expected. Management often fell back on their old management style of control decreasing trust of knowledge workers that they really had an influence on the change. In addition to “co-create” information is needed on what is expected and what is happening, during the case-study it was observed management was not always used to providing this information and therefore it did not happen. Also when MM and KWS were expected to contribute, but were not informed about the outcome of their efforts they easily lost interest to participate again. Through the co-creational nature of the change thus, empowerment was communicated before most managers and employees were able to behave accordingly and/or even before the difference between the old mental model and the new one had been understood. Co-creation was supported by some managers in behavior, by some only in words and by some not at all, and self-managing capacity appeared to not yet exist to the extent TM had hoped. Although in some instances it did exist, but TM did not act upon it yet themselves. This in turn decreased the amount of energy knowledge workers put in, sometimes disappointing management in the lack of enthusiasm (Floyd and Wooldridge, 1992; Floyd and Lane, 2000; Wagner, 1994).

In addition, difficulties arose when some managers and front-line knowledge workers were not aware about the new roles and actions that were expected from them. Or, when aware, did not agree or had difficulties of changing behavior and reflecting upon the often highly subconscious
mental models that guided their behavior. This meant, amongst others, that managers communicated empowerment and co-creation, but were not always able to immediately change their behavior accordingly. In this way mixed signals were send into the organization sometimes creating confusion, uncertainty or even disinterest and counteractive behavior. Even Microsoft’s General Manager, highly believing in empowerment and what the change process was aiming for, had to admit it was not easy. “I as well sometimes noticed that I fell back on old behavior and then I had to be highly aware to push myself out of my comfort zone again”\textsuperscript{77}. In addition, the “organic and co-created” approach at Microsoft the Netherlands meant a more natural flow was followed where the “2bPR change journey” was only taken to the next level of change when certain processes reached maturity or a common understanding was build and agreed upon by a large or influential group within the organization. The size and consistence of these groups although were not quantified and varied, what made these decisions (taken by the SC) very intuitive. This increased the challenge for managers firmly rooted in the “command and control” “mental model” and favoring planned action instead of more intuitive approaches (see f.e. personalities according to MBTI). Further complications derived from the fact that several of the new roles and responsibilities remained unclear and vague, especially within the first period when actors and colleagues were still in the process of setting and understanding the new boundaries of the roles, associated activities, responsibility and interaction patterns, or roles were improperly defined or not supported, which decreased the effectiveness of in-role performance (Biddle & Thomas, 1966; Biddle, 1979; Floyd and Lane, 2000; Kahn et al., 1964; Van de Vliert, 1981).

6.1.2 Effects of Rebalancing Roles: Solutions
The tensions and challenges that surfaced during the “2bPR change journey” have, to a certain extent, always existed. These tensions exist since it is simply not possible for the majority of human beings to express a vision or new schemata and directly live up to all the changes that it entangles. People need time to surface old mental models and understand the gap between old habits (theories-in-use) and the new behavior that would better fit the environment (espoused theory) (Argyris and Schon, 1978), especially when the gap between old and new mental models is large. This was the case for the change at Microsoft the Netherlands, which involved a fundamental shift in the organization’s belief structure, value system, and identity, i.e. alteration of Microsoft’s “mental context” or “social construction of reality” (Berger and Luckman, 1967; Bartunek, 1984; Dutton and Dukerich, 1991; Gioia and Chittipeddi 1991; Walsh, 1988) and these "second-order changes" (Bartunek, 1984; Argyris and Schon, 1978) of “mental models”, “organizational routines” and

\textsuperscript{77} Interview General Manager in June 2008
personal “habits” are by nature time-consuming and difficult to change (Argyris and Schon, 1978; Cohen and Bacdayan, 1994). It is difficult to direct a change in an individual’s cognitive schemes externally, particularly in the short term (e.g. Lord & Foti, 1986). The intricacies of the case and increasing pace of change in the environment although show an increasing complexity of these tensions and challenges, since for the second-order “mental context” changes to happen, especially in fundamental change, time is needed to surface old “mental models”, understand them and sequentially be able to adapt them, but time is exactly what is less and less available; an important reason why Microsoft the Netherlands and other organizations are adopting more “organic and co-created” approaches in the first place.

It can be concluded that the main complexity during the “2bPR change journey” hinged on the gap between time that was needed to align and adapt thinking and behaviour to the needs of changing environments and markets and the time that was available. During the “2bPR change journey” mental models evolved “within a continuous perceptual cycle of exploration, sampling and modification” (Neisser, 1976) influenced by the act of applying the model (Westbrook, 2006; Neisser, 1976) and the actions and communication of managers or colleagues (Balogun, 2003, 2005, 2006; Balogun and Johnson, 2004; 2005; Bartlett and Ghoshal, 1993, 1994b, 1995, 1996, 1998; Gioia and Chittiped, 1991; Westbrook, 2006). With each change interaction a delay was visible; for the “2bPR change journey” the needs in the environment and of organizational members changed first, followed by the development by the organization of a co-evolving vision of a new set of mental models, sequenced by diffusion throughout the organization and adaptation of behaviour.

This delay derives from the fact that it is not until a connection has been made between a framework and an issue (i.e. an issue has been ‘bracketed’ in the mind) that meaning can be created (Weick, 1995) and thus behavior can change. Several processes are of influence in the delay between adaptations of old mental models to new mental models. The processes of (managerial) thought and (managerial) action cannot be seen as separable: ‘management is characterized by thought or “reflection in action”, the continuing interweaving of cognition and action’ (Schon, 1983). This notion of enactment (Weick, 1979) argues that present decisions were taken on the basis of past experience and that past experience was confirmed by present action reducing the uncertainty and ambiguity of decision making and making it manageable. Mental models (Johnson-Laird, 1980; Lundberg, 2005), by providing a repertoire of examples, images, understandings and actions that when making sense of a situation otherwise perceived as unique, facilitated increased speed in decision-making and decreased uncertainty to take action (Schon, 1983). The main reason why mental models or “small-scale models of reality” (Craik, 1943) exist in the first place is the fact that we are not able to possess
complete knowledge (Werhane, 2008) and they therefore improve the efficiency and quality of interaction with our environment (Johnson-Laird, 1986). Mental models, routines and habits are although like a two-edged sword. Their influence and stability “allows efficient coordinated action, but also introduces the risk of highly inappropriate responses (Cohen and Bacdayan, 1994), especially when environments are increasingly complex and time to understand the complexity and to reflect diminishes (Westbrook, 2006).

The case study showed that believes in mental models were sometimes that strong that people applied the models without direct reference to the accuracy or the level of completeness (Westbrook, 2006). Research shows that mental models can be reinforced by a coincidence that makes a choice appear to be the result of correctly applying the model rather than simple coincidence (Besnard et al., 2003). And by being “structurally unitary and autonomous”, mental models can impose its constraints on the original and not vice versa as a “reality of its own” (Fischbein et al., 1990). During the “2bPR change journey” it was confirmed that people often pay more attention to information that is relevant to their current mental models and are less likely to have correctly remembered information that what is inconsistent with them (DiMaggio, 1997; Kiesler and Sproull, 1982; Tversky and Kahneman, 1975). During the “2bPR change journey” change participants expressed different take-a-ways from the several sensemaking and sensegiving events, although they had been exposed to the same information. “In focusing, framing, organizing, and ordering what we experience, mental models bracket and leave out data, and emotional and motivational foci taint or color experience”.

The tendency of old mental models to endure (Isabella, 1990; Labianca et al., 2000; Poole et al., 1989) derives from the fact that mental models are “emotionally comfortable and deeply familiar” (Westbrook, 2006). The act of having applied the model (Westbrook, 2006; Neisser, 1976) for long-time periods with positive results deeply ingrains the application of mental models as routines and habits in hard-to-access procedural memory (Argyris and Schon, 1978, Nystrom and Starbuck, 1984; Cohen and Bacdayan, 1994). And “people generally hold mental models without the self-awareness needed to easily verbalize their nature or recognize the need for alterations” (Westbrook, 2006). This hinders as well the redesign of mental models as the underlying knowledge of the parts of routines held by individual actors is often partially inarticulate (Cohen and Bacdayan, 1994). Changing these mental models and deeply ingrained routines and habits costs more effort than re-applying the model and suggests these mechanisms to give rise to the divergence that Argyris and Schon (1978) describe between espoused theory (what is communicated) and theory-in-use (the way individuals in reality behave).
When a rebalance in power is the outcome of change and management manages change top-down, layer by layer gradually adapts and adopts the new leadership and management style, change is slow, but steady. When a rebalance in power is the outcome of change and management manages change by co-creation, employees directly expect results as the change outcome is communicated, but behavior often stays behind since the manager is still evolving his own mental models towards the goal of the change. If we then consider the “co-creational” change approach and the importance management and employees within Microsoft the Netherlands contributed to role modeling of higher management this is highly challenging since to be consistent in communication and behavior, management should actually directly release their old mental models of “command and control” otherwise they communicate empowerment, inspiration and co-creation, but their behavior is not aligned. In this way, there is a paradox in the high importance contributed to role modeling behavior of management during dramatic change of culture and “mental context” and the possibility of showing role modeling behavior during this kind of change. And demands for managers to change others by showing role model behavior then seems complex. And this process increases in complexity as change is increasingly co-created together with knowledge workers, and management thus loses control on having the time to change first and, in addition, on the way they are expected to change.

Role modeling was only one new role found in this study to have increased in importance to influence change of mental models, and thus behavior, in today’s knowledge worker organizations. Intermediating and coordinating are two others new roles recognized to be able, if attributed to the right group of change participants, to increase the speed of the interaction that drives change or support a higher quality change with broad support throughout the organization than otherwise possible. These 3 new roles, together with self-insight and authenticity, provide the solutions for decreasing the tensions and improving the quality of the increasingly organic and co-created change processes at contemporary knowledge worker organizations and are therefore discussed in-depth in the following paragraphs.
6.2 Role Modeling – Increasing the Pace of the Interaction Loop through Inspiration

“Change leaders need to be prepared to live the changes they want others to adopt” ~ Balogun, 2006

“Everyone thinks of changing the world, but no one thinks of changing himself” ~ Tolstoy

A very interesting finding of this study is the high importance change participants contributed to role model behavior during the change. Interesting since, although role modeling was most often mentioned by change participants as the crucial role for success of the change and found by observation to be the main undercurrent influencing mental models to change during all four subphases of the “alignment of schemata phase” at all three levels (TM, MM and KW) it is a striking difference from most prior academic literature related to the topics of this study (see chapter 2). In line with this finding, the role and behavior summary of Floyd and Lane (2000), while based upon an extensive review of prior role literature and while it closely aligns with the other findings of this study, does not mention role modeling as an important role for change. A more in-depth view reveals that findings about the “role modeling” role are highly scarce in the work context (Buunk et al. 2007), but even more, in general, little research exists (Moberg, 2000; Jaussi, 2003; Buunk et al., 2007; Gibson, 2003; Chung, 2000; Lockwood and Kunda, 1997; Sims, 2002). Research that has been done belongs mainly to the research domains of psychology and sociology. Some exceptions being the studies about transformational and charismatic leadership (Kirkbride, 2006; Bass, 1985; House, 1977; Conger and Kanungo, 1998; Waldman and Yammarino, 1999), research of Schein (1985) about primary mechanisms of leaders to reinforce culture and recent research about the effects of symbolism (Gioia et al., 1994). From these research streams although, role modeling is only mentioned to be an important characteristic of the leader, but further in-depth insights lack. Moberg (2000) mentioned “and yet, little is known about role modeling as a process”, and Lockwood and Kunda (1997) ‘it is as though role modeling is more a cultural cliché than a well understood process’.

In addition, it was even more interesting that change participants, beyond contributing high importance to role model behavior in general, contributed special significance to role modeling of higher management. Especially since the “2bPR change journey” aimed at decreasing top-down influence and increasing empowerment, dispersed initiatives and bottom-up influence. The observations of behavior and interviews throughout the change enable deeper understanding of the relation between the intricacies of the change at the case study company and the significance of role model behavior; and believed to be very valuable for researchers and practitioners and are therefore further explained in this discussion in the following paragraph.
6.2.1 Role Modeling – Definition and Effects

The term *role model* first appeared in the socialization research of Robert Merton where he hypothesized that individuals compare themselves with reference groups of people who occupy the social role to which the individual aspires (Merton, 1957). “Merton emphasized that, rather than assuming one status and one role, a person has a status set in the social structure to which is attached a whole role-set of expected behavior—and that, within those sets, ambiguities, incompatibilities, and conflicts are inevitable. The term role model has passed into general use since to mean any "person who serves as an example, whose behaviour is emulated by others" (Holton, 2004). Berger (1977) defined *role modeling* as "a change in one person's (observer's) behavior that results from his or her observation of someone else's (modeler's) behavior or its consequences".

Based upon prior research and findings of this study *role modeling* is defined as: *Inspiring a change in another person’s (observer’s) behavior through exhibiting certain personal characteristics, "charisma", unusual competence and/or high moral behaviors: high on morality, trust, integrity, honesty and purpose* (Kirkbride, 2006; Berger, 1977). This view acknowledges psychological and sociological theories that emphasize the degree to which individuals look to role models as a way of increasing self-knowledge, motivation, and inspiration (Erikson, 1980; Foote, 1951; Buunk et al., 2007), as well as theories emphasizing that individuals look to role models as a way to effectively learn new task skills (Bandura, 1977; 1986) or moral behavior (Moberg, 2000).

Role modeling in this definition is part of the multiple (and largely informal) vehicles of human interaction like stories, gossip, and rumor; behaviors and actions; discussions and negotiations; and sharing of personal experience and interpretations of change interventions that play a significant role in influencing and changing mental models. Findings regarding what gets shared through such conversations support research on the importance of management’s and peers symbolic influence (f.e. through role modeling) on the change recipient sensemaking process (Donnellon et al., 1986; Gioia and Chittipeddi, 1991; Gioia et al., 1994; Isabella, 1990; Morgan, 1983; Pettigrew, 1985; Pondy, 1978, 1983; Poole et al., 1989; Luis, 1980; Weick, 1995, 2001; Zajac and Fass, 2006). “Members of a group can also interact in ways other than the spoken and written word (Gioia and Chittipeddi, 1991). Several studies indicate that people’s perceptions of their managers’ role modeling behavior relate positively to trust in the managers and relate indirectly, through trust, to both job satisfaction and overall performance (Rich, 1997). Falcione et al. (1978) indicated that executives might influence each other through their behavior or through other nonverbal modes of communication. For example, “by choosing not to attend a particular meeting, an executive may inform other executives that he or she does not place much value on the topics to be discussed” (Huber, 1999).
Role modeling is important for social or vicarious learning. Moberg (2000) explained: ‘probably the most direct and efficient way of learning is personal and experiential learning, where the learner practices desired actions until they are mastered and incentives tie learned behaviors to valued outcomes (Wood, 1980)’. There is although an important alternative - social or vicarious learning. Here the learner attempts to acquire mastery by watching others who have already acquired it (Bandura, 1986). Bandura (1977, 1986) acclaimed these two forms of learning; (1) operant learning theory or reinforcement theory (Wood, 1980; Skinner, 1938; Podsakoff, 1982; Jaworski and Kohli, 1991) and (2) social cognitive theory or social learning theory (Bandura, 1977, 1986) to be highly interrelated and that learning is enhanced when the role model verbally recognizes a behavior that a subordinate has appropriately imitated and vice versa.

6.2.2 NWoW and Case Study Intricacies Explaining Increasing Importance Role Modeling

Although the results of this research cannot provide sufficient answers to why role modeling has not been receiving appropriate research attention in previous studies on change, it sheds light on the intricacies of the case study that better explain the importance of role modeling in the “organic and co-created” change approach that was used. It provides insights in the effects of a rebalance of power and change in mental models regarding the roles and actions of management and knowledge worker that serve an initial better understanding of why role modeling may be an increasingly important role (e.g. Moberg, 2000) if management moves from a “control and command” to a “coordinate and cultivate” (Malone, 2004) and/or “inspire and co-create” management and leadership style and mental model.

The findings from this study consistently indicate the high importance of role modeling to influence actual change in the organization and individuals’ “mental context” and behavior throughout the change journey. Change participants indicated that the emphasis of the “new” leadership on the “2bPR change journey” and strong multi-channeling signaling that change would come (e.g. new General Manager and MT members, establishment of 2bPR SC, published interviews and behavior of the GM, 2bPR communication during Business Unit and team meetings, and being it 1 of the 6 Business Priorities for FY08), triggered motivation for social comparison and an increased readiness to identify best practices. Several researchers corroborate cognitive prompts and attention-focusing stimuli to be essential for social or vicarious learning and for role modeling to be most effective, especially if the role model behavior is subsequently captured in verbal or visual images in more detail (Moberg, 2000; Buunk et al., 2007). Moberg (2000) mentioned “if there is no cognitive prompt to pay attention or cognitive schemata that the modeled behavior is relevant to our own behavior, we are unlikely to perceive the behavior in question as relevant or a behavior change called for”. The
different interventions and events during the change journey all functioned as emotional and cognitive attention-focusing stimuli to enable sensemaking and sensegiving for a potential future organizational context. During several of the sessions best practices or role models (f.e. Quartermakers) were identified, which then were followed or looked into in more detail after the events. Several of these sessions and exercises for example, led to the development of improved scenarios for work processes and work styles (e.g. effective meetings, effective e-mail) by the “virtual context” team.

Role modeling appeared to have special influence during sensegiving (Gioia and Chittipedi, 1991), especially during the energizing phases. During the first energizing phase (Room for Growth Day), the most appreciated and effective events were the dialogue sessions led by MT members and MM. Change participants mentioned these sessions to have been especially important to surface mental models and understand the change that was expected. In addition, comparison of the changes that had been communicated by management during these sessions with subsequent actual behavior was highly noticeable in the weeks that followed. The same pattern was evident during the second energizing phase (especially directly after the move to the new office). Along this line, social comparison theory has shown that especially uncertainty about how to respond and about what to do may enhance the desire to compare oneself with others (Buunk, 1994). Buunk et al. (2007) indicate that social comparison, in general, ‘may be highly important for individuals in a novel and ambiguous situation and may not only influence the way they evaluate themselves, but also motivation and the way of dealing with the situation’. Prior research and this study show that in the increasingly empowered knowledge worker organizations of today employees demand to be directed and work in a way that is a substantial deviation from practices still based upon industrial era thinking (Bell, 1973; 1976; Grant, 1996; Foray and Freeman, 1992; Andersen et al. 2000; OECD, 2000a, 2001). In this way, due to the increasing occurrence of novel and ambiguous situations, the importance of “role modeling” is believed to increase substantially in line with uncertainty.

Further, the findings show a transformation of KWs roles and actions from “listening and accepting” change as “good soldiers” to proactively “contributing and influencing” change. This coincides with a transformation of management roles and actions from “commanding and controlling” change to “inspiring and co-creating” change. “Role modeling” is expected to increase in importance the less KWs act based upon the traditional “good soldier” and “adjusting and conforming” mental model. If KWs have a powerful influence in organizations and on the processes of change, the sensemaking and sensegiving processes that lead to new visions will increasingly become negotiated outcomes based upon convincing and inspirational arguments, and “role modeling” is expected to be an
increasingly important influencing factor. In addition, the fact that TM communicated that MMs and KWs were empowered already during the change as new schemata actually meant, from the start of the change, MMs and KWs expected role model behavior as evidence of TM commitment to empowerment. In addition, to enable MM and KWs to better understand how TM saw empowerment, they had to see how TMs own new roles looked like, to decrease uncertainty on their new levels of freedom and/ or responsibility and to experiment safely within their new space of power and influence. In addition, there was skepticism by quite a number of MM and KWs if several managers would be really able to let go of their “command and control” modus. Behavior, especially from TM on empowerment, entered a phase of continuous scrutiny throughout the organization. (Dis)confirmation of the “new empowerment schemata” and (in)congruent role model behavior of, especially the GM and other highly visible MT members or change participants’ direct managers, appeared to be extremely influential on the believes and mental models of participants throughout the organization: on the believes if change would actually really happen or it were only words and thus the readiness for change.

The transformations occurring during the “2bPR change journey” enabled capitalization of technological and social innovations that belong to the knowledge era, through enhanced recognition of co-dependence and potential improvement of cooperation competence (Grant, 1996). They as well although came along with new and more complex roles, interaction processes and work styles for both management and knowledge workers. The findings of the case study show that the change process was therefore accompanied with several interventions aimed at personal growth and self-improvement. The main message of the 2bPR change journey was “Room for Growth”. Along this line, all interventions during the change journey and the complete transformation of the organizational context (physical, virtual and mental) aimed at optimizing facilitation of knowledge workers’ personal life, work style and personality (People-Ready business) to enable full realization of people’s potential (Microsoft’s mission). The main thought behind this was that personal growth is and will be one of the most important development areas to substantially drive business growth of knowledge worker organizations in the future. Since self-improvement is another important motive for social comparison (Wood, 1989), the main aim of the 2bPR change journey being personal growth better explains the high importance that change participants contributed towards role model behavior.

A last intricacy of the case study and explanation for the importance contributed to role modeling appeared to be entangled with the envisioned outcome of the change of adopting new ways of working and work styles facilitated by better integration of new technologies (what Microsoft called
the “Digital Workstyle”). Interventions in the physical and virtual context were considered important supporting factors for potential adoption of the “Digital Workstyle”. Through identification of the amount of time spend on several activities (Microsoft’s activity-based-working research) the new office was designed and attention for new software development was focused on the most time-consuming and important activities. Change participants although clearly communicated that the real enabler or disabler for adoption of the “Digital Workstyle” came from the change in individual habits and organizational routines, technology being only a facilitator. Surfacing and building understanding of the underlying mental models that inhibited effective adoption happened through several (in)formal processes of social interaction. Change participants indicated the inspiring effect of TM, especially the GM of Microsoft the Netherlands, as role models dedicating significant time to a better understanding and adoption of the “Digital Workstyle” themselves and/ or specific individuals that already excelled in this work style and demonstrated improved effectiveness. Recent research increasingly support this notion of importance of “role modeling” for the use of new technologies (Gist et al., 1989, McAfee, 2003; McKinsey, 2008). The use of new technologies require substantial behavioral change that is so complex that role model behavior becomes highly essential as role modeling is especially recognized within complex environments or for complex tasks (Moberg, 2000; Rich, 1997). Sales research, for example, indicates that leadership by example, or role modeling, is critical because salespeople due to the complexity of the task and visibility of success tend to emulate the work habits, positive attitudes, and goals of their superiors and are less likely to go the “extra mile” if their supervisors are not willing to do the same (Rich, 1997). Gist et al. (1989) found that the use of role modeling to teach new employees a software program was more effective than standard instruction. As well more recent research of McKinsey (2008) and McAfee (2003) indicates that a higher level of usage of information technologies is found at companies that beyond using tactics such as integrating the tools into existing workflows, launching Web 2.0 in conjunction with other strategic initiatives, get senior managers to act as role models for adoption.

### 6.2.3 Rolemodeling and Reasons for Importance Higher Management

When reflecting upon the success of the 2bPR change journey and adaptation of behavior change participants at Microsoft essentially build their believes upon the behavior of several reference groups (Israel, 1963; Huber, 1999). Change participants indicated role model behavior of Top Management [GM, MT and SC], followed by role model behavior of their own manager, to be crucial for their understanding of change. During reflection it was often the first mentioned role to be of importance. Change participants indicated that their inclination to change, readiness to take action and invest time in self-reflection, change of habits, mental models and behavior was more easily
inspired, but as well de-motivated, by management action instead of other reference groups. In this way, successful (congruent) and unsuccessful (incongruent) behavioral alignment (Balogun and Johnson, 2005) to the communicated new schemata by Top Management and management in general, had the largest impact of all roles and behaviors throughout the organization. At several instances the successful or unsuccessful role model behavior of Top Management was directly linked by change participants to the success or failure of complete Business Units and teams to adapt mental models and behavior towards the new schemata, even 1 to 1 direct relationship were mentioned between complete Business Divisions and their Managers. The behavior of the General Manager was considered to be highly congruent with the new schemata, which had a motivating influence, by some even considered inspiring.

Pye and Pettigrew (2006) indicated ‘the core process by which strategizing and organizing is brought to life is leadership where a powerful and dynamic leader act as a catalyst to bring about major organizational change, often against a backdrop of deeply embedded organizational values’, (Colville and Murphy, 2006). Ultimate success of change in an organization rests on the understanding, commitment, and involvement of the chief executive officer (CEO) in the process and successful strategy implementation is clearly directly linked to the unique characteristics, orientation, and actions of the CEO (Pearce and Robinson, 1985; Pye and Pettigrew, 2006). Leonard-Barton and Deschamps (1988) found that ‘messages about the adoption of an innovation issued by an ‘authority’ source (Kochen and Deutsch, 1980) generally alters the receiver’s adoption decision process more than does a message issued by a person without authority.

Analysis of the reasons that change participants gave during the “2bPR journey” show four main reasons for the high importance of role model behavior of Top Management. The first reason the high visibility of Top Management and thus possibility to view from a distance the vision of change being translated into behavior. Reflections of the GM, for example, were communicated via various channels (blogs, magazines, during meetings, in person) and symbolic signals of behavior, like giving up his personal office and integrating “Digital Workstyle” activities in his daily work, were followed closely by change participants. The second reason was the inherent search for successful comparison targets as role models. This is in line with most research about role modeling that is connected to leadership research (Bass, 1977; Rakestraw and Weiss, 1981). Buunk et al. (2007), for example, show that ‘exposure to a successful role model led to a higher degree of inspiration, motivation, identification, and proactive behavior than did exposure to an unsuccessful target’. Research of Huber (1999) found that “people align their beliefs with those others who are of higher status, or to whom they are accountable and accept the validity of acting in ways that are sanctioned by
authority”. In addition, two of the few studies of role modeling in work organizations showed that adult employees considered high-performing senior managers as their role models (Javidan et al., 1995; Javidan and Dastmalchian, 1993).

Thirdly, one of the main elements of the new schemata was empowerment, which mainly meant a change of the role and behavior of TM and MM. In this way role model behavior of management was considered crucial to identify if reality was really moving towards this new schemata and by how far (Labianca et al., 2000). There is an “ongoing need to redefine the subordinate’s zones or boundaries of authority, which are constantly shifting” as the “2bPR change journey” has demonstrated (Milss, 1986). Sims (2002) in this perspective mentions “a leader communicates strong messages to his employees about his values through his own actions.. Employees often emulate leader’s behavior and look to the leaders for cues to appropriate behavior” and “to find out what is valued in the organization”. As one manager remarked “if [the GM] or another MT member behaves in a way that is contrary to what we try to build with 2bPR, that directly negatively affects the credibility of this change. They cannot sell the idea of People-Readiness and then allow different rules for themselves”.

A fourth reason that was mentioned for such an association between the self-managed MM and KWs and their management was the need for support. This is in line with research of Mills (1986) who indicated that the self-managed role performer will tend to operate in a situation in which the basic information raw material is equivocal, ambiguous, or uncertain. This often means that the role performer will be uncertain about performance because there is no "guarantee that equivocality will be removed from the input” (Weick, 1969) and further, there will be often a lapse between the time the action is taken by the role performer and the effects of the act. “The formal leader can provide invaluable assurance, support and consideration to the individual in such uncertain states” (Mills, 1986).

6.3 Coordinating and Intermediating - Evolving Mechanisms to Support Empowerment

During the “2bPR change journey” sensemaking and sensegiving circled throughout the organization. “Coordinating” and “intermediating” this flow were important roles for TM and MM. The “coordinating” role traditionally played by TM became, by establishment of the SC as a formal mechanism of empowerment, shared by MM and was increasingly influenced by MM and KWs when the change progressed. The “intermediating” role of MM was recognized from the beginning of the change by the SC. This role, due to the tensions of moving from old mental models to new mental models (see section 5.2.4), did although not completely effectuate during the “2bPR change journey”. Reflecting back upon the change at the end of the second energizing phase TM, MM and
KWs alike mentioned the lacking support for MM during the “2bPR change journey” as the biggest lesson learned. And the majority of TM, MM and KWs suggested as main recommendation for future change processes to provide increased support for the “intermediating” role of MM, their opportunities to engage and interact in horizontal knowledge exchanges and to better integrate these managers into the change process to truly enable “co-creation” to happen throughout the organization.

6.3.1 Coordinating – Integrating and Managing the Loop
On purpose the word signaling is used within this study and within sensemaking and sensegiving literature instead of communication as change of mental models is affected through not only communication in words (explicit knowledge) verbal and written, but as well strongly through behavior and symbolic actions (Gioia et al., 1994) (tacit knowledge) (Nonaka and Takeuchi, 1995). Throughout the change journey several formal mechanisms to signal empowerment were identified: the nomination of quartermakers and buddies, the specific training for People Managers, the employee council (OOR) and the establishment of the SC and its project groups. The SC and project groups were the most successful effort to establish formal mechanisms of empowerment during the “2bPR change journey”. The ‘quartermakers’, and ‘People Managers’ and OOR did not reach the same stage of professionalization, although ‘People Managers’ had increased the power and influence of their role significantly at the beginning of the third signaling and re-visioning in June 2008. Furthermore the employee council (OOR) as well gained potential at the beginning of the third signaling and re-visioning in June 2008 to substitute the SC as this empowerment mechanism had only been envisioned for a limited time period during the “2bPR change journey”.

Actions, such as the specification of the SC carried significant symbolism, both within the organization and to others within and outside the organization (Brown, 1994; Dutton and Dukerich, 1991; Gioia et al., 1994). Not only the existence, but especially the size, composition (including the GM as chair) and charge of the SC were symbolic indicators to the organization of the commitment to and direction of the change (Feldman and March, 1981). The integration of MM in a SC together with TM confirms Burgelman’s (1994) evolutionary process view that identifies the roles of MM as recognizing the need for divergence and initiating change, a role in the top-down view only given to TM (Floyd and Lane, 2000). In addition, the influence of MM on “coordinating” change is an important aspect of “co-creational” change approach. In this perspective, a SC or task force including TM and MM is expected to be an increasingly used mechanism in future change processes initiated within global knowledge worker organizations, since it is believed MM and KWs will be increasingly
empowered to influence these organizations and their change processes (Nonaka and Takeuchi, 1995).

The SC evolved during the early envisioning phase until the emerging schemata phase from being a “conduit” (Axley, 1984) for sensemaking and influencing efforts, by the GM and MT in the first place, to being a “source” of sensemaking and influence for key stakeholders (Gioia et al., 1994; Whetten, 1984). Overall, sensemaking and sensegiving efforts were directed primarily inward toward the SC during the envisioning and re-visioning phases, mainly outward during the signaling and energizing phases. During the inward phases the critical activity for SC members was to interpret the information received and alternative change processes and concepts within the organization that they confronted.

The way the SC at Microsoft the Netherlands developed during the 2bPR change journey shows that managing change is increasingly less about commanding and controlling and more about inspiring and facilitating sensemaking and sensegiving throughout the organization to achieve a shared understanding and alignment of interpretation. At the beginning the SC members still managed more according to the old mental model and the SC was considered as a closed decision-making body only available to an elite few. When the change progressed evolving mental models of the SC members and understanding of behaviors and interventions that fostered “co-creation” supported this mechanism and its members to more effectively focus on developing ‘simple rules’ (Eisenhardt and Sull, 2001) regarding outcomes and direction instead of micromanaging detail. And, in addition, to increasingly let go of control and empower change participants throughout the organization. This was supported by an increasing understanding, contribution and self-management of MM and KWS to the vision and progress of the “2bPR change journey”. And the SC developed into a mechanism that instead of trying to ‘manage’ the processes happening throughout the organization, even in their absence, focused upon encouraging more of them to take place.

### 6.3.2 Intermediating – Closing the Gap in the Loop

Middle management’s role has been questioned in the past, as an impediment to progress adding little value, and a divergence in opinion exists as to “whether middle managers are an endangered species or whether there is a new breed of more empowered middle manager” (Currie, 1999; Dopson and Stewart, 1990; Redman et al., 1997 in Balogun, 2003). Several researchers (Dopson and Stewart, 1990; Thomas and Dunkerley, 1999; Westley, 1990) indicated the limited research into the

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79 Recognizing strategic potential in this way is a continual activity by top management throughout the aligning schemata phase, in comparison with top-down change where it only is done at the beginning phase of envisioning.
role of middle managers during change, or for that matter, the role of middle manager in general to be an impediment towards reconciliation of the two. The findings of this study although support the growing body of research that contributes an increasingly important role to middle management for new knowledge creation, corporate renewal and strategic and organizational change (Floyd and Wooldridge, 1997; Balogun and Johnson, 2005). In addition, this study and the views of change participants at Microsoft the Netherlands corroborate the view of researchers who argue that middle managers’ role as change agents will increase in importance as organizations become increasingly complex and geographically distributed and its workforce empowered (Balogun and Johnson, 2004; Floyd and Wooldridge, 1992; Ford, 1999).

6.3.2.1 From Old to New Schemata - Acknowledging the People Managers Gap

At Microsoft the Netherlands so called People Managers (PMs) at the middle management level were one of the groups identified as potentially important change community during the 2bPR change journey. During the change an increasing number of people recognized that, due to the fact that these managers had not been consistently addressed as a formal and connected group in the past, the organization encountered difficulties to take full advantage of the talent and potential of these managers and the potential influence of their roles during the change. Upon reflection in June 2008 (new schemata phase) the sometimes lacking support and late integration of this MM layer as important change community during the 2bPR change journey was consistently mentioned by top management (TM), middle management (MM) and front-line knowledge workers (KW) alike as the main important point for improvement. MM and several KW already communicated this structural inefficiency at the beginning phases of the 2bPR change journey. Some MMs even mentioned that the formalization and support for connecting this group had already been an important point of improvement for the organization “if it would have happened years ago”.

Increased empowerment and self-steering of MM and front-line KWs was one of the main expected “mental context” outcomes of the 2bPR journey defined by TM at the beginning phase of the change. The aim was to actually improve the cooperation competence within the organization (i.e. improving upward, horizontal and downward interaction, communication, knowledge sharing and influence and roles). Prior literature indicates that due to their position in the middle, MMs main roles and activities can be divided into (1) upwardly influencing roles (synthesizing and championing to TM), (2) downwardly influencing roles (facilitating and implementing to KW) and (3) laterally influencing and vertically connecting roles (intermediating between TM, MM and KW) (Nonaka and Takeuchi, 1995; Floyd and Lane, 2000; Floyd and Wooldridge, 1992; 1997). At Microsoft the Netherlands the old schemata and setup of the change program influenced the possibilities of these roles to be exercised
and the extent to which MMs were engaged and enabled. A slight underuse of MM upward influence, horizontal influence and downward influence during the old schemata phase translated directly into the more severe underuse of these roles during the 2bPR change journey, especially at the beginning phase.

A main reason for the underuse of upwardly influencing roles (MM championing and synthesizing) at the MM level depended upon the relationships and openness of TM to receive and integrate ideas of MM and front-line KWs alike on the change (TM recognizing role). At the beginning phases of the change it was recognized that several managers were still operating according to the old mental model of “command and control” (Malone, 2004) and were not open for sincere feedback and often asked closed questions. The recognizing role of TM was still mainly outside in and championing and synthesizing activities from MM were not yet coherent across the whole line. Especially the decision-making processes during the envisioning and first signaling and re-visioning phases were considered to be still quite closed processes taking place mainly at the top or with an elite few (SC).

But, even though MMs had been in the position where they could have given entrepreneurial and innovative suggestions to TM (Floyd an Wooldridge, 1994) the difficulties in the upward influencing roles of MM (Floyd and Wooldridge, 1992; 1997) stemmed from a broader problem with the MM knowledge flow, horizontally as well as vertically. Horizontal knowledge sharing and influencing at the MM level did not happen at a regular base as they were not addressed and treated as a formal group. In addition, the “command and control” managerial behavior of some TMs was emulated by several MMs that closed off or decreased opportunities for championing and synthesizing of KWs. In addition, TM was still adapting their roles towards a new mental model of “co-creation”, this meant the ratifying and directing roles often still materialized a little more according to the “top down” mental model. This meant, amongst others that MMs were engaged late into the 2bPR change journey and in several cases did not have substantial support to play their roles sufficiently, as they were lacking information on what to synthesize or what to champion upward and what to facilitate or what to implement downward. Exceptions were several of the MMs that had been receiving one-on-one coaching from their managers or who had been involved in several of the focus group and brainstorm sessions organized by the SC. But MM updating their peers did mainly happen informally (Balogun and Johnson, 2005) and often superficially due to the lack of formalization as a group. This meant that horizontal knowledge sharing, exchange of best practices and peer support (Mom et al., 2007), important activities to enable MM to successfully perform their “intermediating” role (Nonaka and Takeuchi, 1995; Balogun and Johnson, 2005), was relatively blocked. This was especially recognized by MM itself, only later throughout the change increasingly by TM as well.
The main role during the beginning of the first signaling and re-visioning phase by MMs was considered to be downwards influencing (Floyd and Wooldridge, 1992; 1997); implementing deliberate strategies. The other downwards influencing role, of facilitating change (Floyd and Wooldridge, 1992; 1997), was increasingly seen during the second signaling and re-visioning phase. The possibility to exercise this second role was especially highly appreciated by People Managers and MM in general. Facilitation by TM or the SC for this MM role although was considered to come late, as formal support only started in August 2007, while other efforts throughout the organization had taken off end of 2006 already. Again the exceptions were several PMs who were yet knowledgeable about 2bPR by having been coached one-on-one by their TMs or by having been involved in other 2bPR activities already. For several PMs the training just before the Room for_Growth Day was although the first real encounter with the ideas that had been developed over the past months. It was noticed that, especially these managers considered the training not sufficient, as it raised a lot of new questions for them and did not provide them with the information they felt they needed. As changing “mental models” takes time (Isabella, 1990; Labianca et al., 2000; Poole et al., 1989) and facilitation of change of others highly depends on the already changed “mental models” of the manager, this caused several difficulties and uncertainties for these managers and their teams during the “2bPR change journey”. The managers that had started their mental adaptation before appeared to feel much more confident and successful in facilitating their team.

The other side of the story is that empowerment is a two way process (Labianca et al., 2000). And in some instances MM, despite the communication of TM and the SC that upwards influence within 2bPR would be appreciated tended to confront this change as well from the more traditional top down perspective and skepticism. It took several months for some of these MMS to really recognize and understand they could have an influence in shaping the organization the way they envisioned and to understand where they had room to have an influence and where not. For some MMs this empowerment even came uninvited as they indicated to rather receive clear instructions from top management about the vision, strategic objectives of the change, when and how (Williams, 2001; Labianca et al., 2000). While the ‘2bPR change journey’ progressed, more TMs and MMs adjusted their mental models to a more rebalanced influence on the change. During the second signaling and re-visioning and energizing phases communication and behavioral changes by the GM and several TMs increased that indicated their commitment to move away from “command and control” towards “coordination and cultivation” and increasing adoption themselves of the “Digital Workstyle”. Although after the second energizing phase in June 2008 this feeling was still not shared by all PMs and some skepticism remained about the potential and/ or commitment to change of some TMs, as
they were still considered to be more firmly rooted in the old “mental model”. At the end of the second energizing phase although TM, MM and KW schemata became more and more aligned (Labianca et al., 2000). At the beginning phase of the 2bPR change journey TM had stated their believes or espoused theories (Argyris and Schon, 1978) of empowerment, but it took several months more to gradually unlearn several old “command and control” habits and make it more their actual behavior or theory-in use (Argyris and Schon, 1978).

6.3.2.2 New Schemata – Closing the People Managers Gap

The middle managers saw the problems of strategy implementation from a more concrete level of organizations’ activities than the top managers (Nonaka and Takeuchi, 1995). They were the ones facing the problems of resources and the problem of really adapting mental models and behavior to daily actions. In addition, they were most directly confronted with the habits and old routines of their teams and without realigned reward and incentive systems (KPIs) the lack of commitments in time and effort of themselves or their employees to invest in changing them. During the 2bPR change journey the value of MM input for the change process, but as well other processes (e.g. Power to Execute) was increasingly recognized throughout the organization, especially by TM. This is in line with research that indicates that middle managers should be inclusive of strategic decision processes (Dutton and Ashford, 1993; Hart, 1992; Mintzberger, 1978; Burgelman, 1983b; Floyd and Wooldridge, 1997; Balogun and Johnson, 2005), because “middles connect an organization’s strategic and operational levels through mediation, negotiation, and interpretation” (Floyd & Wooldridge, 1997), and are especially essential in the more radical processes of change (Huy, 2001; 2002).

Although the value of MM, as intermediator and link, has been recognized by an increasing number of researchers and organizations (Nonaka and Takeuchi, 1995; Balogun and Johnson, 2005) the main focus to date on vertical interactions between senior managers and others has often obscured the importance of horizontal interactions within organizations (Balogun and Johnson, 2004; 2005) and in many instances remains ‘a highly undervalued lynchpin in the strategy process’ (Balogun and Johnson, 2005). Several researchers (Floyd and Wooldridge, 1997) indicate that as change progresses “most of the reported interactions that contribute to the emergent change outcomes occur informally between middle managers as they go about their everyday work” (Floyd and Wooldridge, 1997). The observations at Microsoft the Netherlands corroborate this view. At some moments PMs shared best practices about how to confront the increasingly virtual cooperation and other elements of the NWoW and 2bPR change journey. Change participants commented this happened mainly before or after meetings, over lunch or coffee and finding best practices or another manager who
was thinking about or struggling with the same problem often only happened by coincidence, but if it
happened was believed to be highly effective.

Further, several change participants indicated that they really appreciated to talk about 2bPR in their
direct team environment and with their direct managers. Larkin and Larkin (1996) found that co-
workers have stronger trust for information given by middle managers than from top management.
In addition, several times throughout the different sessions organized by the SC in order to extract
information from the organization (MMs and KWs) employees exchanged valuable information about
skills and competencies of themselves but as well from colleagues that would be helpful in
development of the 2bPR change journey. Research states that since an organizations’ unique set of
competencies evolves from a network of relationships, and middle managers are at the nodes of
these relationships positions, these middle managers play a crucial role in integrating and aligning
competencies throughout the organization (Black and Boal, 1994). At Microsoft the Netherlands the
observations and views of People Managers and front-line knowledge workers strongly confirmed
this insight. And led us conclude that closer interaction and support for horizontal knowledge sharing
between MM through formalization of this group would be valuable for the organization and, in
addition, foster the value of informal connections and processes.

6.4 Self-Insight and Authenticity – Walk the Talk, but Faster and in the Right Direction

The hardest person you will ever have to lead is yourself. When you can lead yourself
through the challenges and difficulties, you will find that leading others becomes
relatively straight-forward ~ Bill George, True North, 2007.

Several difficulties and tensions existed during the “organic and co-created” change that Microsoft
the Netherlands initiated. During the rebalancing act of power, roles and mental models at Microsoft
two of these difficulties stood out; (1) the inability of organizational members to directly understand
and rolemodel the behaviors according to the new vision and schemata (specifically to perform the
rolemodeling role) and (2) the inability to directly facilitate others and provide the right support f.e.
to effectively use and contribute to the newly established and evolving mechanisms of
empowerment (f.e. the SC, stronger MM layer, quartermakers) from the beginning of the change
(specifically to perform coordinating, intermediating and facilitating roles). For both, time elapsed
before TM, MM and KWs understood and had surfaced how existing mental models differed from
the new mental models and how to behave accordingly and really be able to adopt “co-creational”
behavior (Argyris and Schon, 1978; Prahalad and Ramaswamy, 2003).

The vision and attempt for organic co-creation meant management was itself still in the middle of a
mental change process to become able to lead by example in a “co-creational” fashion, but had not
completed this process yet, while the rest of the organization was already invited to “co-create” and to start reconsidering and influencing the direction of the change. This made the demand for managers to inspire the change by rolemodeling highly complex. Management lost, to a certain extent, control on not only the time available to first change themselves, but as well on the way they were expected to change. Since what was considered to be a role model was more dependent upon influence from various sources now, instead of top management consideration only. In this way, management was sometimes confronted with behavior that was expected from them that was further removed from what they, based upon their own existent mental models, would have envisioned themselves. This meant they sometimes faced an increasingly difficult stretch of their mental models and behavior to move into the direction that was now interchangeably influenced by management and KWs. These problems were largely avoided in the traditional “planned, top down” form of change where management directed the timing of the change and the outcome of the change itself.

In addition, at the beginning phases of the 2bPR journey several steps were made to signal co-creation through the establishment of formal mechanisms of empowerment like the SC, the use of SC project groups and the selection and training of quartermakers (Gioia et al. 1994; Labianca, 2000). As explained, not all these interventions did completely materialize effectively from day one, since management again was still learning how and in the process of transforming their own mental models and behavior to support these mechanisms most effectively (Argyris and Schon, 1978). The delay in engaging MM throughout the organization can be considered as a postponement of the “co-creation” process and replicated a process still more similar to what would have happened if TM would have chosen the traditional “planned, top-down” approach. Especially at the beginning phases of change, People Managers and selected role models (quartermakers) received a rather low amount of resources and information that relatively disabled them to be empowered by more than words (Bartlett and Ghoshal, 1996). Already very early in the change process it became clear that it was no unwillingness by the majority of management, but a direct outcome of the difficulty of engaging in new behavior directly from the moment the new reality was envisioned, which in itself was a moving target in an increasingly faster moving world explaining the reason for engagement into the “organic and co-creational” approach in the first place.

Research shows, and the case study corroborates although, that managers who speak eloquently about vision and values, but show behavior that is inconsistent with their stated beliefs, will ultimately lose respect (Kouzes and Posner, 1987) and trust in the relationship will decrease (Rich, 1997). It is therefore highly valuable to understand the difficulties as explained throughout the case
study and in this discussion and the most important solution available to solve these tensions as soon as possible based upon insights from research and the case study. It was found that choosing not to “co-create organically” and to maintain the traditional “planned and top-down” approach was not a viable option anymore for Microsoft the Netherlands, as the advantages of the “organic and co-creational” approach for Microsoft as a globally connected knowledge worker organization were clear (see literature review, Microsoft White Papers and case study). Therefore solutions needed to be found at the other end of the spectrum; decreasing the time to move from existent mental models to new mental models, to adopt new roles and behavior and to build supporting mechanisms for this purpose. The case study gives a detailed picture of the complications of rolemodeling and “co-creation”, the loss of head start and control by management, and thereby clearly indicates the value of decreasing the time between communication of vision and new mental models and rolemodeling by management and of providing support for “coordinating” and “intermediating” roles.

**Self-Insight**

Research about routines, habits and mental models, among other things, suggests that methods of making actors more conscious of their current practices and mental models may facilitate change (Cohen and Bacdayan, 1994). This case study shows how this was done and corroborates the usefulness of designing interventions that allow organizational members to explicitly surface mental models and to understand the gaps and skills to successfully move towards new ones (f.e. the Rf_G Day fishbowl sessions). In addition, the case study shows increasing activities of management and KWs of self-exploration (Maslow, 1965; f.e. MBTI). Analyzing these activities delivers a consistent picture of the effectiveness of especially these efforts and activities that increase the ability of Microsoft management and employees to understand and thus change their mental models and behavior in order to adapt to newly available working practices and a changing environment and to become more productive. Future change efforts are expected to strongly benefit from such an explicit focus upon the cognitive and emotional reorientation during change (Porras and Robertson, 1992; McKinley and Scherer, 2000; Balogun and Johnson, 2004). Reflecting upon the Microsoft case-study leads to a very strong conclusion that self-exploration (personality and work style) and insights in others (f.e. via MBTI) are a very effective supporting mechanism to facilitate the kind of “organic and co-created” change and related developments that Microsoft the Netherlands went through and are evident in many of today’s global knowledge worker organizations and that self-awareness increases the potential for personal and cooperative competency and productivity and for managers for being able to engage in rolemodeling.
Increasing the skill of self-reflection decreased the gap of time between espoused theory and theory-in-use (Argyris and Schon, 1978) and solved part of the tensions that organizations face when entering similar change journeys as Microsoft. In addition, it improved the ability to be authentic and communicate why behavior was differently from what was expressed to be the common denominator to be successful in the organization. The role model behavior of the GM and several other managers, in this perspective, provided a clear example of self-insight in practice and had an important influence on the organization and the change. Increasingly towards the end of the second energizing phase during the “2bPR change journey” the GM and several other organization members, by providing explanations of how old mental models and personal preferences interfered with their ability to behave according to the new vision, strongly signaled another very important solution beyond understanding oneself and behaving according to the new vision and being able to faster behave in-role, even when new roles develop.

**Authenticity**

At the beginning of the 2bPR change journey effective “rolemodeling” was considered to be setting the example of what kind of behavior was expected to be successful within the NWoW, during 2bPR although TM increasingly faced difficulties by using this approach. First of all, some managers encountered conflicts to adapt their behavior to the vision, as the behavior that was requested conflicted with their own personalities and ways of working. This meant that even although they were able to adopt the new mental model, adapting their behavior implied they would actually become less effective and/ or unhappy in performing their roles in the long-term. Secondly, role modeling of TM and MM and behaving all alike clashed with the vision of People-Readiness. The whole change process was initiated with the idea that all employees should better understand their own specific skills and strengths and those of others to more effectively use them and become better cooperators and complement each other within the digital globalized knowledge worker environment of today. In this way it became increasingly obvious that “rolemodeling” was more then only showing “exact” behavior to be copied, it meant as well being able to explain when behavior could not be aligned to the picture perfect of the new vision as otherwise authenticity, personal happiness and/ or effectiveness would be jeopardized.

To face the difficulties during the change and, in general, in the increasingly complex and demanding environment the organization tried: (1) to increase self-reflection (time and skills) to enable development of self-insight to be able to understand how to most effectively use your own skills and communicate and cooperate with others and what behavior is closest to your true authentic self, and
(2) to communicate when authenticity clashed with the newly expected behavior and why differences between expectations and behavior thus remain in order to avoid decreasing trust in the communicated vision when it cannot be lived up completely by the most visible rolemodel figures in the organization.

The GM at Microsoft the Netherlands was already on several levels congruent with the newly communicated vision and associated mental models. Evidence found throughout the study and in leadership and change research showed this was highly beneficial for the change to take place. Complete congruency although was difficult to reach and throughout the 2bPR change journey the GM found out not beneficial to his own effectiveness and happiness or that of his team or members within the organization. Then the GM started to clearly communicate when his behavior was not (yet) in line with the communicated vision and why not. And then explained that he was still working on understanding how best to change or that, since change would actually decrease his productivity or satisfaction due to his personal preferences and skill set, he therefore would deviate from the overall more general mental model that was developed as a vision for the organization. This behavior was shared by several organizational members and the role modeling by the GM made clear to employees that although management did not always show role model behavior according to their communicated vision and new schemata, this did not directly mean they did not believe in it, there was unwillingness to change and that change of participants would not be appreciated. Instead, this behavior signaled that change of mental models was considered difficult, also by management. Thus instead of role modeling exact behavior to emulate, the GM engaged into role modeling authenticity. Secondly, it gave employees throughout the organization the freedom and psychological safety (Edmondson, 1999) to experiment with their own mental models, personal preferences and new working practices and deviate from the picture perfect when necessary.

The insights and conclusions based on the case study of this research are therefore in line with recent research about the increasing importance of authenticity and authentic leadership (Branson, 2007; Friedman and Lobel, 2003; George, 2003; George and Sims, 2007; George et al. 2007; Walumbwa et al., 2007). Walumbwa et al. (2007) defined authenticity, based upon Harter (2002), as “owning one’s personal experiences, be they thoughts, emotions, needs, preferences, or beliefs, processes captured by the injunction to know oneself” and behaving in accordance with the true self (Harter, 2002). Friedman and Lobel (2003) defined it as ‘the genuine “expression of experienced feelings, thoughts, and beliefs” (Kahn, 1992) that results from acting in accord with personal values’. 

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The latter two researchers differentiated as well in their study between effective executive behavior (in their study to urge for a healthy work-life balance) as, either (1) rolemodeling the behavior (what they call the “Poster Child for Balance”) or (2) not rolemodeling the desired behavior since personal behavior deviates due to personal preference or inner personal values (what they call the “Happy Workaholics”), but then actively supporting the behavior of others and rolemodeling authenticity. For the latter category, in addition, they indicated the high importance of explaining the reasons for deviation. “By expressing work and personal life values through their actions, executive leaders become role models not for balance in the traditional sense of the word but for authenticity. And, if understood and communicated well, an executive’s authenticity can be a positive force for constructive action and performance in the organization” (Friedman and Lobel, 2003). These findings of recent authenticity research, especially those of Friedman and Lobel (2003), are highly aligned to the findings of this study.

<table>
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<tr>
<th>Actions: Time and Energy Invested in Work and Personal Life</th>
<th>Values: What’s Important?</th>
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<tr>
<td>Balance Between Work and Personal Life</td>
<td>Primary Focus on Work</td>
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<td>Equal Investment in Work and Personal Life</td>
<td>Poster Child for Balance</td>
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<tr>
<td>Primary Investment in Work</td>
<td>Unhappy Workaholic</td>
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Figure 23: Four types of Executives, Friedmand and Lobel (2003)
6.5 Discussion: Conclusion

The inability to centralize knowledge and market insight at the top and increasing opportunities and capabilities of employees throughout the organization to contribute has resulted in a shift of power and a transformation of management roles and actions from instructing and controlling change - to - inspiring and co-creating change. It has resulted in a transformation of knowledge workers roles and actions from accepting change as “good soldiers” to proactively contributing and influencing change.

The findings and recommendations of this study show how organizations can attain ‘fitness’ – the capacity to learn and change to fit new circumstances” – that enables optimal alignment between organization and the surrounding world and thus highest gains for productivity (Beer et al., 2005) by increasing empowerment and realigning the roles and actions of its people.

With increased power although as well comes increased influence and responsibility. Therefore this kind of organizational change demands new skills and mental models from management and knowledge workers throughout the organization. When, in addition, one takes into account the direction in which the world is changing and speed of its change, the difficulties and solutions encountered during the “organic co-created” change approach at Microsoft and the findings of this study and several recent studies used to ground this study increasing and supporting self-insight and authentic leadership (of every individual, not only management) are believed to provide important answers to how the new roles and actions can be better understood and executed properly and the knowledge worker organization of today and tomorrow can achieve success and maintain competitive superiority.

Mahatma Ghandi once famously said “you need to be the change you want to see in the world”, which can be considered to be in line with the presented rolemodeling theory. Reflecting on what I have seen over the past 17 months I contemplate, at the end of this study, that the managers and leaders of the future, in addition, need to be able “to be the change others want to see in the world”, though not without staying true and authentic to themselves. Therefore I expect that the most effective managers or leaders of change in the future will therefore be the ones that possess the art of self-reflection and skills to recognize and understand mental models and habits of themselves and others to a higher extent than others. By combining true self-insight and understanding of others the new leaders and manegers of the future are believed to be better able to integrate valuable knowledge throughout the organization and beyond (Grant, 1996) into a consolidated and “co-created” and widely shared vision they are able to authentically act upon and inspire others with.
6.6 Limitations of the Study

It is important to consider the limitations of this study. Like much of the change and sensemaking literature used for this study, this research empirically validates findings from only one organization and one (corporate) culture: Microsoft the Netherlands. In addition, the case study only accounts for one kind of change where the roles and actions of employees are investigated that influence mental models in a transformation of organizational context and ways of working. Also, since the case was considered to be a revelatory case, gaining in-depth insights into the processes at a front-runner organization was believed to be more valuable than collecting multiple shallow views for comparison (Yin, 1994). Such a focus, as well, helps to account for industry and cultural differences that might otherwise have disguised significant effects. It although, on the other hand, limits the generalization of research results and therefore caution needs to be exercised in interpreting the results (see suggestions for future research). Therefore, in line with Lincoln and Guba (1985), it is recommended to read the thick description (Van Maanen, 1979) in chapter 5 to check applicability of the conclusions and conceptual model for different situations.

In addition, throughout this study the quite general assumption is followed that roles, actions and interventions of management and knowledge workers affect mental models. There are no studies known of contradicting this assumption. A vast body of research although acknowledges that the strength and impact of influence varies and depends on (1) the context for change and (2) individual characteristics of the person expected to change (Vermeulen, 2007). “Some individuals may lack the motivation to change their behavior. Others may be averse for the way the change is initiated or implemented. Still others may not have the openness yet to change due to personal difficulties with attention span, patience, retentive ability, or aptitude to learn” (Moberg, 2000).

Furthermore, this study is to some extent based upon the assumption that a change in mental models generates a change in behaviour. Many researchers corroborate this relation (Nonaka and Takeuchi, 1995; Balogun and Jenkins, 2003). Caution although is necessary, since other researchers indicate the relationship to be rather complex and multi-faceted where one does not necessarily lead to the other (Fiol and Lyles, 1985; Huber, 1999; Roome and Wijen, 2005; Simon, 1969; Sinkula, 1994; Slater and Narver, 1995). Therefore a limitation of this study is the imperfect understanding about when mental model change leads to behavioural change and when not (see suggestions for future research).

Leonard-Barton and Deschamps (1988) indicate the adoption decision for innovation to depend upon several elements: (1) the authority adoption decision or perceived managerial behavior on innovation use by management, (2) social influence, (3) accessibility, (4) training, and (5)
individual target user’s characteristics. In this study the adoption decisions of employees within Microsoft the Netherlands of innovations regarding a new organizational context and new ways of working are investigated. This study focuses especially upon the influence of the “authority adoption decision” or “perceived managerial behavior on innovation use by management” and social influence, and a few insights are provided on the influence of accessibility and training. The influence of the individual target user’s characteristics on adoption although is not investigated at all, even though its influence is known to be profound (Leonard-Barton and Deschamps, 1988; Huber, 1999; Vermeulen, 2007; Huber, 1999). This was beyond the scope of this thesis, but therefore also a limitation (See suggestions for future research).

Moreover, there is “often considerable overlap between behaviors and roles at every level”. Giving an overview of roles and actions at different phases will therefore not be as distinct in reality as in the model (Ericsson, 2001). Floyd and Wooldridge (1992) indicate that categorizing involvement theoretically is not meant to suggest discrete breaks in behavior and roles as they ‘combine synergistically into patterns of involvement’. In addition, other roles and actions may exist. In line with Floyd and Lane (2000) we believe that since extant literature suggests these roles and actions they provide “a grounded overview of the managerial activities most salient to organizational change”. Furthermore, the operational definition of top- and middle management and knowledge workers varies considerably across organizational settings; interaction between these groups should therefore be looked at in-depth at every organization individually and conclusions of this study do not necessarily apply on a one-on-one basis.

In addition, it is very important to take into consideration the limitation of the conclusions and recommendations of this study in the light of cultural differences. Especially since recommendations for empowerment are considered Hofstede’s (2005) research shows the existent mental models towards power distance to vary considerably across countries and these variations have been recognized to have a highly important effect on the success or failure of empowerment interventions.

This study as well encounters some additional methodological limitations; conclusions are, for example, largely based upon interviews and observation. Some researchers question though if people are able to express properly their underlying mental models due to several reasons of which the ‘bounded rationality’ (Simon, 1991) of human-beings and the difference between espoused theory and theory-in-use (Argyris and Schon, 1978) very strong ones. This means people will reveal the facts as they believe they are, not per se like they really are. Background, believes, former experience, position within the organization are all expected to influence these believes (Huber,
1999) and thus what is communicated and observed. Since this study depends upon words and actions of employees within the organization and behaviour does not always reflect the current mental model this study is only an approximation of the complex reality that was found at Microsoft the Netherlands, and in general can be found in the world.

Another methodological concern is that most people who have been observed or have been interviewed about the change have not been selected completely at random. Most of them were all more involved in the change process then others and were better noticed during observation since they participated more actively or they agreed or even volunteered to be interviewed. The first group of people observed and interviewed was either formally involved by performing work or analysis to develop the concepts supporting the change and by ensuring implementation, or they indicated interest in being interviewed during one of the first formal interventions (Room for_Growth Day, 6 September 2007). Most interviewees of the second group were informally involved; which means they volunteered to be in the loop, to be within the brainstorm sessions or to participate in other events where the organizational change process could be influenced. There are although always people within an organization not able to cope with change or resisting change. It has been tried to identify these people and some of them agreed to participate in the interviews. This has been very valuable to understand the full picture of the change at hand. Still they were the minority of interviewees and there were only a few events observed where they were participating. It is believed by inviting them for the interviews or engaging in a dialogue with them when walking around and working in the office this limitation has been confronted to a large extent, it is although still a worthwhile limitation to mention.

Furthermore, most observation moments took place during top management and middle management formal interventions, knowledge sharing and decision-making. With hindsight, and more resources, more observation moments during day-to-day team meetings and formal sessions of knowledge workers could have increased the quality of this research to balance the view of top and middle management and knowledge workers even better. In addition, top management outside of the Steering Committee has not been participating in the last round of in-depth interviews, but the researcher has only been attending their training and formal interventions. This is believed to be a limitation. As these interviews could have been giving very valuable insights, especially into the influence and components of the role model behavior role of top management mentioned by all change participants as the most important role throughout the change.
Last but not least, reliability and validity of research can be increased by using multiple researchers to interpret and code the data (Miles and Huberman, 1984). Since “given the ethnographer’s immersion in the data, his or her main problem is that of ‘going native’, i.e. completely adopting the interpretive view of the organization members, and thus losing the dispassionate view required for a more theoretical, second-order analysis” (Gioia et al., 1994). Ideally then, a second researcher, who has not been exposed to the direct, subjective, inside experiences is desirable (“although seldom employed”) (Evered and Louis, 1981). Due to limitations of time and money this has only been done for the first thick description in March 2008 and the first round of interviews in November 2007, not for the last part of the research, which is a limitation of this study.

6.7 Contributions and Recommendations

6.7.1 Main Theoretical Contributions

Notwithstanding the limitations of this research, the findings of this study are interesting in terms of their consistency with and extension of previous theory and models. Several researchers indicated that it is the social, political, cultural and cognitive dimensions of managerial activities which give rise to incremental change typical in organizations and can be employed to galvanize more fundamental change (Johnson, 1992), but, that an explicit framework of to capture change strategies, especially the cultural and managerial processes lacks (Johnson, 1992). This study provides insights in these managerial processes through roles and actions during change that influence the “mental context” within the organization and of the change process. In addition, a conceptual framework, combining theories of sensemaking and sensegiving in organizational change (Balogun and Johnson, 2005; Gioia and Chittipedi, 1991) and new knowledge creation (Nonaka and Takeuchi, 1995), was generated and tested. The framework extends and connects insights from prior research in a holistic framework that proves to be very valuable in promoting understanding of and identifying managerial processes during change, through the roles and actions of management and knowledge workers that influence mental models.

In addition, this study contributes knowledge to the processes and roles underlying the creation of new organizational contexts. Within new knowledge creation theory Nonaka et al. (2006) called for more empirical research investigating the factors of ‘ba’ (the shared physical, virtual and mental organizational context for knowledge work) and the role of management in shaping this context. Nonaka et al. (2006) indicate these themes are “theoretically relevant”, but “empirically under-explored”. The case-study of Microsoft the Netherlands, in this perspective is unique, as it gave the possibility to research these topics within an ideal research setting; one where all three contexts were recognized and the whole change process was designed around these themes. Through the
case study several factors of ‘ba’ were uncovered and several interdependencies were found. In addition, by allowing the researcher to access all meetings around the 2bPR change journey a unique holistic picture could be created that not only gives insights in the roles and actions of management and knowledge worker on shaping the new organizational context, but one that as well can be used for understanding the changing role of management in this context, for which recently research indicated its high importance for new insights (Balogun, 1993; 2006, Floyd and Woodridge, 1992; 1997).

In addition, this study contributes to a topic that once created and legitimized the field of strategy research: the roles and actions of management (Bartlett and Ghoshal, 1994; Galunic and Eisenhardt, 1993). ‘Historically the roles and task of management were a central concern of strategic management research and teaching, in more recent work although, as strategy became just another “functional imperative” (Galunic and Eisenhardt, 1993), the link with management has eroded’ (Bartlett and Ghoshal, 1994). This research especially adds value to the growing body of research that indicates more in-depth insights are needed in the roles and actions of management in contemporary knowledge worker organizations (Bartlett and Ghoshal, 1993, 1994, 1995, 1996; Balogun and Johnson, 2005). Bartlett and Ghoshal (1994) indicated “as we have shown in an earlier article (Bartlett and Ghoshal, 1993) existing theory is stretched too thin in accommodating emerging changes in the fundamental assumptions that underlie how managers think about the task of organizing and shaping the organizational context”.

In line with our conceptual model (see chapter 2), roles and actions have been researched at three levels (Nonaka and Takeuchi, 1995) and therefore extends theories on the roles and actions during change at the level of top management (Floyd and Lane, 2000; Gioia and Chittipedi, 1991; Nonaka and Takeuchi, 1995), middle management (Balogun and Johnson, 2005; Floyd and Lane, 2000; Floyd and Woodridge, 1992; Nonaka and Takeuchi, 1995) and front-line knowledge worker (Floyd and Lane, 2000; Nonaka and Takeuchi, 1995). It also provides significant insights on how empowerment is brought into the organizational culture and work processes as a kind of rebalancing act and contributes to the growing body of empowerment literature (Labianca, 2000). Furthermore, this study provides more insights in the role of structural symbols (a visible steering committee) as catalysts for institutionalizing change as reaction to a call for research of Gioia and Chittipedi (1994). Also it contributes valuable new information to the middle-up-down model of Nonaka and Takeuchi (1995), especially the design and functioning of the steering committee and to new insights on the importance of rolemodeling (Heracleous, 2002) in change, while role modeling previously has received little attention in this area of research.
In addition, Doz and Chakravarthy (1992) underscored that research within the strategic management field must become more relevant to practice. They called for research that focuses on corporate strategy processes and that is action-research oriented. “Strategy process research must help the firm adapt to changes in its environment and to renew itself proactively. Yet, the research to date on the strategy process has been rather static and too narrowly focused. The complexity of doing research on the complete transformation of companies has led many process researchers to fall back on steady state research into relationships between individual administrative systems and measurable outcomes” (Doz and Chakravarthy, 1992). This study, by building upon prior research, by engaging into longitudinal data-gathering (17 months) encompassing a complete transformation cycle has tried to deliver to this call and avoid its criticism. In addition, Doz and Chakravarty (1992) indicate “due to the difficulty to get access to higher management there has been an inability to research the decision-making processes at this level”. This research makes an important contribution since I have been allowed to access all information and attend all management meetings related to the change, including those of higher management. Therefore, this research enables theory extension with real life empirical data that are rarely accessible.

Furthermore, this study provides insights in the tensions that exist when moving from old mental models, routines and habits to new ones. It is seen that to achieve highest productivity and job satisfaction this as well means knowledge workers and management will need to find a proper way to balance the exploration of new ways of working and exploitation of the efficiency by using old ones. Analyzing this study indicates several of these processes to be comparable to the exploration, exploitation and ambidexterity discussion going on in the strategic- and corporate renewal literature (see f.e. Birkinshaw and Gibson, 2004; Lubatkin et al., 2006; Lewin and Volberda, 1999; Lewin et al., 1999; March, 1991). The connection with sensemaking and sensegiving and mental model and schemata literature, in this perspective, as well provides an interesting new angel on these topics. Especially since the case study company provides an in-depth view of the central evolutionary processes of renewing organizational context and ways of working and related mental model shifts. Also insights are given in the reactions, feelings and attitudes of employees within organizations when they try to balance exploitation of their old habits and exploration of new ones, especially since they notice their effectiveness and efficiency decrease in the initial stage of exploration.

One of the features of self-management is the need for repeating redefinition of the subordinates task boundaries (Slocum and Sims, 1980). Little is known about how this redefinition of boundaries is done and how such activities are transmitted to subordinates. And more elaborate models are needed to address the complexity of self-management in organizations (Mills, 1983). This study
contributes to the elaboration of initial insights to this redefinition of boundaries and therefore contributes to the research about subordinates tasks boundaries and self-management.

Last but not least, the findings contribute to theory regarding the firms’ dynamic capability (Nelson, 1991) or ‘fitness’ of the organization to change (Beer et al., 2005), as in-depth insights are given in the development of organizational context to fit changing ways of working and in the sensemaking and sensegiving processes, phases, roles and actions that are needed for a change in mental models to take place that allow for the organization and its members to increase the capacity to align faster and more effectively to changing circumstances and complex situations by increasing their “co-creational” or cooperation competency and ability to integrate individuals knowledge throughout the organization (Grant, 1996).

6.7.2 Recommendations for Future Research
Several researchers (Nonaka, 1988; Wooldridge and Floyd, 1988) suggest appropriate forms of change and roles and actions and levels of involvement are likely to vary across setting (Miles and Snow, 1992). The conclusions and conceptual model of this study although, have been derived and empirically validated based on only one case study and change process. A suggestion for future studies therefore is to further examine the roles and actions of change actors and their influence on mental models during change at different environmental and competitive settings. Testing the conceptual model and findings in more empirical studies in a wider variety of companies, within different industries, in more countries, for more types of change processes would increase the reliability and thus importance of the findings of this study. In addition, this study has explored the topic at hand from the interpretive, qualitative research design. Future research might also continue to explore the roles and actions in influencing mental model change by taking a large-scale sample or quantitative approach.

Since mental models are so fundamental to change (Johnson-Laird, 1980) and the pace of change is only expected to increase (Huygens et al., 2001; Lewin and Volberda, 1999) it is believed that the interconnection between mental models, mental models shifts and the influence of various actors within organization provides many promising avenues for developing both theory and measures of roles and actions that are more effective for self-insight, personal development and effectiveness of leadership and management style and interventions that influence mental models of others. At stake in such extension and possible validation of the model is not just the possibility of developing richer normative proposals on how change actors and participants can influence effective change, but also the performance of their companies and broader issues that are more fundamental to organization
theory. Particularly regarding the subject of vision, researchers still have much to learn about the nature and effectiveness of proactive organizational actions vis-à-vis reactive actions towards their environments (Rajagopalan and Spreitzer, 1996). The increasing influence and responsibility of knowledge workers who are in direct contact with the market, being able to soak up information and diffuse this knowledge upwards and downwards spiraling (Nonaka and Takeuchi, 1995) throughout the organization can become a powerful weapon in the race towards sustainable competitive advantage, as Grant (1996) indicates that connected knowledge throughout the organization is the essence of organizational capability in the knowledge era.

Another important task for future research could be to further examine the relationship between different forms of actions. Under which conditions specific mental models might be reinforced by the presence of commensurate actions, and what factors may make these different processes more or less effective. Much previous research on the influence of symbolic management for change has focused on either behavior or communications (Fiss and Zajac, 2006). This study, although not directed to this question, showed a preliminary view on the interactions of both forms. And scholars are still only beginning to understand the interactions between both forms of organizational actions (Fiss and Zajac, 2006) this topic is recommended to be further explored.

The many change participants of this study indicate the importance of role modeling, especially at the top management level, throughout the change process. This role is hardly recognized in change management literature although increasingly mentioned. Within psychological and social literature more insights are found. For this reason more in-depth research is suggested to better understand the determinants of role modeling and role model behavior. It would be interesting to understand the connection between role model behavior and leadership, why someone is a role model and why not, if people can be trained to become a role model, what skills and competencies role models possess, the differences between role model behavior in lateral and vertical relationships, in what kind of change processes role model behavior is most necessary, recent notions of the importance of role model behavior often focus on ICT (Mathieu, 2005; McAfee, 2003) and the case study organization as well is on its way of adopting new behaviors for a large part on ICT skills. Several questions remain unanswered and since this role was mentioned by the majority of change participants at Microsoft the Netherlands future research is highly recommended.

Another issue for further research and especially for discussion in organizations in assigning middle managers more responsibility in being the linking pin of the organization during change is the question of needed competencies (Balogun and Johnson, 2004). It was noticed at Microsoft the
Netherlands that some change participants did not believe several current middle managers to have these competencies. A question then is: what are the key competences of middle managers in their different roles to influence mental models during change or be engaged in the upward influence processes of strategic change? How to facilitate the changes in the role demands by e.g. training? And can this be trained?

The analysis of this study has been done at Microsoft the Netherlands and “Top Management” referred to the Country Management Team (CMT) and steering committee (SC) of Microsoft the Netherlands. The initial visions behind the change at Microsoft the Netherlands were designed and communicated although by Bill Gates and his team at Microsoft Corporate. And it is true that the analysis could have been done by adding this additional level and that the model can be used at various interconnecting levels at higher and lower vertical levels. Although as Doz and Chakravarthy (1992) indicate these kind of situations are rarely accessible, and the case study in this study is therefore a unique case, testing the model including additional levels is believed to be a highly interesting path for future research.

In addition, the research question could also have been approached from a different theoretical perspective. The change process has been presented and analyzed from a sensemaking and new knowledge creation perspective, since this more recent perspective has been indicated to be in need of further conceptualization (Nonaka et al., 2006; Ericson, 2001). But the change process could also have been regarded as a process of legitimization, whereby new organizational identities are formed and creation and adoption of a new organizational context and ways of working could have been looked into as depending on the legitimacy that organizational actors would have assigned to it (Ashforth and Gibbs, 1990). Or from a more political perspective, where power dimensions and people’s interests play an important role (Pettigrew, 1985). Future research could focus upon these different theoretical perspectives.

In the implementation of an organizational innovation, managers are usually presumed to influence the extent to which the innovation is adopted and used by their subordinates (Leonard-Barton and Deschamps, 1988). Findings of several researches and this study suggest that the managerial influence is not equally perceived by all employees (Leonard-Barton and Deschamps, 1988; Huber, 1999; Vermeulen, 2007). Rather, certain context-specific characteristics of individual employees mediate the managerial influence. Findings of Leonard-Barton and Deschamps (1988) suggest that

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80 In Microsoft documents and daily language different names are used for the Top Management of Microsoft the Netherlands. For methodological reasons the words used in Microsoft documents or by Microsoft employees will be maintained. Therefore the terms Country Management Team (CMT), Country Leadership Team (CLT) and Management Team (MT) will be used interchangeably.
the diffusion of an innovation within an organization perhaps could be viewed as a two-step managerial process. “Employees whose characteristics incline them to adopt innovation will do so without management support or urging if it is simply made available. Employees low on these characteristics will await a managerial directive before adopting”. Future research is believed to provide better insights in this topic. Vermeulen (2007) already made an effort to portray the complete overview of determinants predicting adoption, but from the point of view of this study to better understand the need for role model behavior and “situational leadership” more in-depth research on the need for managerial directives or empowerment is believed to be valuable.

In addition, research issues specific to organizing and strategizing remain. Change initiatives create considerable cognitive disorder and entail a certain cost associated with cognitive renegotiation. How can such costs be minimized and the transitions made easier for those involved? Several other change questions were encountered during the process. For example: Is the degree to which stakeholders accept the discontinuity, associated with change, related to the source and type of symbolism used to introduce the change? What characteristics of the top management team or new ad hoc organizational structures facilitate the acceptance of change? This research offers some tentative propositions about the patterns of schema change accompanying shifts in organizational context and behavior and the critical shaping role of middle manager sensemaking is highlighted. To make further progress though, researchers need to develop greater understanding of how specific aspects of change context and design affect patterns of schema development and the implications of observed effects for how managers facilitate change in organizations.

6.7.3 Main Managerial Contributions

Although this study has taken place at only one organization, the insights in how roles and actions of management and knowledge workers affect the creation of a new organizational context (physical, virtual and mental context) and how ways of working are adapted to an increasingly digital and globalized world give the findings of this study broader relevance.

In addition, valuable insights are provided for organizations that want to successfully change from old and existent mental models still incorporated in the traditional planning and top-down change paradigm to new mental models of organic and co-created change. And thus for organizations that engage in empowerment efforts and rebalancing acts of power when management moves from “command and control” to a “coordinate and cultivate” (Malone, 2004) mental models and knowledge workers are expected to increasingly adopt models related to “self-steering and contributing”.

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Furthermore, the interaction patterns that are uncovered between top management, middle management and knowledge workers through (in)formal roles and actions in the different phases of change that affect mental models and behavior may be found in other organizations involving the above mentioned characteristics, but also in different change processes. The conclusions may therefore prove to be valuable for any knowledge worker organization to take into account when considering change in general or to better explain the general processes of knowledge exchange and creation during daily business. Considering that most findings of this study closely align with previous research and literature and that the conceptual model and conclusions extend, combine and empirically validate these several previous insights, makes this a highly likely assumption.

In addition, this study provides more insights in the role of structural symbols as catalysts for institutionalizing change (a visible steering committee, actions of management, formalizing role models), the high importance of ensuring a complete and effective interaction loop between middle, up and down (Nonaka and Takeuchi, 1995; Grant, 1996), the positive effects of role modeling to inspire change (especially by higher management) and of supporting organizational members to engage into activities that increase self-insight and the importance of a psychological safe environment (Edmondson, 1999) both in order to facilitate employees to understand and act according personal and company values and working preferences that enable gaining energy and behaving authentically within today’s global knowledge worker organizations.

6.7.4 Recommendations for Practitioners – Complete and Inspire the Loop of Interaction

“For future growth, we have to inspire our customers and partners. Show them what value our technology generates and how it empowers and enables people to fulfill their ambitions and organizations to increase their productivity. Showing our customers not only ‘why’ and ‘what’, but also ‘how’. By doing it ourselves. Be*Do*Say. We need 2bPR” ~ Microsoft, Internal Document, April 2006

Developments and trends in the world instigated the need to start the “2bPR change journey” at Microsoft the Netherlands. As this study has shown, many implications followed. Researchers and practitioners alike recognize that changes in one part of the organizational context affects others and that (re)alignment of them to each other is crucial (Huygens et al., 2001; Lewin and Volberda, 1999). Throughout the change process several barriers were identified that inhibited 2bPR from full or effective implementation right away.

Several of these barriers depended on practices that may have well suited the organization before the “2bPR change journey”. But based upon the new insights and emerging schemata belonging to the new organizational context and ways of working reconsidering some of them is believed to be
valuable, not only to the future succes of 2bPR within Microsoft the Netherlands, but as well if future implementations follow in other countries or organizations.

Some of the recommendations may only count for Microsoft, due to the set up and specifics of the organization, several although are believed to have broader meaning and significance for other organizations as well, especially when these organizations engage into similar kind of change processes as Microsoft the Netherlands embarked upon.

The WHAT and HOW of Change - Filling and Focusing the Loop of Interaction

Organic co-creation does not mean we will just see what happens - Define parameters

The case study shows ‘managing’ change is less about directing and controlling and more about facilitating recipient sensemaking processes to achieve alignment of interpretation and direction throughout the organization (Balogun and Johnson, 2005). Eisenhardt and Sull (2001) mention that, since senior managers cannot be expected to ‘know’ all that is happening in highly dynamic or complex conditions, they should focus on ‘simple rules’ to align interpretation, for example by defining expected outcomes and/ or boundary conditions.

Organic and co-created change does not mean – we will just see what happens (Slocum And Sims, 1980). The case study shows implementation still needs to be consciously viewed by management as a multi-phase process. Although it is not possible or value-adding anymore to pre-plan change phases as in prior stable markets they still exist in a more organic form. Defining a bandwidth in which increasingly self-managed individuals can operate and interpret what makes sense and what should be done will support employees to decrease uncertainty and have a feeling of direction, but as well feel empowered to contribute to the change. In addition, it provides a common direction and will therefore support acceleration of the pace of change by pre-empting that employees throughout the organization will wander off in different directions for too long.

Mills (186) suggested that role performers should be loosely supervised in terms of specific task activities, but more closely supervised in terms of clarification of task boundaries and support for the discretionary activities undertaken. The “2bPR change journey” corroborates the effectiveness of this approach.

Be aware what you start - Make old mental models explicit

It has been shown that changes in the mental context and culture of an organization are especially challenging. Behavior is driven by the mental models that are held by individuals within the organization that taken together form organizational culture (Johnson-Laird, 1980; Schein, 1985). Old views and mental models have to be replaced to alter behavior, but they have a tendency to endure
(Isabella, 1990; Labianca et al., 2000; Poole et al., 1989). In addition, as they are often highly unconscious (Kihlstrom, 1987) it is not even always clear what to change exactly. To let an organization successfully change its mental context and culture and move from old mental models and behavior to new ones it is important to make old mental models clearly explicit and surface that which is taken for granted and has become routine. Since aspects of the mental context and culture cannot be easily challenged or changed and will not necessarily become explicit through the debates around implementation of change unless a conscious effort is taken to make these mental models explicit (Weick, 1995).

These barriers to change might be either symbolic in nature, manifested in difficulties of changing the stories, symbols of tradition and history that exist and in the everyday routines that people take for granted, or they might be political in nature, manifested within the difficulties of changing organizational reward and control systems and the structure of the organization. The case study at Microsoft the Netherlands clearly shows that, no matter what nature, it is important to generate discussion and dialogue that make change actors more conscious of their current practices (Cohen and Bacdayan, 1994) and to let them understand the gap between the old mental model and potential of a new envisioned future and the barriers that exist in between.

This might be facilitated in different ways. The case study shows several methods that were effective such as undertaking a culture audit, communicating to managers and employees the need to challenge what is taken for granted, organizing events with the specific purpose of discussing existing mental models, working practices, styles and future scenarios, providing employees insight in their behavior and personality (f.e. MBTI, work style test), objective activity measurements, supporting and making available content that stimulates (in)formal dialogues about the change and barriers that might exist, sending symbolic signals for change such as establishment of a steering committee, auctioning furniture etc.

The case study shows surfacing mental models is especially important when the change is perceived as radical by organizational members and all elements of organizational context (physical, virtual and mental context) are transformed at the same time. The highly tangible elements of organizational context as the design and move to a new office (physical context) and new technology and tools (virtual context) more easily attracted attention and resources, as organizational members often felt more comfortable with a focus on the details of these processes than understanding and altering the mental context. The focus on changing the mental context and unconscious thinking processes,
through the inherent element that these second-order changes cost more effort, was more easily neglected or forgotten as effects were not directly visible or possible to understand.

In addition, the case study shows surfacing these mental models is increasingly important in today’s fast changing environment, since it is not possible anymore to define a clear vision and associated mental models upfront, which demands continuous reinterpretation of triggers on a daily basis throughout the organization, not only at the top. This demands a stronger knowledge of how existent mental models restrain change or how they can potentially guide inadequate responses to new situations of everyone.

**Be aware of interconnections between mental, physical and virtual context and knowledge work**

In the diffusion of a new vision within an organization, adoption can be influenced by physical (Elsbach and Bechky, 2007), mental and social (Swanson, 1982, Schein, 1985) and/or virtual infrastructure (Boudreau and Robey, 2005; Kim and Lee, 2006) and by training (Popper, 1983). Results of the case study and literature (Veldhoen and Company, 2005; Nonaka and Takeuchi, 1995; Nonaka et al., 2006) show the mental, physical and virtual context to be highly interconnected. And that non-alignment of exactly the connections between physical, mental and virtual worlds is increasingly recognized to limit further improvements in knowledge worker productivity and satisfaction (Thompson et al., 1991; Brynjolfsson, 1993; Brynjolfsson and Hitt, 1998; Brynjolfsson and Yang, 1996). F.e. the mere existence of technology and the possibility of its use, f.e. to make conference and video calls (virtual context) has no value if knowledge workers mindset and capabilities are not changed (mental context) and employees are thus copying communication behavior in a way that resembles physical presence (face traffic every morning to be at the office at 8:30).

Analysis of the case at Microsoft the Netherlands showed that the state of the mental context at the organization is directly related to a “virtual optimum” and “physical minimum”\(^{81}\). This meant, amongst others, that conference calls were still found to be unsuitable for brainstorm sessions by organizational members at Microsoft the Netherlands. This was thus considered to be a physical minimum. The virtual optimum and physical minimum barrier although were recognized to differ per individual, team and organization. And, in addition, it was recognized that, might technology and office infrastructure improve to more advanced forms and the mental context (mindset and capabilities) adjust successfully as well, the optima and minima will probably shift again. Already a

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\(^{81}\) Metaphors coined by the General Manager of Microsoft the Netherlands in an effort to better explain the direction of the “2bPR change journey” and visualize, as far as possible, the future vision of this journey
difference between appreciation for optima and minima is recognized between generations (f.e. the so-called Net Generation or Generation Y) that grew up with or without extensive exposure to completely integrated information and communication technologies in daily life\textsuperscript{82}. The main point is that, no matter where the “physical optimum” and “virtual optimum” currently resides it is not possible to capitalize on improvements in one context if the other two contexts are not (re)aligned to support this improvement by the majority of the team or organization and therefore changes in one context or dimension of the work environment should always be considered in relation to consequences or limitations of the other contexts or dimensions (Van Baalen et al., 2008).

**Communicate progress and demonstrate value with performance measures**

The 2bPR vision required a major mindset change on the part of employees throughout the organization. This kind of radical transformation takes time and is not an overnight change. Yet as the transformation unfolds, both internal and external stakeholders needed “proof that it’s working” (Beer et al., 1990). Gaining buy-in required education and “early wins” that demonstrated value (Clarke et al., 1997). Metrics should be identified, progress tracked, and results communicated as early as possible.

During the Netherlands 2bPR journey specific metrics and/or “early win” stories were developed or shared rather late with the larger part of the organization. Although - when developed - they were highly appreciated. It is therefore recommended to dedicate substantial resources to their development and to activities meant to share knowledge on them to increase their power. Also, since Microsoft the Netherlands developed more insights in metrics, “early win” stories and best practices along the way, together with amongst others RSM Erasmus University, they could serve other subsidiaries of Microsoft and/or organizations to more effectively generate specific organizational insights and “early win” stories in the early phases of their “change journeys”.

**Create New or Fine-Tune Key Performance Indicators**

Management expressed difficulties to reallocate resources to support the change and make it successful when time and commitment were not translated into the bonus and reward systems within the organization. Knowledge Workers faced the same difficulty as the change required substantial efforts to change deeply ingrained behavior, but without a change in KPIs (Key Performance Indicators) most of these efforts went unrecognized and came on top of their daily work.

Several recommendations were expressed to improve the way success was measured by Microsoft, including eventually adapting performance appraisal systems to organizational practices such as 360 degree feedback and simplifying the KPI structure to leave more freedom for interpretation. The change of KPIs was although partly out of the hands of Microsoft the Netherlands, as in the existent mental model and structure of the worldwide organization their change will highly depend on Microsoft Corporate.

The BY WHOM of Change – Strengthen and Close the Gaps in the Loop of Interaction

Co-creation is about shared influence – Be aware for an inverted NIH Syndrome at the top

During the case study Top Management delegated a large part of its responsibility for the change to the Steering Committee and project groups that operated throughout the organization and coordinated the “2bPR change journey”. This delegation of authority although should not be confused with Top Management losing responsibility or considered to be a signal of the unimportance of their commitment and interference. On the contrary.

In traditional top-down managed change the role of management is to envision the outcomes of the change and enforce behavioral adoption down the line. In co-created change, instead of only having a one-way interaction of enforcing change down the line by management (see figure 17, old mental model), interaction develops as a balanced two-way process where Top Management is expected to increasingly integrate bottom-up influences in the visions and future direction of the organization. Integration of knowledge from throughout the organization is expected to benefit the organization by a faster and better response to changing market situations and needs of employees or the environment (Bryan and Joyce, 2007). It although as well complicates the activities of envisioning and re-visioning as the vision is interchangeably influenced at the level of TM, MM and KWS alike and this is obviously more complicated than just negotiating and agreeing on an outcome with a small elite group. Co-created change thus actually means increased complexity for Top Management, as they are expected to take care about changes they did not envision themselves, and they have less influence in keeping the newly developed visions closer to their comfort zones as they were able to do in the top down change approach.

Research and this case study although show that resistance to top-down change is not because MM and KWS are more prone to resist change than managers. Today resistance to change is often casted as a ‘psychological concept personalizing the issue as employees versus managers’ (Dent and Goldberg, 1999). Several researchers (Dent and Goldberg, 1999; Lewin, 1947; Coch and French, 1948) although claim that “resistance to change is a combination of an individual reaction to frustration
with strong group-induced forces" instead (Coch and French, 1948) and a Not Invented Here (NIH) syndrome applies equally to management and employees and thus depends more on non-participation. The analysis of the changing interactions of management and employees during the case study corroborate these claims, as it was seen that when change initiatives were invented bottom-up, management had problems to adopt these initiatives and sequentially perform in-role and be able to enforce these changes down the line. The main point is that it is important to recognize that this NIH syndrome will increasingly invert if change is developed bottom-up and responsibility and mechanisms to cancel these developments are not yet well understood or defined.

In top-down change top management took responsibility for enforcing change down the line, the steering committee and “quartermakers” adopted this role to a certain extent during the “2bPR change journey”, although these were rather unconscious efforts and increased attention is recommended when co-creation is truly the aim.

**Clearly communicate roles and progress of change, that input is appreciated and provide feedback**

If a co-creational view of change is taken and new roles are expected from employees, on providing input to the change, it is important to clearly communicate this expectation directly at the beginning of the change and continue this message consistently. In addition, if input is given, it is important to provide feedback on what happened with the input, since otherwise motivation of employees to share their ideas will cease.

If a co-creational view of change is taken it is important that knowledge about the change process is shared. People are not able to contribute if they are not aware how and when. Change is a secondary activity beyond the normal responsibilities during daily life. Input should therefore be triggered. Also, the case study showed it is important roles of key actors in the change process are clearly communicated. If it is not evident who is responsible, employees are less likely to share ideas with these key actors and thus contribute during the (re-)visioning phases of the change process. It may be useful to use an on-line portal to post decisions and questions of key actors in the change process and to provide information on projects where employees can provide or are expected to provide input to.

In addition, since role creation and negotiation (Bucher and Stelling, 1969) or role making (Graen, 1976) is a process of ongoing redefinition, clarification at certain specific moments during the change provides clarity to management and knowledge workers on how to align their interpretations of each other’s (new and changing) roles.
Increase involvement of top and middle management to role model and instigate dialogue

Moving from a view of traditional planning to organic evolution and from a top-down towards a co-created change is highly impactful for leadership and management throughout the organization. Making their personal old mental models explicit is highly important as they will start leading the change based upon their old mental models, which means at the beginning old behavior is still in place.

This means it is almost impossible to not create confusion, as leadership will have to communicate empowerment, co-creation, freedom and trust while many of them are still themselves in the process of surfacing their old mental models and adapting their behavior. Many of the managers at Microsoft indicated it was only after months that they recognized some of their old mental models on how they managed (cq. Management style). And therefore only knew with hindsight that they would have made choices different with this new knowledge, but that they were not able to see them or to live them directly from the beginning.

Although change increasingly comes from dispersed initiative and bottom-up processes throughout the case study it was highly evident that “role modeling” at the top level was very important. Several explanations have been given. An important managerial implication of this finding is the high value of clearly informing and communicating this role and its significant influence to set expectations at the top management level of their role and its complexity directly from the start. Being a role model for change is highly difficult if management themselves is still struggling with their personal role during the change. As explained, this is to a certain extent inevitable. Minimizing the gap between old and new behavior is important. Beyond clear communication, a thorough facilitation of the process of mental change of top management is therefore considered valuable and recommended.

It is recognized (Balogun, 2006; Balogun and Johnson, 2005) that managers have far less control over processes of change than traditional thinking on the management of change suggests, because they cannot control many of the informal and lateral interrecipient sensemaking processes. While the role of “directing” transformed more into “facilitating” the case study shows that it is still important for top and middle management to be highly involved in the change. Recognizing the existence of events and agendas that MM and KWs find important and are involved in may enable TM to understand the issues, participate in them or send others they can rely on as ambassadors for change. They can let the sensemaking come to them as well by being out in the organization, talking to people, sharing stories, listening and setting an example through their behaviors and actions, known as management by walking around. Or they can themselves initiate and support more events at which individuals at
various levels or functional positions can come together (with or without management) to share thoughts and impressions of the way change is developing. Especially support for business units with TMs that clearly show difficulties of in-role performance to the change and are behind in adoption to other Business Units can be cross-divisionally influenced this way. Although it is understood this is a politically sensitive decision and activity that should be confronted with care.

**Provide leeway for middle management and encourage horizontal interactions**

If a co-creational view of change is taken it is important that knowledge is not only shared top-down, but as well horizontally. Due to the central position of middle management in vertical communication it is crucial to evolve more formal mechanisms to let these actors share their questions and best practices during the change process. Work on knowledge generation, and innovation in general, strongly supports this recommendation (Nonaka and Takeuchi, 1995).

This recommendation appeared to be the most important lesson learned for Microsoft the Netherlands at the end of the second energizing phase. Prior organization and old mental models did not render Middle Management and People Managers the kind of important “intermediating” role they increasingly will take to make co-creation a success and to close the gap in the loop of interaction for knowledge exchange and sensemaking and sensegiving to occur consistently throughout the organization. Formalizing the MM layer as one group, and providing support for more consistent interactions is therefore believed to render the organization with substantial benefits (Floyd and Wooldridge, 1992; 1997; Huy, 2002; Nonaka and Takeuchi, 1995).

**Create boundary spanning positions – Increase social capital**

If top management wants to instill a new set of expectations for middle managers as innovators and change agents, this study suggests more managers need to be put into regular contact with the environment. “That boundary spanners are more influential than others means that the overall level of middle management involvement can be expected to increase with increases in the number of positions in boundary-spanning sub-units, or alternatively, with increase in the number of managers moving through such positions over time” (Floyd and Wooldridge, 1997).

**Evolve formal coordination mechanisms that last**

If a co-creational view of change is taken it is important to assign formal roles and responsibilities to key actors throughout the organization. Role differentiation within 2bPR creates significant demands for coordination and alignment of activities. New formal coordination mechanisms are required to promote communication and interpersonal relationships among individuals in different roles.
The SC appeared to be a very effective mechanism to coordinate the “2bPR change journey” and stimulate participation in the change throughout the organization. At the end of the second energizing face an employee council, OOR, was established. This mechanism gained potential to substitute the SC as this latter empowerment mechanism had only been envisioned for a limited time period during the “2bPR change journey”. Main point is that for co-creation to happen a kind of dedicated platform should exist to bring important initiatives for considerable change to the fore of attention and cross hierarchical lines and prevail above the normal daily life of business.

**Attend to Individual Difference in Level of Anxiety for Change and the Ability to Adopt the Change**

Individuals react differently to radical change because of their prior experiences and life-cycles stages. A successful transition process accommodates these individual concerns (Vermeulen, 2008). Empowerment works well when employees are eager to take personal responsibility. Since not all employees will directly embrace greater responsibility, customized planning for the transition from old mental models to new mental models and special programs (often organized by human resources) may be necessary to move more reluctant or anxious employees towards this goal.

**Stimulate and Support Personal Growth and Develop Specific Digital Work Style Competencies**

Weick (1995) indicated that to make sense of a situation individuals need to connect an issue to a frame and bracket it first in the mind before such an activity can start in the first place and mental models and behavior can be changed. Greater self-insight, in this perspective, is believed to increase the analytical skills that eventually make strategizing and organizing happen (Whittington et al., 2006; and Price et al., 2006; Pye and Pettigrew, 2006), which was confirmed throughout this study.

The processes that we have seen to be central in the actual processes of sensemaking and sensegiving and change are the cognitive bounds (behavioral, cultural and symbolic processes) which preserve current ways of doing things of those who take and influence decisions. Further, change is considered to be a political learning process, where different strategic actors bring different interests and resources to the negotiating table. “Greater awareness of the different power sources used by different players and the need for well-tuned antennae to pick up signals about competing interests” (Pye and Pettigrew, 2006) and the increase of better self insight and insights in others are therefore recommended as keys for the design of more effective change interventions and in order to increase productivity of knowledge workers.

**Stimulate, Support and Highlight Role Modeling, especially from Management and Respected Peers**

Research has emphasized that individuals receive developmental help from a range of individuals, including peers, subordinates, supervisors and leaders (Higgins and Thomas, 2001). Convincing
evidence is marshaled that role models are important for development and used to help define attitudes, professional identity, and goals, especially in complex job situations such as lawyers (Ely, 1994), investment bankers and consultants (Ibarra, 1999).

This case study and research corroborates that organizational members are influenced by advice from management and respected peers and by how many respected people are available to model the new behavior (Gibson, 2003; Rogers, 1982; Leonard-Barton, 1985; Nielson, Carlson, and Lankau, 2001; Ostroff and Kozlowski, 1992; Hill, 1992; Nicholson, 1984). Possibly the most obvious recommendation that can be derived from this study is that role model behavior of management and employees should be made as visible as possible to others. There are a number of practices that can do this. For example, commendations such as People Ready Employee-of-the-Month Awards could be given. Articles in newsletters and web pages could profile role models. Or a group such as the “quartermakers” can be formally nominated as role models. Finally, informal systems can have as much power as formal. Many organizations can’t use formal reward mechanisms to signal approval of certain behaviours and disapproval of others early on in the change process. This shouldn’t stop them using informal mechanisms such as public thankyous, prizes or success stories to encourage adoption of appropriate behaviours.

In order to counter the indeterminacy of the role modeling process, it is important that scripts and schemas during change clearly identify the figure doing the modeling and the acts that are being modeled (Moberg, 2000). Role modeling of management is highly visible. By delegating responsibility for the change partly to a mechanism of empowerment as the SC they should not forget their important influence on the organization by means of their role modeling behavior of the changes envisioned and concluded upon by this body. In addition, other employees may come into organizations with the most recent technical skills, they may provide a better role model of these skills than would more experienced people and senior management (Coutu, 2000). These individuals role model the kind of Digital work style often better than management, their behavior although is not that visible. Identification of this group was done as “quartermakers”, in addition although support by management to define their role and support content to be available and time to show role model behavior deemed to be necessary, even imperative to create higher effectiveness and visibility for their behavior. Due to the complexity of the changes expected from employees during the “2bPR change journey having multiple developmental relationships is though to be a more effective strategy for individuals than one homogeneous package (Ibarra, 1999; Gibson, 2003).

*Provide Psychological Safety for Experimentation and Authenticity*
Beyond psychological safety to address anxiety for the change to come, individuals as well need this safe space away from their normal work environment where they can explore differing interpretations and come to some shared sense of what they are collectively trying to achieve and how they should do this. Modeling and workshop techniques such as cause maps, MBTI and model building can help individuals reveal their assumptions and thoughts about their current and future organization, their work and their colleagues.

While many processes of change may incorporate such techniques into early workshops, they are restricted to the early days of change. Many participants have more questions about what change means for them and how they go about their changed job roles when they are actually in the middle of change and trying to implement it. Thus workshops are needed throughout the change process offering the leaders a chance to interact with the sensemaking processes of their subordinates.

In addition, the changes in roles and work style that were expected were radical changes. As personal growth and authenticity were considered to be a major support for increasing knowledge worker productivity KWs should receive psychological support (Edmondson, 1999) to experiment, as mental models only evolve “within a continuous perceptual cycle of exploration, sampling and modification” (Neisser, 1976) by the act of applying the model (Westbrook, 2006; Neisser, 1976) and reflecting upon the effects when certain elements are changed.

**Adapt Selection and Promotion Criteria to be Able to Derive at an Improved Empowered Workforce**

Selection and promotion criteria before the “2bPR change journey” were based upon an old mental models and power balance. Several KWs expressed that if MM were to receive a more prominent role in the organization as “intermediating” force then selection and promotion criteria for this group should be changed accordingly.

Still many organizations promote successful specialists by providing them a management role, even if their capabilities do not render them fit for the managerial tasks of especially people management and the intermediating role of networking. Several employees at Microsoft the Netherlands indicated that if promotion to a management role would stay the most important way of promotion for specialists People Managers would not be expected to successfully perform if the job of MM should become more prominent in the organization and fulfill the special and strong role of intermediators in the future. The practice of promotion is therefore an important practice to reconsider if co-creation is truly the aim of the organization.
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Abbreviations

2bPR = 2 be people-ready
CLT = country leadership team
CMT = country management team
ICT = information and communication technologies
KW = front-line Knowledge Worker
MM = Middle Management
MT = management team
NWoW = new world of work
TM = Top Management
# Appendices

## Appendix 1 – Overview Definitions Mental Models

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<tr>
<th>Descriptive</th>
<th>Explanatory</th>
<th>Research Studies</th>
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<tbody>
<tr>
<td>“Small scale models” of reality</td>
<td>...it is able to try out various alternatives, conclude which is the best of them, react to future situations before they arise, utilize the knowledge of past events in dealing with the present and the future, and in every way to react in a much fuller, safer, and more competent manner to the emergencies which face it.”</td>
<td>Craik, 1943</td>
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<tr>
<td>Cognitive maps are not readily available to be examined by the mind’s eye,</td>
<td>...within a continuous perceptual cycle of exploration, sampling and modification.</td>
<td>Neisser, 1976</td>
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<td>but are active, information-seeking structures...</td>
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<td></td>
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<tr>
<td>“Schemata are cognitive structures or frameworks...</td>
<td>...by which generic concepts derived from past events and experiences are stored in memory”.</td>
<td>Rumelhart and Ortony, 1977</td>
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<tr>
<td>Managers store and organize information in abstract ways in the form of</td>
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<td>systemic schemata, and not just as a collection of original situations,</td>
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<td>encounters or exchanges.</td>
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<td>“Human beings understand the world by constructing working models of it in</td>
<td>“These mental models allow people to draw inferences, make predictions, understand phenomena, decide which actions to take, and experience events vicariously.”</td>
<td>Johnson-Laird, 1983</td>
</tr>
<tr>
<td>their minds”. These models are constructed when we make inferences that</td>
<td>...“use them to infer relationships, predict outcomes, understand the systems they encounter,</td>
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<td>can be either</td>
<td></td>
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<tr>
<td>Schemata facilitate a manager to decide what information is relevant and</td>
<td></td>
<td>Taylor and Crocker, 1981</td>
</tr>
<tr>
<td>which information to focus on. They allow managers to qualify information</td>
<td></td>
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<tr>
<td>concerning competitors and relationships, and hence structure complex</td>
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<tr>
<td>information about interconnectedness in business network environments. On</td>
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<tr>
<td>the basis of prior schemata, managers can make sense of new situations or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>exchanges.</td>
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</table>

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189
# Explicit vs. Implicit Knowledge

<table>
<thead>
<tr>
<th>Explicit</th>
<th>Implicit</th>
</tr>
</thead>
<tbody>
<tr>
<td>requiring &quot;a conscious and cold-blooded effort&quot;</td>
<td>&quot;rapid, effortless, and outside conscious awareness&quot;</td>
</tr>
<tr>
<td>determine a course of action, control that action, and experience events &quot;by proxy&quot;.</td>
<td></td>
</tr>
</tbody>
</table>

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## Schemata

- **Schemata** are structured units or clusters of thematically related knowledge.
- "Schemata are data reduction devices... enabling individuals to negotiate a complex and confusing world".
- Form is the model itself, the homomorphic mapping consisting of elements and their relation which represents the thing that is being modeled. State is the dynamic configuration of the aspects of the model that can change as a result of running the model.

- Mental models are used to describe, predict and explain system purpose, function, state and form...
- "A mental model is a mechanism... whereby humans generate descriptions of system purpose and form, explanations of system functioning and observed system states, and predictions of future system states". Hence mental models allow people to predict and explain the behavior of the world around them, to recognize and remember relationships among components of the environment, and to construct expectations for what is likely to occur next.

- "Schemata are the bases... upon which one relates knowledge, attributes meaning and fashions understanding"
- A schema is a "cognitive structure that represents knowledge about a concept or type of stimulus, including its attributes and the relations among those attributes". "these clusters of knowledge are our active construction of reality".

- (1) Mental models are internal representations, (2) language is the key to understanding mental models, that is, mental models can be represented linguistically and those When making decisions or talking to others, people use mental models of the world to evaluate choices and frame discussions.

---

*Thron, 1984*

*Bartunek, 1984; Bartunek and Moch, 1987*

*Rouse and Morris, 1986*

*Poole et al., 1989*

*Fiske and Taylor, 1991*

*Carley and Palmquist, 1992*
representations can be based on linguistic accounts, (3) mental models can be represented as networks of concepts, (4) the meaning of a concept for an individual is embedded in its relations to other concepts in the individual’s mental model, and (5) the social meaning of a concept is not defined in a universal sense but rather through the intersection of individuals’ mental models.

| “The canonical form of a mental model, as indeed of any model, is a homomorphic mapping from one domain to another, resulting in an ‘imperfect’ representation of the thing modeled”. | Mental models simplify the chaotic environments and multiple logical options. | Thomas, Clark and Gioia, 1993 |
| “Mental models are internal cognitive structures that the individual constructs, explicitly or implicitly, to represent a particular target domain, be it an event, an activity, an object, or a subject area”. | | Morray, 1997 |
| “Mental models are organized knowledge structures… ...that allow individuals to interact with their environment. Hence mental models serve three crucial purposes: They help people to describe, explain, and predict events in their environment”. | | Jacob and Shaw, 1998 |
| Mental models are “conceptual frameworks that individuals form, based on experience and formal knowledge acquisition,... ...which allow them not only to predict the results of explicit behaviors but also to interpret and understand their environment”. | | Mathieu, 2000 |
| | | Westbrook, 2006 |
## Appendix 2 – Research Design Elements of this Study (Crotty, 1998)

<table>
<thead>
<tr>
<th>Epistemology</th>
<th>Theoretical Perspective</th>
<th>Methodology</th>
<th>Methods</th>
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<tbody>
<tr>
<td>- Objectivism</td>
<td>- Postivism (and post-positivism)</td>
<td>- Experimental research</td>
<td>- Sampling</td>
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<td>- <strong>Constructionism</strong></td>
<td>- <strong>Interpretivism</strong></td>
<td>- Survey research</td>
<td>- Measurement and scaling</td>
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<td>- Subjectivism (and variants)</td>
<td>- <strong>Symbolic Interactionism</strong></td>
<td>- Ethnography</td>
<td>- Questionnaire</td>
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<td></td>
<td>o Phenomenology</td>
<td>- Phenomenological research</td>
<td>- <strong>Observation</strong></td>
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<td>o Hermeneutics</td>
<td>- Grounded theory</td>
<td>o <strong>Participant</strong></td>
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<td>- Critical Inquiry</td>
<td>- Heuristic inquiry</td>
<td>o <strong>Non-participant</strong></td>
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<td></td>
<td>- Femenism</td>
<td>- <strong>Action research</strong></td>
<td>- <strong>Interview</strong></td>
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<td>- Postmodernism</td>
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<td></td>
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<td>Etc.</td>
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<td>- <strong>Narrative</strong></td>
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<td>- <strong>Visual ethnographic methods</strong></td>
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<td>- Data reduction</td>
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<td>- <strong>Theme identification</strong></td>
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<td>- Comparative analysis</td>
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<td></td>
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<td>- Cognitive mapping</td>
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<td>- <strong>Content analysis</strong></td>
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<td></td>
<td>- <strong>Conversation analysis</strong></td>
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<td></td>
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<td>Etc.</td>
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</table>
Appendix 3 – 2bPR Meetings and Events
Several formal meetings, events and explicit communication moments occurred or were organized during the 2bPR change journey that facilitated and influenced sensemaking and sensegiving. These are listed below. The list is not exhaustive, although believed to provide a clear picture of several interventions and its timeline.

Notetaking has been done by several researchers from RSM Erasmus University. At several occasions all researchers were present, but one of us made notes. Researchers included: Vincent Vermeulen (VV), Wieteke Dupain (WD), Marcel Legerstee (ME) and Robert Engels (RE). Meetings and events before 30-01-2007 have been analyzed through notes taken by Microsoft (MS) or other parties; f.e. Veldhoen and Company (VC).

<table>
<thead>
<tr>
<th>Date</th>
<th>Source</th>
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<th>Note Taker</th>
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<td>White Paper New World of Work</td>
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<td>Decision</td>
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<tr>
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<td>Meetings/ Interviews/ ALL</td>
<td>VC</td>
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<td>4 2005 and ongoing</td>
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<tr>
<td>5 2006/02/08</td>
<td>CMT MS NL Session on cultural change</td>
<td>Meeting/ TM</td>
<td>MS</td>
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<tr>
<td>6 2006/05/12</td>
<td>CMT MS NL Session on 2bPR</td>
<td>Meeting/ TM</td>
<td>MS</td>
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<tr>
<td>7</td>
<td>Decision establishing Steering Committee (SC)</td>
<td>Decision</td>
<td>-</td>
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<tr>
<td>8 2006/06/15</td>
<td>Paper Codename 2bPR</td>
<td>Paper</td>
<td>MS</td>
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<tr>
<td>9 2006/09/</td>
<td>1st SC Meeting</td>
<td>Meeting/ TM and MM</td>
<td>MS</td>
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<tr>
<td>10 2006/11/</td>
<td>Introduction and meeting Quartermakers</td>
<td>Meeting/ TM/ MM/ KW</td>
<td>MS</td>
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<tr>
<td>11 2007/01/30</td>
<td>Launch Vista and Company Meeting</td>
<td>Meeting/ ALL</td>
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<td>12 2007/02/22</td>
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<td>Meeting/ MM/ KW</td>
<td>VV</td>
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<tr>
<td>13 2007/02/26</td>
<td>Kick-off HED</td>
<td>Meeting/ MM/ KW</td>
<td>VV</td>
</tr>
<tr>
<td>14 2007/02/28</td>
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<td>Meeting/ MM/KW</td>
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<td>Meeting/ MM/KW</td>
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<td>Event New Hire Day (2)</td>
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<td>Meeting/ TM/MM</td>
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<td>2007/04/17</td>
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<td>2007/04/23</td>
<td>Event CEO Steve Ballmer</td>
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<td>2007/04/27</td>
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</tr>
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<td>29</td>
<td>2007/06/04</td>
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<td>2007/06/18</td>
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<td>Tool</td>
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<td>35</td>
<td>-</td>
<td>Communication Personality Test</td>
<td>Tool</td>
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<td>36</td>
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<td>3</td>
<td>2007/02/01 Meeting Kevin Sauer - Global Workplace Advantage Team MS Corporate</td>
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</table>

**Appendix 4 – Meetings 2bPR for Research and Interviews**

Type of Meeting. R = these meetings were set up to further brief the research group about 2bPR and its background by experts. I = Interviews with employees or managers of Microsoft Corporation. IM = Internal Meetings with the RSM Erasmus research group to make sense of progress at Microsoft, Rabobank and De Unie and discovering connections to theory and group analysis.
<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
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<td>Meeting RSM Erasmus Team</td>
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<td>2007/03/16</td>
<td>Meeting RSM Erasmus Team</td>
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<td>2007/03/19</td>
<td>Meeting Dan Rasmus - MS Corporate</td>
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<td>Interview Ludwig Kilian</td>
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<td>2008/06/18</td>
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<td>Interview Mark Meerbeek</td>
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<td>Interview Robert Tempels</td>
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<td>37</td>
<td>2008/06/20</td>
<td>Interview Richard de Goederen</td>
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<td>38</td>
<td>2008/06/20</td>
<td>Interview Dik Bijl</td>
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<td>2008/06/23</td>
<td>Interview Saskia Nijs</td>
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<td>2008/06/24</td>
<td>Interview Ilco van der Bie</td>
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<td>41</td>
<td>2008/06/24</td>
<td>Interview Theo Rinsema, General Manager Microsoft the Netherlands</td>
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</table>
Appendix 5 – Interview Design (Kvale, 1996)

1) **Thematizing** - Before even thinking about particular methods or interview formats, the evaluation team needs to be clear on the purpose of the study and the topic to be investigated. The questions of "why" and "what" need to be answered before the question of "how" can be answered. This is as important in a qualitative evaluation study as in a quantitative one.

2) **Designing** - The overall design for the study, including the later stages of analyzing and reporting, should be planned before the interviewing begins. For example, if there are no funds for transcribing or analyzing interviews, it may be wise to use a more structured format that will be easier to code later.

3) **Interviewing** - To an extent that is not true in many other methods, the interviewer is the instrument in this type of evaluation (Guba & Lincoln, 1981, as cited in Patton, 1987). The "instrument" can be affected by factors like fatigue, personality, and knowledge, as well as levels of skill, training, and experience. Patton (1987) points out that any face-to-face interview is also an observation. The skilled interviewer is sensitive to nonverbal messages, effects of the setting on the interview, and nuances of the relationship. While these subjective factors are sometimes considered threats to validity, they can also be strengths because the skilled interviewer can use flexibility and insight to ensure an in-depth, detailed understanding of the participant's experience.

4) **Transcribing** - This important step prepares the material from the interview for analysis. Both Kvale (1996) and Patton (1990) provide detailed practical suggestions for this process, ranging from ensuring that your tape recorder has good batteries to developing a sensitivity to the linguistic differences between oral speech and written text.

5) **Analyzing** - Data analysis is an issue that should be considered very early in the process of designing a study. Qualitative interviews and their transcripts produce a large volume of material which must be condensed, categorized or otherwise interpreted and made meaningful, and this may turn out to be one of the most costly and time-consuming aspects of the evaluation. If time and resources are limited, you may wish to use more standardized interview formats which are easier to code and interpret.

Methods for analyzing and interpreting qualitative interviews vary widely. Kvale (1996) describes five analysis methods that include 1) **meaning condensation**, 2) **meaning categorization**, 3) **narrative structuring**, 4) **meaning interpretation**, and 5) generating meaning through ad hoc methods. Patton (1987, 1990) also addresses a number of techniques for quantifying and analyzing qualitative interview data.
The most appropriate method of analysis for any given study will depend on the purpose of your evaluation and the nature of the material, as well as the time and resources available for this part of the process. Some methods attempt to be more objective, while others depend more heavily on subjective judgments and insights of the researcher. Computer software programs are available that can assist in categorizing interview statements or counting key words, which may allow some forms of quantitative analysis.

6) **Verifying** - In traditional research terms, this means determining **reliability** (how consistent the findings are), **validity** (whether the study really investigates what you intended to investigate), and **generalizability** (whether the findings apply to anyone outside of this particular program). In qualitative studies, one important way of verifying findings or establishing validity is to actually take transcripts or analyzed results back to some of the interview participants, and ask them if this is really what they meant. Guba and Lincoln (1989) discuss the concepts of **confirmability, dependability, credibility and transferability** as alternative ways of ensuring quality of data in qualitative evaluations. For more in depth discussions of these important issues in qualitative research, readers are strongly encouraged to consult relevant chapters in Kvale (1996), Patton (1990), or Guba and Lincoln (1989).

7) **Reporting** - If the evaluation report is to effectively communicate findings, it must a) be in a form that meets some accepted scientific criteria, b) meet ethical standards such as confidentiality and respect, and c) be readable and usable for its intended audiences. In some cases, different reports may be needed for different audiences. An appropriate balance needs to be found between including endless quotations that will bore the reader and just quoting a few entertaining stories that happened to appeal to the researcher.
Appendix 6 - Interview Script 1st Phase - November 2007

1. Introduction:
   a) Identify ourselves (name, purposes of study)
   b) RSM ERASMUS University/MICROSOFT
   c) Thank interviewee for agreeing to participate
   d) Remind her/him that all responses will be published anonymous.

2. Interviewee:
   Could you tell us something about yourself (name, age) and your role within the organization?
   a) ORGANIZATION:
   b) TELEPHONE:
   c) EMAIL:
   d) NAME:
   e) AGE
   f) JOB TITLE:

3. Culture:
   a) Power Distance – Is there within MS a big power distance between different management and employee layers?
   b) Individualism - Collectivism
   c) Masculinity - Femininity – Intro: Male values are a.o. competiviness, assertiveness, ambition and gathering richness or
      wealth; female values modesty, servant behavior, solidarity
   d) Onzekerheitsvermijding – Are there a lot of rules, formal procedures and rituals within MS.
   e) Long or short term thinking
   f) Innovation – Is there room for innovation or more conformation?

4. Perceived characteristics New World of Work
   a. What are according to you characteristics of “Het Nieuwe Werken”?
   b. Do you find these characteristics back within your organization?
   c. External pressure – which external influences have been and will be helpful in adopting new ways of working and
      2bPR within Microsoft?
   d. Organizational readiness - Is your organization at this moment ready to successfully adopt new ways of working and
      2bPR? Sufficient IT sophistication, financial resources, willingness to adopt, role management, differences per
      department, differences per workstyle

5. Change process - 2bPR strategy to enable the New World of Work vision
   Bij deze sectie vragen willen wij graag meer inzicht krijgen in hoe u informatie heeft ontvangen
   over 2bPR/NWoW, hoe uw houding is t.o.v. het concept en hoe u verwacht dat dit
   ondersteunend is aan nieuwe werk concepten.

5.1 Initiation of 2bPR
   1. Could you therefore tell us about the first time you heard about 2bPR?
      a. When was it?
b. How did you get further information? Formal information, informal or a combination? i) Presentations (company meeting, Room for_Growth day), ii) Internal newsletters, iii) Word-of-mouth, iv) Manager order or suggestions, v) Participation in meetings vi) Other

c. How did you experience this information and why?

d. What did you do with the information you got? Did you directly start thinking of how it would affect you or your team? Did you find out how you could influence the direction in which the change was evolving?

2. Were you involved in the preparation phase of 2bPR so far? What did you do?

3. Would you like to have been more involved? Why were you not? Eg. did you think this was not possible or did you not get time to participate?

4. How clear are goals, time span, expected results, etc? Did you perceive there was room for your input in defining the goals and expected results of 2bPR?

5. How is your attitude towards 2bPR, and has it changed over time?

6. Do you understand the reasons for 2bPR and do you think it is the right reaction?

7. How do you experience your subordinates/ colleagues attitude towards 2bPR, in the beginning and now?

8. Are there factors that enable or constrain you to become 2bPR?

9. Do you believe in 2bPR there will be room to remove constraints for 2bPR and support enablers?

10. How much contact did you have with your colleagues regarding 2bPR – and regarding what questions?

5.2 Implementation/Adoption of 2bPR

1. How do you perceive the initial event to implement 2bPR into the organization like the Room for_Growth day? Are you aware of any other interventions?

2. Are you currently involved in defining or implementing 2bPR?

3. Would you like to become (more) involved in defining and implementing 2bPR in the future?

4. Do you receive any information about the progress of the implementation of 2bPR?

5. Do you believe 2bPR is about changes in accordance with demands from Microsoft employees or knowledge workers in general?

6. How do you and your colleagues collaborate about 2bPR during the implementation, if questions are raised how is the answer found?

5.3 Results of 2bPR - Effects

1. Did 2bPR already have any result on you or the organization in general?
   a. Did it already have an impact on your behavior, are you already changing ways of working, if so, how do your new working routines differ from the old ones? Or how have working routines of colleagues changed?
   b. Or it did not yet deliver results but it had an impact on your mindset and you believe it will change behavior within the organization in the future?

2. What do you believe to be results of 2bPR for you as a person and for the organization overall?

3. How do you define the new working routines for yourself and how do you share them with your colleagues?

4. Is there, in fact, a combination of factors that convinced you of the success of the proposed changes? Identify the factors, and their relative influencing strengths.
6. Finish Interview

1. Are there any areas you think we have missed in the discussion about the change process around 2bPR? Does the respondent have further comments to make concerning their opinion on the organizational changes about to occur and the desired behaviour?

2. Do you have any further material that you would like to share with us?

3. If in the further process we would like to have a clarification are we allowed to contact you?

Thank the respondent, again. Provide email address.
Appendix 7 - Interview Scripts 2\textsuperscript{nd} Phase - June 2008

Slightly adapted interviews were used for Middle Management and Knowledge Workers. Below the English and Dutch interview scripts for Top Management and Steering Committee. And references.

<table>
<thead>
<tr>
<th>Interview Script – Role of Management and Knowledge Worker in 2bPR journey</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Top Management and Steering Committee</strong></td>
</tr>
</tbody>
</table>

**Introduction Interviewer and Purpose Interview:**
1. Introduce (name, purposes of study/ RSM ERASMUS University)
2. Thank interviewee for agreeing to participate
3. Remind her/him that all responses will only be used with prior consultation and/or consent of use of name otherwise they will be made anonymous

**Interviewee:** Could you tell us something about yourself and your role within the organization?
1. Name:
2. Organizational Role:

**Change process - 2bPR strategy to enable the New World of Work vision**

By asking these questions we would like to get deeper insights into the 2bPR journey. Especially insights in the role of different people within the organization during the journey, specifically top management and steering committee, middle management and the knowledge worker. And insights in their actions, i.e. the way they developed and communicated information about the (desired) change within the organization.

**A. Reasons for Initiating 2bPR – Sensemaking Triggers. Old Schemata and New Schemata**
1. Why was 2bPR started? What are the reasons for 2bPR?
   a. (Internal Pressures/ Opportunities or External Pressures/ Opportunities)
2. Can you explain some differences if we would compare the old organization (before 2bPR) vs. the new organization (with 2bPR)?
   a. (How were things done before and how now? What change in behavior/ mindset/ mental space/ norms/ values/ culture had to take place?)

**B. First steps – Envisioning – Designing Change Interventions**
3. After the decision to start 2bPR what were the initial steps?
   a. (When was 2bPR in the Netherlands initiated)
b. ((Steering Group Established, Defining Purpose, Defining Process etc.))

4. How was the vision formulated for 2bPR?
   a. (And who was involved in formulating the vision for 2bPR before the Steering Committee was established?)

5. What was the rationale or philosophy behind how 2bPR would be managed?
   a. I heard things like organic process/ top-down communication/ bottom-up input and feedback/ empowerment etc.?
   b. In what way was thought that Microsoft employees should have input in defining 2bPR goals, expected results and the transformation process?

C. Signalling/ Communication of 2bPR and Re-Envisioning

6. When and how was the first communication about 2bPR and the Digital Workstyle towards MM and KW (before the RfG day)?
   a. (Way: i) Formal/ ii) informal) (Method: i) Presentations (company meeting, Room for_Growth day), ii) Internal newsletters, iii) Word-of-mouth, iv) Manager order or suggestions, v) Participation in meetings vi) Movies v) Other...)

7. What kind of feedback came back?
   a. Was this feedback different from MM or KW?
   b. What was done with this feedback?

8. Why was decided at a later stage to take People Managers apart and train them separately?

9. Do you believe enough people were mobilized/ properly informed/ involved in the initial phase of 2bPR until the Room for Growth Day? Or with hindsight more people should have been mobilized?
   a. (Like getting People Managers more integrated at an earlier stage)

D. Energizing/ Implementation of 2bPR

10. What were the effects of the Room for Growth Day and the Move to the New Building on the organization?
    a. Did it help to increase understanding of the new context and workstyle and successful adaptation? In what way?

11. Were these effects comparable for these two main interventions? Different?

12. Can you tell us a little about the informal processes at Microsoft that happened during the implementation and their effect?
    a. (Like stories & rumours/gossip, sharing of experiences, sharing of interpretations, discussions, negotiations, non-verbal signs and signals, role model behavior)

E. Your Role and Other Roles

13. What has been your role in the 2bPR transformation journey?
    a. (Dchairing 2bPR committee, Rdesigning vision, Dcoordinating, Rdeciding upon resources and timeline, Rrole model)
    b. TM roles – recognizing, directing, ratifying, (experimenting, adjusting)

14. How do you think others saw your role? Do you think it was the same/ they had expected something else?

15. If you look back would you see a role for you different than the one you have played in the process now?
a. (Would you have done something differently?)
b. (Were you involved enough?)

16. Did you have the resources/ power/ time to implement 2bPR into the organization?
   a. (What restricted you most?)

17. How did you see the roles of others in the process?
   a. (Like Steering Committee, Top managers, Middle managers and Knowledge workers? Depending on own role)
   b. Designing interventions?
      i. Communications, Team Building, Change Plans, Training, Briefing& Counselling, Room for Growth day, Buddy Systems, Software, Etc.
   c. Executing interventions?

F. Results of 2bPR – New Schemata

18. Did the organization already become what was envisioned? Or are there still differences. Do you know why they exist?
   a. (Behavioral changes or still in mindshift phase?)

19. Did you already implement 2bPR and the Digital Workstyle yourself? How?
   a. (What most impacted you?)
   b. (If you had questions how did you find the answer? Did you have much contact with others regarding 2bPR? With whom and what had insights did they give?)

20. Were there difficulties to successful implementation of 2bPR and adaptation to a new workstyle?
   a. What was the most difficult?
   b. (Organizational readiness - Is your organization at this moment ready to successfully adopt new ways of working and 2bPR? Or what is missing? (Sufficient IT sophistication, financial resources, willingness to adopt, role management, differences per department, differences per workstyle. What still needs considerable attention).)
   c. (Design flaws - Lack of inter-divisional transition, management, Business as usual getting in the way, No detailed design team output, No contract details early on, Level/pace redundancies, Inadequate communication)

21. Are these difficulties solved? What was your role?

G. Lessons Learned

22. What are the biggest lessons learned? What would you have done different if you started today.

H. Netherlands Pilot Country

23. Why did the Netherlands become pilot country for 2bPR?
   a. Who was involved in making this decision?

Finish Interview

1. Thank the respondent.
2. Is there anything you think is interesting that we have missed during this interview?
3. Do you have any further material that you think is relevant for me to look into?
4. If in the further process we would like to have a clarification are we allowed to contact you?
Appendix 8 – Interview Script – Dutch Version

Interview Script – Rol van Management en Kennis Werker in de 2bPR journey
Top Management en Steering Committee

Introductie Interviewer en Doel Interview:
1. Introductie (naam/ doel studie/ RSM ERASMUS University)
2. Bedank interviewee voor interview
3. Geef aan dat antwoorden alleen gebruikt zullen worden na overleg met de interviewee en en/of anoniem zullen worden gebruikt

Interviewee: Kan je iets vertellen over jezelf en rol binnen de organisatie?
3. Name:
4. Organizational Role:

Verander proces - 2bPR strategie om NWoW visie te implementeren
De vragen die gesteld worden in dit interview hebben als doel om een dieper inzicht in de 2bPR journey te verkrijgen. Speciaal inzichten in de rol van verschillende mensen binnen de organisatie zoals het top management en de stuurgroep, het midden management en de kennis werker. Tevens inzichten in hun acties, ofwel de manier waarop zij informative hebben ontwikkeld en gecommuniceerd over de verwachte verandering binnen de organisatie.

I. Redenen voor initiatie van 2bPR – Sensemaking Triggers. Old Schemata en New Schemata
5. Waarom werd 2bPR geïnitieerd? Wat zijn de redenen voor 2bPR?
   a. (Interne druk/ Kansen/ Externe druk)
6. Waarom is Nederland pilot land geworden voor 2bPR?
   a. Wie was betrokken bij deze beslissing?

J. Eerste stappen – Visie en Interventie Ontwikkeling
7. Nadat de beslissing was gemaakt om 2bPR te initiëren wat waren de eerste stappen?
   c. (Wanneer begon 2bPR in Nederland)?
   d. ((Opzetten Stuurgroep, Definieren doel 2bPR, Definieren tijdslijn en proces))
8. Hoe is de visie voor 2bPR ontwikkeld?
   a. (En wie was erbij betrokken voordat de stuurgroep bestond?)
9. Wat was de filosofie achter 2bPR? Hoe zou deze verandering gemanaged worden?
   a. Ik heb dingen voorbij horen komen als organisch proces/ top-down communicatie/ bottom-up input en feedback/ empowerment etc.?
10. Op welke manier werd gedacht dat Microsoft werknemers invloed zouden kunnen hebben op het definiëren van de doelen van 2bPR, verwachte resultaten en interventies?

K. Signalling/ Communicatie van 2bPR en Re-Envisioning
11. Wanneer en hoe was de eerste communicatie over 2bPR en de Digital Workstyle naar MM en KW (voor de
RfG dag?


12. Wat voor soort feedback kwam terug?
   a. Was deze feedback verschillend van MM en KW?
   b. What werd er gedaan met deze feedback?

13. Waarom werd op een later tijdstip besloten de People Managers apart te trainen?
14. Zijn genoeg/ te weinig mensen binnen de organisatie gemobiliseerd/ geinformeerd/ betrokken bij de initiële fase van 2bPR tot aan de Room for Growth Dag? Of achteraf hadden meer mensen in een eerder stadium gemobiliseerd moeten worden?
   a. (People Managers)

L. Energizing/ Implementatie van 2bPR
15. Wat waren de effecten van de Room for Growth Dag en de verhuizing naar het Nieuwe Gebouw op de organisatie en interne mentale verandering?
16. Hielp het om begrip te vergroten van de nieuwe context en worlstyle en het succesvoller te implementeren? Op wat voor manier?
17. Waren deze effecten hetzelfde voor beide evenementen? Verschillend?
18. Kan je iets vertellen over de vele informele processen bij Microsoft die hebben plaatsgevonden tijdens de 2bPR journey en hun effect?
   a. (Zoals verhalen, gossip, rumours, delen van ervaringen, interpretaties, discussies, onderhandelingen, non-verbal signs en andere signalen, role model behavior/ voorbeeldgedrag)

M. Jouw Rol binnen 2bPR en die van Anderen
19. Wat was jouw rol of bijdrage in de 2bPR transformatie journey?
   a. (Dchairing 2bPR committee, Rdesigning vision, Dcoordinating, Rdeciding upon resources and timeline, Rrole model)
   b. TM roles – recognizing, directing, ratifying, (experimenting, adjusting)
20. Hoe denk jij dat anderen jouw rol zagen? Denk jij dat het hetzelfde was of dat ze iets anders hadden verwacht?
21. Als je terugkijkt zou jij een andere rol zien die meer waarde zou opleveren voor jou en de organisatie dan diegene die je nu hebt gespeeld?
   a. (Zou je iets anders hebben aangepakt?)
   b. (Was je betrokken genoeg?)
22. Had je de middelen/ beslissingsrechten en tijd om 2bPR succesvol te implementeren?
23. Hoe zie jij de rol van anderen in het proces?
   a. (Zoals de Stuurgroep, Top managers, Middle managers en Kennis Werkers? Hangt af van eigen rol)
   c. Uitvoeren van interventies?

24. Hoe belangrijk denk jij dat het was dat leiders binnen de organisatie het goede voorbeeld gaven, hoe zie jij jouw rol daarin, MT en People Managers?

25. Zou je enkele verschillen kunnen aangeven als je de oude organisatie (voor 2bPR) zouden vergelijk met de nieuwe organisatie (met 2bPR)?
   a. (Hoe werden dingen gedaan voor 2bPR en introductie Digital Workstyle en nu? Welke verandering in gedrag of mindset/ normen/ waarden heeft plaatsgevonden?)

26. In hoeverre is de visie van 2bPR en de Digital Workstyle bereikt? Zijn er nog verschillen? In welk opzicht?
   a. (Gedragsveranderen nog niet maar shift in mindset wel?)

27. Ben je zelf al 2bPR en heb je de Digitale Workstyle geadopteerd?
   a. (Wat heeft jou het meest geholpen om dit te bereiken?)
   b. (Als je vragen had waar kreeg je het antwoord? Had je veel contact met anderen over 2bPR? Met wie en van wie waren de meest waardevolle inzichten TM/SC/MM/KW?)

28. Was het moeilijk om 2bPR succesvol te implementeren in de organisatie en over te stappen op een Nieuwe Manier van Werken?
   a. Wat was het moeilijkste? (Om te veranderen?)
   b. (Organizational readiness - Is de organisatie op dit moment klaar of nieuwe manieren van werken succesvol te adopteren? Of wat mist er nog? (Voldoende IT kennis, financiële middelen, willingness to adopt, managementstijl, verschillen per afdeling, verschillen workstyle).
   c. (Design flaws - Lack of inter-divisional transition, management, Business as usual getting in the way, No detailed design team output, No contract details early on, Level/pace redundancies, Inadequate communication)

29. Zijn de moeilijkheden die er waren opgelost? Wat was jouw rol daarbij?

O. Lessons Learned

30. Wat zijnde grootste lessons learned die je meeneemt uit de ervaring tot nu toe? Wat zou je nu je weet wat je vandaag weet anders hebben gedaan?
**Einde Interview**

31. Is er nog iets wat jij denkt dat interesant is te weten over de rol van management en kenniswerker in 2bPR was ik heb gemist tijdens dit interview?

32. Heb jij materiaal waarvan jij denkt dat het interessant is voor mij om nog eens naar te kijken voor ik begin aan het schrijven van conclusies voor dit onderzoek?

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**Interview Script Question References:**


Bartlett, C.A. and Ghoshal, S. 1997. The myth of the generic manager: New personal competencies for new management... California Management Review; Fall 1997; 40, 1; pg. 92

Bartlett, C.A. and Ghoshal, S. 1998. Beyond strategic planning to organization learning: Lifeblood of the individ... Strategy & Leadership; Jan/Feb; 26, 1; pg. 34


Appendix 9 – Global Research Workplace Optimization

Global Research Locations
Leadership interviews, Surveys, Observations, Focus Groups. Plan Review

Workplace Components

Workpoint:
- Individual – Open – Concentrative
- Individual – Open – Collaborative
- Individual – Open – Mobile/Interactive
- Individual – Enclosed
- Individual – Open – Touchdown

Neighborhood:
- Open – Collaborative Lounge
- Enclosed – Small Group
- Open – Project Based Collaborative
- Individual – Phone Booth
- Enclosed – Project Based Collaborative
- Screening/Display

Village:
- Conference Room (6 – 12 people)
- Conference Room (12 – 20 people)
- Informal Breakout Space
- Resource Center – Mail/ Copy/ Supplies
- Café Corner

Customer Service:
- Customer Conference Center (large)
- Customer Conference Center (medium)
- Customer Conference Center (small)
- Multi-Purpose Room
- Lounge/ Servery

Distributed Services:
- Small Reception
- Ground Floor Reception
- Lunch Room Food Service
Work styles overview

Through an ongoing extensive global research effort, the Workplace Advantage team has identified (and will continue to update) seven distinct work styles that can be used to characterize the general requirements of our employees. These work styles are based upon Microsoft job families.

- **M1**: A generally desk-bound employee providing support and administrative assistance to a team
- **M2**: A concentrative analyst function
- **M3**: Most traditional engineering functions
- **M4**: A creative or research function
- **M5**: An internally mobile team, project, or product lead
- **M6**: A highly mobile manager immersed in formal collaboration
- **M7**: An externally mobile employee dependent upon virtual communication

On the following pages is a summary overview of each work style and the physical implications for housing them. Additional detailed data may be found in the Research Report.

### M2 – Combined survey and observation data

- This chart combines data from both the survey and observation for a summary view of utilization.
- The gray zone separating individual workspace and internal mobility depicts a range or margin of error that must be taken into account when planning with these numbers – the charts represent regional roll-ups or averages.
- Desk bound but virtually connected with quite a bit of time in conference rooms.
- Work style M2 appears concentrative, but has higher levels of interaction and lower levels of creative work than other concentrative types.
- Since output is based upon an on-demand basis, collaboration area need is likely to ebb and flow based upon project.

<table>
<thead>
<tr>
<th>Work style</th>
<th>Regional</th>
<th>Global Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1</td>
<td>44%</td>
<td>56%</td>
</tr>
<tr>
<td>M2</td>
<td>29%</td>
<td>71%</td>
</tr>
<tr>
<td>M3</td>
<td>35%</td>
<td>65%</td>
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<tr>
<td>M4</td>
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<td>64%</td>
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<tr>
<td>M5</td>
<td>42%</td>
<td>58%</td>
</tr>
<tr>
<td>M6</td>
<td>9%</td>
<td>91%</td>
</tr>
<tr>
<td>M7</td>
<td>6%</td>
<td>94%</td>
</tr>
</tbody>
</table>

HR total calculated from HR People file last refreshed April, 2004.
Appendix 10 – Sensemaking Triggers
There were several reasons that triggered Microsoft the Netherlands to initiate the 2bPR change. The first reason was the acknowledgement by top management that several high-impact aspects of the organization; like its physical office design, its culture, use of own technology and workstyle needed to be reconsidered in the light of demands from a changing world.

A second sensemaking trigger was that the aspects under discussion and the believes on how these aspects should be changed were highly related to recently developed visions of Bill Gates’ and Microsoft Corporate. By integrating these visions into the change at Microsoft the Netherlands it was first of all possible to add insights to these overarching visions for Microsoft, its partners and clients and secondly affirm support from Microsoft Corporate for upcoming changes and earn respect.

Another reason was the need of Microsoft to develop new legs of growth. Within the New World of Work Microsoft faces a changing business model. Traditionally, people obtained software by buying an existing packaged solution from a software vendor like Microsoft. Nowadays, however, software as a service has grown substantially. Software as a service means that people do not own a software package, but only pay for the use (of a particular part) of an application. Due to advertisement earnings, organizations are even able to offer services for free. This creates a risk for future profitability of Microsoft’ business model. In order to sustain growth and create new legs of growth, introducing NWoW, the People-Ready Business and new ways of working, like the Digital Workstyle concept, implementing them successfully within the own organization and providing consultancy services afterwards is an illustration of that.

Another reason can be labeled as a ‘practice what you preach’ reason or in Microsoft words ‘be-do-say’. By introducing new ways of working employees start using the by Microsoft itself developed software more intensively. This way, the wide variety of possibilities these Microsoft software applications provide becomes apparently clear to, for instance, (potential) customers.

The last reason Microsoft started off with the 2bPR strategic change, is the decreasing labor force because of the ageing population. As a result of this decreasing labor force, the labor market will be structurally tight. To attract and keep the best employees, employees should be provided with the possibility to fulfill their ambitions. New ways of work should provide them in that. Furthermore, the only possibility to sustain growth with a decreasing work force is by increasing the productivity of employees. New ways of work at Microsoft should attract the highest qualified employees to work for the company. And realize the full potential of its employees and thereby increase their productivity.
Appendix 11 – NWoW Trends

The New World of Work is influenced by several trends that define the business landscape in the coming five to 10 years (Microsoft, 2005a):

1. **Economic transformation**: The transformation from a manufacturing-based economy to a services-based economy will accelerate.

2. **One World of Business**: Political and economic dynamics are forging a single global market, a global workforce, global customers, partners, and suppliers. Collaboration across time-zones, across organizations, across firewalls will be commonplace.

3. **Always On, Always Connected**: The challenges of the “always on, always connected” world will be converting information into insights; managing time and staying focused on high priority tasks; finding the right information and connecting with the right people in an organization via the best channel; staying on the same page as colleagues; and managing the balance between work and family life.

4. **The Transparent Organization**: The systems that make organizations more agile also make them more accountable. Governments, markets and consumers are demanding visibility into internal processes to ensure that businesses are acting in compliance with their legal, fiduciary and public responsibilities, and that the vast warehouses of personal data being collected are not being used to compromise privacy rights.

5. **NetGen Meets Baby Boom**: Most baby boomers are just barely catching up with the tools and practices of information work today. But for the workers who will be delivering the innovations and productivity growth of tomorrow, this technology not only won’t come as a surprise, it will be a positive expectation. The “net generation” that’s coming of age today has lived its entire life in the digital age. They are rapid adopters of new information technology and are not only comfortable, but expect to work collaboratively with others. It is expected that many of these workers will find surprising applications for the new technology, resulting in exciting changes that we couldn’t possibly predict today.

6. **Competing for Talent in a Shrinking Workforce**: Because demographics show an aging, shrinking workforce in most of the developed world over the next 50 years, maximizing the productivity of the workers that are available is critical.

Appendix 12 – Background Information Organizational Context

The three environments during 2bPR summarized by Microsoft and Veldhoen and Company (2005):

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1. The social/mental environment - the way in which activities are organized:
   • requiring of staff collective effort to adapt habits with regard to creating, sharing and distributing knowledge and enhancing interaction and collaboration
2. The physical environment - the way in which physical work environment supports different activities:
   • providing staff with the best facilities and employee services to support day to day activities and enhance performance
   • providing staff with individual freedom to choose a work environment that accommodates work activities without losing team cohesion and identity
3. The virtual environment - the way in which information used to execute activities is ‘mobilized’ (disclosed, distributed and saved):
   • providing staff with fit for purpose ICT and information management solutions to be productive anywhere, anyplace, anytime

According to interviewees the existing social environment is subject to change

   • Culture: introduction of CPE values to guide work behavior (respect, integrity, responsibility, accountability, challenge, goal oriented, etc.)
   • Customer intimacy: dedicated marketing campaigns for different markets; offer dedicated advice for product implementation
   • Quality of internal processes: reporting / feedback system, management by objectives, transparent reward system)
   • Cost efficient operation: increase cost awareness at all levels
   • Work support: train and inspire staff
   • Reputation of brand, company and products: new world wide marketing campaign based on corporate mission

According to interviewees the existing physical environment needs to adapt to adequately accommodate

   • Team mobility and flexibility (shrinking and expanding teams)
   • Collaboration, interaction and between individuals or cross group collaboration
   • Informal meetings between groups (insufficient break out space, poorly located)
   • Acoustic and visual privacy (concentration problems, people working at home)
   • Employee support: better amenities needed (i.e. banking facilities, restaurant)

According to interviewees the existing virtual environment needs to adapt to adequately accommodate
• Sharing of information and knowledge (tools are available but habits did not sufficiently adapt)
  • A more systematic approach to knowledge sharing
  • A clear policy on archiving; collective organization of information
• Effective use of communication tools (e-mail overload)
• ICT / Information management support for guest and visitors (WiFi)

Appendix 13 – Change Context and Goals 2bPR Journey

Appendix 14 – Envisioned and Proposed Process of Change
Beta 1.1 which behavior is required by NWOW? We develop the culturemap ourselves:

/ which leadershipstyle accomodates the NWOW?
/ when are we succesful? What are the objectives?
/ which behavior and competencies are needed?
/ priority-setting

Beta 1.2 New World of Work and MT

How do we as a MT internalize this behavior / these competencies?

A program has to be developed

/ development of a custom-made program for the MT
/ experience & inspiration through sessions at customers

by doing so, we take the lead in facing the change

Beta 2.2 Change Communities

How to evangelize and hand-over to our people?

We select opinionleaders to help us evangelize and spread

/ Creation of change-communities around MT-members
/ Opinion-leaders to be confronted with new leadershipstyle
/ Their objective is to sustain the new culture
/ MT is endresponsible and coaches the change-communities

Appendix 15 – Overview of Communication

Based and analyzed upon internal documents about communication and observations and interviews.
### Groups and Role

<table>
<thead>
<tr>
<th>Quartermasters: 30 - 40 pioneers of MSFT Netherlands. Colleagues with a clear view and with their own following ('Petri dish'). To whom we pose questions before launching into actually making the real transformation into a ‘people ready’ company – see project plan Mental World.</th>
<th>People managers: 50-70 members of staff to whom at least 1 other member of staff reports.</th>
<th>Staff@MSFT NL: In total there are 735 people working at MSFT NL</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 566 permanent employees (MSFT tenure)</td>
<td>- 148 “i” people and “v” people (temporary tenure or via a supplier)</td>
<td>- 21 members of staff (without an email alias); they work in catering, cleaning, the post room</td>
</tr>
</tbody>
</table>

### Communication Objectives

<table>
<thead>
<tr>
<th>Knowledge: Understanding that actually living through the vision of The New Work is essential for lasting internal and external success</th>
<th>Knowledge: knowing what is going on</th>
<th>Knowledge: knowing that they have to get going</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude: A want to explore actively the possibilities and potential (personal) barriers which The New Work entails</td>
<td>Attitude: trusting quartermasters in their direct environment with leading the way in the transformation</td>
<td>Attitude: believing in and being enthusiastic about getting involved in The New Work</td>
</tr>
<tr>
<td>Behaviour: Using the supporting technology and working agreements which belong to The New Work of MSFT NL sharing experience gained in a pro-active manner with MSFT NL colleagues in order get the dialogue underway</td>
<td>Behaviour: motivating team members to experiment with The New Work</td>
<td>Behaviour: beginning internal discussions on The New Work in a pro-active manner</td>
</tr>
<tr>
<td></td>
<td>Experimenting with one’s own management style so that it suits The New Work of MSFT NL</td>
<td>Experimenting with elements of The New Work</td>
</tr>
<tr>
<td></td>
<td>Sharing one’s own experiences with The New Work in a frank manner internally and externally</td>
<td></td>
</tr>
</tbody>
</table>

### Key Message

<table>
<thead>
<tr>
<th>Give space, take space. The call to action for this key message can be very diverse. Some examples:</th>
<th>Give space, take space. The call to action for this key message can be very diverse. Some examples:</th>
<th>Take space, give space.</th>
</tr>
</thead>
<tbody>
<tr>
<td>- take the space to experiment with new technology</td>
<td>- give space to make mistakes</td>
<td></td>
</tr>
<tr>
<td>- take the space to bring current working agreements under discussion</td>
<td>- take space to make mistakes</td>
<td></td>
</tr>
<tr>
<td>- take the space to distribute your time differently</td>
<td>- take the space to experiment with new technology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- take the space to bring current working agreements under discussion</td>
<td></td>
</tr>
</tbody>
</table>
- take the space to tell colleagues what you require in order to perform at the optimal level
- take the space to tell colleagues about your experiences
- give space to colleagues so that they can air their concerns
- give space to colleagues so that they can try it in their way
- give space to colleagues so that they can build their (self-) confidence

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- take the space to tell colleagues about your experiences
- give space to colleagues so that they can air their concerns
- give space to colleagues so that they can try it in their way
- give space to colleagues so that they can build their (self-) confidence

### Strategy

**Confronting and inspiring with provocations (both external and internal), which then prompt further experimentation with and discussion about The New Work of MSFT NL.**

And: making (wider) internal communication resources accessible, in order to share direct and frank thoughts, views and experiences.

**Make use of existing consultations and feed these with process information regarding 2bPR from December 2006 onwards, throughout the transformation process. By giving the people managers this ‘head start’ in terms of knowledge, we enable them to fulfil managerial roles.**

**To make visible the dialogue in the so-called ‘Petri dishes’ and to give them a public platform. And in order to enrich the dialogue, (external and internal) provocations are used to confront and inspire, which then prompt further experimentation with and discussion about The New Work of MSFT NL.**

### Resources

- **kick-off workshop (Oct)**
- **follow-up workshop (Dec)**
  → offer of internal communication resources to share experiences and enter into dialogue:
  - Campaign
  - NL web
  - Company meeting
    - Magazine

- **update of Country MT member in their BU MT**
- **BU MT member update his/her team**
- **monthly ppt with key messages from Theo**
- **+ resources MSFT NL members of staff**

- **via the line: BU meetings, team meetings, 1-on-1 meetings**
- **The New Work campaign**
- **Company Meeting, 30 January**
- **NL web (blog/vlog Theo, business inspirator, wikipedia on The New Work FY06Q3, The New Communication FY06Q4, The New Learning FY07Q1, Creating The New Values FY07Q2)**
- **Exhibition space**
- **Workshops/ training – input quartermasters**

### Appendix 16 – Roll Out Scenario Program

- Bottom up: by enabling all employees to become 2bPR (gross group based on workstyles)
• Top down: lead by example, to stimulate and reinforce 2bPR
  – LT team members get 1:1 coaching and team support to really change to 2bPR
  – BU MT’s will have “champs” to roll out in our BU MT

Roll out overall view

People driven
• Cosmo test
• Cross Group
• Workstyles: M1-M7
Bottom up
Cross group
(main approach)

Management Driven
• Country MT
• Business unit MT
• Team Meetings
Top down
LT + people mngrs
(reinforcement)

Scenario components:
Training Buddies Floor-walk Self-Paced Tools Communication etc etc

Appendix 17 - Interventions Scenarios

Effective Meetings – Interventions

- Pilot C-MT
- Kick-off day
- Update New Hire training
- Create Blogs, WIKI, Market places
- Availability of other ‘adoption’ resources
- Availability of (Web-Based) training
- Software-ready program
- Train Buddies & Floorwalkers
- Software-readyness C-MT
- Availability of Templates
- 2bPR ambassador program
- Super Champs
Appendix 18 – Initial Glossary Interventions Microsoft 2bPR

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Explanation</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Super Champs</td>
<td>Super specialist (Technical and Mental) to support implementation process</td>
<td>Meant specifically for the first users (eg MT). Recruited via hand-picking</td>
</tr>
<tr>
<td>MT Pilot</td>
<td>Guide Country Mgt to give the good example</td>
<td>Guided by Super Champs – driven by HR and team</td>
</tr>
<tr>
<td>Templates</td>
<td>Integrated tools to facilitate processes</td>
<td>Reuse existing materials and built by Microsoft Internal</td>
</tr>
<tr>
<td>Floorwalkers</td>
<td>Specialist that pro-actively engages to guide implementation process to support BROAD implementation process</td>
<td>Meant to Kick-Start broad implementation. Recruited via vendor-construction.</td>
</tr>
<tr>
<td><strong>Buddies</strong></td>
<td>Departmental specialist (Technical and Mental) to support BROAD implementation process</td>
<td>Meant to guide all colleagues via (ad-hoc or planned) 1:1 and 1: few support. Volunteers, Recruited via internal communication</td>
</tr>
<tr>
<td><strong>Ambassador Program</strong></td>
<td>Be-Do-Say relived.....</td>
<td>We all should give the good example, prize good behavior and correct ‘mistakes’....</td>
</tr>
<tr>
<td><strong>Software Readiness</strong></td>
<td>Make sure all machines contain the right software and latest updates</td>
<td>Driven by OTG</td>
</tr>
<tr>
<td><strong>Training</strong></td>
<td>All formats of education (classroom, virtual, webbased, etc)</td>
<td>Integrated in HR-systems Driven by HR, content provided by internal team</td>
</tr>
<tr>
<td><strong>Supportive materials</strong></td>
<td>Communicative materials to support process (movies, documents, EPE)</td>
<td>Reuse existing materials and make available via NLWeb / 2bPR web</td>
</tr>
<tr>
<td><strong>New Hire day</strong></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Sharing mechanism</strong></td>
<td>Mechanisms like wiki, blog, vlog, ask-me etc to share experiences and knowledge</td>
<td></td>
</tr>
</tbody>
</table>
## Appendix 19 – Curriculum Room for Growth Day

### Curriculum

<table>
<thead>
<tr>
<th>Virtual Individual</th>
<th>Physical Team</th>
<th>Physical/Virtual Cross Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework 1 + 2</td>
<td>Start</td>
<td>Why?</td>
</tr>
<tr>
<td></td>
<td>Insight in mental patterns</td>
<td>Hands-on experience (scenario/activity based)</td>
</tr>
<tr>
<td></td>
<td>Activity based working (2 scenario’s)</td>
<td>Existing Technical training</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Technical buddy system</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mental buddy system</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Virtual Individual</th>
<th>Country MT (cross)</th>
<th>To be determined (train the trainer or insourcing)</th>
</tr>
</thead>
<tbody>
<tr>
<td>People Mgrs + HR Consultant</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Appendix 20 – People Managers 2bPR Implementation Path
People managers implementation path
FY08

Retreat 1  (1 / 2 days)
Focus NWOW & Team
Based on MBTI
Ruimte voor Groei
1-day
NWOW
Team & 
Business prio's
MBTI

Retreat 2 (1/2days)
Focus team combined with Business priorities

Proposed approach
Retreat 1 day
Year end FY08

Retreat can be set up in conjunction with HR to combine business prio's with Team Development and the integration of 2BPR