LUND UNIVERSITY
School of Economics and Management

Reuniting IT Development (Dev) and Operations (Ops)

A study on the merger of two opposite organizational logics
in the self-organizing era, from an identity perspective

by

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Abstract

Agile working methods gain in popularity among practitioners within the IT (Information Technology) industry and beyond, as a result of the revival of the self-organizing team as a mode for organizing work in contemporary organizations. The talk of DevOps, as an agile method which merges opposite organizational logics, IT Development (Dev) and IT Operations (Ops), into a self-organizing team, has arisen as a management fashion. Following interpretative research traditions and an abductive study approach, our purpose is to enhance the understanding of the 'hard-to-grasp' phenomena of individual and group identity in organizational change. In addition, the contemporary 'self-organizing era' calls for a consideration of group identity in change processes, which appeared to be understudied. A large Dutch financial institution, referred to as The Bank, currently adopting DevOps working methods served as a single case-study.

Our rich empirical descriptions show how the radical merger of two opposite logics cause identity issues for the individual – employee and team lead – as well as on the group level. By complementing the discursive framework of organizational changing by Jian (2011), we underpin our thesis that group identity has become equally or even more salient than organizational identity. By extension of the framework by Alvesson & Willmott (2002) of identity regulation, we show how identity is 'softly' regulated on the individual and group level, in order to align the 'self-organizing' swarm with overarching organizational objectives.

Keywords: Organizational Change, Identity, Group Identity, Organizational Identity, Employee Identity, Identity Regulation, Merging Teams, Team Transition, Organizational Control, Agile, DevOps, Management Fashion

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Thank you all,

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Table of Content

List of Figures

1 Introduction

Within the first chapter, the reader will be introduced to the performed study. Starting with a prologue, the theoretical background of the study will be provided, to give context to the case, which will be introduced afterwards. Subsequently, we present our research objectives, including the research gap and purpose of our study. The first chapter concludes with the disposition of the study, to inform the reader on the content of the remainder of the thesis.

1.1 Prologue

> *"Identity is problematic - and yet so crucial to how and what one values, feels and does in all social domains, including organizations - that the dynamics of identity need to be better understood."* (Albert et al., 2000: 14)

For the purpose of this thesis, a study has been performed on a change process of a merger within the Information Technology (IT) department of a Dutch bank, to enhance the understanding of how individual and group identity are reconstructed in organizational change. In order to fulfill the requirement of anonymity, we refer to the organization as 'The Bank' throughout the paper.

The Bank is currently in the pilot phase of implementing a new way of working, labelled DevOps. This new way of working requires two distinct organizational logics to merge into one self-organizing team with shared responsibilities. There will be a close consideration of how the merger affects existing employee identity on both, the level of a) the individual - such as team member and team lead - as well as b) the group level.

As the new way of working is characterized by self-organizing teams, the need for managers, who are expected to facilitate this process in the transitional stage, may eventually be reduced. In addition, with this study we will also explore how the organization seeks alignment of a large number of self-organizing teams with strategic objectives.

The next sections will further define and explain the previously introduced terms and concepts, by providing the theoretical background and introduction of the case.

1.2 Background

The following section serves to introduce the background of our study. We are highlighting the broader theoretical context as well as the background of DevOps, the new working method.

The revival of the self-organizing team

The concept of self-organizing teams as a mode for organizing work has been around in organizations for multiple decennia, under different labels such as *"self-managing, autonomous or empowered"* (Renkema et al., 2018: 81). Especially within the 1990ies, this type of work-teams was considered a management fashion (Barker and Tompkins, 1994). However, these teams were often embedded in organizations with a project management structure, characterized by traditional or controlling management styles and a rigid planning (Hodgson, 2002; Renkema et al. 2018). Therefore, the trend vanished in relevance over time, as a consequence of the aforementioned factors undermining the self-organizing nature of the team.

In recent years, the concept of self-organizing teams seems to revive as a consequence of global trends of digitalization and globalization, as well as fast-pacing technological advancements (Renkema et al., 2018). IT no longer is a distinct department but has become a crucial lever for the digitalization process and therefore, needs to be infused into every organizational fiber (Fiampolis & Groll, 2016). There is an urgency to digitalize services in a rapid pace in order to meet changing customer requirements, and a demand for flexibility to respond to external developments (Omarini, 2017) Therefore, the search for a mode of organizing, which enhances flexibility and employee empowerment but simultaneously, allows maintaining of control, contemporary or "*post-bureaucratic project management technologies"* arose (Hodgson & Brian, 2013: 309). In particular, what is called 'agile methods' by practitioners, seems to increase in popularity among a wide range of organizations. Predominantly within the field of computer science and IT, the belief seems to have emerged that organizational 'agility' could be a way of survival in a competitive business environment (Deloitte, 2017a; Sia et al., 2016). The literal meaning of agile is "*nimble*" (Christopher, 2000: 38), but in this particular context, it is better described as a method for software development *"characterized by the division of tasks into short phases of work and frequent reassessment and adaptation of plans"* (Oxford University Press, 2018a). Therefore, multiple established companies implemented agile methods within the IT department in an attempt to simplify complex working processes and to change legacy cultures (Cram & Newell, 2017; Sia et al., 2016).

DevOps: a new agile method

Even though one of the intended benefits of agile methods is shorter time to market, it appears often not to be realized in practice. IT Operations, another IT function which integrates the software designed by the development teams for customer usage, can often not keep up with the continuous agile working processes (Gill et al., 2018). Therefore, recently, the talk of the DevOps way of working, as a new manifestation of the so-called agile methods, seems to have arisen as a popular management trend. DevOps is an acronym of IT Development (Dev) and Operations (Ops), which refers to contrasting organizational logics, being merged into one self-organizing and multidisciplinary team. "*An institutional logic is the set of material practices and symbolic systems including assumptions, values, and beliefs by which individuals and organizations provide meaning to their daily activity… and reproduce their lives and experiences.*" (Thornton et al., 2012: 1). Please refer to Appendix A for a visualization of such merger.

Whereas IT Development employees are innovation-driven and future-focused, the IT Operations employee tends to consider change a threat for the reliability of client services. In other words: "*The stewardship of one group to protect the company and the other to accelerate the response to change creates tension, frustration, and conflict*" (McCarthy et al., 2015: 600). Due to these contrasting characteristics in terms of goals, working cultures and ambitions, Hussaini (2014) describes a *"Wall of Confusion"* between the two logics. The main objective of DevOps is therefore to align the contrasting cultures and enhance collaboration in the process of software development without undermining quality, speed and efficiency (Angara et al., 2016; Banica et al., 2017; Roche, 2013).

It must be noted, that due to the lack of a shared definition among practitioners, some would even consider DevOps *"notorious for its ambiguity"* (Ståhl, 2017: 440). Despite this ambiguity, most practitioners seem to agree that DevOps is an agile method and therefore, shares the principles of a collaborative culture and the importance of human interactions (Banica et al., 2017). Thus, the 'softer' and technological aspects of DevOps go hand in hand (Hosono, 2012 in Diel et al., 2016). Although some critics consider it another *"mindless"* management fashion, others belief that DevOps as a new agile method will go mainstream in contemporary organizations (Cram & Newell, 2017).

The implications of merging opposite logics into a self-organizing team

Nonetheless, as with every other organizational change, the merger of the two organizational logics into one combined team has implications for the people targeted by the process. Despite an evident rationale for change on the organizational level, lacking capabilities to enable employee adoption of the change, as well as, misaligning intangible factors such as "people, values and leadership" with factors such as "technology, strategy and structure" could result in failure (Beer & Eisenstat, 1996: 589). The contrasting nature of the organizational logics makes alignment of all these factors - soft and hard - even more challenging. Therefore, the human side of change, including people and culture, is often mentioned most challenging for a straightforward change (Gill et al., 2018).

Shifting our focus to the employee on **the individual level**, "*uncertainties, confusion, anxiety and feelings of inadequacy*" may color the change process as a result of individual sense-making (Alvesson & Sveningsson, 2008: 34). Moreover, the extent to which an employee feels a sense of belonging in relation to the initiated change project, influences the level of receptiveness or participation (Alvesson & Sveningsson, 2008). This process of identification with organizational ambitions is also addressed by Jian (2011), who emphasizes the relationship between change and the interplay between identity on the organizational and individual level. For instance, the introduction of self-organizing teams has implications for the traditional roles of the employee and the team lead. In this light, Watson (1994) addressed how management trends, which some would consider DevOps, could cause a counterintuitive position for the manager. As defined by its role, the manager is expected to serve the organizational interest, although shifting 'control' to the self-organizing team might provoke the stability of one's self-image.

The emphasis on teams in the new way of working, also requires a close consideration of how the merger of two organizational logics affects identity **on the group level**. As a consequence of the merger, several challenges may potentially arise. For instance, due to a silo-mentality, there may be a lacking will to collaborate or share knowledge in between the two logics, as well as a clash of working styles. Also, fear of increased responsibility in the merged team may result in not showing accountability for shared tasks (Gill et al., 2018; Kamuto & Langerman, 2017). Other authors highlight an area of improvement regarding the alignment of communications and understanding of mutual cultures of the opposite logics (Diel et al, 2016).

Identity as a lens for studying change processes

Therefore, identity on various levels, - the organizational, the group and the individual - and how it evolves and reinforces, takes a center role in organizational change processes. Van Dick et al. (2018) suggest, to take the potential effect of a change on the existing employee identity into account, for the overall success of the initiative. Other authors highlight how an 'identity lens' is salient for understanding organizational behavior in modern team-based settings characterized by flatter structures and a somehow self-organizing nature (Albert, Ashforth, & Dutton, 2000 in Annosi et al., 2017). Sveningsson and Alvesson's (2003) claim, that to increase the understanding of organizational phenomena such as identity, these particular situations need to be studied. Hence, we see great value on enhancing the understanding of how identity on the individual and group level is constructed, through studying our radical merger case. Within the following section, the studied organization, which serves as a case, will be introduced.

1.3 Case

This section serves to introduce our case. In particular, the ambitions and challenges the organization faces, which motivate the change process, serve as the context of our study.

The Bank in the form as it is known today, is the result of multiple mergers and acquisitions within the past. It is headquartered in The Netherlands and employs around 20.000 employees (Company website, 2018)[1]. The focus of this study is on the IT department, which exists of around 6000 employees, and the organizational logics of IT Operations and IT Development in specific. The IT department is spread over several locations in the Netherlands. The following figure provides an overview of the for our case relevant developments within the organization in order to enhance the reader's understanding.

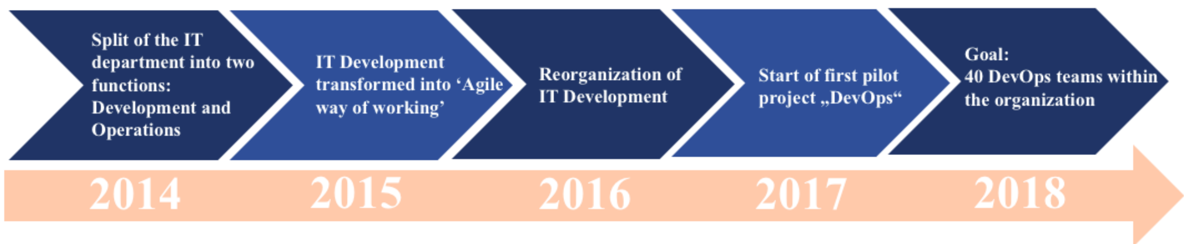


Figure 1: Timeline of relevant developments within the object of study

[1] To preserve the anonymity of our studied organization, we are not providing the original source. All retrieved data from the organizations' website is marked.

In 2014, the two organizational logics, IT Operations and IT Development, have been separated into two distinct sub-organizations for a specific purpose. IT Development focuses on the development of new software and innovation with change as their main driver. In return, IT Operations has a monitoring or controlling role regarding these new developments and its impact on the availability of client services (Hanna, Team Lead Ops; Immanuel, Ops Engineer; Lisa, Senior HR Manager). For this reason, maintaining stability and the avoidance of incidents disrupting client services is the main aim of IT Operations. The separation and opposite ambitions create stark contrasts in between the two organizational logics, as illustrated by the following excerpt:

> *"I remember an incident manager, from which I took over the job, he told me there is only one thing to remember: In your role as an incident manager, you have to hate project managers and development managers."* (Julia, Ops Engineer)

As it seems to be the case with various established organizations, the global trend of digitalization caused The Bank to reconsider traditional business models. Therefore, IT has taken a central place in The Bank's strategic ambitions of digitalization and innovation, in contrary to the back-of-the-house department it used to be. As a consequence, the IT department is currently reorganizing the way of working and the structure, with the aim to speed up the time-to-market of products and services and to simplify organizational structures and processes. (Company website, 2018).

In order to enable the realization of these digital ambitions, agile methods were introduced with the aim to transform the traditional way of working. This solely occurred within the IT Development logic, due to the split with the IT Operations a year before. In addition, several reorganization programs have been executed on both the employee and management level. Namely, as a consequence of the self-organizing character of the agile teams, the management layers are reduced. Due to the increased use of technology and automation of traditional work tasks, there are less people needed to develop and operate the IT products. (Lisa, Senior HR Manager).

However, due to the split of the two organizational logics, the intended benefits of the implemented agile methods were not achieved, and closer collaboration appeared needed. For this reason, the DevOps way of working was implemented in multiple pilot teams. This decision implied the merger of the IT Development and IT Operations logics into one self-organizing team with universal cross-skilled roles. Within the conducted interviews, the senior HR manager provided us with the official definition of DevOps at The Bank:

"DevOps is a culture and way of working that emphasizes communication and collaboration between Business, IT Development and IT Operations. It extends the Agile principles by […] *automating the product lifecycle and enabling cross-functional teams to take full ownership of their product from an end-to-end perspective."* (Lisa, Senior HR Manager)

In sum, merging IT Development and IT Operations into one self-organizing team is not without challenges, considering the contrasting working ambitions and the former split of the two organizational logics. By taking an identity lens, we will study the change process of the merger in order to understand and interpret those challenges.

1.4 Research Objective

Within this section, we will present the research problem and subsequently, the statement of purpose of the study, followed by the identified research limitations. The final section provides the overall research question.

Research Problem

Taking a broader theoretical perspective and going beyond the label of the DevOps way of working, we enter the field of organizational studies. As previously introduced, the subject of our study is an organizational change process within an IT department of The Bank with the aim to implement a new way of working, labelled DevOps. This requires two stark contrasting organizational logics to merge into one self-organizing team. Identity on the individual and group level will serve as our lens for studying the change process.

The field of organizational change and identity has been fairly studied from various perspectives in previous work (Sveningsson & Sörgärde, 2013). Nevertheless, some aspects of identity scholarship still seem to be understudied, or invite for *"rich empirical analyses"*, for instance, of how individual identity is constructed in particular processes (Alvesson, Ashcraft & Thomas, 2008: 7; Sveningsson & Alvesson, 2003). Organizational change starts indeed by the sense-making of the individual employee, but they should be considered as members of a larger group (Cameron & Green, 2015). In particular, the revival of the self-organizing teams in contemporary organizations, calls for the consideration of group identity in change processes. Within self-managing teams the individual's identification is higher towards the own group than towards the organization (Barker & Tompkins, 1994). Despite the salience of group identity as previously motivated, the concept seems to be understudied, due to a focus on individual and organizational identity respectively. Annosi et al. (2017) highlight how limited research is performed on group identity in team-based organizations and how group identity may serve as a means by organizations for creating commitment to strategic ambitions. Van Dick et al. (2018) highlight a gap between theoretical perspectives on shared identity and its power within groups and what actually has been empirically studied.

From a practical perspective, according to leading consultancy firms, the DevOps hype is justified in terms of improved quality, efficiency and shorter time to market (Bossert et al., 2015; Deloitte, 2017b; Ketterer & Schmid, 2017). Nevertheless, both qualitative and quantitative studies on the effects of working according to relatively new DevOps practices seem to be rare (Erich et al., 2017). Moreover, despite strong claims around the human orientation of agile methods such as DevOps, in previous, often non-academic work the technical aspects of the mergers are highlighted rather than 'people aspects' such as identity. These 'softer' aspects have barely been subject of an empirical study in this particular context before (Gill et al., 2018). However, due to the rise of the agile teams as a consequence of the increasing popularity of the corresponding methods, Hodgson & Brian (2013) call for a critical consideration of the consequences of 'agile' on traditional control mechanisms.

Therefore, we believe that our case of the merger of the contrasting logics into a self-organizing team, for the implementation of agile methods, allows to study the identified problems, with a focus on individual and group identity.

Statement of Purpose

Taking the previously identified research problem into consideration, we aim to study a change process which requires two opposite organizational logics to merge into one self-organizing team, for the implementation of a new working method. The purpose is to enhance the understanding of identity on the individual and group level in organizational change. Through our radical case of two opposite logics, the great opportunity is provided to analyze the usually 'hard-to-grasp' concept of identity, by creating insightful stories. Therefore, the contribution of our study is threefold:

Firstly, on a theoretical level, within the field of organization studies, by performing an empirical study we contribute to a) *the understanding of how individual and group identity is (re)constructed in organizational change processes*, on a case organization currently implementing DevOps. In particular, due to the emphasis on self-organizing teams in the new way of working, we shed our light on the concept of group identity, which is currently understudied. Secondly, with the introduction of this working method autonomy shifts from the organization towards these teams. Therefore, we aim to explore b) *how The Bank aligns the 'swarm of self-organizing teams' with organizational objectives*, as a result of the change. Finally, on a more practical level, we provide insights in a change process towards DevOps by performing a qualitative study on c) *how individual and group identities affect such change process*, which currently lacks in the limited body of literature.

We aim to contribute to the previously described research gaps but not solely for the purpose of bridging it (Alvesson & Sandberg, 2011). The revival of the self-organizing teams, and its implications, and the likeliness that 'fashionable' working methods as DevOps will soon 'dominate' the management agenda in many contemporary organizations, makes the findings of this study relevant for scholars or researchers. As well as for consultancies, IT professionals and managers involved in such mergers.

Research Limitations

For this particular study, a specific scope has been determined. First of all, the subject of study regards a change process in the IT department of The Bank. For this reason, the new way of working, labelled DevOps, has also a strong technical orientation, which relates to the field of computer science and information technology. Therefore, we are emphasizing that within this thesis, the subject has been studied from the field of organization studies, with a focus on individual and group identity. Secondly, in the eye of critics, DevOps is considered a management fashion. We are not entering the discussion on whether this is the case or not, but touch upon the implications of following up on such trends on employee identity. Thirdly, neither will we recommend best practices or key success factors for implementing DevOps on a practitioner level, since we mainly consider the subject from a theoretical perspective and aim to achieve a greater understanding of certain organizational phenomena. Finally, to understand how individual and group identity is constructed and reconstructed in organizational change, we need to explore the broader context. However, due to the complexity of organizational change, and the limited scope of our study, we would like to stress that there are various factors to consider in this particular process.

Research Question

Building upon the previous sections, we therefore arrive at the following research question:

- How are individual and group identities affected in a merger of two organizational logics into one self-organizing team, for the implementation of agile working methods?

In line with our research approach, which is further explained in the third chapter, we formulated a broad research question, which eventually allows us to tolerate the conceptualization of theory.

1.5 Disposition

The last section of the first chapter serves to provide the reader with an overview of the main topics, to be presented in the remainder of this thesis:

Chapter one and **chapter two** serve to introduce the reader into our subject of study, we set the scene by providing a case description and background, as well as, the theoretical framework guiding our study. **Chapter three** underpins our chosen methodology by introducing our philosophical grounding and how we collected and analyzed our data. Within **chapter four**, we present our empirical material in form of a narrative. In **Chapter five,** we discuss our findings along the expanded framework of Jian (2011), in order to address how the individual and group identity is affected by the change process of a team merger. Within our **chapter six**, we summarize and finally, conclude our thesis. Additionally, we provide suggestions for future research. The **reference list** is accompanied by supporting **appendices**.

2 Literature Review

The chapter of the literature review serves to demonstrate the theoretical background of our study. Due to the tremendous body of theory and literature on the fields of organizational change and identity, we refrain from calling our literature review as comprehensive. We rather point out various concepts and theories, which we consider important to understand and to explain the phenomena around our case-study.

The first focus is on organizational change and its triggers. As authors highlight the close link between organizational change and organizational identity, we administer an overview of identity and provide the definitions we follow within the study. Additionally, we see great interest in two main areas of identity and highlight the fields of identity on the group- and individual-level, with a focus on self-managing teams. As indicated in our research problem, a specific merger of two opposite organizational logics is the subject of our case-study. Therefore, the third section highlights the theoretical backgrounds in regard to organizational mergers. Finally, we provide the reader with a summary of the chapter.

2.1 Organizational Change

Organizational change has become a fairly studied subject of research within the last decade. Alvesson and Sveningsson (2015) highlight that numerous labels, concepts and methods have been developed within the past, despite the high failure rate of most organizational change efforts.

Barely any organization can afford not to change, therefore, Sveningsson & Sörgärde (2013) claim that change is inevitable. Typically, such change processes start with external or internal trigger for change (Cameron & Green, 2015). Former ones can be economic reasons, new technologies, changed customer preferences, competitors, politics, policies, social and cultural values (Alvesson & Sveningsson, 2015; Palmer, Dunford & Akin, 2009). Despite the enormous external pressure companies are facing, numerous internal trigger such as new products or designs, low performance, a new management, an unskilled workforce or a relocation, can lead to major organizational change processes (Palmer et al., 2009).

Even though these triggers seem mostly separated, Sveningsson & Sörgärde (2013) argue, internal and external triggers can mostly not be distinguished from each other, as they are interwoven. The authors highlight further, that internal and external trigger are connected to the individuals' sense-making and perception, what one may see as a trigger, someone else does not notice. Another mentioned trigger for organizational change is fashion, where organizations *"imitate the structure and practices of others"* (Palmer et al., 2009: 65). Alvesson and Sveningsson (2015) also see that changes often takes place as a follow up on management fashions and not of the presumably created value for the organization. Especially managers tend to follow these fad's and adapt whatever fashion is popular by that time. This is often linked to the overall pressure of organizations to maintain credibility and reputation. Managers are locked in a paradox, internal and external triggers force change but at the same time managers need to hold up the current state of stability (Palmer et al., 2009).

Stability and vision during organizational change is often mentioned as a crucial success factor of change programs (Clark et al., 2010; Van Dick et al., 2018), whereas the state of instability during change processes creates uncertainty and among employees often job insecurity. Schumacher et al. (2016: 809) define job insecurity as *"an employee's feeling or an overall concern that his or her job is at risk or that an employee is likely to face involuntary job loss in the near future."* In addition to job insecurity, Van Dick et al. (2018: 20) mention the general increased feeling of stress during organizational change, even though the change is often executed in order to *"improve working conditions and to relieve employees from stress"*. Insecurities at work and especially during change may have negative consequences on the individual and organizational level (Schumacher et al., 2016), therefore, Cameron and Green (2015) point out the need to reduce the anxiety about the change by creating psychological safety.

Weick and Quinn (1999) describe two types of organizational change and distinct hereby between episodic and continuous change. Former one is defined as *"infrequent, discontinuous, and intentional"* (p. 365) and are rather seen as a process with clear trigger, a starting point and a defined outcome, which is the definite end of the change process. Whereas continuous change is described as *"endless modification in work processes and social practice"* (p. 366). Organizations who are able to have continuous change, are seen as the ideal organization. The change is constant with no end-state and contributes to the overall adaptability of the organization.

Thomas et al. (2011: 22) argue, organizations are the *"emergent property of change",* because *"change is endemic, natural, and ongoing"*. Furthermore, they emphasize the actors in such organizations, who perform with micro-interactions the everyday work. Thomas et al. (2011) argue, that a change process may come from senior management but is highly translated and performed by those who do the everyday work. The meanings and interpretations of the actors in regard to the change process are the main driver of the outcome. Which implies, that the actors within organizational change are crucial and how their meaning can be influenced and maybe even controlled.

Sveningsson and Sörgärde (2013) highlight the need to link organizational change to other fields such as identity and Clark et al. (2010: 400) underline *"that major organizational change implies the need for changes in organizational identity."* Therefore, the focus within the following section is on identity on different levels within organizational change.

2.2 Organizational Identity

Organizational identity is a key concept in organizational studies (Clark et al., 2010). Alvesson & Empson (2008: 1) define organizational identity as *"the form by which organizational members define themselves as a social group in relation to their external environment"*. In addition, they highlight, that organizational identity often overlaps with organizational culture. Alvesson (2004: 188) adds, that organizations *"are the sources for the identity of the employed"*. A higher employee identification towards the company is desirable, as it increases employee performance and well-being and leads to lower turnover rates of employees (Barker & Tompkins, 1994; Jetten et al., 2002; Ullrich et al., 2005). Identification is additionally seen as a coping strategy to deal with organizational demands but also as a guide to give directions (Barker & Tompkins, 1994). Subsequently, Jetten et al. (2002) argue, that strong identification with the organization leads employees to taking the organization's perspective and getting therefore a greater understanding why certain strategic decisions, such as change, are needed. The general openness to change increases and employees are more cooperative during change processes (Alvesson & Empson, 2008; Jetten et al., 2002).

Alvesson and Willmott (2002: 620) even argue, that identity functions as *"a medium of organizational control",* as organizations enjoin self-identities which are congruent with the organizational objectives through identity work. *"Identity work refers to people being engaged in forming, repairing, maintaining, strengthening or revising the constructions that are productive of a sense of coherence and distinctiveness"* (Sveningsson & Alvesson, 2003: 1165). Alvesson and Willmott (2002) outline the equally importance of self-identity, identity work and identity regulation and how they interact (see figure 2). It is explained how self-identity of an individual is obtained through continuous identity work; identity work informs identity regulation which is in turn responsive to the self-identity. Especially within larger organizations, identity regulation is deemed to be significant, and should take into greater consideration. Regardless numerous advantages of creating a strong organizational identity such as increased motivation, performance and lower turnover, also the negative side of identification is subject of research in various fields.

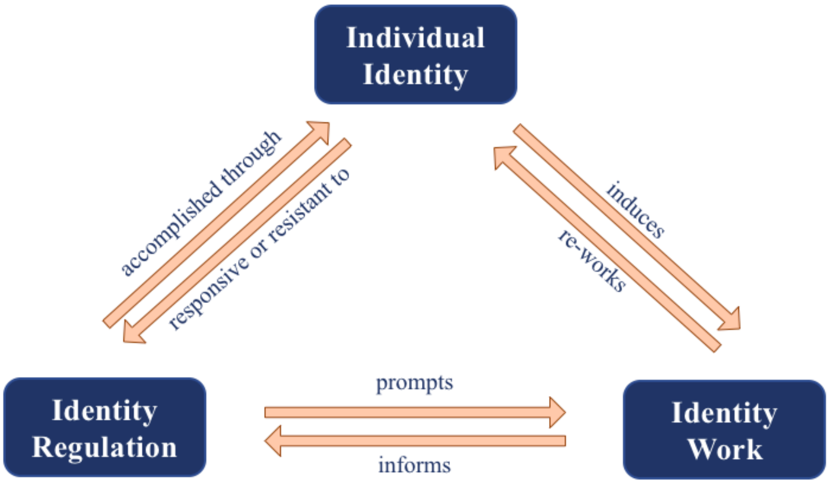


Figure 2: Identity Triangle adapted from Alvesson and Willmott (2002)

As previously described, identity within the organizational context can be used as a mode of control. Based on the findings of Costas and Fleming (2009: 354), individuals tend to elude from 'unpopular' identities and respond in various forms *"including cynicism, humor, skepticism [and] irony"*. The researchers label this phenomenon 'dis-identification', which is often used to overcome the tension between 'Who am I' and 'Who I should be'- according to the organization. Similar to 'dis-identification', Sveningsson & Alvesson (2003) describe negative identity as 'anti-identity', which emerges out of negatives, whereas personal identity is often constructed out of positive subjectivity, anti-identity emerges out of negatives (Alvesson & Sveningsson, 2011). Anti-identity *"is constructed to present a counter-picture to oneself"* (Alvesson & Sveningsson, 2011: 171).

2.3 Identity on the Group Level

As aforementioned, organizational identity is a large construct which gives individuals various stimulation to create identity on different levels. Authors highlight the importance of taking the team-level within organizational change into account, as most individuals belong to one or more groups. Despite the small availability of research within that area (Cameron & Green, 2015), scholars refer to these groups within the organizational context as teams or work-groups. As the terms are not consistent within available literature, we are referring to it as identity on the team-level, where a team is seen as two or more individuals accomplishing common task related work (Bush et al., 2017).

Cameron and Green (2015) point out the great importance on recognizing the team-level in organizational change. As teams are defined in many ways, depending on the context in which they take place, we want to provide the definition of Cohen and Bailey (1997 in Cameron & Green, 2015: 55) we are following within the present research, who define a work-team as

> *"a collection of individuals who are interdependent in their tasks, who share responsibility for outcomes, who see themselves and who are seen by others as an intact social entity embedded in one or more larger social systems (for example, business unit or corporation), and who manage their relationships across organizational boundaries".*

Identity on a group-level implies various constructions. Some researchers focus hereby on work-teams in a traditional sense with at least one manager and self-managing work-teams without a manager or supervisor. Barker and Tompkins (1994) focused highly on identity within self-organizing teams, which was especially within the 1990ies considered as a management fashion. At first often found among small to medium size enterprises, it became quickly an often-proceeded restructuring process among large organization due to its financially benefits as less management is needed. Cameron and Green (2015) see a self-managed team as a sub-set to the work-team. Barker & Tompkins (1994) refer to self-managing teams as peer groups who take total ownership, from decision-making processes to coordination and performance of all required work in their field of work, with no supervisor or manager. Or as the author state, with even more supervisors, as the peer pressure within those teams acts as a function of control.

It is expected to identify with the team and follow the teams' norms and rules. The identification towards the group is often so powerful, that in conflict situations within the organization, group members identify more with their own group and distance themselves from other groups, even though they belong to the same organization (Van Dick et al., 2018). Putting this into context, Barker and Tompkins (1994) concluded, that within self-managing teams the individual's identification is higher towards the team than towards the organization. Therefore, a higher team-level identification leads to negative feelings towards an upcoming reorganization processes whereas a higher identification towards the organization and thus, a greater understanding for the overall need for change, leads to more positive feelings towards organizational change efforts (Jetten et al., 2002).

2.4 Identity on the Individual Level

Identity on the individual level is, according to Alvesson (2004: 188), broadly seen as *"how a person constructs a particular version of him- or herself"*. We distinguish in this section between a 'single' employee and a manager, both can be viewed as individuals within an organizational context. Cameron and Green (2015) highlight the power of individuals within change, as change starts on an individual level. Despite the power of individuals during change, also the importance is highlighted within literature. Jetten et al. (2002) argue, that individuals who have a strong identification towards the organization have also a greater understanding for the needed change, whereas Ullrich et al. (2005: 1552) study has demonstrated *"that employees whose organizational identification was relatively strong felt threatened by the cultural change programme and were opposed to it more than weakly identified employees."* Therefore, it is questionable what an organization should strive for in order to successfully accomplish change efforts.

Identity of Knowledge Worker

As the present study is focused on employees within the IT department of a bank, a notion in regard to these specific individuals working in this kind of organization seem to be from importance. As most of the work within the IT department requires certain skills and specific knowledge, these individuals can be considered as knowledge workers (Newell et al., 2009: 29) or *"qualified labour"* (Alvesson, 2004: 8). Newell et al. (2009: 24) consider software development as a contemporary type of work, which can be considered as knowledge work as it "*acts as the main input into the work, the major way of achieving the work and the major output."* Therefore, we can speak of knowledge workers, creating or doing knowledge work within a knowledge-intensive firm.

According to Alvesson (2004), identity in the context of knowledge workers is important to consider as identity gives not just managerial control over knowledge workers but also a basis for image management, loyalty and source for self-esteem and confidence at work. The knowledge workers identity at work is often interwoven with 'private' identity as they need to bring in much of themselves into work, and are thus more vulnerable to frustrations. Another mentioned threat of identity and stability is the increasing level of knowledge in general. Those highly educated specialists, who enjoyed prestigious roles in organizations within the past, are often mixed with service workers who fulfil step by step also their role, which lowers the self-esteem of knowledge workers. Alvesson (2004) reasons, that especially in knowledge-intensive firms intensive identity work should take place and managers should try to encourage strong identification with the organization.

Identity of individuals in managerial roles

Despite the ‘single’ employee within an organization, also the role of managers in the context of identity and change is subject of research. Watson (1994) put certain interest within his study on managers and their perception of change processes within the organization and how these affected their identity. He highlights especially the paradox in which managers are often locked:

> *“Every manager has a responsibility, by virtue of his or her appointment as a member of the control apparatus of the corporation, to contribute to the performance of the organization as a whole. But, at the same time, they need to control their own personal lives and identities and to make sense of the work they are doing, both on behalf of the employing organization and in terms of their own personal and private purposes and priorities.”(Watson, 1994: 895)*

Despite numerous attempts of researchers to define managerial work, it is often seen as rather ambiguous and vague by organizational members (Sveningsson & Alvesson, 2016). Often it includes a great number of administrative tasks which conflicts with the identity of the manager as a knowledge worker, instead of seeing him- or herself as a manager, many have to admit that their role leads more towards an administrator (Sveningsson & Alvesson, 2016). Disappearing roles within change are additionally not just affecting employees, especially the self-steering nature of many teams create certain job insecurity on the managerial level. Sveningsson and Alvesson (2016) argue, that the feeling of anxiety leads to an active search for stability. Organizational changes are also perceived difficult for managers, as it is expected from them to act as good roles models, which is often hard to achieve, especially in situations where the manager itself does not fully agrees with the need for change.

2.5 Merging Teams: Organizational Change and Identity

The two previous sections presented the implications of organizational change on identity on the group and individual level. The merger into one combined team of two opposite logics within the organization, can be defined as an episodic change process. According to Ullrich et al. (2005), episodic change threats identity. Therefore, this section serves to examine previous studies on merging teams and how these affects identity. Therefore, we see great value on taking literature on identity within mergers and acquisitions into account.

Van Leeuwen et al. (2003) see merging groups in various settings, from families to countries, unions and teams. A merging team can thus be defined as a blend of two or more teams into one team (Giessner & Mummenday, 2008). As aforementioned, previous research has shown that the identification is often higher towards the work group than towards the organization, because *"first, individuals tend to have a greater degree of familiarity and commonality with members of their own work-group; and second, workgroups allow them to maintain their distinctiveness without being overwhelmed by the larger organization"* (Elstak et al., 2015: 35). The distinctiveness from other groups is hereby an often-mentioned topic. In general, team merger within organizations can be seen as a change, which is characterized by uncertainty. Elstak et al. (2015) argue, a strong identity helps to decrease the level of uncertainty.

Numerous studies around mergers and in particular team merger have identified problems, affecting the successful implementation of those transitions. In general, the required stage of leaving the pre-merger identity and adopt or create a new one is often mentioned (Clark et al., 2010; Van Leeuwen et al., 2003). Mainly because team members are typically motivated to preserve their team and the distinctiveness from others (Van Leeuwen et al., 2003). The authors further highlight, that in merging situations one group's identity will dominate, even though it is tried to include both pre-merger identities within the post-merger identity. Bush et al. (2017: 3) found problems with the time constraints these teams have to face while adapting to the transition. A great amount of time *"to perform transition-specific activities"* such as team meetings and team building activities should be placed. According to Giessner & Mummendey (2008), team members have to deal with three different groups during merger: the own pre-merger group; the other pre-merger group and the newly created group.

Despite identified problems affecting the outcome of such merger, numerous opinions have been expressed which lead to greater success of mergers. Bush et al. (2017) see great value in diversity of teams and the selection of the right people, which can be allocated to be able to adapt to such transitions. This can be connected to the overall team maturity, as teams with a high maturity level are generally seen to have a greater overall understanding of the tasks and processes. Hereby a synchronization of the team members behavior leads additionally to similar attitudes and helps therefore to achieve team goals (Bush et al., 2017). To reduce the intergroup bias, Giessner and Mummendey (2008) see common goals as helpful. Elstak et al. (2015: 54) add, that a general clear statement on *'who are we'* rather than trying to *'look good' should* be placed.

Alvesson and Empson (2008) emphasize, that a commonly shared set of ideas eases the construction of a shared identity within teams. Which implies, that it would be beneficial if teams, which will be merged, have certain shared values, social positions or even similar educational backgrounds. Ullrich et al. (2005) highlight within their research, that often in merger situations, the identity from the more prestigious organization will be adopted, which may lead to identity problems among the team with the minor identity. As Jetten et al. (2002: 282) summarize, the success of a merger is partly depended on the extent to which the individuals *"let go of their pre-merger identity."* Birkinshaw et al. (2000) add, that cultural compatibility of the two merging teams can reduce the stress and therefore ease the general change process. Which goes hand in hand with Van Dick et al. (2018: 21) claim, that *"shared identities [are] a relevant factor for the change success [...]"*.

Clark et al. (2010) discovered the transitional identity concept, a notable solution to overcome issues regarding identity in organizational change processes. The concept helps to provide the necessary sense of stability during change by constructing a transitional identity. As *"it allows people [...] to accept that an identity change is indeed under way and that it is important to let go of their former organizational identities to enable the construction of a new one."*(Clark et al., 2010: 428). Also Van Dick et al. (2018) highlight the benefits of an interim identity, an identity which is only created for the time of the change, which helps to create a new shared identity after the change.

In general, a great link between the success rate of a merger and the identity of those involved can be drawn from existing literature. Merger are seen as a threat to organizational identification, therefore the post-merger identification is important for the integration success (Ullrich & van Dick, 2007). Particular attention should be drawn towards the link between pre- and post-merger identity (Ullrich et al., 2005), to help individuals and teams to reduce uncertainty and enable a quick identification with the newly created identity.

2.6 Chapter Summary

Within the second chapter of our thesis, we reviewed previous theories and literature on organizational change and identity. We started with organizational change, and the internal and external trigger which may force them. As Sveningsson and Sörgärde (2013) and Clark et al.

(2010) argued, identity is closely linked to the field of organizational change. Therefore, the second section focused on organizational identity. Hereby, a clear distinction between identity on the group and individual level was made. Special attention was drawn towards the managerial role and self-managing teams. Within the third section we highlighted the particular field of merging teams. Throughout the literature review, clear definitions for job-insecurity, identity, identification and teams, are provided, which will be the foundation for subsequent chapters.

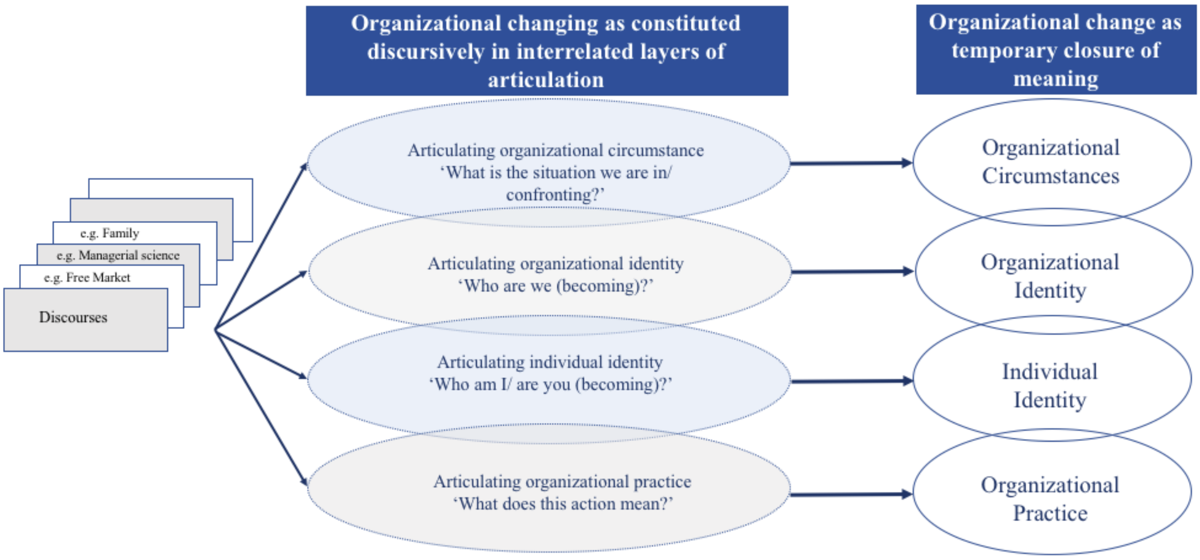


Figure 3: A discursive framework of organizational changing adapted from Jian (2011: 47)

As explained before, the aim of the theoretical background is not to be comprehensive, due to the extensive body of literature within the relevant fields. One particular author captures the previously treated topics in one holistic platform. The processual framework of Jian (2011) conceptualizes organizational changing, expressed through discourses in various interconnected levels of meaning-making (figure 3). 'Organizational Circumstances' treats discourses on the change process itself and its drivers, how this impacts the collective sense-making of the change, is captured in the layer of 'Organizational identity'. In return, 'Individual identity' focuses on how the individual and identity work form meanings in the process of changing. Finally, the layer of 'Organizational Practice' represents the dynamics of how meaning is negotiated regarding new practices as a consequence of the change. We are now proceeding within the following chapter on specifying the methodology of our research.

3 Methodology

This chapter provides an in-depth understanding on how we undertook our research. At first, an overview on our philosophical underpinnings is provided, followed by our general research approach. Then, the data collection process and the data analysis is further explained. The chapter concludes with the limitations of our research.

3.1 Philosophical Grounding

> *"[T]he researcher must enter the field with an open-mind and a great deal of curiosity in order to be able to capture the moment when it all happens."*
> (Styhre, 2013: 56)

In order to understand our study and the decisions we made, we provide the philosophical underpinnings to our study within the following section. As we examine the phenomena occurring in a team-merger-process of two former distinct IT functions, our greatest concern is the understanding of the people involved, their feelings and identifications. Because of this strong focus on humans, we adopted an interpretive research approach. This tradition focuses on *"understanding differences between humans as social actors"* (Saunders et al., 2009: 115). The research philosophy of interpretivism is also reflected within our axiology, the role our values play within the study (Saunders et al., 2009). We as researchers are part of the object of study and can be therefore not excluded. In addition, our values play a role on our data collection. As we value personal interaction, we undertook personal interviews, which will be further explained within the section of the data collection.

Styhre's quote was our code of practice while conducting our study. Our overall study takes place in a continuously changing environment, on topics within the workplace of individuals. As researchers, we need to understand the subjective reality of our interviewees in order to make sense of it and understand them, which follows the ontology of subjectivism. According to Saunders et al. (2009: 111), subjectivism describes the understanding of "*the meanings that individuals attach to social phenomena*".

We create acceptable knowledge (epistemology) within our field of study of organizational change, by phenomenology, in which way humans make sense in the world around them (Saunders et al., 2009), and symbolic interactionism. According to Prasad (2005: 23), symbolic interactionism has been taken up by many researchers in organization studies, as it forces *"an intimate understanding of social situations largely from the standpoint of participants themselves"*. This research tradition emphasizes highly on the individuals' sense of identity and how it is constructed and reconstructed in differing environments.

We are aware of the fact, that it is crucial to adopt an empathetic stance towards the social world of the researched subjects when the interpretative tradition is used (Saunders et al., 2009). We meet this requirement as one researcher, who is already familiar with the subject of study through former research and employment, will lead the interviews. The second researcher will take a more objective role, as no former personal interactions with the organization or its members took place. The next section continues with our research approach.

3.2 Research Approach

After providing the philosophical underpinnings of our study, we continue with an explanation of our qualitative research approach, which is according to Creswell (2014: 32) *"an approach for exploring and understanding the meaning individuals or groups ascribe to a social or human problem."* Our research approach is highly reflected in our data collection process, which will be further explained within the next section.

As we study one single organization, our object of study serves as a case-study. According to Robson (2002: 178), a case study is *"a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real-life context"*. As more than one department or sub-unit of the organization is included within our study, Saunders et al. (2009) would even refer to it as an embedded case study. The case study gives us the possibility, to develop an in-depth analysis of the process and the individuals (Creswell, 2014).

Through previous studies and the former employment of one of the researchers, we gained knowledge in our field of study and most assumptions will be grounded through guessing (Swedberg, 2014), therefore, we decided to take an abductive research approach. Abduction gives us the opportunity, to reflect through interviews and observations on our assumptions; to focus more on the "out-of-ordinary" and explore this further.

Following our interpretative research tradition and abductive research approach, we perform a conceptual study. As this research study has a time constraint, we undertook all interviews within a two-week timeframe. Therefore, a snapshot of the phenomenon within the organization is examined. Saunders et al. (2009) refer to studies, which have a limited time horizon, as cross-sectional studies. We performed semi-structured and in-depth interviews on relatively small samples, which supports our interpretative research tradition (Saunders et al., 2009). The data collection process will be further explained within the following section.

3.3 Data Collection

The following section provides the reader with an in-depth understanding on how the qualitative data of the study was collected.

As aforementioned, the object of study is The Bank, currently in the process of implementing a new way of working, labelled DevOps, which requires two former distinct IT functions to merge into one team. In addition, numerous consultancies claim certain success factors and advantages of DevOps. Thus, we decided to collect our primary data from two different sources. First, we collected data within a leading consultancy to obtain a prior understanding of such a merger from different perspectives and create context for the following interviews within The Bank. Secondly, we conducted interviews within The Bank itself. As our main aim is to understand the context in which the interviewees build their reality, we choose a broad spectrum of interviewees from management and individual level. The interviews are, in that sense, our primary data which we build up with secondary data through literature and mostly peer reviewed journal articles. As aforementioned, DevOps specific literature is often non-academic and thus not peer reviewed. Within the following, the data collection process in explained in detail:

Our primary data was collected through semi-structured, in-depth interviews within a two-week timeframe. These types of interviews serve to gain new insights (Robson, 2002) and provide us with the opportunity to probe the given answers. This is essential while adopting an interpretivist epistemology, as the individuals meaning towards the phenomena is our main concern (Saunders et al., 2009).

First, we conducted one group interview with three participants at the consultancy, which took place within the facilities of the consultancy. All three interviewees decided themselves about their participation. Our main motivation to undertake this group interview, was to identify key themes which build the fundament of the following interviews at The Bank. According to Saunders et al. (2009), group interviews may limit the variation of opinions, as individuals tend to agree rather in groups, while they would disagree in private. In our group interview, we did not make this experience. Through carefully prepared questions, we were able to establish a discussion where the participants felt comfortable enough to disagree with each other and fully involve themselves within the interview, which resulted in a great number of generated insights.

Secondly, we undertook thirteen interviews with individual team members and team leads of The Bank. Through the personal network of one of the researchers, we were able to contact the team-leads of two different teams which are involved within the DevOps transformation, but located in different offices within the Netherlands. One team is part of the official pilot, whereas the second team is at the preparation stage to join the pilot, but not officially part of it, yet. We listed certain requirements for the interviews, such as an equal number of former IT Development and IT Operations team members and that interviewees need to decide voluntarily if they want to participate. The team leads arranged the setting for the interviews, including the location. All thirteen interviews took place within the premises of The Bank. We prepared questions for the interview, but they varied from interview to interview as it is intended to guide the participant into certain topics but give them the opportunity to answer openly (Saunders et al., 2009). Eleven out of thirteen interviews were conducted face-to-face, two interviews had to be conducted through a live video application due to availability constraints of the two participants. As the interviews at The Bank are focused on the individual's perception of the current change environment within The Bank and especially how it affected them on a very personal level, we choose to interview them individually to reduce the suspensions. In addition, we guaranteed each interviewee anonymity by randomizing their names, positions and gender (see Appendix B).

Within the interviews, both researchers had a specific role. One researcher was assigned the leading role, while the second researcher took the role of an observer. All interviews are audio recorded, as we received the individual’s permission. The recordings provided us with the opportunity to transcribe all recorded interviews afterwards.

All interviews were conducted in English. We, as non-native English-speakers, are aware of the fact of information loss or misunderstandings as a result of conducting the interviews in a non-native language. Within the process of transcribing, some quotes have been slightly edited, but only for adequate language purposes, not content wise.

3.4 Data Analysis

This section presents our data analysis including on how our data was processed, structured and analyzed after it has been conducted, even though Kvale (1996, in Saunders et al., 2009) sees the analysis of qualitative data as a process, that already starts at the data collection process and will continue even after the process of the data analysis.

After conducting our interviews and therefore finishing the state of data collection, we proceeded to create scripts by transcribing every interview. Hereby, it was from great importance to us to work very carefully through the recordings as we were not solely interested in what the interviewees say, but also on how it was said. The developed transcripts built the starting point for our data analysis.

Following our exploratory, abductive research approach, the analysis is built from particular to general themes and interpret the meaning of the data (Creswell, 2014). Therefore, we chose to make use of the *'Grounded Theory'* to analyze our data, a strategy to build upon or around data a theory (Saunders et al., 2009). We followed the structure and processes of Strauss and Corbin's model (Strauss & Corbin, 1998, cited in Styhre, 2013) of open coding, axial coding and selective coding. Within the first process, open coding, terms that appear in the data are utilized to label chunks of data. Within the second process, the axial coding, these open codes are grouped into sub-categories and within the third stage, the selective coding, the previous generated sub-categories were related to existing literature. According to Styhre (2013), coding bridges and bonds the data in a meaningful way, but coding is also the outcome of the researcher's interpretation and analysis. Therefore, different researchers may would interpret the data differently than we did.

Using the three steps of Strauss and Corbin's model, we generated around 700 open codes within the first step. Undertaking the second step of axial coding, we grouped the 700 open codes to broader topics, which helped us to reduce the codes to 77. We continued the process by writing these 77 focused codes down and sorted them in a meaningful way. Out of the sorted 77 focused codes, we derived 11 themes, which build the foundation of our qualitative data analysis. Within the 11 themes, we looked further for the 'out-of-the-ordinary', for specific instances of identity within the everyday practice and reality of the interviewees. In addition, we pondered the relevance and significance of the themes categorized into three colors: green, for highly relevant themes, yellow for supportive themes and red for omitted themes (see Appendix C). This results in a total of 4 themes. We build our empirical material in the form of a narrative, which is presented in chapter 4. According to Svenningson and Sörgärde (2013), narratives are helpful in the field of interpretations and sense-making within organizational change, as actors within the change often use positive or negative stories about events to make sense of them.

3.5 Credibility

Within this section, we are reflecting on the credibility of our study and therefore analyze the reliability and generalizability of our study.

First, we are concerned with the reliability, the consistency of our findings. According to Robson (2002) four different threats of reliability may occur: subject or participant error, subject or participant bias, observer error and observer bias. As we undertook interviews to gather qualitative data, we are mainly concerned with the participant error. We believe we overcome this threat by choosing a time for the interview, when it suited the interviewee best. Additionally, we intended to reduce stress, by providing a more casual seating option, comforting with coffee or tea, and closed doors of the interview-room.

Regarding the participant bias, we have to admit, that mostly team leads chose the interview participants, which is our main concern as Saunders et al. (2009) argue, employment insecurity leads participants to rather answer what might be in the best interest of the employer and not their own opinion. As one of our main findings is job-insecurity (see chapter 4), someone can argue how reliable our data is. But we interpret exactly that finding as reliable, as we believe, if the participants would not have answered truthfully, we might would not have had the finding of job insecurity.

Observer error refers to the possibility of at least two variations of questioning the interviewee, as two researchers were present during the interviews. We intended to lessen this threat by following our semi-structured interview questionnaire and providing both researchers with the opportunity to ask questions. This also refers to the fourth threat of reliability, observer bias. As two researchers have been present, there are two different options of interpreting the data. In our case, believe the possibility of different interpretations lead to a greater discussion, as also one of the researchers is familiar with the organization, whereas the second researcher is more objective, as being unfamiliar with the organization.

Generalizability concerns with the question, if the data would have the same impact in for example a different organization. We argue, that the generalizability of our findings is dependent. The motivation of our study is not to generate general applicable findings or solutions to certain problems. As stated, we intent to create a greater understanding of identity and the (re)construction of identity in particular settings. Our case and the introduced new way of working, DevOps, is in a pilot project within the organization, therefore, we worked with a limited set of data.

In sum, the reliability and generalizability of our study can be questioned, as we studied a snapshot of a phenomenon in a particular setting, where the case is bounded by time and activity (Saunders et al., 2009). But as discussed, we tried to lessen the threats, where possible.

3.6 Chapter Summary

Within the final part of this chapter, we provide a summary of the methodology of our research. We elaborated on our philosophical underpinnings and the motivation for taking interpretivism as starting point of our research. In line with interpretivism, we choose to undertake a conceptual study with an abductive research approach. As interpretivism focuses highly on how humans perceive the world around them, we as researchers are aware of the importance of the empathetic stance we have to take in order to generate insights. Therefore, we chose to examine a former employer of one of the researchers in order to fulfil the requirements. We were able to conduct 14 interviews in total, on an individual and group level. The transcriptions of the interviews built our qualitative dataset which were sorted and coded, using Strauss and Corbin's model for data analysis. Despite all aforementioned limitations of our research, a strong human orientation characterizes the methodology of our studies, even though our object of study is highly IT related.

4 Employee Identity: Under Construction

This chapter presents our empirical material in the form of a narrative. As introduced before, our study focuses on individual and group identity, in a particular case, where two distinct functions are merged into a combined team for the purpose of implementing a new way of working. The contrasting characteristics of the groups provide the opportunity to study the manner in which identity comes forward in a change process. The main aim of this chapter, is to provide the reader with the foundation of what is actually happening within our case, by the use of a narrative.

The narrative is structured as follows: In the first section, we are **'Setting the Scene'** by introducing the overall change project and put it into context within The Bank. Afterwards, the differences between the two distinct functions will be explained and underpinned within the section of **'The invisible Wall'**, where the significance of identity within the group level comes forward. We further proceed to present the material on the individual level and distinguish hereby between team members and team leads. The identity on the individual level of the team member is presented as **'The Agile Employee Identity'** and the identity of the team leads is presented as **'The Paradoxical Life of a Team Lead'**. We argue, that the overall change initiative results in great insecurities among the workforce, which is presented within the last section of this chapter **'The Change Process as a Source for Insecurities'**. The correlation and time frame of the chosen themes is illustrated in figure 4, to enhance the understanding of the reader. The themes consist of several subthemes, underpinned by a rich presentation of interviewee quotes.

Figure 4: Key themes within the empirical narrative

4.1 Setting The Scene

In an attempt to cope with the challenges posed by the global digitalization trend, the IT department has taken a central place in The Bank's strategic ambitions of digital innovation. This position is in stark contrast to the back-of-the-house department it used to be, as illustrated by the following statement: "*IT in that age was indeed a specialty within companies. The world has changed and has also transformed corporations into core IT companies.*" (Fanny, Team Lead Dev). To achieve these digital ambitions, The Bank introduced the agile working within the IT Development department a few years ago, with the aim to accelerate the time-to-market of the products and to achieve greater ability to adapt to a changing environment.

However, the intended benefits of agile were not achieved, due to the structural separation of the IT department, in the siloes of IT Development and IT Operations. This is demonstrated by a senior manager, who explains the motivation for initiating the organizational change process, as presented in our case study. Various factors, such as the lagging position of The Bank in comparison to competitors far beyond the financial industry cause a significant sense of urgency for change:

> *"Just agile was not enough. We have to do things faster. More integrated. The more siloes, the less effective. The longer it takes to respond to change. All types of organizations without the legacy and shit we have produce like idiots. New technologies and regulations are coming up. Without speeding up, we will not make it." (Lisa, Senior HR Manager)*

In order to overcome the previously described siloes and building upon the agile principles, the DevOps way of working, is now being implemented in the IT organization. Although, the change project is only carried out in several pilot teams at this point in time, it has already become a 'buzz word' within the overall IT organization: "*DevOps became a buzz on the floor as much as it was in the market.*" (Denise, Dev Engineer). As a result of this 'buzz' and other factors, we could observe a large extent of confusion, despite a strong conviction among nearly all interviewees that DevOps will be the way to go in the near future. For instance, one of the IT Operations engineers, elaborated on how a large number of change projects are initiated simultaneously and in a rather short timeframe at The Bank:

> *"Agile, DevOps, reorganizations, two of them in three years... No one knows what direction we are going. We're working towards a common goal while not knowing*

> *what it is. So how should you change yourself to actually contribute to that?" (Julia, Ops Engineer)*

In relation to the ambiguity of the overall goal, as addressed by Julia, it must be noted that the vast majority of the interviewees could not provide us with a shared definition of DevOps, even though the senior manager shared how employees were involved in the process of drafting one.

As a consequence of implementing this way of working, the distinct IT Development and IT Operations organizations need to merge into a combined team with shared responsibilities. Taking into consideration the historical context of the IT department, the split of the two organizations a few years ago, has created a polarization between the two organizational logics. Moreover, due to this split, IT Operations was not included in the change efforts towards agile, which was solely implemented within IT Development by a formal change program. The consequence of this approach is illustrated by one of the interviewees as follows:

> *"We made the Development part first agile. Now, there is still kind of a virtual wall between Development and Operations, which is still in the old not-agile world." (Fanny, Team Lead Dev)*

As a result, we noticed the talk of 'a new agile world', where IT Development is settled and 'an old-world', where IT Operations belongs to, within the bank. These dynamics will be further elaborated on in 'The invisible Wall', which we consider the starting point of our journey along the employee perception of the change process.

4.2 The invisible Wall

After setting the overall scene of our narrative, we start by exploring the pre-merger dynamics between IT Development and IT Operations, and subsequently, how the merger affects identity on these group levels. Despite the separation by organizational structure, an invisible wall between the two organizations seems to be present, manifested in different manners. Therefore, various contrasting group identities arose, causing the merger of the two distinct teams to be challenging. After presenting the 'The invisible Wall' between the two groups, we further explore the differences in the subthemes: 'Playing with the cool Guys' and 'Reuniting IT Development and IT Operations'.

The fast majority of our interviewees seems to share the opinion that the distinct IT Operations and IT Development organizations have contrasting drivers, values and responsibilities. The extent to which this is perceived as problematic for the mutual collaboration or results in conflicts, differs. One IT Development engineer shared how she perceived the pre-merger dynamics between the two departments:

> *"So, as my name will not be mentioned, I can be frank about it. There was a brick wall between the IT Development and the IT Operations team. ... At times it felt, that the ambitions we have in our work-life are very different. It was a war kind of situation." (Denise, Dev Engineer)*

Thus, whereas IT Development is driven by change and excitement for bringing new products into production, she experienced the opposite ambition to scrutinize and maintain a stable environment, from the IT Operations perspective. Our interviewee would even speak of a 'war kind of situation', which implies a very limited sense of shared identity among the two groups. Another IT Operations engineer referred to similar contrasts but describes it in a slightly 'friendlier' manner, speaking of *"the one that pushes the gas and the one that pulls the breaks"* in the pre-merger situation (Immanuel, Ops Engineer).

The two quotes show a very distinct work culture and group identity within the two logics, which already implies a potentially problematic merger situation. Despite the differences within the way of working of those groups, the overall reputation of the groups within The Bank differ enormously, which will be further shown in the next section.

4.2.1 Playing with the cool Guys

As introduced before, the trend to refer to 'the new agile world' and 'the old world' was expressed by our interviewees. 'The old world' can hereby be understood as the traditional way of working of The Bank, before agile or DevOps were introduced. We noticed, that 'the new agile world' seems to be the more popular group to identify with than the latter. The latter often served to describe several groups, which were not considered to contribute to the change process in a positive way, in the eye of the interviewees. Especially considered from an IT Development perspective, which is demonstrated in the following excerpt:

> *"The Development teams are asked for all kinds of criteria and documents. It is always a non-skilled process where the Operations engineer, which is still in the old*

not-agile world, follows a checklist rather than making an assessment based on knowledge." (Fanny, Team Lead Dev)

The use of wording such as 'non-skilled', 'non-agile' and the notion of assessments being performed based upon checklists rather than knowledge, could imply that IT Operations is considered of a minor knowledgeability by the IT Development organization. Another team lead shared how the IT Operations engineers, who were already working closely with the IT Development team before the introduction of the DevOps pilot, were very eager to become official members of a combined team:

> *"My Operations guys that were already closely working with Development, they felt very anxious. They were a bit of an island near the team and wanted very much to be part of it. The agile ceremonies were meant for Development. We were left out. "If we need you, we will call you. Otherwise you will not be informed." (Hanna, Team Lead Ops)*

George, now a foreman[2], but a former IT Operations engineers continued on this matter:

> *"I always felt that I was behind. They were developing and I was always tailing after them to check on them, they informed me later, that kind of stuff. That made me feel very uncomfortable. You are not involved in all kinds of things, because you are Operations. You are not part of the team." (George, Foreman)*

In sum, it seems that IT Development refers to IT Operations as non-agile or old-fashioned and criticizes the nature of their work as non-knowledgeable. Whereas, IT Operations is very eager to become part of a combined DevOps team, due to feelings of anxiety and missing out. This results in different group identities pre-merger. On the one hand, IT Operations seems very motivated to merge with the 'cool' IT Development guys in order to be included in the 'new agile world'. One the other hand, the merge with IT Operations is from IT Development rather perceived as teaming up with the 'little brother' from the 'old world', and therefore show themselves more critical. The topic of the combined team, reuniting IT Development and IT Operations, will be further developed in the following subtheme.

[2] Please refer to Appendix A for a visualization of the different roles in a DevOps team.

4.2.2 Reuniting IT Development and IT Operations

The merge of the IT Development and IT Operations organizations for the sake of working DevOps, means that the two formerly distinct groups will be reunited, even though they were separated a few years ago. The Bank now expects employees to take shared responsibility and ownership of the product within the combined DevOps team, as demonstrated by a senior manager:

> *"What you develop, you test. If it is broken, you will also fix it. So, the big change for the Development employee, is that he also is Operations. Not just Operations responsible, he is Operations. Full stop."*

Thus, to achieve this shared responsibility in the combined team, there needs to be a willingness to identify with responsibilities and to develop capabilities beyond one's own traditional role and vice versa. In general, despite some insecurities on a personal level, when asked, we could observe an overall receptiveness towards these new responsibilities, with the exception of certain unfavorable tasks 'of the others'. For instance, being on call during the night in case of technical failures. A team lead asked one of his IT Development team members about his willingness to work night shifts. In the merged team, that would not be solely an IT Operations responsibility anymore:

> *"He said: Well, they have to be on call. Almost everyone in Development is like: "We want to do the Operations part, but not being on call during the night." It is just the Operations people doing it." (Carl, Team Lead Dev)*

Formerly, if a technical incident occurred, as a team lead shared, one could hide in their own role and it usually was a matter of finger-pointing to the 'others'. *"I did the right thing and they screwed up."* (Fanny, Team Lead Dev). The IT Development engineers would, for instance, not even know when their developments were released into production by IT Operations, or be aware of the fact that incidents occurred. "*They did not care.*" (Carl, Team Lead Dev). In contrast, one of our interviewees shared that now, in one of the pilot DevOps teams, when such a crisis situation occurs, the IT Development and IT Operations engineers change 'the siloed mindset' and instantly take shared responsibility. (Becky, Foreman Dev).

However, even though a shared burden seems to reunite IT Development and IT Operations to some extent, in the normal situation, the reunion of the two logics in the merged team creates a certain level of confusion. One interviewee illustrates as follows:

> *"It is like an identity crisis. We were used to working together, then we were split up and not even a year and a half later, we were united again. Then you see responsibilities getting deluded. Am I supposed to do this, or are you? You still rely on the knowledge of others in the different teams." (Julia, Ops Engineer)*

Within the section of 'The invisible wall' differences between the two opposite organizational logics and their identities were presented in the time frame of the pre-merger situation and right after. The fact that the two organizational logics have been separated and reunited caused a polarization and confusion regarding responsibilities. Additionally, we could distinguish between a more prestigious group, 'the new or agile world' and a less popular one, 'the old-world', our interviewees identified with or distanced from. Especially the confusion, caused by numerous changes within the past, resulted in the notion of an identity crisis. This hints at the impact of the change on the individual level, even though the change takes officially place on a group level.

With the differences of IT Development and IT Operations in mind, we will now continue with our journey along the change process and present the impact of the change process among the individual in the next section.

4.3 An Agile Employee Identity

This section of our narrative highlights how the individual identity of the employee is challenged in the team merger process. The focus is on the IT Development and IT Operations engineer affected by the implementation of the new working method. The three sub-themes will address the topics of 'identity at stake', 'resisting new identities' and the 'fit for DevOps' image that arose, portraying certain employees as (non)capable for working in the DevOps team.

4.3.1 Identity at Stake

The implementation of the agile way of working within the IT Development function, led to the introduction of multidisciplinary and cross-skilled teams, where everyone officially is called a development engineer. Therefore, in the latest reorganization, several traditional roles formally disappeared and new universal roles and corresponding job descriptions were designed, including the requirement of the cross-functional skillset. As a senior manager explained, The Bank expects a certain core expertise from the DevOps employee, and additional skill and knowledge development in a broader sense. Which means, having certain knowledge and complementary skills related to different IT disciplines - Development and Operations - on a more generic level (Lisa, Senior HR Manager).

The following excerpt shows how a more senior employee refers to himself, when asked if he could identify himself with the expectation of the crossed-skill-set. He still refers to himself as the business analyst, the role he has been working in for many years and shares how ‘he has lost himself’ when looking into the mirror:

> *“Officially my role already disappeared. I am still calling myself a business analyst, which I am not anymore, formally. [...] I know my limitations, if they really want me to be that cross-skilled guy who also knows those five programming languages. [...] Looking into my current job description, I do not recognize myself! Not at all!” (Adam, Dev Engineer)*

This tendency of clinging to former roles instead of identifying with a new role related to the DevOps of working, was not solely observed by us researchers. The team leads also referred to this topic and shared how different members of their team, each refer to their individual role, and somehow resist the role they are expected to adopt:

> *“The developers call themselves development engineers. Those with a business analyst background call themselves business analyst. Operations colleagues call themselves Operations engineers. The team members do not call themselves DevOps engineers. They still leave the siloes there and make the differences clear.” (Carl, Team Lead Dev)*

The consultants in the focus group also shared similar experiences, motivated as follows:

> *“It still is a valuable reference to them. It is an identity shift. But if the context did not change, then the new role often does not make sense. They are still in the transition phase and need to identify with the new universal role.” (Consultancy)*

Finally, one of the team leads also provided us with an explanation for the stronger identification with former than present roles. Traditionally within IT, knowledge and specialism were very valuable to The Bank employee. Somehow, it made people feel indispensable and provided them with a certain status or at least an important self-image. In her opinion and those of most interviewees, adapting to the new way of working is mainly a matter of changing your mindset (Fanny, Team Lead Dev).

In sum, this supporting story showed a clear dis-identification of employees towards the newly introduced job titles and descriptions, introduced by The Bank. Possible reasons for this behavior is the lack of meaning of the new roles and the reduced prestige that comes with the new universal titles. Therefore, most of the interviewed employees remain to refer to their previous role. The next section demonstrates how the dis-identification sometimes even leads to resistance.

4.3.2 Resisting new Identities

Just before the introduction of the DevOps pilot, a reorganization took place within IT Development. As the following statement illustrates, the reorganization as well as the particular change process causes difficulties for some employees to maintain a stable self-view. The following interviewee was given a role after the reorganization, which was not his first preference. Moreover, he felt that the job description did not fit to his skills and knowledge at all and is too demanding in general:

> *"I'm supposed to be the … I keep forgetting the name of my function. They keep changing it and after this last reorganization I also didn't agree with it. If you look at the job description, I would be surprised if somewhere in the world there would be someone who could do that." (Adam, Dev Engineer)*

In addition, some IT Operations engineers somehow distanced themselves from their official job title and expressed that roles such as 'team developer' or 'connector' were a better fit to their personal ambitions and preferences. One in specific mentioned not to be interested in the IT content, although he is aware that The Bank deems this important:

> *"I really don't know. I am not a DevOps engineer. I am not Operations, I am not Development. I see myself as a team developer, not as an operations engineer. I am very aware of the importance that you can develop or know all kind of IT stuff I am not interested in. I like people more than the IT part." (Immanuel, Ops Engineer)*

Moreover, multiple IT Operations engineers described their main activity as bridging the gap between IT Operations and IT Development. One interviewee in particular shared that she considered herself not intelligent enough to become a developer. Due to the ‘connector self-image’, she might still identify herself as being close to the IT Development colleagues:

> *“I hope that people would recognize me as a connector, which says more about me than my official Operations role. The people I am mostly talking to are developers and not the Operations organization itself. To become a developer was too hard for me, I was not smart enough, I’ll be honest about that!” (Julia, Ops Engineer)*

This section highlights how in response to the previously described dis-identification among the employees also a form of resistance comes forward. Instead of identifying with the newly assigned roles and job titles on, some individuals respond in resistance by creating their own - to them more meaningful – title. In addition to resistance, this can be also interpreted as an attempt to maintain a stable identity in times of multiple changes. On the contrary to dis-identification and resistance as a response to the new change, an opposing group of employees was identified, the ones that show themselves highly motivated to change, which comes up in the following section.

4.3.3 The ‘Fit for DevOps’ - Self-image

Among various interviewees, a certain tendency is noted to portray oneself as very change-minded. In addition, they nearly over-emphasized their willingness to develop the capabilities needed to prove that one is fit for a position in the organization of the future.

> *“More than the development knowledge, I am having the learning ability. It is important to adapt to the changes continuously, and keep learning. It keeps me motivated if there is a new thing coming up in the market, I need to know it.” (Denise, Dev Engineer)*

In contrary, within several interviews, one particular group in the organization’s population was highlighted, which were considered not to be fit for the future. It was said that the current change process to DevOps could be more challenging than for others. For instance, the senior employees with over 20 years of experience, were considered less receptive to change and conditioned in ‘the traditional way of working’, characterized by a rigid planning and top-down management:

> *"If you are eager to change and consider that a way to develop yourself, then it's ok. But if you are a senior developer with 20-years of experience, who always worked in the same way and wonder what's wrong with that, then you might have a problem with DevOps." (Immanuel, Ops Engineer)*

Another interviewee indicated that age could also be a factor impacting the willingness to change and to develop oneself, pointing at the significant age differences in her team. In her opinion, one has in general sufficient opportunities as long as one adapts to current changes, although this may be more difficult for senior employees who are over 50 years old (Julia, Ops Engineer).

Moreover, a DevOps engineer is expected to be cross-skilled, which enables taking on responsibilities for both IT Development and IT Operations tasks. One interviewee, whose team is not in the official DevOps pilot yet, was asked whether he would be capable of picking up IT Development tasks. He expressed his insecurities by addressing his lacking knowledge:

> *"I like to do the IT Operations work but I am not secure about developing. It's good to understand what others are doing and that you can take up other tasks to a certain degree, but really doing the developing part... That's too ambitious." (Ken, Ops Engineer)*

Thus, not all IT Operations interviewees could picture themselves in a DevOps engineer role in the near future, since performing the IT Development tasks was considered too ambitious and insecurity.

The section of 'the agile employee identity', presented how existing employee identities are challenged within the change process of the merger. This is shown by the dis-identification towards the newly introduced roles by clinging to former roles, which employees still identified more with than current ones. As well, how new identities, corresponding with the DevOps way of working, led to insecurities regarding capabilities. Despite the dis-identifying and resisting behavior, some of the interviewees showed off a nearly over-motivated image towards the change. This may be interpreted as a coping-strategy to overcome the identity shift from the old to the new situation.

With these notions in mind, we will now leave the identity of the individual team member and move forwards to the identity of the team leads within the following section.

4.4 The paradoxical Life of a Team Lead

Within this narrative, we will continue to consider how the merger impacts the identity on the individual level, but shift our attention to the team leads of the two organizational logics. By the end of this chapter, the reader will have learned how, due to the change, performing their jobs has become a paradoxical experience for some of the team leads. This will be illustrated by the subsections of ‘Undermining the Team Lead Role’, ‘Resisting the current Situation’ and ‘Managing the self-organizing Team’.

The DevOps team is characterized by its self-organizing nature. Within the team, there is a role for a facilitative foreman focusing on the team processes. Now, IT Operations and IT Development are working closer together in a combined setting, which has implications for the existing roles of the team leads of each team.

4.4.1 Undermining the Team Lead Role

The presence of both, a foreman and two team leads near the DevOps team, causes a certain overlap in terms of activities. All three roles are expected to exhibit a facilitative or servant leadership style, due to the new way of working with the self-organizing team. A foreman of one of the combined teams elaborated on what she considered the ‘team lead role’ and how she viewed her own role towards the team:

> *“I think Carl (Team Lead Dev) is doing a good job by telling them to be self-*organizing *and not interfering that much. Supporting not managing, which is also my role, of course. I try to facilitate, instead of Carl, HR is his thing. That is not really what I do. I will not be a manager for them, they already have one.” (Becky, Foreman Dev)*

This interviewee highlights the supportive character of both of the roles and values the space this particular team lead provides towards the self-organizing team, including herself. In her opinion, the team lead role is more concerning administrative tasks, which she does not consider part of her role. Carl, the team lead, in his turn also explains his current activities as followed:

> *“That is quite boring, actually. Now, I am mostly occupied with administrative issues. [...] I am not doing workshops with the team or whatsoever, it’s more in the background. Talking a lot. Talking to everyone once a month.” (Carl, Team Lead Dev)*

Another team lead also shared how she currently experiences her role as a rather in between and lonely position, due to the presence of the foreman in the team. Simultaneously, she does feel the pressure from her superiors:

> *"I am actually in the middle of it. I feel alone in my position. The foreman can perfectly handle the teams, while I do feel the control and pushing from the hierarchy." (Fanny, Team Lead Dev)*

In addition, within the pilot-phase, there still is the traditional line management structure of both the IT Development and IT Operations logics above the combined team. As introduced before, a particular servant leadership style is expected from the team leads in The Bank. One of the IT Development leads demonstrates how - in his opinion - his IT Operations counterpart does not exhibit the servant leadership role towards the self-organizing team in the same extent as he does himself:

> *"I do not involve in their day to day operations. But I am in the IT Operations WhatsApp group. I do see in there, that in the evenings when they are chatting, the IT Operations manager does tell people what to do sometimes." (Carl, Team Lead Dev)*

This may be interpreted as a manifestation of Carl trying to portray himself as a facilitative leader, a requirement as set by The Bank, while downplaying the degree to which his colleague is. Based upon personal experiences in the field, the consultants in the focus group, also highlighted the issue of having too many captains - the traditional line management and the foreman - near the self-organizing DevOps team, as a situation that should be avoided.

In sum, in the current structure, the team lead feels the pressure from senior management, while its autonomy is partly shifted to the self-organizing team. Therefore, their role gets 'emptier' and more centered around 'boring' administrative tasks. Simultaneously, one team lead tried to show off himself as a 'better' servant leader than its counterpart, which may be a coping strategy as a result of identity issues. Therefore, the implications of the merger on the individual identity of the team leads is closely considered in the following subtheme.

4.4.2 Resisting the current Situation

The developments as previously discussed may result in challenges regarding the maintaining of a stable and coherent self-image on the team lead level. One of the team leads elaborated in a rather critical manner, about how senior management follows up on industry fashions by implementing agile. In her opinion, solely because the main competitor also initiated such a transformation. She shared how it made her feel that the responsibility to facilitate the agile and DevOps change process was shifted to external consultants and coaches:

> *"If you do not accept the transformation of your own role by externalizing your responsibility to make your organization agile... What will that do to my own personal transformation as a manager? [...] You are not accepting the change yourself." (Fanny, Team Lead Dev)*

Hanna, the IT Operations team lead, also addressed how her current role is getting somehow 'emptier' due to the implementation of the DevOps way of working, while also touching on traditional management activities such as performance appraisal:

> *"I am still searching for that role. It is costing me less time, because some people are now in the DevOps team. I still have to give them a good appraisal at the end of the year, while not seeing them working anymore every day." (Hanna, Team Lead Dev)*

This notion of 'performance appraisal' underpins the opinion of Becky (Foreman Dev), as previously presented, that the team lead is more concerned with administrative related activities. When the consultants in our focus group were asked about whether all roles of management within the self-organizing teams could therefore be eliminated, they disagreed:

> *"These teams need someone to be inspirational. To be the captain. If current leaders are not ready to take on that role, they are being positioned in these empty roles. The opportunities are plenty, but you need the right type of mindset." (Consultancy)*

Becoming self-organizing as a new team is a challenging process, initially, which - in their opinion - creates a need for a particular kind of inspirational leadership.

The underlying resistance towards the change process, may be explained through the former career path of managers within The Bank. Within the traditional way of working, the only career path possible was 'going up'. Now, due to the change, the need for management is reduced and so is their span of control. Also, the potential threat of losing the title 'Team Lead' or 'Manager' results in the increased need for individuals to remain relevant and important. Additionally, the paradoxical task of managing a team which is supposed to be self-organizing arises, which will be further assessed in the following supporting theme.

4.4.3 Managing the self-organizing Team

Throughout the research, several interviewees shared how they considered the current organizational culture of The Bank, traditionally characterized by a strong presence of managerial control, an obstacle for self-organization by the DevOps teams. One of the foremen provides an explanation: "*From a historical perspective, there is a lot of fear for management, because everything we did, had to be validated"* (Becky, Foreman Dev). An example of this 'culture of management' and need for approval was shared by one of the team leads, who recently took over one of the teams:

> *"When I just started here, people asked permission to have a holiday. I said: "I do not care, as long as the team is OK with it." Afterwards, they went to the foreman and said: "Foreman, am I allowed to go on a holiday?" (Carl, Team Lead Dev)*

Thus, becoming self-organizing seems to be as challenging for the team, as it is for the team lead. One may argue that the presence of the traditional management culture therefore reinforces the former status of the team leads. Hanna continued on this matter, about how she learned that the self-organizing aspect of the transformation towards the DevOps way of working, is not accomplished overnight:

> *"You will learn that changing towards an agile or DevOps team is not starting today and being tomorrow. You have to realize that most people within The Bank are used to following orders from the management. This is a 180-degree turn." (Hanna, Team Lead Ops)*

At the same time, another team lead addressed how working according to the agile principles, meaning to have self-organizing teams in place, leads to an internal conflict for herself. In the change process, she aims for a balance between, on the one hand, facilitating the teams with the freedom to be self-organizing and agile, while on the other hand, maintaining full control. She also shared to be aware of the latter mentioned restricting the independent-thinking and learning by the team:

> *"I think the managerial role is a little bit underestimated. It is easy to point at us. I also feel everyday my own internal conflict. I do not like to make mistakes myself. Every time that things go wrong, I feel it in my core. With every fiber of my body I want to fight this thing from happening." (Fanny, Team Lead Dev)*

This trade-off between trusting the team in being self-organizing and having authority as a manager, was also indirectly highlighted by another IT Development team lead. He explained that it was easier to trust the team if the client was internal, since they would experience the consequences directly, which would be more difficult for him in case of an external customer (Carl, Team Lead Dev).

This section demonstrated 'The paradoxical Life of a Team Lead', as a consequence of the change process towards DevOps, while still considering identity on the individual level. Due to the presence of the traditional line management of both IT Development and IT Operations, as well as the role of the foreman within the DevOps team, a certain overlap in terms of responsibilities could be identified. This development seems to result in a somehow 'emptier' and 'lonelier' experience of the current role by the team leads, which in turn, affect the team leader's self-view. The historical context of The Bank also plays a part in this change process, due to the presence of the traditional management oriented culture, which complicates the transformation towards self-organizing DevOps teams, for both the employee as the team lead.

With the end of this section, we have covered identity on the group and individual level. In spite of the claimed human orientation of the new way of working, which could imply a greater employee receptiveness, an inability to maintain a coherent self-image during the change was identified on both levels. As a consequence, insecurities appear to be a salient theme throughout our interviews, which will be addressed and demonstrated within the final section of our narrative.

4.5 The Change Process as a Source for Insecurities

Within this final theme within our narrative of the empirical section, we touch upon the topic of insecurities, which arose around the time the change was initiated. Currently, the DevOps way of working is only implemented in a pilot phase and the change process is still considered as being under construction. Among nearly all interviewees, we found a broad consensus or at least awareness regarding the need for reorganizing the organizational structures in the near future, to align those with the new way of working. We start off with the perspective of the team members and follow with the team leads.

4.5.1 Team member Perspective

Starting with the perspective of the individual team member affected by the change process to DevOps, the topic of job insecurity appeared to be a central theme throughout the interviews. Both, the IT Development and IT Operations logics, have been reorganized in previous years, however, due to the introduction of DevOps, an overall awareness could be identified that a new reorganization might follow within a relatively short notice. The impact of this potential threat depends on who you ask. One IT Development engineer, for instance, felt that the last reorganization within his department caused more insecurity than the current change to DevOps:

> *"I worked for this company all my life. I have had so many reorganizations that you get used to it. The last one came really close. For the first time I was thinking, I might really lose my job now, which had much more impact than this DevOps change thing." (Adam, Dev Engineer)*

Thus, Adam shows us indirectly the uncertain consolidation of the life of The Bank employee, due to the ever-changing context. The impact of the last reorganization in particular, was also addressed by one of the team leads, who said *"it really shook things up",* especially for the senior employees who work at The Bank for over 20 years. He added that, in his personal opinion, the "*conservative*" pace of this particular change process could be accelerated by further reorganizing (Carl, Team Lead Dev). Another interviewee explained, while highlighting his ability to adapt to change, how reorganizations are part of The Bank's DNA. His main critic is the efficiency-objective of such reorganizations, which he would prefer to be actual development of the organization and its people:

> *"Of course, there will be a reorganization again. If I would connect that to job insecurity, then I would not have a life here for over 25 years. I see the need. It seems that we will have a cost-sharing operation again, that's the way we reorganize." (Immanuel, Ops Engineer)*

His opinion was shared by Julia, who also linked DevOps to a potential reorganization, sharing her concern that DevOps is implemented to improve time to market, but at the side, also might be exploited by The Bank for reorganization purposes (Julia, Ops Engineer). The relationship between DevOps and reorganizations was also topic of discussion in the consultancy focus group. They somehow confirmed the previous concerns regarding the objectives of implementing the DevOps way of working. The threat of automation of traditional work tasks, for instance, - also highlighted by other interviewees - was topic of discussion. Nevertheless, the consultants felt that any change could cause job insecurity:

> *"The delivery is not fast enough. There are too many people. That is why the focus is on automation. But if you automate that type of work, what are you going to do? Making yourself redundant? DevOps is not the trigger; any change can lead to layoffs." (Consultancy)*

The consultants did stress, however, that if the organization would put sufficient effort into enabling people to change, it is quite likely that the majority of the employees could be taken along in the change. Simultaneously, due to the fast-paced technological developments in the industry, keeping up a IT specialism is challenging. Without continuously developing knowledge and skills, it is likely that one becomes obsolete within a year, the senior manager explained. Transforming the way one works, depends on two factors, according to her:

> *"You have a will and a skill aspect. If they are willing to develop themselves, then normally it is going to work, because, when we reorganized, we kept the best people. Then you should be able to go from agile to DevOps. If you are not willing, it stops." (Lisa, Senior HR Manager)*

Thus, showing a willingness to continuously develop oneself is essential to avoid the chance of redundancy and therefore, may limit feelings of job insecurity. Additionally, in previous reorganizations, 'the brightest' people maintained their job, which should enable to 'make it' through this particular change process. At least, according to the senior HR manager.

Within this section, we noticed an overall employee awareness of the fast-changing circumstances in and around The Bank. As a consequence, we noticed how the increasing demand for new skills from the organization may create insecurity among employees. Besides the general fear of job loss, common in most change processes, the insecurity for not fulfilling future requirements is clearly expressed. Similarly, the context in which this change process takes place, does also create insecurities on the team lead level, which are demonstrated in the following section.

4.5.2 Team Lead Perspective

All interviewed team leads, from the IT Development and IT Operations logics, shared the opinion, that their roles will be merged into one role or might disappear in the near future. The following interviewee also thinks that further reductions may follow, while the role itself will remain and the span of control increases. The next excerpt shows his opinion on the merging the two team lead roles:

> *"If you would blend the two roles, it is more logical that you expand my role than the IT Operations team lead role. That is more an old-fashioned hierarchy. My role also has different contractual responsibilities, which would be too much to give to an IT Operations lead." (Carl, Team Lead Dev)*

Thus, in his opinion, the IT Development team lead role is more likely to remain, since the role of the IT Operations team lead is labelled 'old-fashioned' and includes responsibilities of a lesser importance. This is in line with previous views on IT Operations representing the 'old or non-agile world', as expressed earlier in this narrative. The senior manager also addressed the topic of merging the two roles and the ability of the IT Development and Operations team leads to fulfill the merged role. She acknowledged that, in some individual cases, there are indeed some slight differences in qualifications, but stressed that the chances remain equal:

> *"For some, the gap between what is and what should be is bigger. That does not mean the IT Operations managers are not candidates for a new job. Absolutely, they are. They have very good people over there." (Lisa, Senior HR Manager)*

The IT Operations team lead shared how she currently struggles, to not feel of added value to the organization anymore in a way she always tried to. Simultaneously, the insecure position she finds herself in currently, also motivates here:

> *"I have always been looking for where I could add the most value for myself and the organization. It is a struggle not having that anymore, while it is also challenging. I think it is all about adaptation. You have to be proactive. Not just sit back and wait." (Hanna, Team Lead Ops)*

In line with this view on the impermanent nature of today's leadership role, one of interviewees explained how she currently experiences her role as counter-intuitive. By facilitating the change process towards a self-organizing team on the one hand, she further reduces the need for her own role, on the other hand:

"If I perform my role correctly, I will be obsolete within a year and a half. That is what should drive me, to prove that I would fit one of the remaining positions, while it also makes me insecure. If I am able to, I will improve my adaptability to change." (Fanny, Team Lead Dev)

Finally, it is not just the team leads themselves, who are aware of the fact that their role in the current form might disappears in the near future. One of the team members, for instance, expects the entire management layer of the team leads to disappear within a year and a half, while also mentioning a narrow-minded vision and a lacking DevOps mindset as the main issues (Immanuel, Ops Engineer). However, the senior manager confirmed that a further reduction of the team lead function is inevitable and that all those affected are aware of that, but there will still be a need for a structure above the 490 self-organizing teams in the end-state (Lisa, Senior HR Manager).

Thus, one may conclude that in addition to the general insecurities, such as the fear of job loss, team leads are facing a confusing game. By performing the role as expected by their duty, they 'facilitate' the process towards their 'own obsoleteness'. Also, the increased emptiness of the team lead roles influences the self-image and confidence of the team leads. One way to cope with that paradox seems, again, to be by presenting oneself in a better light than the opponent.

In sum, the final narrative highlighted the theme of insecurities, as a consequence of the inability to maintain a coherent stable self-view, considered the individual and team lead perspective. Previous reorganizations and other preceded changes, color the perception of this change, but the impact is different for each individual. Employees mainly question the sincerity of the change objectives, while linking it to a potentially new reorganization. Moreover, we found a broad consensus or at least a certain awareness regarding the need for reorganizing the organizational structures, in order to align those with the new way of working. The team leads shared how facilitating the transformation to a self-organizing DevOps team, by making yourself obsolete, is an insecure experience, but perceived needed for showing yourself fit for one of the remaining positions. Finally, having multiple 'captains' currently near the self-organizing DevOps team, makes the merger of IT Operations and IT Development team lead positions into one combined role most likely.

4.6 Chapter Summary

Within this chapter, we provided the reader with our empirical material in the form of a narrative. We demonstrated the contrasting characteristics of the organizational logics of IT Development and IT Operations and how an '**Invisible Wall**' triggers contrasting group identities both pre-merger and right after. We then proceeded to the individual level and distinguished hereby, highlighting **'An Agile Employee Identity'** and **'The Paradoxical Life of a Team Lead'**. The change process in general had great impact on the identity constructions and sense-making among individuals, which results in resistant behavior and dis-identification. Especially the demand of a cross-functional skillset in order to fulfill the requirements of The Bank, leads to doubts among the workforce. Within the current transitional phase, the team leads find themselves additionally in a rather paradoxical role. The Bank and the principles of the new way of working requires them to facilitate their teams to become self-organizing, which leads to the obsoleteness of the team lead role. Therefore, multiple manifestations of identity issues on the team lead level could be identified. The consequences of these identity struggles were discussed in **'The Change Process as a Source for Insecurities'**.

This chapter provided the foundation for the discussion of our empirical material in a theoretical context, which is demonstrated in the following chapter.

5 Discussion

Within this chapter we will closely examine our empirical material for further interpretations and position our findings in a broader theoretical light. Hereby, it must be noted that from a single-case study, we cannot generalize to how every actor in an organizational change process acts. Our case serves as an example to highlight the findings within our particular study. As the narrative in our empirical section illustrated, the merger of two opposite organizational logics for the purpose of introducing a new way of working, labelled DevOps, indisputably triggers identity work on the group and individual level; the employee and the team lead. As a result of this particular change process and the volatile context, the inability to maintain a coherent self-image, led to various forms of insecurity.

To enhance the reader's understanding, we structure our discussion accordingly the processual framework of Jian (2011), as presented in the summary of our theoretical background. The 'holistic' platform allows for integration of, for our study relevant theories in the interrelated layers, which serve our discussion. Nonetheless, recalling the salience to appraise of group identity in change as identified in our research problem, we see the need to adapt the framework.

Figure 5: Complemented framework of organizational changing (in adaption to Jian, 2011)

As figure 5 presents, we expanded Jian's framework with the additional layer 'Group Identity', as an extra dimension of meaning-making. We purposefully positioned the additional element on a similar layer as 'Organizational Identity' to stress the interrelatedness here. We argue, that 'Organizational Identity' is shaped by the sharedness of the group identities of 'the swarm of self-organizing teams'. This is motivated by the 'rise of the self-organizing teams' in contemporary organizations, and the stronger identification of its members with their own group than with their organization. This argument is further developed in the particular section of our discussion.

We now proceed with the discussion with the following structure: 'Organizational Circumstances', 'Organizational Identity ≥ Group Identity, 'Individual Identity' and lastly, 'Organizational Practice'. The discussion will be concluded in the chapter summary.

5.1 Organizational Circumstances

The first layer of the framework 'Organizational Circumstances' captures the reflexive sense-making of the overall changing process by all organizational members, for instance, through questions such as: 'What is the situation we are in or confronting?' (Jian, 2011: 47).

Fashionable Motives for Change

A salient element for making sense of an organizational change process one faces is the understanding of its drivers (Jian, 2011). Nearly all employees shared how The Bank is in the midst of a digital transformation, yet with a different emphasis, depending on one's hierarchical position. Employees highlighted how the radical change of working methods differed from the former and the traditional bank culture. Team leads addressed how the formerly 'back-of-the-house' IT department became a salient lever for the digital ambitions. The damaged reputation and corporate image in the post-financial crisis era, were mainly stressed by senior management, as well as, how the existing business model is threatened by new 'faster entrants' in the market. The different perceptions of the 'reality' that the organization faces, is explained by Corey (2014, cited in Jian, 2011). Senior management make sense of the change through 'the talk of' strategic drivers, whereas the differences between 'the old' and 'the new' is dominant in the sense-making of subordinates. In line with the middle management position, the team leads have a rather 'in between' interpretation of the change, translating the strategic ambitions to the implications for the local department.

Hence, 'fashionable' or 'good looking' ways of working, such agile methods, were implemented with the aim to survive in its competitive landscape. Despite the claimed human orientation of these methods, a significant psychological impact on existing employee identity was noted in our study. Therefore, we draw attention to the impact of management fashions as a motivation for organizational change on existing employee identities. In this light, Cram and Newell (2017) distinguish between 'mindless and mindful' adoption of the agile methods. The former is driven by ratio and macro-environmental factors, while considering the psychological safety of the employees affected. The latter mainly motivates change by a sincere aim for innovation and progression, but by not fully embedding essential elements into the organization, the project vanishes in meaning over-time. Despite the apparent drivers on the macro level and a rational need for The Bank to do things differently in order to remain 'in business', there is a clear lack of consideration of the impact of the change on the mental well-being of the employee. Instead, fast-paced innovation is prioritized. Readjustment of organizational structures, e.g. the presence of the traditional line management layer, to fully embed the new way of working in the organization, is of a lower priority. Therefore, the stereotypical change motives and an insufficient consideration of the impact on existing employee identities, make The Bank following up on a 'human oriented' industry trend in a 'mindless' and instrumental way. The consequences of this approach on the employee sense-making of the change will be discussed in following sections.

Confusion and Instability

Previous work thoroughly discussed how in a complex process of organizational change, employee perceptions of instability and a certain degree of ambiguity are inevitable (Clark et al., 2010; Van Dick et al., 2018; Schumacher et al., 2016). However, due to the specific design of a pilot, a limited share of the overall population of the IT department is included in the change. In combination with the previously discussed 'instrumental' approach and the observation that DevOps is currently an industry buzzword, a large amount of confusion could be identified among our interviewees. It is worth noting, that despite the engagement of employees and team leads in the process of drafting a shared definition, which somehow could be viewed as a *"discursive change template"* (Tsouka & Chia, 2002: 579), none of the interviewees could reproduce it. Including the senior manager in charge of this particular 'dialogic' initiative. This indicates how employees on various levels struggle to make sense of 'the changing reality' they are confronted with. We interpret the volatile context in which this particular change is executed, namely preceded by various reorganizations and multiple change programs in a relatively short time-frame, as an explanation for the confusion. A lack of stability and direction in the process of organizational change creates uncertainty, as seen in our case, further mystifies the employee understanding of what actually is going on, and triggers individual insecurities (Clark et al., 2010; Van Dick et al., 2018). Although, Weick & Quinn

(1999) describe the organizational ability to have continuous change as an ideal situation, however, our study argues against it by the demonstration of the sincere implications of an uncertain consolidation for the stability of employee identity.

A universal Identity frame of the desired Employee

The introduction of the DevOps way of working within The Bank accompanies a concrete expectation in terms of capabilities and behavior of the IT Development and IT Operations employees being merged into a combined team. The particular identity frame corresponding to the new working method could be summarized by a change-minded attitude, taking responsibility, and a willing to share and collaborate. In addition, from the team leads a similar mindset is expected, complemented by a servant leadership style and a change facilitator role. We understand this expectation as a particular universal frame of the 'desired employee', which emerges as a result of strategic ambitions on the senior management level, and needs to be met by the organizational members. Previous studies already showed how those in charge of formulating human capital strategies seek manners to utilize employee identity and its attributes in a rather flexible manner (Alvesson & Willmott, 2002). As a consequence, on a micro-level, the targeted individual needs to seek realignment of one's self-view with the particular identity frame. Thomas et al. (2011) explain that one may try to frame people in an alternative way, but the sense-making of those involved, and how they assign meaning towards, in this case the DevOps identity frame, are salient drivers of the overall success of the change. The process of negotiating meaning to the universal identity frames, is discussed in subsequent sections, but it already reveals a rather optimistic view by The Bank on the extent to which the human identity is flexible.

Regulating the DevOps Identity

Whereas Barker and Tompkins (1994) describe this process of identification as a mode for providing direction, Alvesson and Willmott (2002) call the 'exploitation' of identity by the organization 'identity regulation'; a mode for controlling or aligning the individual employee identity with overarching strategy. Therefore, in line with these authors, we view the implementation of the DevOps and corresponding identity frames by The Bank a manner to regulate identities on the individual level, whether purposefully, or not. The reputable development engineers work in a mixed composition with the service-oriented operations engineers in the merged team. Alvesson & Willmott (2002) explain how status differences may also function as a mode of identity regulation. For instance, the highly-skilled development engineer is a contemporary ‘knowledge worker’, who often enjoy a larger autonomy (Newell et al., 2009). Therefore, identity regulation on the individual level may be ‘exploited’ as a ‘soft’ managerial control mechanism to provoke the subsumption of the identity of the autonomous knowledge worker to the organization (Alvesson, 2004; Newell et al., 2009)

We now shift our focus to identity on the group level. Currently, there are 490 teams within the IT department with a self-organizing nature, and, simultaneously, the already reduced management layer is likely to be further reduced. Therefore, in an attempt to align the ‘swarm of self-organizing teams’ with the organizational objectives, identity regulation is a purposeful manner for this large organization to preserve control. This is underpinned by the finding of the conflicting trade-off on the managerial level, between aiming for self-organizing ‘agile’ teams on the one hand, and maintaining full control - due to external pressures and a traditional management culture - on the other. In this light, Hodgson & Brian (2013) demonstrated the limited autonomy of self-organizing teams working with agile methods, due to the presence of various modes of control outside of the team. The authors argue that by ‘fashionable’ terms such as ‘facilitative or servant leadership’ the illusion of team empowerment is created, as a cover for the rather traditional power relations still in place. Other authors also highlight how such ‘liberal talk’ actually is a ‘feel-good’ facade for forcing employee commitment to strategic objectives (Casey, 1995 in Willmott & Alvesson, 2002). We highly recognize all of the aforementioned in our study. Therefore, we argue that by the use of the particular ‘DevOps’ identity frame, The Bank regulates identity on the individual and group level.

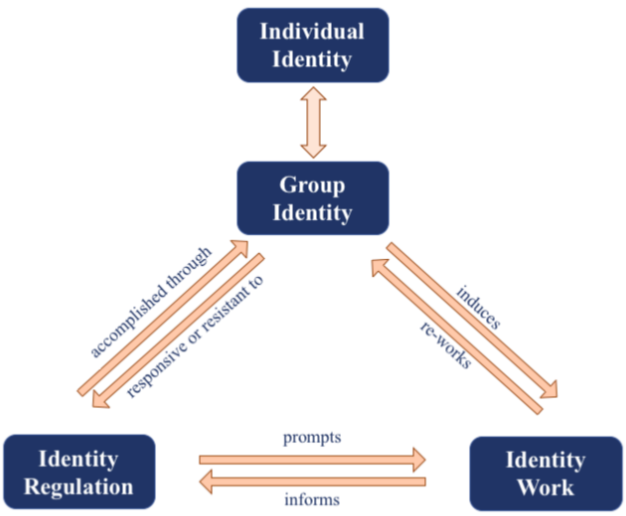


Figure 6: Complemented Identity Triangle (in adaption to Alvesson & Willmott, 2002)

In contrary to previous work, which mainly focused on individual and organizational identity, Alvesson and Willmott (2002) do consider the group in the light of identity regulation. The authors recognize how an individual constructs and presents the self-view through the memberships of and in a larger group. The management of the social relationships may therefore be considered a mode of identity regulation; as is the merger of the organizational logics and the introduction of this particular team. However, in the era of self-organizing teams, we argue that these social groups become at least an equal or even more powerful target for identity regulation than the individual employee. Hence, we propose an adjustment of their framework. Purposefully, we do not suggest replacing of the individual identity by the element of group identity, but stress the interrelatedness between identity on both levels. Instead, we aim to complement - what is called by the authors a non-exhaustive framework - with the element of 'group identity', as demonstrated in figure 6, in order to emphasize the salience of group identity in contemporary organizations. Organizational control of the 'self-organizing swarm' can be maintained through the targeting of the group identity in the regulation efforts, while individuals retrieve the self-identity as a member of the group.

The following section will further examine the salience of group identity and its relation to organizational identity.

5.2 Group Identity ≥ Organizational Identity

The second interrelated layer of the Jian (2011) framework is 'Organizational Identity', which addresses the collective sense-making of the change, in the form of the question: 'Who are we becoming?'. As previously introduced, we see the need to add the element of 'group identity' to the framework, which can be found in figure 6. With the introduction of self-organizing teams, the collectiveness and shared understanding of groups and their identities comes forward. Our study shows how group identity becomes equally or even more salient than organizational identity, and as well, that the sharedness of group identities shape organizational identity. Therefore, group identity and organizational identity are interconnected and positioned on the same layer in the adjusted framework. This will be demonstrated in the following section.

The particular change process is characterized by two stark contrasting organizational logics, being merged for the implementation of a new way of working. Therefore, in this section, we discuss in a broader theoretical light the manner the different group identities manifested itself within the process of the merger.

Sharedness of Group Identities

Various authors have already addressed the conflicting ambitions of and a certain 'wall' phenomenon' in between the two organizational logics (Hussaini, 2014; McCarthy et al., 2015).

Our study confirms the existence of the wall, tangibly, due to the separation by organizational structure, but also in an intangible manner by contrasting logics, goals, values and motivations. In the pre-merger situation, several metaphors were expressed by our interviewees to describe the dynamics in between the groups, as well as, the extent to which one could speak of a shared sense of identity. Whereas one described an extreme case of ‘a war zone’ between the two opposite logics, due to contrasting ambitions, another spoke about ‘one group pushing the gas, while the other pulled the brake’. The latter could not relate to the so-called ‘wall’ phenomenon at all. For a potential explanation for the difference in dynamics, we refer to the definitions of organizational identity and social identity guiding this study. The former being “*the form by which organizational members define themselves as a social group in relation to their external environment.”* (Alvesson & Empson, 2008: 1), and the latter as the *“sharedness of an organizational identity within the organization”* (Van Dick et al., 2018: 20). Clearly, in the extreme example, employees were stronger identified with the own logic, thus, either IT Development or IT Operations. In the more ‘neutral’ case, there was at least the notion of both ‘the gas’ and ‘the breaks’ being needed for a shared outcome. In this latter instance, a greater sense of sharedness in between the identities of the two organizational logics is noted. Potentially, this results from working together for a long period of time in an isolated location, apart from the rest of the IT department. In contrast to the ‘war zone’ groups, which are located in the overall IT department, although on the same floor.

Hence, the first example underpins our thesis that group identity is more dominant than organizational level, due to the presence of a warzone between two logics, despite both belonging to the same organization. There was clearly no sharedness of an overall organizational identity, which somehow could be noted in the second instance. However, solely due to isolation, a greater sharedness was achieved between the two logics.

Knowledge Work versus Service Work

Another manner in which group identities came forward in the change process of the merger, is in terms of identification with minor and superior groups, where organizational members preferred to enjoy membership of or distanced from. This is represented by IT Development being viewed the innovative ‘agile guys’ doing knowledge work, whereas IT Operations is considered doing ‘old-fashioned’ service work. IT Development tends to be more critical towards non-agile components of The Bank, such as IT Operations. For instance, by framing IT Operations as ‘non-skilled checklist-performers’, the latter refers to a perception of a minor knowledgeability.

An explanation of the aforementioned is found in the differing nature of work performed by the two groups. One could label the software developers contemporary knowledge workers, since knowledge "*acts as the main input into the work, the major way of achieving the work and the major output"* (Newell et al., 2009: 24), whereas the nature of the IT Operations work, is better described as service work. Alvesson (2004) highlights, how self-esteem and confidence results from the employee identity of the knowledge worker. Moreover, this work identity is often intertwined with their 'personal identity', which makes them more likely to experience frustration in the workplace. In addition, the merger of the two groups into a combined team with shared responsibilities, could also threaten the self-image of the highly educated developer, who always enjoyed a certain specialist status and were recognized for its knowledgeability (Alvesson, 2004). 'Service workers' will now also fulfill related tasks and develop similar capabilities post-merger. Therefore, the more critical attitude towards IT Operations, may have been a result of these factors.

Simultaneously, a clear desire or perhaps even anxiety could be observed on the side of the IT Operations organization, to identify with the more prestigious group of the 'agile guys' and to be included by the developers. The implications on the individual identity will be further discussed in the following chapter, but previous work already showed how in merger situations, the more prestigious group identity is adopted, causing the 'minor' group identity to be at stake (Ullrich et al, 2005), despite of efforts to integrate the minor identity in the new situation (Van Leeuwen et al., 2003). This seems to be the case within our study, by the notion of the 'non-agile' and 'agile' group identities and the longing of the IT Operations employees for inclusion.

Reuniting IT Development and IT Operations

This section starts by referring to the definition of a work-team by Cohen and Bailey (1997), which guided our study. The definition serves here to reflect on the degree to which shared identities were constructed on the group level, as a consequence of the merger. Already in the pre-merger situation, there was an interdependency of tasks, since the software developed by the IT Developers needs to be maintained by IT Operations, whose main priority is the stability of the product. Due to the structural separation and the 'invisible wall', finger-pointing towards and blaming of the other group in a time of crisis, for instance a technical incident, led to frequent conflicts. This is explained by Van Dick et al. (2018), who share how, as a consequence of strong identification with the own group, in conflict situations, groups distance from each other, despite all belonging to the same organization. Now, due to the implementation of the DevOps way of working, The Bank expects the merged groups to take responsibility for the shared outcome. Even though the degree of shared ownership left area for improvement in the normal situation, our study shows the interesting finding, that in similar crisis situations post-merger, shared responsibility was instantly taken by the DevOps team, without these conflicts.

In an attempt to explain this unexpected finding, we consider the work of Alvesson and Empson (2008), who highlighted how shared values, social positions and educational background smoothen the process of constructing a new shared identity. Nonetheless, as previous sections already showed, precisely as a consequence of social differences, various and conflicting manifestations of group identities arose during the merger. We therefore, question the degree to which a shared identity has been developed in this still ongoing change process and rather seek the explanation in the shared burden, which temporarily reunites the two organizational logics in such situations.

In sum, within the section of 'Group Identity ≥ Organizational Identity' we discussed the forthcoming of the importance of the group identity within the studied merger process. As highlighted, strong group identities in the pre-merger situation have been identified. During the merger, differences and insecurities among both group are still significant but the accomplishment of first successes leads towards the creation of a shared identity of the merged team. We interpret this notion as an achieved level of shared sense-making within the newly merged group. Ownership and responsibility is taken, but needs to be further developed to become truly successful as a self-organizing team with shared responsibilities.

As Jian (2011) symbolizes within the framework, the four layers stand for themselves but are connected to the upper and the lower layer. Hereby, the lower layer is the 'Individual Identity'. Cameron and Green (2015) already stressed to consider the group-level in the process of change, but also addressed the power of an individual within change. Therefore, we emphasize the strong correlation between the group identity and the individual identity, which is further discussed within the following chapter.

5.3 Individual Identity

The third layer of Jian's framework is 'Individual Identity', which refers to the individual's sense-making process and questions such as: 'Who am I' and 'Who are you'. As previously noted, Cameron and Green (2015) argue, that change starts with individuals. Even though the main aim of the present change process is to merge groups, we see great interest in taking the effects on the individual identity into account. Hereby, we distinguish the argumentation into two sections, one for the individual team member and the second for the individual team lead.

An Agile Employee Identity

The efforts from the organization to regulate the self-managing team by introducing new universal roles, affect the individuals and how they make sense of such organizational events. As introduced before, we view this effort as a form of identity regulation, in order to align the individual employee with overall objectives and trigger the subsumption of self-identities to the organization (Alvesson and Willmott, 2002). As a consequence of the set identity frame, our study shows how this results in a purgatory experience for the individual employee, with various manifestations of severe identity issues as a consequence. For instance, employees struggle to find themselves within their new roles. One interviewee even expresses the loss of his own identity, as he does not recognize himself within the new job-title and especially the expectation frame set by the organization anymore. As he expressed, the requirements are too demanding, that in his opinion, no one could live up to that scope of expectations. Therefore, he is not fulfilling the cross-skilled requirements as set by The Bank. This finding can be linked to the concept of self-alienation by Costas & Fleming (2009), which goes beyond the concept of dis-identification and describes the process of losing the self-identity within the organization. Moreover, the identity issues of this senior employee might have been fueled by the clear notion from various interviewees to point out his ‘age group’ as a misfit with the new way of working. Senior employees in agile ways of working are often the ‘victim’ of age stereotyping, as a consequence of a decreasing perception of their performance over the years (Schloegel et al., 2015).

Besides this extreme example of identity loss, distancing from newly assigned roles is clearly shown within the empirical data. Some interviewees refer to themselves with different titles than their formal roles would suggest, which we interpret as a form of resistance towards the formal one. They create their own identity around, in what they perceive as more suitable frames of who they want to be, by referring to themselves as ‘connector’ or ‘team developer’. This was especially notable among the Operations interviewees, of which one shared not to be interested in the IT content and others considered oneself not bright or educated enough to grow development skills in order to meet the cross-skilled identity frame. Alvesson & Sveningsson (2011) labelled this phenomenon as ‘anti-identity’, where the aim is to create an alternative image of oneself in order to maintain a coherent self-view. Other interviewees expressed a strong attachment to former job-titles, but simultaneously, how besides the title, their actual work tasks have not changed. This can be linked to the lacking ability to negotiate meaning around the new titles, which triggers the loss of the pre-merger self-identity. Namely, the individuals find themselves in the transitional phase in between of 'leaving' the former identity and constructing a new identity around new roles and titles. Moreover, the highly knowledgeable development engineers often enjoy prestigious specialist roles and corresponding titles (Alvesson, 2004). Post-merger, these valuable titles are replaced by 'universal' roles, similar for every team member, including, the 'minor 'knowledgeable' IT operations employees. One should not underestimate the impact of losing such 'prestigious' titles on self-esteem, and consequently, on the ability to maintain a stable self-identity.

In the particular organization, the rich history of organizational change and the consecutive confusion as previously discussed in 'Organizational Circumstance' should kept in mind, while interpreting the employee's behavior. Change is a continuous process within the organization, due to the turbulent context. Before one change initiative is finalized, employees are already confronted with another. Figure 2 demonstrates the presence of multiple changes in a short timeframe. To demand an individual to continuously identify with new norms, roles and values and form meaning regarding a new title and work tasks is already challenging. Hence, how does an individual make sense of change initiative in a continuously changing context? Is it even possible, to change or adapt identity all the time like a 'chameleon' or does this eventually solely result in 'self-alienation', as a true self-identity cannot be created anymore (Costas & Fleming, 2009)? As a consequence, we noted the tendency among some of our interviewees to over-eagerly portray oneself as change-minded, in order to convince us researchers of their ability to adapt to change. We would refer to this behavior as 'over-identification', interpreted as a strategy to cope with identity struggles, as a result of the identity frame set by The Bank. Whetten et al. (1998) explain, how on the one hand, over-identified employees are beneficial for the organization's functioning. On the other hand, the self-esteem of the employee becomes a vulnerable subject to organizational vagaries, which we clearly recognize in our study. Moreover, in what is said to be a fast-pacing and changing environment nowadays, it is questionable if an end-state will be ever achieved. We argue that, instead of the DevOps identity frame, the 'regulation' of a transitional or interim identity by The Bank, such as introduced by various authors, would have been a more humane way of supporting employees in the identity reconstruction process (Clark et al., 2010; Van Dick et al., 2018). Therefore, we argue, that an 'agile' or flexible employee identity can be a means to cope to with an uncertain consolidation, like The Bank's.

In sum, within our particular case, most challenging for individuals seems to preserve a coherent and stable self-identity, when confronted with the DevOps identity frame. We explain these identity issues as a consequence of the organizational attempts to "*produce the appropriate individual*" (Alvesson & Willmott, 2002: 619). Moreover, our study sheds light on identity construction in a turbulent context where individuals are highly identified with the organization but struggle to adapt to the ever-changing organizational demands. Creating a meaningful and satisfying self-image around the strong sense of organizational identification, seems to be the main challenge for those individuals.

The Paradoxical Life of a Team Lead

From a team lead perspective, the following section discusses our findings in regard to the identity construction of these individuals in our particular change process.

In general, the paradox of managing a self-organizing team seems to be one of the main concerns team leads are currently facing. The introduction of *"flatter, less bureaucratized ways of organizing*", as is self-organizing agile team, which leads to an increased and intensified span of control for middle managers. (Newell et al., 2009: 35). However, through the expression of our team leads, we identified a different impact of this mode of organizing on the middle management level within The Bank. One team lead refers to his current role as 'boring', another expressed the 'loneliness' which comes as a consequence not being included in the team. The third struggled to find his role within the composition of a self-organizing team. The emptiness of the managerial life has already been addressed by Sveningsson and Alvesson (2016), who confirm that most managers spend their time on functional and operating tasks. This may be even extended to the question how this affects the identity of the team leads as most of them are highly capable and educated individuals (Sveningsson & Alvesson, 2016). The often intangible and complex nature of knowledge work, as we consider software development, is difficult 'manage', which provides the knowledge worker with a relatively large autonomy (Newell et al., 2009). The introduction of the self-organizing team takes even more autonomy away from the team lead. Therefore, one the managers responded in a sarcastic manner, when the future existence of his role within the company was questions, he said: *"maybe I will become a developer"*. We interpret this response as an indirect manifestation of a threatened self-view on the team lead level, whereas his sarcastic attitude is a coping mechanism for his uncertain position.

Additionally, the interviewed consultancy claims, that the need for a manager within self-managing teams is still present, but instead of taking administrative roles on, the 'manager' needs take the role of an inspiring or visionary leader who guides and gives directions. Furthermore, the position of the team leads in between the hierarchies as middle manager is also worth a note. They are supposed to be a role model and servant leader for the self-organizing, flat hierarchy-embossed teams, but at the same time, they have to report to senior management in a still traditional manner. Sveningsson and Alvesson (2016), who also observed the rise of a ‘visionary’ leadership ideal, argue against the consultants, by calling it a cover-up for the previously described unsubstantiated ‘administrative’ activities. Moreover, they argue, that the inspiring leadership style may also serve to compensate the self-esteem for the loss of authority towards the self-organizing team, and its knowledge workers. We highly recognize the aforementioned – the administrative tasks and identity issues as a consequence - in our case study and therefore, agree with the authors, that the self-image of a servant leader might serve as a strategy for coping the team lead’s symbiotic and paradoxical position.

In sum, how the change produced coherent damage on the self-image of the individual, the employee as well as the team lead, is highly visible. The given identity frames of becoming a cross-skilled DevOps engineer for the team member, and a servant leader as a team lead, trigger identity work on the individual level. As a consequence, employee insecurity as a salient theme is diagnosed. For instance, due to the formerly prestigious positions of some of these individuals.

The following section discusses how The Bank’s employees made sense of the novel practices accompanying the new working methods in the post-merger situation.

5.4 Organizational Practice

The lower layer of the Jian (2011) framework captures the sense-making of all organizational members regarding the new working practices, as a result of the change process. A central question in the process of meaning formation is: ‘What does this action mean?’. We remind the reader here that the working methods are recently introduced as an experiment in various pilot teams. Therefore, we need to interpret the change and the sense-making of, as still ‘in progress’. Hence, what is to be highlighted here is far from comprehensive, yet some initial findings are worth nothing.

Previous sections illustrated how the change process of the merger triggered identity work on the individual and group level, resulting in perceptions of confusion, anxiety and insecurity. These manifestations as a consequence of instability during organizational change are somehow ‘common knowledge’, and not particular for our case. Some aspects of job insecurity as manifested in our study are worth noting here. Nearly all interviewees addressed a relationship between the particular change process and previous reorganizations. An explanation for this finding is again found in the volatile organizational circumstances. The implementation of the new way of working might not be that impactful, as there has been a constant state of job insecurity. This is illustrated by the example of the ‘self-alienated interviewee’, as previously described, who perceived the DevOps change as a ‘minor thing’, compared to the job insecurity he faced in the previous reorganization, despite his lifelong employment. This perception becomes even more interesting, considering that the new methods are associated with the automation of traditional work tasks, which implies employee redundancy as a consequence. Thus, we argue that the recent fear for job loss may have reinforced the employee ‘willingness’ to change and would also explain the absence of nearly any critic among most interviewees regarding the introduction of the new working method.

An unexpected and contradictory finding in this area, is the broad consensus among our interviewees regarding the need for future reorganizations. Despite some concerns regarding the sincerity of the motives for the implementation of DevOps, - as ‘another reorganization tactic’-, nearly everyone acknowledged the likeliness of a new reorganization. Thus, implicitly, they accept the likely event that their current position might disappears, whereas protective behavior is often the more common while facing job insecurity. A potential explanation is provided by Sveningsson and Sörgärde (2013), who explain how employees, interpret events they confront in the complexity of organizational life by the use of stories, as shown in our empirical material. Troublesome experiences, such as previous reorganizations, or tensions between the organizational logics in the pre-merger situation, may justify the new working methods. In a similar way, the need for a new reorganization, as needed to enable this way of working, could possibly also be legitimized.

We now shift our focus to the team leads in our study and how they interpret the introduction of the new working methods. In this particular context of The Bank, where the merged teams have, next to two team leads also a foreman, one may argue that the team lead roles in both organizational logics are at stake. Interesting to highlight is the confidence of the IT Development team lead, that his role will last longer than the team lead role of IT Operations. As Sveningsson and Alvesson (2003) argue, when a job might be at stake, the feeling of anxiety leads to an active search for stability. Therefore, the expression of being ‘safer’ than the other team lead may comforts and leads to a greater feeling of stability and therefore, reduced anxiety. In addition, by ‘portraying’ oneself as superior to the ‘rival’, one positively reinforces the self-esteem, which is intertwined with one's self-view (Turner, 1984 in Alvesson & Willmott, 2002). The other team leads deal with this the insecurity in a different way. They are aware of the fact that her successful facilitation of the change process towards a self-managing team, consequently, paradoxically, eliminates the current position. But they see value in performing to the new requirements - as assigned by her role -, as good as possible, to show the ability to eventually fulfill another position within the changed organization. Whereas Sveningsson and Alvesson (2016) refer to this behavior as identity adjustment, we interpret this as a manifestation of a 'transitional' or 'interim identity', constructed by the team lead to cope with the insecurity of the identity reconstruction process. In addition, despite the 'human orientation' of the working methods, we view the symbiotic and paradoxical position of the team lead, as a consequence of the change, rather inhuman.

5.5 Chapter Summary

We introduced and structured this chapter by the adaption of the Jian (2011) framework, by positioning group identity as an equal or even more powerful form of identity than organizational identity. This is motivated by the thesis that in the self-organizing era, organizational identity rather is the sharedness of the swarm of group identities. In the layer of '**Organizational Circumstance**' we noted the rather fashionable and stereotypical change motives and the mind-less follow-up on an industry trend by The Bank, with a lacking consideration of the impact on the stability of the employee identity. Confusion and instability arose as a consequence of the buzz-word 'DevOps' and the unknown definition. A universal identity frame of 'the desired employee' is observed, including flexible expectations of the individual and group identity. We complemented the framework of Alvesson & Willmot (2002) with 'group identity' as an additional element. Due to the revival of the self-organizing teams, group identity becomes salient to consider. The identity regulation by The Bank therefore, targets the group and its members to align them with organizational objectives. In the layer of '**Group Identity ≥ Organizational Identity',** by our case of the extreme opposites, we demonstrated how various forms of group identity have become more salient and dominant than organizational identity. IT Development – as contemporary knowledge workers - shows a more critical attitude towards IT Operations, better defined as service workers. The latter, however, is very eager to work in the combined team. Hence, the prestigious and dominant identity in the merger clearly was those of the agile IT Development. Whereas shared responsibility normally is troublesome, due the previous issues, in a crisis this occurs instantly, which implies a greater sense of identification with the new group. Subsequently, '**Individual Identity**' demonstrated the employee response to the identity regulation by The Bank; identity issues in various forms: self-alienation, anti-identity and over-identification. For instance, due to the loss of prestigious titles to universal roles and demanding organizational requirements. Therefore, an 'agile' or flexible was observed as a coping mechanism with the ever-changing organization. On the team lead level, as a consequence of the self-organizing team, a lonely, boring or empty experience of managerial life was observed. A servant leadership style is expected, which we argue is to compensate the self-esteem during the execution of mainly administrative tasks. The lower level of '**Organizational Practice'** showed how despite the still ongoing change process job insecurity appears to be a central theme in the employee sense-making of the new working methods. The particular change is connected to previous and potentially upcoming reorganizations. The impact on identity of the counter-intuitive task of facilitating a change process which makes oneself obsolete, varies per team lead. Whereas one portrays oneself as superior to the counterpart of the opposite logic, the others create an interim identity to deal with the paradoxical position.

6 Conclusion

We will introduce this concluding chapter by recalling the research problem underlying our study on the radical case of a merger of two opposite organizational logics into one self-organizing team. The change process is a consequence of the implementation of a new agile working method labelled DevOps. Besides the thoroughly studied field of organizational change and identity, we observed the need for rich empirical accounts of how individual identity is reconstructed in change processes. Due to the current era of the 'revival' of the self-organizing team, group identity has become more salient to consider in organizational change. The phenomenon of group identity appeared to be understudied, due to a predominant focus on individual and organizational identity. On a practical level, despite that agile methods are characterized by claims of a human orientation, previous work mainly highlighted the instrumental aspects of such change processes.

6.1 Research Objective

By taking an 'identity lens', our purpose was to enhance the understanding of individual and group identity and the manner in which it comes forward in a change process of a merger of two opposite organizational logics. The research question guiding our study was as follows:

- How are individual and group identities affected in a merger of two organizational logics into one self-organizing team, for the implementation of agile working methods?

By performing our empirical study, and through studying the fields of organizational change and identity, group and individual identity, team mergers and self-organizing teams, we addressed the identified research problem as follows in the section: 'Research Contribution'.

6.2 Research Contribution

Despite the already thoroughly studied areas of organizational change and identity, our contribution is three-fold, both on a theoretical as practical level.

First, **on a theoretical level**, we are enhancing the understanding of the (re)construction of individual and group identity within the change process of merging two opposite organizational logics. Due to our radical case of two merging organizational logics, allowed us the great opportunity for studying the usually 'hard-to-grasp' concept of identity on various levels. In this regard, we addressed the claim of various scholars by the provision of rich empirical descriptions of **individual identity** in change (Alvesson, Ashcraft & Thomas, 2008: 7; Sveningsson & Alvesson, 2003). Several notions of identity issues were identified as a consequence of the change and the inability to maintain a stable and coherent self-view. In addition, we identified the understudied subject of **group identity**. By the manifestation of several prominent forms of group identity in our study, we contribute in this area, by complementing the framework of Jian (2011) with the element of group identity. We argue, that due to rise of self-organizing teams and accompanying change processes, the group identity gains in importance and becomes more salient to consider than solely individual or organizational identity. This is underpinned by the individual's stronger identification with the own group than towards the organization, as was shown in our case study. Hence, in contemporary organizations with such teams, we define organizational identity as the sharedness of the group identities of the 'self-organizing swarm'.

Secondly, over the course of our study, we identified **an alternative mode of organizational control** in contemporary organizations. Due to the implementation of agile working methods, The Bank shifts autonomy to a large number of self-organizing teams. Therefore, the organization needs to seek new control mechanisms for alignment of these teams with overarching objectives. We found how control of these 'self-organizing swarms' is maintained through 'soft' identity regulation. Hence, we have complemented the triangle of identity regulation from Alvesson & Willmott (2002), with the element of group identity on a similar and interrelated level with 'self-identity'. We argue that the self-organizing groups become at least an equal or even more powerful target for identity regulation than the individual employee. From a theoretical stance, this expansion is logical, nevertheless, the scope of our empirical study did not allow to examine the actual effect of targeting group identity as a regulatory and controlling means by organizations.

Most of available literature and research on agile methods – as is DevOps - is firstly, of a non-academic nature and secondly, characterized by a strong technical orientation. Hence, on a **practical level**, we contribute by the provision of a variety of insights on the process of implementing DevOps methods, with a focus on the 'softer' aspect of individual and group identity within such mergers. Our study clearly shows the deconstructive impact of a lacking consideration of employee identity in the merger of the two organizational logics, although the methods 'officially' recognize the human factor. Therefore, we stress here to those in charge of implementing such initiative, to not take the claimed human orientation of agile methods trend for granted. Additionally, we also observed how – in our case – the autonomy of these self-organizing teams is undermined by the presence of control mechanisms such as the traditional line management, as well as identity regulation by The Bank on the group and the individual level. Hence, what is said to be an 'empowering' working method, we would rather view a romantic or naïve management fashion. Finally, to the best of our knowledge, our study may have been one of the first academically performed study on the softer aspects of the implementation of DevOps working methods.

6.3 Suggestions for Future Research

As introduced in the limitations, a specific scope was set for our study. A wide variety of 'out scope' insights was gained over the course of our study, which invite for future research:

Firstly, we call for a greater consideration of identity within organizational change. The salience of identity is widely acknowledged, as numerous researchers made this call before. However, we still noted a limited consideration in our study. **Secondly**, the subject of group identity and its power within change processes is arguably understudied. We invite for further research on this phenomenon within the field of organizational and identity studies. **Thirdly**, our case study suggested an instance of organizational efforts of identity regulation on the group level. Hence, considering the 'revival of the self-organizing team', we see great value in future empirical studies on identity regulation and control of such groups. **Fourthly**, the merger of the two contrasting organizational logics demands knowledge sharing between the so-called knowledge - and service worker. Further research could examine knowledge sharing between the two types of workers. **Fifthly**, the examined change process at The Bank is still ongoing, therefore the long-term implications are unknown. Qualitative and quantitative studies could focus on whether these 'fashionable' ways of working are fully embedded in organizations.

List of References

Abalhamid, S. & Mishra, A. (2017). Adopting of Agile methods in Software Development Organizations: Systematic Mapping. *TEM Journal*, 6(4), 817-825.

Adam (2018). *Interview #2 with Adam. Interview [in person] by Annemoon Hester Borst & Henriette Seeck. The Netherlands. 2018-03-27. Transcribed by Henriette Seeck.* [Interview]

Albert, S., Ashforth, B.E. & Dutton, J.E. (2000). Organizational identity and identification: Charting new waters and building new bridges. *Academy of management review*, 25(1), pp.13-17.

Alvesson, M. (2004). *Knowledge work and knowledge-intensive firms*. OUP Oxford.

Alvesson, M., Ashcraft, K. & Thomas, R. (2008). Identity Matters: Reflections on the Construction of Identity Scholarship. *Organization Studies*, 15(1): 5-28

Alvesson, M. & Empson, L. (2008). The construction of organizational identity: Comparative case studies of consulting firms. *Scandinavian Journal of Management*, 24(1), pp.1-16.

Alvesson, M. & Sandberg, J. (2011). Generating research questions through problematization. *Academy of Management Review*, 36(2), 247-271.

Alvesson, M. & Sveningsson, S. (2011). Identity work in consultancy projects: ambiguity and distribution of credit and blame. *In Discourses of deficit* (pp. 159-174). Palgrave Macmillan: London.

Alvesson, M. & Sveningsson, S. (2015). *Changing Organizational Culture: Cultural Change Work in Process*. 2nd edition. London: Routledge.

Alvesson, M. & Willmott, H. (2002). Identity regulation as organizational control: Producing the appropriate individual. *Journal of management studies*, 39(5), pp.619-644.

Angara, J., Prasad, S. & Sridevi, G. (2016). The Factors Driving Testing in DevOps Setting- A Systematic Literature Survey. *Indian Journal of Science and Technology*, 9(48): 2-8.

Annosi, M., Foss, N., Brunetta, F. & Magnusson, M. (2017) The Interaction of Control Systems and Stakeholder Networks in Shaping the Identities of Self-Managed Teams. *Organization Studies*, 38(5): 619-645.

Banica, L., Radulescu, M., Rosca, D. & Hagiu, A. (2017). Is DevOps another Project Management Methodology? *Informatica Economică*, 39-51.

Barker, J.R. & Tompkins, P.K. (1994). Identification in the Self-Managing Organization Characteristics of Target and Tenure. *Human Communication Research*, 21(2), pp.223-240.

Becky (2018). *Interview #3 with Becky. Interview [in person] by Annemoon Hester Borst & Henriette Seeck. The Netherlands. 2018-03-27. Transcribed by Annemoon Hester Borst.* [Interview]

Beer, M. & Eisenstadt, R. (1992). Developing an Organization Capable of Implementing Strategy and Learning. *Human Relations*, 49(5), 597-619.

Birkinshaw, J., Bresman, H. & Håkanson, L. (2000). Managing the post-acquisition integration process: How the human integration and task integration processes interact to foster value creation. *Journal of management studies*, 37(3), pp.395-425.

Bossert, O., Ip, S. & Starikova, I. (2015). *Beyond agile: Reorganizing IT for faster software delivery.* Available online: https://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/beyond-agile-reorganizing-it-for-faster-software-delivery. [Accessed 02 March 2018]

Bush, J.T., LePine, J.A. & Newton, D.W. (2017). Teams in transition: An integrative review and synthesis of research on team task transitions and propositions for future research. *Human Resource Management Review*.

Cameron, E. & Green, M. (2015). *Making sense of change management: A complete guide to the models, tools and techniques of organizational change*. Kogan: Page Publishers

Carl (2018). *Interview #4 with Carl. Interview [in person] by Annemoon Hester Borst & Henriette Seeck. The Netherlands. 2018-03-27. Transcribed by Henriette Seeck.* [Interview]

Company website (2018). *Information derived from company website.*

Consultancy (2018). *Interview #1 with Consultancy. Interview [in person] by Annemoon Hester Borst & Henriette Seeck. The Netherlands. 2018-03-30. Transcribed by Annemoon Hester Borst.* [Interview]

Costas, J. & Fleming, P. (2009). Beyond dis-identification: A discursive approach to self-alienation in contemporary organizations. *Human Relations*, 62(3), pp.353-378.

Cram, W. & Newell, S. (2016). Mindful revolution or mindless trend? Examining agile development as a management fashion, *European Journal of Information Systems*, 25(2): 154-169.

Creswell, J.W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. 4th edition. Thousand Oaks: California.

Christopher, M. (2000). The Agile Supply Chain: Competing in Volatile Markets. *Industrial Market Management*, 29, 37-44.

Deloitte (2017a). Banking Outlook 2018: Accelerating the Transformation. Available online: https://www2.deloitte.com/content/dam/Deloitte/nl/Documents/financial-services/deloitte-nl-fsi-banking-outlook-2018.pdf. [Accessed 18 February 2018]

Deloitte (2017b). Tech Trends 2018: The Symphonic Enterprise. Available online: https://www2.deloitte.com/content/dam/insights/us/articles/Tech-Trends-2018/4109_TechTrends-2018_FINAL.pdf. [Accessed 18 February 2018]

Denise (2018). *Interview #5 with Denise. Interview [in person] by Annemoon Hester Borst & Henriette Seeck. The Netherlands. 2018-04-04. Transcribed by Annemoon Hester Borst.* [Interview]

Denning, S. (2018). How major corporations are making sense of Agile. *Strategy & Leadership, 46(1), 3-9.*

Diel, E., Marczak, S. & Cruzes, D. (2016). Communication Challenges and Strategies in Distributed Devops, *2016 IEEE 11th International Conference on Global Software Engineering (ICGSE)*, 24-28.

Doherty, N. & King, M. (2005). From technical to socio-technical change: tackling the human and organizational aspects of systems development projects. *European Journal of Information Systems*, 14(1): 1-5.

Elumalai, A., Sprague, K., Tandon, S. & Yee, L. (2017). Ten trends redefining enterprise IT infrastructure. Available online: https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/ten-trends-redefining-enterprise-it-infrastructure. [Accessed 20 February 2018]

Emil (2018). *Interview #6 with Emil. Interview [in person] by Annemoon Hester Borst & Henriette Seeck. The Netherlands. 2018-04-04. Transcribed by Henriette Seeck.* [Interview]

Elbanna, A. & Sarker, S. (2016). The Risks of Agile Software Development: Learning from Adopters. *IEEE Software*, 33(5), pp.72-79.

Elstak, M.N., Bhatt, M., Van Riel, C., Pratt, M.G. & Berens, G.A. (2015). Organizational identification during a merger: The role of self-enhancement and uncertainty reduction motives during a major organizational change. *Journal of Management Studies*, 52(1), pp.32-62.

Erich, F., Amrit, C. & Daneva, M. (2017). A qualitative study of DevOps and the usage in practice. *Journal of Software Evolution and Process*, 29(6).

Fanny (2018). *Interview #7 with Fanny. Interview [in person] by Annemoon Hester Borst & Henriette Seeck. The Netherlands. 2018-04-04. Transcribed by Annemoon Hester Borst.* [Interview]

Fiampolis, P. & Groll, J. (2016). Bringing together Dev and Ops. *Training Journal*, 12-15.

Gartner. (2018). IT Operations. Available online: https://www.gartner.com/it-glossary/it-operations/. [Last accessed 03 March 2018]

George (2018). *Interview #8 with George. Interview [in person] by Annemoon Hester Borst & Henriette Seeck. The Netherlands. 2018-04-04. Transcribed by Henriette Seeck.* [Interview]

Giessner, S.R. & Mummendey, A. (2008). United we win, divided we fail? Effects of cognitive merger representations and performance feedback on merging groups. *European Journal of Social Psychology*, 38(3), pp.412-435.

Gill, A., Loumish, A., Riyat, I. & Han, S. (2018). DevOps for information management systems., *VINE Journal of Information and Knowledge Management Systems*, Vol. 48 Issue: 1, pp.122-139.

Hanna (2018). *Interview #9 with Hanna. Interview [in person] by Annemoon Hester Borst & Henriette Seeck. The Netherlands. 2018-04-04. Transcribed by Annemoon Hester Borst.* [Interview]

Hodgson, D. (2002). Disciplining the professional: the case of project management. *Journal of Management Studies*, 39(6): 803–21.

Hodgson, D. & Briand, L. (2013). Controlling the uncontrollable: 'Agile' teams and illusions of autonomy in creative work. *Work, employment and society*, 27(2): 308–325.

Hussaini, S. (2014). Strengthening harmonization of Development (Dev) and Operations (Ops) silos in IT environment through Systems approach. *2014 IEEE 17th International Conference on Intelligent Transportation Systems (ITSC)*, 178-183.

Immanuel (2018). *Interview #10 with Immanuel. Interview [in person] by Annemoon Hester Borst & Henriette Seeck. The Netherlands. 2018-04-04. Transcribed by Henriette Seeck.* [Interview]

Jetten, J., O'Brien, A. & Trindall, N. (2002). Changing identity: Predicting adjustment to organizational restructure as a function of subgroup and superordinate identification. *British Journal of Social Psychology*, 41(2), pp.281-297.

Jian, G. (2011). Articulating circumstance, identity and practice: toward a discursive framework of organizational changing. *Organization*. 18(1): 45-64.

Jiang, L. & Eberlein, A. (2009). An analysis of the history of classical software development and agile development. *2009 IEEE International Conference on Systems, Man and Cybernetics*, 3733-3738.

Julia (2018). *Interview #11 with Julia. Interview [in person] by Annemoon Hester Borst & Henriette Seeck. The Netherlands. 2018-04-04. Transcribed by Annemoon Hester Borst.* [Interview]

Kamuto, M. & Langerman, J. (2017). Factors Inhibiting the Adoption of DevOps in Large Organisations: South African Context, *2017 2nd IEEE International Conference On Recent Trends In Electronics Information & Communication Technology,* 48-51.

Ken (2018). *Interview #12 with Ken. Interview [live video] by Annemoon Hester Borst & Henriette Seeck. The Netherlands. 2018-04-04. Transcribed by Henriette Seeck.* [Interview]

Ketterer, H. & Schmid, C. (2017). Leaner, Faster and Better with DevOps. Available online: https://www.bcg.com/publications/2017/technology-digital-leaner-faster-better-devops.aspx. [Last accessed 03 March 2018]

Kvale, S. (1996). *InterViews*. Thousand Oaks, CA: Sage.

Lazwanthi, M., Alsadoon, A., Prasad, P., Sager, S. & Elchouemi, A. (2016). Cultural impact on agile projects: Universal agile culture model (UACM), *2016 7th International Conference on Information and Communication Systems (ICICS)*, 292-297.

Lisa (2018). *Interview #13 with Lisa. Interview [live video] by Annemoon Hester Borst & Henriette Seeck. The Netherlands. 2018-04-04. Transcribed by Annemoon Hester Borst.* [Interview]

McCarthy, M., Herger, L., Khan, S. & Belgodere, B. (2015). Composable DevOps: Automated Ontology Based DevOps Maturity Analysis. *2015 IEEE International Conference on Services Computing*, 600-607.

Mike (2018). *Interview #14 with Mike. Interview [live video] by Annemoon Hester Borst & Henriette Seeck. The Netherlands. 2018-04-04. Transcribed by Henriette Seeck.* [Interview]

Newell, S., Robertson, M., Scarbrough, H. & Swan, J. (2009). *Managing knowledge work and innovation*. Palgrave Macmillan

Omarini, A. (2017). The Digital Transformation in Banking and The Role of FinTechs in the New Financial Intermediation Scenario. *International Journal of Finance, Economics and Trade*: 1(1): 1-6.

Oxford University Press. (2018). *Agile.* Available online: https://en.oxforddictionaries.com/definition/agile. [Last accessed 03 March 2018]

Palmer, I., Dunford, R. & Akin, G., 2009. *Managing organizational change: A multiple perspectives approach*. New York: McGraw-Hill Irwin.

Prasad, P. (2005). *Crafting qualitative research working in the post-positivist traditions.* M.E. Sharpe.

Renkema, M., Bondarouk, T. & Bos-Nehles, A. (2018) Transformation to self-managing teams: lessons learned: A look at current trends and data", *Strategic HR Review*, 17(2): 81-84

Robson, C. (2002). *Real World Research* (2nd edn). Oxford: Blackwell.

Roche, J. (2013). Adopting Devops Practices in Quality Assurance, *Communications of the ACM*, 56(11): 38-43.

Saunders, M., Lewis, P. & Thornhill, A. (2009). *Research Methods for Business Students*. 5th edition. Harlow: Pearson Education Limited.

Schloegel, U., Stegmann, S. Maedche, A., van Dick, R. (2018) "Age stereotypes in agile software development – an empirical study of performance expectations", *Information Technology & People*, 31(1): 41-62,

Schumacher, D., Schreurs, B., Van Emmerik, H. & De Witte, H. (2016). Explaining the Relation Between Job Insecurity and Employee Outcomes During Organizational Change: A Multiple Group Comparison, *Human Resource Management*, 55(5): 809-827, Business Source Complete.

Sia, S., Soh, C. & Weill, P. (2016). How DBS Bank Pursued a Digital Business Strategy. *MIS Quarterly Executive*, 15(2): 105-121.

Ståhl, D., Mårtensson, T. & Bosch, J. (2017). Continuous Practices and DevOps: Beyond the Buzz, What Does It All Mean? 2*017 43rd Euromicro Conference on Software Engineering and Advanced Applications (SEAA)*, 440-448.

Styhre, A. (2013). *How to write academic texts: a practical guide.* (1st edn). Lund: Studentlitteratur.

Sveningsson, S. & Alvesson, M. (2003). Managing managerial identities: Organizational fragmentation, discourse and identity struggle. *Human relations*, 56(10), pp.1163-1193.

Sveningsson, S., & Alvesson, M. (2016). Managerial Lives: Leadership and Identity in an Imperfect World. Cambridge: Cambridge University Press.

Sveningsson, S. & Sörgärde, N. (2013). Organisational Change Management in Strannegård, L. and Styrhe, A. (eds) Management: An Advanced Introduction. Lund: Studentlitteratur

Swedberg, R. (2014). *The Art of Social Theory*. Princeton, New Jersey: Princeton University Press.

Thomas, R., Sargent, L.D. & Hardy, C. (2011). Managing organizational change: Negotiating meaning and power-resistance relations. *Organization Science*, 22(1), pp. 22 - 41.

Thornton, P., Ocasio, W. & Lounsbury, M. (2012). The Instiutional Logics Perspective: A New Approach to Culture, Structure and Process. New York: Oxford University Press.

Tsouka, H. & Chia, R. (2002). On Organizational Becoming: Rethinking Organizational Change. *Organization Science*, 13(5): 567-582.

Ullrich, J. & van Dick, R. (2007). The Group Psychology of Mergers & Acquisitions: Lessons from the Social Identity Approach, in Cary L. Cooper, Sydney Finkelstein (ed.) Advances in Mergers and Acquisitions (Advances in Mergers and Acquisitions, Volume 6) Emerald Group Publishing Limited, pp.1 – 15.

Ullrich, J., Wieseke, J. & Dick, R.V. (2005). Continuity and change in mergers and acquisitions: A social identity case study of a German industrial merger. *Journal of Management Studies*, 42(8), pp.1549-1569.

Van Dick, R., Ciampa, V. & Liang, S. (2018). Shared identity in organizational stress and change. *Current Opinion in Psychology 2018*, 23: 20–25.

Van Leeuwen, E., Van Knippenberg, D. & Ellemers, N., (2003). Continuing and changing group identities: The effects of merging on social identification and ingroup bias. *Personality and social psychology bulletin*, 29(6), pp.679-690.

Watson, T. (1994). Management 'flavours of the month': their role in managers' lives. *The International Journal of Human Resources Management*, 5(4): 893-909.

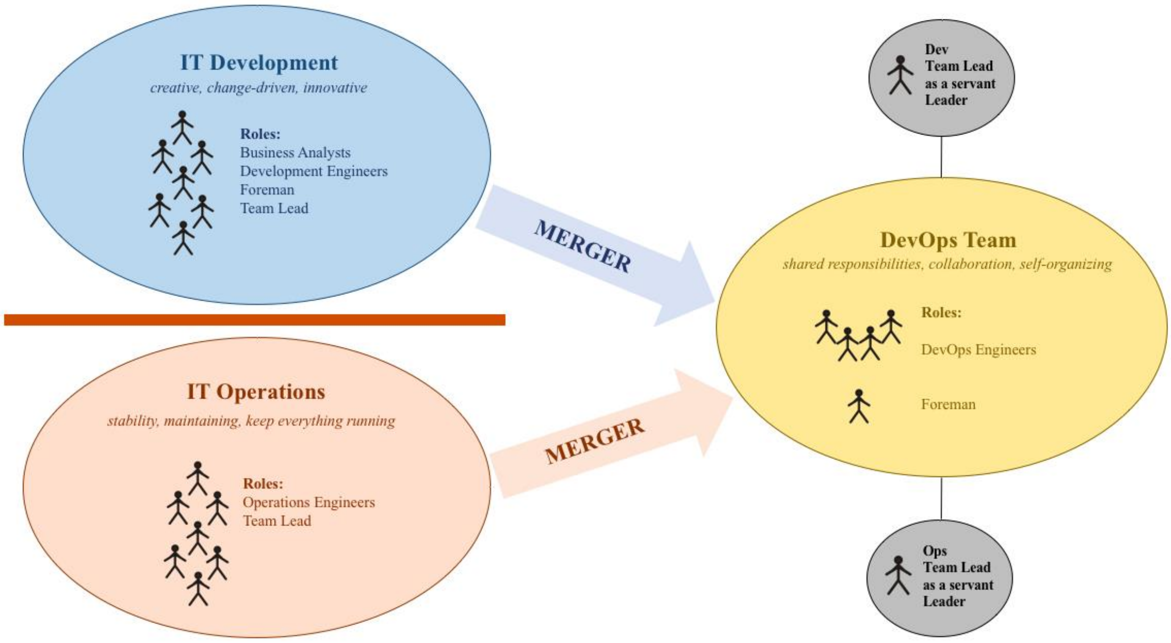
Weick, K.E. & Quinn, R.E. (1999). Organizational change and development. *Annual review of psychology*, 50(1), pp.361-386.

Whetten, D. & Godfrey, P. (1998). *Identity in Organizations - building theory through conversations.* Thousand Oaks, CA: Sage.

Williams, L. (2010). Agile Software Development Methodologies and Practices. *Advances in Computers*, (80): 1-44.

Appendix A

Visualization of a DevOps merger



Appendix B

Overview of Interviews

No.	Name (fictive)	Role
1	Consultancy	Human capital/ Technology consultants
2	Adam	Dev Engineer
3	Becky	Foreman (Dev)
4	Carl	Team Lead (Dev)
5	Denise	Dev Engineer
6	Emil	Dev Engineer
7	Fanny	Team Lead (Dev)
8	George	Foreman (Dev)
9	Hanna	Team Lead (Ops)
10	Immanuel	Ops Engineer
11	Julia	Ops Engineer
12	Ken	Ops Engineer
13	Lisa	Senior HR Manager
14	Mike	Ops Engineer

Appendix C

Derived themes	Reasons
Identity at stake	- Not (so much) discussed within literature on DevOps - Could be discussed in relation to digitalization - Could be discussed in relation to management trends - Aligned with methodology: identity of individual - Most “out-of-ordinary” finding in relation to theory
Managerial role and self-organizing teams	- Not (so much) discussed within DevOps literature - Could be discussed in relation to digitalization - Could be discussed in relation to management trends - Aligned with methodology: identity of individual - Most “out-of-ordinary” finding in relation to theory
Job Insecurity	- Reorganization sentiment colors change to DevOps - Automation is a big part of DevOps implies disappearing of tasks - Self-organizing team implies less management - Do I fit in? Do I have what it takes to go DevOps?
Wall of Confusion or tensions between Dev and Ops	- Not perceived by all interviewees - Was experienced in old situation of the split - DevOps considered a way of breaking down the wall - Not main topic but can still be discussed in relation to identity
Ambiguity around definition of DevOps and shared understanding	- Not main topic but can still be discussed in relation to identity - What is actually expected from people in this transition - What is the overall direction?
Perceptions of the change management process	- Perspectives on how the organization handles things - It provides context for understanding our findings - Our focus is on understanding the individual social context
DevOps as challenges for existing HR processes	- Perspective on how organization handles things - Not main topic but certain elements can still be discussed - Knowledge worker and identity - Organization itself already working on these aspects
Agile as prerequisite for DevOps	- Not related to research question - Provides a broader context

Organizational factors	- Perspectives on how the organization handles things - Provides context to understand findings - Our focus is on understanding the individual in social context - Organizational issues by many interviewees highlighted as major issue
Challenges of working with external parties	- Highly organizational issue, not very broad
Challenges of changing existing organizational culture	- Not main topic but can still be discussed in relation to identity - Many writings on cultural differences already - Many writings on organizational and corporate culture already existing - Cultural differences highlighted by many interviewees as major issue