



# The Influence of Agile Ways of Working on Change Capacity

*A case study exploring organizational agility in practice*

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## Executive summary

In this case study, I explore if and how agile ways of working influence change capacity. In that, I investigate the effects on change capacity at both the organizational and individual level. First, to gain an understanding of the prevalent perspectives and arguments on agile and change capacity, literature was reviewed. Second, qualitative data was collected from a single firm set within the banking industry. The findings from this were then analyzed as ‘actions’ taken by the firm represented by agile ways of working, and the ‘outcome’ represented by organizational and individual change capacity. While the actions were synonymous with those described in agile literature, the outcome revealed completely new insights not previously addressed by scholars.

This study indicates that agile ways of working positively influence change capacity; at the organizational level, by creating shared understanding and quick results. Additionally, it shows that the organization’s sensing capabilities are enhanced at the operational level with scope to further optimize them at the strategic level. The influence of agile ways of working on the firm’s seizing capabilities is undeniable, as the organization is able to adapt and respond to changes in a rapid manner like never before. At the individual level, agile ways of working create change readiness and trust. At the same time, some risks are identified at both levels, including backlog of work, stress, and fatigue. The positive effects outweigh the risks significantly, indicating the magnitude of benefits an organization can potentially enjoy by adopting agile ways of working.

This thesis provides novel and valuable insights to practitioners regarding the benefits of agile ways of working and how its specific elements can build change capacity. It also highlights the role of top management in the process. This study is especially beneficial to those managers who are considering agile ways of working or have recently implemented it at their firm.

## Preface

This thesis is written as part of the Master of Science in Economics and Business Administration at the Norwegian School of Economics, where I am currently specializing in Strategy and Management. This study is conducted as part of the university's research program called Future-Oriented Corporate Solutions (FOCUS). Being part of FOCUS gave me the opportunity to work on a worthwhile research topic while getting tremendous support from its network of students and professionals. I thoroughly enjoyed working on this study, where I not only gained new knowledge on the subject but also learned plenty about myself and others.

I am very grateful to my supervisor, Professor Inger G. Stensaker, for her timely guidance and thoughtful advice throughout the research process. Her insights were immensely helpful in shaping my thesis. The continuous feedback and support I received from her encouraged me to think critically and produce meaningful work. I am also thankful for her help in identifying a fitting case for the research and negotiating access for data collection.

I would also like to extend my gratitude to the case company for allowing me to interview its employees as well as for cooperating with me throughout the process. Not to mention, the interviewees for participating in the study and setting aside valuable time for answering my questions with an open and friendly approach. I thoroughly enjoyed our conversations and learned a lot during the process, which I am very thankful for.

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# 1. Introduction

The contemporary buzzword, ‘agile’, has been around for a while, but only recently gained increased significance among business practitioners and academics due to its relevance and applicability in today’s rapidly changing environment. Dynamic changes in the external setting have affected how businesses organize and create value for stakeholders (Evans et al., 2017). Globalization, shift in regulations, and rapid technological changes have induced turbulence in markets, urging businesses to continuously adapt as situations evolve (Ganguly et al., 2009). Further adding a layer of complexity, these changes are characterized by deep uncertainty making it even more challenging for organizations to respond in a quick and effective manner. The ability to respond to changes rapidly and efficiently in a world driven by VUCA (volatility, uncertainty, complexity, ambiguity), is expected to determine the future success of businesses (Prats et al., 2018). This ability is what scholars define as ‘agile’ and it has risen to popularity as the recipe for surviving change as well as securing competitive advantage (Gunasekaran, 1999). Thus, it comes as no surprise that more and more organizations, even corporate giants such as Google, IBM, and Spotify, are actively employing agile ways of working to stay ahead.

Equally important is the ability of an organization to learn and evolve in the face of multiple changes (Buono & Kerber, 2010). This is determined by its capacity for change. Developing change capacity is paramount as organizations continue to ride the wave of perpetual change. While agile makes it possible to respond to changes in a quick, flexible, and decisive manner, change capacity facilitates continuous learning and adjustment in the face of uncertainty and ambiguity. Though the former claim has been widely discussed, no empirical research has been conducted yet. Moreover, as organizations turn towards agile ways of working as a solution to effectively respond to change, it is not known whether this further influences their change capacity. Understanding this relationship may present huge opportunities for business practitioners in planning and organizing for change in the future.

Extensive literature can be found on organizational agility with regard to its applicability, implementation, measurement as well as its impact on organizational effectiveness and performance (Shari & Zhang, 1999; Ganguly et al., 2009; Sidky et al., 2007; Holbeche, 2018; Cegarra-Navarro et al., 2016). Similarly, many studies have been conducted on change capacity (Gravenhorst et al., 2003; Meyer & Stensaker, 2006; Buono & Kerber, 2010). However, the influence of agile ways of working on change capacity still remains unexplored. This thesis aims to make novel contributions to literature by examining a case study of an agile organization

within a real-life setting. Not only does this study clarify the existing interpretations of agile and its characteristics, but it also examines if and how agile ways working influence change capacity at the organizational and individual level. A qualitative exploratory study, this thesis investigates the following research question:

***How do agile ways of working influence change capacity?***

The research begins with reviewing existing literature on agility and change capacity including dynamic capabilities. Further, qualitative data collected from a single firm in the form of interviews and observations are analyzed. The findings first detail the actions taken by the firm indicating the agile ways of working, followed by the outcome in the form of organizational and individual change capacity. Furthermore, specific insights are provided into how different elements of agile ways of working can influence change capacity at both levels. At the organizational level, the study also addresses the effects on the dynamic capabilities of sensing and seizing. The role of top management is also highlighted. The study concludes by demonstrating an overall positive shift in change capacity as a direct consequence of agile ways of working. Some risks are also identified.

## 2. Literature review

*This section explores the existing literature on agility to establish an understanding of the concept. Further, it delves deeper into agile ways of working and its characteristics. This is followed by a review of existing studies on change capacity, including dynamic capabilities.*

### 2.1 Organizational agility

Agility is often addressed in tandem with “flexibility”, “adaptability”, “nimble” and/or “speed” (Sherehiy et al., 2007; Gunasekaran, 1999; Shari & Zhang, 1999). The understanding of agility as a concept has evolved over time with various definitions attached to it. The origin of the concept can be traced back to the 1960s when there was an emphasis on mass production and standardized designs in the manufacturing industry. Flexibility, cost, quality, and dependability were identified as distinctive competencies based on which manufacturing firms structured their product and process cycles (Hayes & Wheelwright, 1979). Through the years, competitive priorities were seen shifting between these competencies, with more focus on flexibility (Vokurka & Fliedner, 1998). Flexibility, as a capability, enables the firm to shift focus between activities or change the order in which it is performed, especially in the event of changes in market demand (Vokurka & Fliedner, 1998). Agility, while including the function of flexibility, moves beyond it and demands that firms make rapid decisions in the face of unpredictable changes in the external environment (Fliedner & Vokurka, 1997). Agility hence became a capability that was developed in response to quickly changing customer needs and competitive forces in the market. In today’s fast-changing environment, agility has gained increased relevance; to further explore the prevalent interpretations of the concept, an array of definitions was reviewed (see table 1, page 9). As expected, no unified understanding of the concept or a single definition was found. However, there were many characteristics in common.

Further, there is a consensus among scholars on the need for developing agile capabilities. An early study on agility conducted by Vokurka and Fliedner (1998) suggested that dynamic changes in the global marketplace have exponentially increased competition where the focus has shifted to providing the customer with better quality, more variety of products and shorter response time. Shariff and Zhang (1999) indicated that unexpected changes in the environment, including surviving threats and capitalizing on new opportunities have urged businesses to



develop the distinct capability of agility. Going agile is understood to enable businesses to effectively respond to continuous changes.

*Table 1: Definitions of agility*

<b>Term used</b>	<b>Definition</b>	<b>Author/s</b>
Agility	Agility is dynamic, context-specific, aggressively change-embracing, and growth-oriented. It has four strategic dimensions (1) enriching the customers (2) cooperating to enhance competitiveness (3) organizing to master changes (4) leveraging the impact of people and information.	Goldman, Nagel, & Preiss (1995)
Agility	Agility is the ability to market successfully low-cost, high-quality products with short lead times and in varying volumes that provide enhanced value to customers through customization.	Fliedner & Vokurka (1997)
Agility	“Agility is the successful exploration of competitive bases (speed, flexibility, innovation proactivity, quality, and profitability) through the integration of reconfigurable resources and best practices in a knowledge-rich environment to provide customer-driven products and services in a fast-changing market environment.”	Yusuf, Sarhadi & Gunasekaran (1999)
Agile organization	“The capabilities that an agile organization should have to be able to make appropriate response to changes taking place in its business environment, are responsiveness, competence, flexibility, quickness.”	Shari & Zhang (1999)
Agile organization	An agile organization is one whose organizational structures and administrative processes enable fast and fluid translation of initiatives into customer enriching business activities.	Gunasekaran (2001)
Agility	The capacity of an organization to redeploy/ redirect its resources efficiently and effectively to value-creating and value protecting (and capturing) higher-yield activities as internal and external circumstances warrant.	Teece, Peteraf & Leih (2016)
Organizational agility	“Agility is a complex construct that can take multiple forms. It captures an organization’s ability to develop quickly and apply flexible, nimble, and dynamic capabilities.”	Holbeche (2018)
Agility	The capacity for moving quickly, flexibly, and decisively in anticipating, initiating, and taking advantage of opportunities and avoiding any negative consequences of change.	McCann, Selsky & Lee (2009)
Strategic agility	The capacity to create value within a core business where the strategic direction is continuously adjusted and adapted.	Doz & Kosonen (2008)

Recent studies on agility are often found making comparisons with the traditional organizational model, with criticisms for its rigidity, hierarchy, and linear planning (Rigby et

al., 2016; Aghina et al., 2018). The traditional model is thus placed at the opposite end of the spectrum in the discussions of agility. Holbeche (2015) claims that agile organizations are different; they thrive on a people-focused culture accompanied by flexible management and an organizational structure that is built for collaboration. Compared to the old paradigm, the new paradigm views organizations as agile living organisms where leadership is spread across levels and resources are accustomed to quick changes and flexible ways of working (Aghina et al., 2018). While these studies view agile as a replacement solution to the traditional approach, others advocate that both approaches can co-exist (Vinekar et al., 2006). Similarly, Rigby and colleagues (2020) argue that agile is meant for innovation and is not a replacement for traditional operations.

Although different definitions and views on agility co-exist, it is interesting to see that firms that practice agility, share specific characteristics tied to specific ways of working. Agility in practice is not limited to a certain method or form, in fact, it can be implemented in many ways. For this study, the different agile methods along with their characteristics are collectively referred to as *agile ways of working*. In the next section, I explain the elements that entail agile ways of working.

### 2.1.1 Agile ways of working (AWW)

Agile as a method was first developed in the mass manufacturing industry and has led to the rise of practices such as JIT (just in time), business re-engineering, total quality management, and lean methodologies. Toyota and Ford were some of the early adopters. The agile method further rose to popularity in the IT industry, where large organizations such as IBM and Microsoft were found using agile methods to develop and release products faster and get feedback sooner. Agile innovation, in particular, has transformed the software industry and is now spreading to non-IT functions. It is favorable in conditions where solutions to problems are not easily identifiable and there is uncertainty regarding the scope (Rigby, et al., 2016). Agile today is practiced using different methods and frameworks. Some very popular methods include scrum, lean development and Kanban. These are briefly explained in the following sections. It is said that agile methods are tailored according to projects and industries. While several methods of agile are accessible, it is up to the leader to choose one that fits the context (Rigby, et al., 2016).

## Scrum

Scrum was developed by Ken Schwaber and Jeff Sutherland in the early 1990s who defined it “as a framework within which people can address complex adaptive problems, while productively and creatively delivering products of the highest possible value” (p. 3). The basic premise of scrum is to improve the product, team, and working environment (Schwaber & Sutherland, 2017). Whenever there is a new opportunity, a small cross-functional team between three to nine members is created. A product leader is responsible for delivering the end product and managing the team as well as dialogues with other key stakeholders. The leader does not assign team members with tasks or determine how long should tasks take. Instead, team members themselves create a roadmap of all the tasks and decide how it will be completed (Rigby et al., 2016). At the core of the scrum method is the *sprint* during which a potentially usable product is created in less than a month (Schwaber & Sutherland, 2017). Each sprint is addressed as a ‘project’ and is guided by a goal that is expected to be met in no longer than a month. The idea is that a longer time horizon may be subjected to many external changes thus putting the viability of the product or idea at risk. Therefore, sprints have a time cap of a month. The teams have daily *stand-up* meetings where they briefly discuss updates on the project, and any issues that need to be solved are immediately tackled (Rigby et al., 2016).

## Kanban

Originally developed in Japan, Kanban was created to control production between processes at the Toyota manufacturing plants. The Japanese term Kanban refers to ‘signboarding’ and is a visual scheduling technique which allows operators to have an overview of activities and subsequently make decisions pertaining to different tasks. It is an execution tool directing the operation of processes on a daily basis. Kanban is meant to transfer control in the hands of the operators, where supervisors are seldom required to intervene. This not only frees up the supervisors’ time but also empowers the operators (Gross & McInnis, 2003). The goal behind Kanban is to make continuous incremental changes in the form of improvements. The core principles guiding Kanban are making work visible, managing flow, making progress explicit, implementing feedback mechanisms, and improving the methods and models in use (Leopold & Kaltenecker, 2015). Operations are made visible through boards, where every step in the process is identified. Notes, generally in the form of physical post-its are attached to corresponding tasks indicating a short description, deadline, and owner of the task. This provides all members involved with an overview of tasks and also an understanding of how

tasks may be interdependent. The board is used at stand-up meetings, where status on tasks are discussed with members (Leopold & Kaltenecker, 2015).

### *Lean Development*

Lean development is described as “*a product development paradigm with an end-to-end focus on creating value for the customer, eliminating waste, optimizing value streams, empowering people, and continuously improving*” (Ebert et al., 2012, p. 22). Originated in the software industry, lean is now being applied in other industries. Lean and agile are strongly related and very often lean practices are used in combination with other agile methods to eliminate activities that do not add value and to improve workflows. Lean development is said to bridge the gap where agile methods are too focused on short-timelines, team set-up, and reducing documentation that they fall short on addressing the impact on overall life-cycle cost (Ebert et al., 2012). Though lean and agile originated in different industries, their core principles overlap. Today, lean thinking is being applied to agile methods to benefit from combined results including optimizing complex and repetitive tasks, eliminating waste as well as streamlining top-down decision making (Bente et al., 2012).

### *Expanding agility beyond IT functions*

Even though AWW, including the different methods described above, originated in the IT and manufacturing industries, they are today being applied across functions such as strategic marketing, planning, logistics, and sales. Firms are seen using AWW within different departments, in some cases, entire organizations adopt this way of working. Several characteristics are also found to be in common tied to AWW. Some prominent characteristics include flexibility, self-organizing and cross-functional teams, continuous improvement, people-focused culture, and active top management support (Vokurka & Flidner, 1998; Holbeche, 2015; Beck, et al., 2001; LeMay, 2019; Goldman et al., 1995; Rigby et al., 2016). These are explained separately in the following segments.

Flexibility enables the organization to shift focus between activities or change the order in which it is performed (Vokurka & Flidner, 1998). It can be defined as the organization’s ability to effectively adjust business practices, resources and time, based on the changes in the circumstances (Holbeche, 2015). An agile organization is determined by its flexible organizational structure where resources and operations can be adapted accordingly to best respond to changes. Since there may be varying degrees of uncertainty and ambiguity around

the changes that occur, organizations must be prepared to shift course when necessary, and in order to do this, flexibility is critical (Harraf et al., 2015). More particularly, agile practices allow for flexibility in choosing the optimum working style, processes and resources based on the opportunity at hand. Work cycles and project durations can also be modified on the run to effectively deliver the end result and are not restricted to rigid structures (LeMay, 2019).

By nature, agile is known to be incremental with self-organizing teams where processes and work structures emerge on the go (Boehm & Turner, 2006). Team members experience autonomy with respect to decision-making and organization of tasks. Moreover, agile is best built around a small group of motivated individuals, ideally hailing from multi-disciplinary backgrounds, who are committed to solving problems quickly and creatively (Rigby et al., 2016). Agile teams are cross-functional, where resources required to run the project from planning to execution are set up in a single team (Le May, 2019). When resources across silos are placed in the same team, it accelerates development and release of the product faster without time lag that generally appears due to coordination between different teams. This allows team members to plan and prioritize tasks through constant feedback and collaboration, thus enabling a quicker release of the final product. Rigby and colleagues (2016) suggest that agile has many advantages over traditional approaches. It is understood to increase team productivity and employee satisfaction. It creates efficiency by minimizing waste associated with excessive planning documentation and unnecessary meetings. Moreover, the cross-functional team set up where members from different disciplines collaborate is understood to build mutual trust and respect.

The agile manifesto (Beck, et al., 2001) emphasizes a culture of ‘people over processes’, where projects hinge on the competence and motivation of individuals and teams. The principle essentially highlights that people are more valuable than processes, and collaboration among them is the greatest asset within an agile organization (LeMay, 2019). Teams in an agile organization are driven by trust between the members, aided by an environment that encourages creative problem-solving and open communication (Rigby et al., 2016). Shaped by individual initiative and dedication, the agile culture promotes embracing change rather than avoiding it as a threat (Cummins, 2017).

Continuous improvement is at the core of any agile project cycle, where continuous feedback loops are established to enable this (Davis, 2013). Towards the end of the projects, teams discuss their learnings and address how both the product and processes can be improved in the

next cycle. This action is termed as *retrospective* and is understood to facilitate change where corrections are immediately initiated thus pushing the teams to continuously improve as they work their way through projects (Davis, 2013).

Top management plays an important role in the implementation of AWW. Rigby and colleagues (2016) insist that managers need to possess a strong understanding of where and when agile can be implemented. They are expected to play an active role when it comes to developing strategy, resource allocation, stimulating collaboration and empowering teams (Holbeche, 2018). The leaders must be willing to let teams work autonomously and extend their support when necessary in terms of quick decision-making and financial support (Rigby, et al., 2016; Le May, 2019).

## 2.2 Change capacity

There is a consensus among researchers and practitioners on the importance and need to develop organizational change capacity in today's rapidly changing world. Organizational change capacity has been studied in various settings (Judge & Elenkov, 2005; Klarner et al., 2007). Also, in connection to change experience and change project performance (McGuinness & Morgan, 2005; Heckmann et al., 2015). Some other studies also suggest prescriptions for building change capacity (Thames & Webster, 2009; Meyer & Stensaker, 2006; Buono & Kerber, 2010). However, the definition of change capacity as applied in these studies shows significant variations. For the purpose of this thesis, the most fitting definition of *change capacity* is the one presented by Buono & Kerber (2010) who define it as "*the dynamic process of continuous learning and adjustment, enabling the organization to thrive in the midst of ambiguity and uncertainty as well as implement those changes*" (p. 5). Here, the capacity to respond to multiple changes is central as opposed to changing just once.

Buono and Kerber (2010) further explained the actions that enhance change capacity, including creating an atmosphere of trust and transparency as well as forming diverse teams to encourage innovation and creativity. To build a change-supportive infrastructure, it is advised to create a fluid structure that allows for easy formation of groups. To ensure ongoing strategizing, teams must be devoted to scanning the environment for competition and new opportunities. As such, change capacity appears related and relevant for agility, yet incorporates more than flexibility and speed as it has to do with developing capabilities to continuously learn and adapt. Buono

and Kerber (2009) further emphasize on building change-supportive culture through information sharing, using a common language for change and encouraging questioning and experimentation.

Most notable literature on change capacity is focused on the organizational level (Judge & Douglas, 2009; Heslin & Marr, 2008; Meyer & Stensaker, 2006), and only few studies have been conducted at the individual level. However, a related concept named *change readiness* captures the same notion at the individual level. It is defined as “*a mindset that exists among employees during the implementation of organizational changes. It comprises beliefs, attitudes and intentions of change target members regarding the need for and capability of implementing organizational change*” (Armenakis and Fredenberger, 1997, p. 144). One notable study in this context was conducted by Cunningham and colleagues (2002), who found that employees with active positions with control over challenging jobs exhibited higher readiness for change and were more likely to participate in organizational redesign. Another study by Vakola (2014) emphasizes on creating an atmosphere of trust by encouraging open communication and feedback.

### 2.2.1 Dynamic capabilities

Dynamic capabilities are defined as “*the firm’s ability to integrate, build, and reconfigure internal and external competences to address rapidly changing markets*” (Teece et al., 1997, p. 516). Many studies can be found linking agility with three dynamic capabilities: sensing, seizing and transforming (Teece et al., 2016; Holbeche, 2015; Baskarada & Koronios, 2018). This is not surprising, as agile organizations handle constant changes and require such capabilities to continuously support them and gain competitive advantage. ‘*Sensing*’ refers to assessing opportunities and threats in relation to customers’ needs. ‘*Seizing*’ refers to mobilization of resources to realize value from the opportunities that arise as a result of sensing. ‘*Transforming*’ involves continuous renewal and reconfiguration of processes (Teece et al., 2016). From an organizational change capacity perspective, this study also examines whether AWW enables a firm’s dynamic capabilities.

In sum, this thesis explores if and how AWW contributes to developing change capacity at the organizational and individual level. AWW includes cross-functional and autonomous teams that employ specific methods to deliver results. The literature on agility claims that this way of working creates more flexible organizations that are able to respond to changes in the external

environment in a rapid manner. However, this has not been empirically proven yet. While a rapid response is important in VUCA environments, organizations need to develop a broader capacity for change enabling them to not simply set up teams that quickly solve business problems, but also allow the organization to change multiple times. This requires individuals that are ready for change and organizational dynamic capabilities (sensing, seizing, transforming). These key concepts will be used as a theoretical frame in the analysis.



### 3. Methodology

*In this section, I outline the methodological approach employed in answering the research question. Here, I start with providing an overview of the research design including the approach, strategy, and research setting. This is followed by an extensive account of the various methods used for data collection and analysis. Lastly, I address the research quality, limitations and ethical considerations.*

#### 3.1 Research design

The research design outlines the plan for how the researcher intends to answer the research question (Saunders et al., 2016). The purpose of this research is to investigate concepts which have previously not been addressed, hence making it exploratory and novel in nature. The literature on agility and change capacity has been developed over the years but is immensely fragmented, therefore making it impossible to answer the research question without finding new insights. Exploratory studies seeking answers to questions ‘How’ and ‘What’ are best addressed using qualitative methodologies (Saunders et al., 2016; Rich & Ginsburg, 1999). Moreover, qualitative methods make it possible to capture rich, descriptive data in a natural setting (Bogdan & Biklen, 2007) which is a prerequisite for this study.

This study takes a single case study approach where the phenomenon is studied within a real-life setting. Since the goal is to gain an in-depth understanding of the phenomenon and generate new insights, a case study strategy is considered valuable (Yin, 2014). Case studies are said to be highly instrumental in developing new theory where existing theory appears inadequate (Eisenhardt, 1989). Moreover, by taking a case study approach, it is possible to collect evidence from multiple sources (Yin, 2014). Bogdan & Biklen (2007) also claim that the best qualitative studies are those that employ techniques of in-depth interviews and participant observation, as these can lead to authentic and rich insights into the phenomenon. Therefore, in conducting this study, techniques including in-depth interviews, semi-structured interviews and participant observations were used.

##### 3.1.1 Research approach

This study utilizes a combination of deductive and inductive approaches. The research question emerged based on observations and reports of how organizations were attempting to respond to

a high pace of change in the external environment. Relevant research and definitions of the concepts were drawn deductively from existing literature. The questions in the interview guide were also initially developed deductively from agility and change literature. Further, an inductive approach is used in analyzing data and discovering new insights which were previously unaddressed. An inductive approach is deemed necessary when existing theory fails to sufficiently answer the research question (Eisenhardt & Graebner, 2007). The combination of both approaches creates flexibility in the interpretation of data, where existing theory serves as a starting point for reflection and new data allows for fresh interpretations.

### 3.1.2 Research objective and strategy

The objective of this research is to help academics and practitioners understand how agile is practiced in reality and how AWW may influence change capacity. There are plenty of discussions around the topic of agility and the numerous possibilities associated with it. However, there is a gap in research when it comes to establishing whether AWW actively influences change capacity and how this may occur at both the organizational and individual level. It is expected that filling this gap can benefit both academics and practitioners.

The single case study strategy is considered highly suitable as it makes it possible to observe and analyze a phenomenon that only a few have considered before (Saunders et al., 2016). The case is described as unique due to the richness of information it provides with regard to examining organizational agility and change capacity. Moreover, only a few firms with a similar history and background have been able to reap the benefits of going agile.

### 3.1.3 Research setting

#### *Presentation of the case*

All data used in the study is anonymized to protect the identity of the firm and its employees. Throughout the study, the firm is identified by the pseudonym, Bank Inc. This research involves a single firm, Bank Inc. that recently decided to go agile. Bank Inc. has an innovation and development division that is primarily responsible for running projects in an agile manner. While employees from this division work on the projects at almost full capacity, individuals working in different departments are also involved at times. To gain a holistic view of how AWW is being implemented at Bank Inc., individuals across different departments with varying levels of involvement in projects were interviewed. Data is collected through interviews, observations, and company documents.

### *Case introduction*

Bank Inc. is an independent small-medium sized bank based in Scandinavia and was established more than 140 years ago. In addition to the headquarters, Bank Inc. has another branch situated in the same city. It has two subsidiaries within real estate and housing credit and is also actively involved in finance and insurance services. In recent years, the firm launched a digital real estate division which was hugely successful.

Bank Inc. has a total of 100 employees spread across different divisions such as IT, customer service, marketing, innovation and development, digital advisory, housing credit and so on. The department most interesting to this study is Innovation and Development as it is actively involved in the firm's agile practices. The Director of Innovation who was appointed in 2015 leads this department and is also responsible for all digital activities at the bank, including marketing, customer service and digital advisory. All in all, the director's team extends to 50 members which is half of the bank. The director first introduced AWW in 2018 in the form of sprints. In the sprints, the teams work on different projects in a short period of time. Teams also refer to the sprints as projects. In two years, Bank Inc. has successfully transformed processes and created new products through sprints, hence making it a very interesting subject for this research.

## 3.2 Data collection

Data for this study was collected from a single firm. My supervisor, Inger Stensaker, negotiated access with Bank Inc. and made initial contact. Her help was immensely useful in setting up the very first interview with the Director of Innovation and Development at the firm, following which I was able to schedule the rest of the interviews. In this section, I first indicate the data sources and explain the different techniques used for data collection. Then, I provide a description of the sample as well as the interview process and scheduling.

### 3.2.1 Data sources

For this study, both primary and secondary data was used. Primary data was collected through different techniques including qualitative semi-structured interviews, in-depth interviews, and participant observations. During the observations, photographs and notes were taken.

Secondary data was collected from the company documents, workflows as well as the company website. All interviews were audio-taped, and data was transcribed.

### 3.2.2 Qualitative semi-structured interviews

Semi-structured interviews are valuable when the research is exploratory in nature and the researcher aims to capture opinions and feelings of the participant with the option of asking probing questions (Saunders et al., 2016). It is expected that participants are more likely to express their points-of-view when the interview is open-ended than when it is standardized (Flick, 2014).

Eight out of the ten interviews conducted were semi-structured in nature. An interview guide was created where questions were categorized into distinct themes based on theory and were designed to imitate the natural flow of conversation and stimulate dialogue with the participants (see Appendix A). The interview guide was also vetted by the supervisor. Furthermore, it was expanded to capture interesting topics discovered during the first round of interviews.

The semi-structured nature of the interviews provided plenty of room for flexibility, where questions were adjusted according to the participants' role and experience. The open-ended questions allowed for discovering new themes and asking probing questions where further explanation was required.

### 3.2.3 In-depth interviews

In-depth interviews provide rich insights into the subject's way of thinking; probing questions are further asked as topics unfold (Bogdan & Biklen, 2007). Such interviews are said to be particularly useful in exploratory studies where understanding the context and inquiring into the matter is essential (Saunders et al., 2016). Two in-depth interviews were conducted for this study.

The very first in-depth interview was conducted with the Director of Innovation and Development. Since the director was responsible for the sprints at the firm, they were in a strong position to share a top-level perspective; it was critical to allow them to talk freely. The interview was conducted on a two-to-one basis by Professor Stensaker and myself. It was very open, and questions were asked as the conversation evolved. While the interview was unstructured, as interviewers, we had a very clear idea of the areas we wanted to explore.

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Several themes were identified as the interview unfolded, which later on served as a solid foundation for conducting subsequent interviews.

The second in-depth interview was held with a project manager where the firm's internal agile workflows and the strategy document were explored. During the interview, the informant walked me through a PowerPoint presentation of the different workflows, lean boards and process mapping techniques used by the firm. Questions were asked as different frameworks were discussed. The PowerPoint presentation supplemented with the informant's descriptions were very useful in interpreting how AWW is being implemented at the firm. In the same session, the informant also showed me a digital version of the strategy document.

### 3.2.4 Participant observation

Observation as a method under primary data collection is said to be useful in enabling the researcher to examine behavior and non-verbal expressions of participants and cross-check them with other data (Schmuck, 1997). Moreover, it is possible to observe the duration of activities, dynamics at events and the general atmosphere. Participant observation is when the researcher enters the world of the participants with the objective of learning about them (Saunders et al., 2016). There are different ways of conducting participant observation; the method that appeared most suitable in the context of this research is observer-as-participant. Here the primary activity done by the researcher is observing, and the purpose is known to all. Taking on this role, I attended one of the stand-up meetings at the firm. The stand-up meetings are said to be one of the key elements of the firm's agile practices. The objective was to observe how these meetings were conducted, what they entailed, and what kind of interactions the participants had with each other. During the meeting, I silently observed and attempted to minimize my presence as much as possible to not influence the behavior of participants in any way. The observation itself was qualitative in nature, where I continuously took notes and also collected evidence in the form of photographs. Photographs are most commonly used in concurrence with the participant observation technique and allows the researcher to capture details that might otherwise be easily overlooked (Bogdan & Biklen, 2007). These were valuable when supplemented with participants' descriptions of the stand-up meetings. All observations from the meeting are presented in the 'Findings' section.

### 3.2.5 Secondary data

Secondary data was collected in the form of images of the firm's strategy document, workflows, and visual illustrations prepared by the teams. Additionally, information available on the company website was used. The strategy document and workflows consisted of textual and non-textual (pictures) data and were presented to me by one of the informants in an in-depth interview as previously mentioned. Since these documents were only meant for internal purposes, they were not physically or digitally shared with me. However, extensive notes were taken throughout the presentation along with some photographs for visual evidence with the permission of the informant. These were very valuable in informing the study and are presented in the 'Findings'.

### 3.2.6 Sample

Given that this is a case study, purposive sampling technique was utilized. This works best with small sample sizes, especially when the researcher wants to gain maximum information. Moreover, to ensure the richness of data, the informants were chosen based on their varied roles and level of involvement in the sprints. Some informants utilized up to 90 per cent of their capacity working on sprints and some others below 30 per cent. Additionally, an informant who was previously involved in the sprints and has now moved on to another role was interviewed. Another informant who worked on a very successful project prior to the implementation of AWW was also interviewed as it was said that learnings from this project were instrumental in running the sprints that followed. This made it possible to gain diverse insights into the phenomenon. An individual from top management was also interviewed. Altogether, 10 interviews were conducted, where one informant was interviewed twice on two separate occasions. The list of informants and their background information is presented in Table 2 on the next page.

*Table 2: List of informants*

INFORMANTS	THEIR ROLE IN BANK INC.	DESCRIPTION
INFORMANT 1	Director of Innovation and Development	Part of top management. Has worked in the bank for the past five years and is currently in charge of AWW.
INFORMANT 2	Product and business developer	Part of the Innovation and Development division and functions primarily in the role of project leader in sprints. Majority of their time is spent on sprints. Has worked at the firm for more than 10 years.  This informant was interviewed twice. The first time was a semi-structured interview following the interview guide. The second was in the form of an in-depth interview to learn more about the agile workflows and strategy document of the firm.
INFORMANT 3	Product and business developer	Part of the Innovation and Development division and functions primarily in the role of project leader in sprints. Works 90 per cent on sprints. Has worked at the firm for 15 years.
INFORMANT 4	Head of digital advisory	Works 20 per cent on sprints and 80 per cent in digital advisory. Has worked at the firm for 15 years.
INFORMANT 5	CEO of digital real estate division	Heads the successful new division at the firm which was launched recently through a similar style as the sprints. Has worked at the firm for 12 years.

INFORMANT 6	Head of customer service	Works mostly full time in customer service and also works on sprints when specific expertise is required. Has worked in the bank for 10 years.
INFORMANT 7	IT Developer	One of the three developers at the firm. Works at 85 per cent capacity on sprints. Has worked at the firm for a year.
INFORMANT 8	Product and business developer	Part of the Innovation and Development division at the firm and functions primarily in the role of project leader for sprints. Works 90 per cent on projects. Has worked at the firm for 5 years.
INFORMANT 9	Customer advisor digital	Was previously involved in sprints but had to move on to a different division due to flexible hours post maternity leave. Has worked at the firm for almost 10 years.

### 3.2.7 Interview process and scheduling

After negotiating the access for data collection, the first interview was conducted with the Director of Innovation and Development by Professor Stensaker and myself. This was an in-depth interview and lasted for approximately one hour and twenty minutes. At the end of the interview, the schedule for the remaining interviews, the stand-up meeting as well as potential participants were discussed with the director. The remaining interviews were conducted by myself in two rounds approximately two weeks apart. Four participants were interviewed in the first round and five more were interviewed in the second. This provided us with sufficient time to reflect on the findings of the first round of interviews and adjust the interview guide accordingly. Additionally, after the first round of interviews, special requests were made to interview candidates with specific experience in the subsequent round given their potential value to the study. I attended the stand-up meeting on the same day as I conducted the first round of interviews.



Saunders and colleagues (2016) suggest that establishing personal contact is crucial for building a rapport with the participants and deriving the most out of the interviews. Therefore, all interviews were conducted in person, except one which was conducted over the telephone. This was necessary to accommodate the convenience of the participant.

Before starting every interview, I gave the participants a brief introduction of myself and provided necessary information around the research. I also took them through the FOCUS consent form and explained how the data will be used and stored (see Appendix B). They were assured that all data will be anonymized and that they had the right to withdraw at any time.

After the participants signed the consent form, interviews typically began with the participants sharing background information about themselves, including a brief description of their past and present professional roles, education, and tenure at the firm. Questions from the interview guide were followed based on its relevance to the context. The open-ended nature of the interviews allowed me to explore undiscovered themes thus presenting new potential to the research question. The participants were very forthcoming in sharing information which was a significant advantage to the study. The interviews were conducted in English. However, since Norwegian was the first language of all the participants, they were encouraged to use Norwegian expressions on occasions where it was challenging to come up with accurate English terms. This was handy not only in capturing the accuracy of the statements, but it also made the participants feel more comfortable. Moreover, as I have a good understanding of the Norwegian language, there were no issues with interpretation. At the end of the interview, participants had the option of asking questions or clarifying any topics that were discussed earlier on. The recorded audiotapes from the interviews were later transcribed into text files.

### 3.3 Data analysis

Data analysis is described as the process of systematically finding and organizing materials collected from the field with the goal of enabling the researcher to present the findings. In this section, I explain the approach taken for data analysis along with the rationale.

#### 3.3.1 Data preparation

All data from the interviews was transcribed for accurate interpretation. A reliable online software called AmberScript was used in the process. To ensure that all the data was transcribed

without discrepancy, I also double-checked them manually. Materials from secondary data and observations such as photographs were also catalogued and organized in preparation for the analysis. A photo tool was used to blur out images with participants and other sensitive information. Therefore, all images presented in the findings are blurred.

### 3.3.2 Initial coding

In data analysis, grounded theory coding was followed which made it possible to study actions and processes. It is said that coding enables the reader to define what is happening and interpret what the data actually means (Charmaz, 2006). A code is a single word or short phrase which represents the data (Saunders et al., 2016). Following the steps indicated by Charmaz (2006), initial line-by-line coding was performed where patterns were identified and labelled with corresponding codes (see figure 3.3.2). All data was taken in its entirety and coded carefully. Following the interview guide closely during data collection generally makes coding simpler as most topics are already categorized by default, however, it is common for participants to deviate or address similar topics in different contexts, therefore conducting line-by-line coding was important. Moreover, it helps the researcher to keep an open mind and observe nuances in data (Charmaz, 2006). Initial coding was very useful for becoming familiar with the data and closely observing potential themes. This set the stage for organizing the data into distinct categories.

I2: It's very different in terms of...that your set goals for a limited amount of time. And you have a mandate, and you say this is what we're going to do for this period. This project. And it basically gives you the right fuel to deliver something in the expected time you're supposed to deliver. Instead of having just a role in the bank and this is my responsibility and blah, blah, blah. Then you have plans in the future but nothing concrete. So I think what we do here... it helps. If you are thinking about the transparency in the organization, we have... the way we do hear about the progress that we draw that the reports everyone can come and listen and see what we are doing...and...I think the best thing about this is that we are different people... are set together to work in order to get something in place. So we have marketing people, the developer, the product manager, and the staff that really can... the products are all mixed together. So if we haven't done this, I'm not sure whether we could have produced so...rapidly things we are doing as we do now. Yeah. So in terms of speed ...and communication and understanding.

I2: To me, it's quite obvious because you work across the silos, you work across the departments, you have access to resources you normally don't have and being together in the projects is very valuable. So you don't have to do something on your own then check out with other people afterwards... and all that was wrong, and you go back again and it's more efficient. And it also helps the rest of the organization to understand what we actually are doing. And it keeps up the speed because if you work together... it works more quickly than if you don't. So what we have done is basically to turn things upside down, if you see a retrospective of what we have done before

Samyuktha Kam... Short-term goals/ Fast pace: ▾

Samyuktha Kam... Change in approach: There is a shift

Samyuktha Kam... Communication leading to ▾

Samyuktha Kam... Cross-functional teams: Individuals

Samyuktha Kam... Ability to produce rapidly: it is a ▾

Samyuktha Kam... Main elements that stand out: ▾

Samyuktha Kam... Cross-functional teams: working ▾

Samyuktha Kam... Cross-functional teams: Helps verify

Samyuktha Kam... Better knowledge of what is going ▾

Samyuktha Kam... Cross-functional teams: creates ▾

Samyuktha Kam... It is more quick than working in ▾

Samyuktha Kam... Opposite of what they were doing ▾

Figure 3.3.2: Example of initial coding performed on data. On the left side, the transcript is presented, and on the right side, respective codes are assigned along with short representative sentences.

### 3.3.3 Focused Coding

After the initial coding, focused coding was performed to determine the most significant codes that could further categorize the data completely. Following Charmaz's (2006) guidelines for focused coding, all codes were revisited, some were even revised when new threads became apparent. It made it possible to compare data across interviews hence refining the concepts further. After clear categories emerged, data was rearranged into separate files accordingly. These were initially grouped into categories of why the firm did it, how they did it, and what they achieved. This made it possible to draw a clear demarcation between antecedents, actions, and outcome. Within each of these categories, themes were further identified and organized accordingly (see figure 3.3.3) and data was compared. In some cases, data was applicable to more than one theme which was also carefully accounted for. The categories were then narrowed down to *actions* taken by the firm represented by *AWW* and *outcome* represented by *change capacity*. Change capacity was further categorized into organizational and individual change capacity. As the research question is mainly concerned with identifying if and how *AWW* influences change capacity, a model was created based on the findings under actions and outcome. This allowed for capturing the most significant findings under the categories of *AWW*, organizational change capacity, and individual change capacity. The model is presented in the 'Discussion' section to enable the reader to navigate through the discussion in a systematic manner.

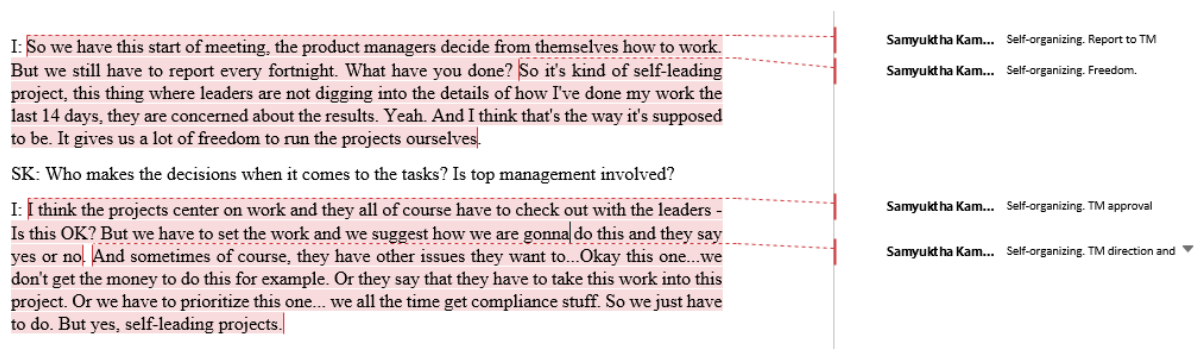


Figure 3.3.3 Example for focused coding, where data is regrouped according to significant themes identified within three initial categories. In this example, the theme was self-organizing teams with a link to top management.

## 3.4 Research quality and methodology limitations

This section sets out to establish the quality of the research by addressing suitable measures for its assessment with an explanation of the steps taken to further strengthen it. Limitations of the methodology in use are also discussed. *Validity* and *reliability* are generally described as key measures for determining research quality, especially in the case of quantitative research. Validity encompasses internal and external validity, where the former determines whether the research accurately establishes a causal relationship between the research variables, and the latter refers to the generalizability of the research findings (Saunders et al., 2016). The measure of reliability establishes the replicability of study, and if the study would yield the same results if it were to be performed by another researcher (Saunders et al., 2016). However, for qualitative research, scholars consider these measures as inappropriate for assessing the quality given that this nature of research is based on socially constructed realities of participants (Denzin & Lincoln, 1986; Walle, 2015; Saunders et al., 2016). As a solution, Lincoln and Guba (1985) proposed alternative measures called *credibility*, *transferability*, *dependability* and *conformability* which aids the researcher in establishing the trustworthiness of the research.

As described by Lincoln and Guba (1985), *credibility* determines the plausibility and reliability of the research findings. Similar to external validity, *transferability* establishes whether the findings are applicable to different settings. *Dependability* is parallel to reliability and determines if the study will lead to the same outcome when performed on different occasions by different researchers. *Conformability* establishes the objective approach taken by the researcher, ensuring that personal biases do not influence interpretations from research. For this research, the aforementioned measures are considered most fitting in determining the research quality.

### 3.4.1 Credibility

Credibility is the extent to which the study captures the true and accurate description of the phenomenon as intended by the participant (Saunders et al., 2016). In qualitative studies, it is also referred to as ‘truth value’ and indicates whether the researcher was able to interpret the subjective feelings of participants without any form of manipulation (Walle, 2015). To ensure credibility, a range of techniques were applied. Creswell & Creswell (2018) insist on using multiple approaches, as it not only improves the researcher’s ability to evaluate the accuracy of the qualitative findings but also convinces the readers of that accuracy.

Firstly, data was gathered from multiple sources such as semi-structured and in-depth interviews, observations, company documents and so on in a process called *triangulation*. *Triangulation* is combining different sources of data, methods, and perspectives with the intention of cross-checking information (Guba, 1981). Themes developed upon resultant converging data are said to strengthen the credibility of the study. Primary data was gathered from multiple informants holding different positions at the firm. This accounted for different perspectives and representation of their realities. I was also able to gather evidence from the stand-up meetings in the form of observations. Data collected from secondary sources such as company reports, and workflows also proved to be valuable in verifying coherence of the data. Themes emerging from the analysis were supported by more than two pieces of evidence. Moreover, vast amounts of literature were reviewed and examined in the process to aid thorough search for explanations (Guba, 1981).

Secondly, debriefing sessions were held with my supervisor where different possibilities around the study were discussed. Critique from these sessions was valuable in questioning observed patterns and rethinking concepts. Incorporating this into the study is understood to have further strengthened the overall credibility.

Thirdly, negative cases were also accounted for during the analysis to provide the best possible explanation of the phenomenon. This made it possible to retain only those themes that were verified by an adequate number of informants.

In the case of informants whose involvement in the projects is not as extensive compared to some others, or the informants whose involvement is only limited to a few projects in the past, it is possible that they may not fully recall minor details around the processes used during the sprints. But in order to adequately mitigate missing out useful facts, responses from those informants who are fully involved in projects were used to verify information especially when it comes to timelines of sprints and use of different tools.

### 3.4.2 Transferability

Guba (1981) claims that in qualitative research, all phenomena are context-bound and are not meant for general applicability. The merit of such research is based on the findings that are unique to the situation (Creswell & Creswell, 2018). Transferability refers to the ability to transfer findings at a general level to a different context. This research is a case study and mainly exploratory in nature, where the phenomenon is studied in the given context and valuable

information is extracted. The goal was to obtain rich and dense information that could be instrumental in understanding the phenomenon rather than assuring its representativeness. The purposive sampling technique allowed for maximizing the range of relevant and useful information. Upon providing information about topics I was looking to investigate, a contact at the firm recommended appropriate candidates for the interviews. These candidates were carefully chosen based on their history and involvement in the sprints at the firm. Furthermore, the varying roles and degrees of experience of the informants were taken into consideration so as to capture different angles of the phenomenon. In order to give the readers a complete understanding of the context, the background information of the firm and informants is presented in the 'Research setting' and 'Sample' sections respectively. This along with a rich description of the context at each step is expected to allow the reader to make independent judgements whether the findings can be applied to different settings.

### 3.4.3 Dependability

Dependability is defined as the extent to which the study is considered reliable in the event that it is replicated on multiple occasions (Saunders et al., 2016). Maintaining consistent standards throughout the research methods is critical to strengthen dependability (Guba, 1981). While replication of qualitative work is described as almost impossible as it is built upon the uniqueness of the situation (Walle, 2015), it is possible to maintain a standard that the research can be anchored to. One way this was achieved was by developing the interview guide with appropriate themes based on literature and then following it as closely as possible. Given that the in-depth and semi-structured interviews were primarily exploratory, it was common to deviate into new concepts, but such observations were noted, and subsequent revisions were made to the interview guide to account for this. The idea was to learn from informants' descriptions of the phenomenon and not to manipulate them (Walle, 2015).

Another way the dependability of the research was strengthened was by asking participants to compare a successful project with a failed one. This is said to ensure consistency allowing the researcher to verify discrete concepts described by the participants over and over again. This is also understood to be valuable in developing theory (Slevin & Sines, 2000).

Dependability can also be strengthened by giving a complete account of the processes and methods used in the course of research (Saunders et al., 2016). This thesis, therefore, includes a detailed description of all the steps and processes that were undertaken. The processes were

also examined by the supervisor to verify that they fall within the generally accepted guidelines of research.

#### 3.4.4 Conformability

To achieve conformability, it is crucial that the researcher maintains objectivity and refrains from any bias that may influence the performance and outcome of the study (Guba, 1981). Generally, in qualitative research, it becomes necessary to build a rapport and sense of closeness with the participants to derive the most from their descriptions of the phenomenon. However, this can be detrimental in maintaining objectivity as there is a risk of over-involvement (Walle, 2015). This was accounted for by establishing a clear research design. Moreover, in my interactions with the subjects, I maintained appropriate distance and practiced neutrality. All findings are presented as summaries along with quotes to capture the descriptions as intended by the participants. The supervisor's involvement at various stages, such as during the interview process and discussion of the findings, were valuable in confirming the concepts and methods in question. A journal was kept throughout, where observations were recorded and discussed with the supervisor during meetings. Moreover, the study follows an extremely transparent process, where all steps are documented and can be easily located by other researchers in the event of replication.

However, there is always a risk that participants may withhold information during the interview process due to a lack of trust. This was attempted to be minimized by providing consent forms that ensured confidentiality. Moreover, the participants were assured that the audiotapes of the interviews would be deleted after their use.

#### 3.4.5 Ethical considerations

Ethics are defined by the code of conduct that guides the researcher's behavior in connection to the rights of those who are instrumental to the work or are affected by it (Saunders et al., 2016). In conducting this research, ethics were considered at every stage. Subjects taking part in interviews were given sufficient information in advance as well as at the beginning of the interview. Their right to confidentiality was explained to them and a written form seeking their consent was also obtained. Participants were allowed to withdraw from the study at any stage and were provided with the necessary contact details for doing so. Identities of all participants are anonymized and any data drawing connections to them has been replaced by aliases. Consent was also sought when collecting photographic evidence of the stand-up meetings and

workflows. Moreover, images with people and sensitive information are intentionally blurred out such that subjects remain unidentifiable. Data has been stored securely to further ensure protection of the participants' identities. In processing data, objectivity was maintained, and data was presented as they were intended by the participants. Finally, a draft of the thesis was also sent to the case company for verifying facts.



## 4. Findings

*In this section, I present the analysis of the findings from the data collection. The findings are organized under two distinct categories outlining the actions representing agile ways of working (AWW), and the outcome representing change capacity at the organizational and individual level. In the first part, the firm's actions including different elements of AWW are presented, followed by an analysis of how these actions have influenced organizational and individual change capacity.*

### 4.1 Actions: Agile ways of working (AWW)

The first in-depth interview with the Director of Innovation and Development served as a solid starting point for understanding the events that led to the adoption of AWW at Bank Inc. and most importantly, how it is being implemented currently. The director's description of the history and current set-up of the AWW is presented in the form of a summary below. This is followed by a detailed analysis of the emergent themes along with evidence in the form of quotes from the rest of the informants.

#### Overview

AWW was first implemented after the appointment of the Director of Innovation and Development in 2016. The director came with extensive experience of working on change programs and lean methods. Starting with the basics, the director focused on reducing unnecessary costs related to IT and simultaneously turning around the decline in customers. With the onset of digitalization in banking services, the firm had a strong need to strengthen its digital front to retain old customers and attract new ones. Furthermore, it had ambitions of creating a holistic digital experience for customers right from internet and mobile banking through to online loan applications. Due to limited capabilities, the firm was already seeking help from an external strategic partner to support its IT requirements. On discovering that they were bleeding enormous IT costs through the years, the director renegotiated contracts at reasonable terms thus saving the firm a significant amount of money. This was described as a turning point, where the director not only won the confidence and trust of the higher-ups but also freed up funds that could be internally invested in technology and innovation. Additionally, the director revisited internal processes supporting the digital infrastructure and noticed severe

under-utilization of existing capacity which appeared to be an easy fix. This was another quick win, where the director's intervention drove capacity utilization from 30 to 90 per cent. The director thus set in motion a series of changes which was previously not considered by the firm. These actions were met with appreciation from members of the top management and board, which proved to be valuable for the director's next ambition for introducing AWW at the firm.

The director is a firm believer that change will not happen unless leaders drive it. Anchored in this notion, sprints as an agile way of working was newly introduced at the firm at the beginning of 2018. It started with a large workshop, where all employees were invited to propose and discuss new ideas that could propel the firm's success. Simultaneously, the director saw it necessary to change the way the strategy of the firm was presented such that it could support the firm's agile practices. This saw a complete overhaul of the strategy presentation going from a lengthy document that employees did not read or comprehend, to a concise action-plan that was easily understandable and relatable. Moreover, the strategy was modified such that the long-term vision and values were preserved while highlighting short-term goals associated with the sprints. Previously, the strategy document remained untouched for up to five years at a time. Now, to accommodate the short-term goals guiding the sprints, the strategy document is revisited and updated twice a year. This is understood to not only set a clear direction for the firm but to also create a common understanding among employees regarding the firm's current actions and future plans.

Ideas for sprints are sourced from employees throughout the organization, involving topics related to technology, customers, employees, society, regulations and so on. These are later reviewed by the director of innovation and filtered based on whether they are a good fit for the overall strategy and values, and whether they can be realistically implemented through sprints based on factors such as time and availability of resources. In the first workshop, the firm collected up to 700 ideas; it is up to the director to shortlist and prioritize the ideas before proposing them to the board for approval. Usually, ideas that are relevant and appear urgent with respect to circumstances receive final approval from the board and are later converted into sprints. Availability of funding is also an important criterion when picking the ideas. Moreover, to regularly assess the validity of backlog ideas, the firm has set a process in place where all ideas are reviewed every six months and those that still appear relevant are subsequently scheduled as sprints. Internally, sprints are also referred to as 'projects'. A sprint can last for 16 weeks or six months, at the end of which a final product is delivered. On occasions, the duration is further extended.

After short-listing and prioritizing the projects, resources are allocated to them based on the required competence. Out of the 100 employees at the firm, at least 20 are said to regularly work on projects. They can either voluntarily sign up for it or be assigned by the director if they have unique skills that are necessary for the project. The firm uses an online questionnaire to assess individual interest in different projects. Employees working in different departments may also be invited to work in sprints. The teams are cross-functional, where resources from different divisions such as IT, marketing, customer service and so on work together. A leader is appointed for each project, who is in charge of managing the day-to-day activities of the team and reports directly to the director on a regular basis. The size of the teams working on each sprint can vary depending on the project; generally, teams can involve three to seven members. Bigger projects may involve up to 20 members, however, these are divided into sub-projects with smaller teams of up to four or five members. Internally, projects are categorized into five main areas – customer, digital, society, people, ‘Kroner’ or money. All projects fall within the set categories and are planned for every six months. The firm works on up to 18 projects including sub-projects every six months, some of which are carried over to the next period.

To better understand what these projects entail and the objectives behind them, the informants were asked to provide a few examples of some of the projects they have worked on.

Example 1:

*We had a very, very, big project. A couple of years ago, we looked into how the advisors in the bank are working, because everybody said, ‘we don't have time for the customers. The whole day is not so good structured. We hardly have time to talk to them.’ So, what can we do with that? And we had a big, big, process finding out ‘what to do’. And we are working with... we are using the Lean methods. And in such projects, not just deploying a system, but if we want to find out something... I'm doing a similar thing today about...digging into the diagnosis - what's the real problem here? What's the real problem of this situation? And we interviewed people and we did quite a lot of research to find out - why is it so busy? What are the advisors doing? How much time do they really spend with our customer today? And what can we do about it? So in the end, we changed the way they produce the loans that somebody else should do it because this is not efficient. Because most of the cases went to another committee to have that accepted or rejected. And we also said that all the administrative things that you do with the customer, if they want to change*

*something, it should be done by somebody else. You could just produce. And then we had...after the diagnosis, when we saw that this is how we are supposed to do it, we also made the system... kind of CRM system ourselves. That made it easier for them to have control over their portfolio. And from the diagnosis to the design to the implementation, I think that was really good steps and we did it very thoroughly. So, I think that's probably the biggest project we have run in terms of doing some changes in the back.*

**Example 2:**

*The theme of the project was...we wanted to take applying for housing loans to a new level. So we had... first, we had many inputs about things that we needed to do to be able to lift this to the next level. And then I described different contributions - how we could work with this and what we could produce or do to make this happen in real life. And then we prioritized all the contributions and then I handed it to the administration. And they were happy with what was prioritized, and I had one new contribution, within the separated step that we should work with later on. And then we took on the sub-projects. We know what we should do, how we should do it and which kind of competence we needed to be able to do this. So then we had our project group set up, and we were all really small groups at least in all but one sub-project. And I think that being in small groups of 3 and 4 was really key to be efficient, effective and getting everybody to contribute to what we're doing. And we had one of the sub-projects - like you have... people from IT, you have people working operational who want to be sure that everything is really going the way it should be going. And you have different departments within operational, like a business team and one working with the private customers. And then you have the legal department. And here in this project, you have all of them coming together.*

**Example 3:**

*One of the good projects was that - I'm head of the digital advisory team: So before, we actually had the program called loan process. It's where we put in all the data from the customers. So for income, children, cars, whatever. So everything we needed before, we need to type in manually. So they sent us by mail or they came into a meeting, and they handed us tax returns and whatnot, and we needed to write all of that in. When we started the digital team, we also then implemented the digital*

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*process of applying for a loan. So that was really interesting to be part of. Because maybe before we didn't think that it was possible doing this. But as we worked on the project, we saw that everything was really possible. So now the customers, they go online, and apply for a loan and they type in all the different data themselves, and they also give us consent, so that we can go in and withdraw their payslips and the tax returns and whatnot from Altinn. So we took all of the pieces and put it together and made one application, so it would be much easier for the customers to apply. And so when we started to look at the applications, we had much more data from the beginning. So it goes much faster for us to process applications. If we have all the data, we can give the customer or potential customer the answer the same day.*

In the examples, various themes related to AWW come to the forefront simultaneously including, processes, teams, methods, and so on. To gain a deeper understanding of AWW as practiced at the firm, it is necessary to examine these themes individually and understand the different elements and characteristics tied to it. For this, responses from informants working on the projects are analyzed. As the findings revealed a variety of topics, these are categorized under representative themes of *team structure, processes and methods, culture, and top management support*. Each of these themes is addressed and analyzed individually along with quotes in the following sections.

#### 4.1.1 Team structure

As the projects are entirely driven by teams, it was important to gain an understanding of how the teams are organized and the factors that contribute to their success or failure. The responses shed light on many aspects including how teams are set up, how project streams are created, and what guidelines are followed.

The findings show that before every sprint, members have the opportunity to indicate their interest in upcoming projects. Top management later evaluates these applications and finalizes the teams. Here, project leaders also have the freedom to request specific resources depending on the skills they require.

*So before every sprint, the leadership decides what to prioritize, and we see ourselves - which kind of project we want to attend to? What kind of process or*

*project we want to lead? And when that is set, everybody doesn't get their wishes of course, but when that is set the project manager needs to say what kind of resources do I need? And sometimes, we just say what kind of resources, and sometimes we say the name. Depending on whether it's important to have the right person or whether it's just the skills.*

Every project involves a project stream run by a designated team. Often the large scope of deliverables on some projects require further division into sub-projects. These are then categorized into individual project streams. Different streams have their respective mandates with teams allocated accordingly.

*And after we had found out who was going to work on the project, we then decided this is such a big thing that we need to divide it. So we had different project streams to pull it off. So we had three different streams. And we had different people in the different streams, but we are also coming to meetings that everybody joined. And they have specific... specific mandates in every stream. What we are going to look at here... and then what we do... and what do we think we will achieve with it all.*

Teams with three to four members are described as a small team in this context and are considered to be more effective.

*We split the project into four streams. I think we were three or four people on every smaller project. And then we saw that sometimes or actually every time it's more efficient to work in smaller groups.*

*I think smaller teams are better because you don't have to communicate that much information to the entire team. When it's a big team, you have to speak to other people and then some part of their tasks or expectations are lost when the communication is spread around the group. Yeah with a small team, you can have it more concise.*

Further, when it comes to the team set-up and guidelines they follow, the findings indicate that teams are *cross-functional* and *self-organizing* in nature. Interesting evidence was found in this regard, and therefore these are addressed separately in the following segments.

## *Cross-functional teams*

Described as highly cross-functional, teams working in sprints comprised of a mix of resources depending on the size and expertise required to deliver the project.

*It's a really big project, so it requires not only the developers but also some from the marketing department and also others from the bank.*

Involving members from specific departments is seen as valuable due to their expertise in the required areas. Moreover, this set-up is necessary to come up with the right solutions and to avoid thinking in isolation.

*We also started with what kind of people do we need in this project. And it was very important to have advisors leading us from the Private Market department. So that will be included. So, it's not just our fancy ideas. But they are actually involved and coming up with solutions themselves. That's a very important part of how we work, so that we are not in our own world up here and not including everybody else.*

The core team is usually fixed with one project manager and up to three members. In the case that additional expertise is required, other members of the firm are also invited to consult on projects. Having access to additional resources when necessary also helps keep the speed up.

*So, I think the good thing about these projects is that there may be one project leader or project manager and then two or three other fixed members. And then they ask different people in the organization if they can come in and bring their expertise when they need it.*

*So we took these groups down and we said that OK, these three people will actually be in the project. And we can use some resources to lean on or to use to check out along the way because that way we can get more speed.*

An informant expressed that the cross-functional set-up is an essential part of AWW, making it possible to access diverse resources. It is more efficient as all resources necessary to fulfil the job are set within a single team and it is possible to get quicker feedback and produce rapid results.

*You work across the silos, you work across the departments, you have access to resources you normally don't have and being together in the projects is very*

*valuable. So, you don't have to do something on your own then check out with other people afterwards...and if all that you did was wrong then you go back again. It's more efficient. And it also helps the rest of the organization to understand what we actually are doing. And it keeps up the speed because if you work together... it works more quickly than if you don't.*

### **Self-organizing teams**

Further, when the informants were asked about how they planned and organized their work, it was found that teams primarily decide between themselves how they intend to tackle the tasks at hand. When it comes to following guidelines, the teams borrow from the lean method in addition to creating their own guidelines. One of the informants claimed that it also largely varies according to the job at hand and people involved.

*I think we made our own guidelines in the beginning. This is how we want it to be. We used lean method for guidelines to how...actually, it all depends on who we are, which process it is. Sometimes, it's very important to have all employees with us and they understand how we work, why we do this. We are actually depending on everyone to get on with it. And sometimes if it's just implementing a process or new product, it's not that important that everyone understands along the way.*

Another informant stressed that each project is different and there are no hard and fast guidelines that are followed. In fact, they make their own rules. It is mostly up to the project managers to run the projects as they see fit.

*The thing is that every project is so different...what we all do similar is that we have a startup meeting. We decide what manner we should have, what goals we should reach. And then it's up to the project manager how the project is run. Because it could be quite a big difference regarding what the project is all about. So sometimes you have weekly meetings, sometimes we have meetings every day. Sometimes it's about the system, sometimes it's about people. And you also have different people in the projects. And I can tell you that I've been Project Manager for a few years now, and every project is very different from another because of the people joining the project.*

The manner of working on projects appears flexible; it is completely up to the team's discretion how often they want to conduct meetings and what tasks they take on.



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*We had a structure that was on a top-level. We said we have meetings twice or once a week depending on what... and then we said this week we are going to work with this.*

The findings further revealed that the teams did not have a set protocol or guidelines that their superiors expected them to follow while working in sprints. On the contrary, they have the freedom to make their own rules at the beginning of projects based on the deliverables. This indicates a level of autonomy practiced on projects, where team members have a free hand when it comes to determining and following a working style that suits them. Moreover, top management is concerned with results and did not interfere in daily activities, thereby giving the teams the freedom to choose how they accomplish their tasks.

*Don't use any specific guidelines, but we use time in the beginning of the project to set our own rules based on - what are we supposed to do? What are we supposed to deliver? How are we supposed to work? Are we going to have small and often meetings or we're going to have big workshops meetings or how do we want to solve this? I think we make them as we set the project group. We make a set of rules on how to follow this project.*

*So, we have this start meeting, the project managers decide for themselves how to work. But we still have to report every fortnight - what have you done? So, it's kind of self-leading project, where leaders are not digging into the details of how I've done my work the last 14 days, they are concerned about the results. And I think that's the way it's supposed to be. It gives us a lot of freedom to run the projects ourselves. Of course, there could be issues with this. If you're not a self-driven person, that could be an issue. But most of the times I think this is just getting more fuel to the engine...because we are trusted to do the work. And I think that is very good. There's not just transactional leadership. This is a whole different story. And I think that benefits us.*

Another informant argued that project teams may receive instructions and they tend to act accordingly, but at the same time have plenty of space to initiate new things on their own. Moreover, there is a sense of ownership among team members pertaining to tasks that need to be completed.

*The good thing here is that everybody has to do as they are told, or they are planning to do. But also, the good thing is that people can start to do something by themselves and give that into the project. The project manager may not always be the one who says, “go, and do that! Go, and do that!” But people are proactive and understand themselves that they need to go and bring....or talk to that person to get that insight, or talk to this person and get the insight.*

#### 4.1.2 Methods and processes

The second theme indicates the different methods and processes adopted by the firm as part of AWW. As mentioned previously, the firm implemented the *sprint* agile method; exploring this further revealed more characteristics with regard to timelines, continuous improvement, and flexibility. Further, it is found that the *Kanban* board is used for managing tasks. *Process mapping* is used for driving efficiency in processes by eliminating waste. *Stand-up meetings* are held to openly share information. *Visualization* in the form of drawings are used to report periodical progress. Each of these elements is explained separately in the following segments.

##### *Sprints*

The duration of a typical sprint at Bank Inc. is 16 weeks. However, for larger projects, the sprints can last up to six months.

*The sprint is 16 weeks. That can vary. Because if it's a big project, it's from January to June. If it's a shorter one, then it's finished faster, but it depends.*

There is also an option of splitting a single sprint into multiple smaller sprints in the case that it is too large to accommodate in one go. Although the actual sprint period itself is described as very busy, teams get to pause and use the time between sprints to reflect and plan ahead. In doing so, there is a focus on continuous improvement, where potential solutions are evaluated critically to arrive at the most appropriate one. The time-boxed format allows members to reflect and learn from past projects and subsequently improve.

*You don't work with the same project for ages unless it's a big, big project. We can split it up and put it into more sprints so that you always know that - okay. It's gonna be very hectic for these 16 weeks, and then you know there's a pause in the end or*

*in the beginning and you learn so much from it... because every sprint we would have to plan for the new sprint.*

*I think we're getting better and better to always think about how we can improve. It's not always just take this task, put it in and do it digitally. It's very often that we have to see - okay, but can we do it easier before we do it more digital? Or do we do it easier for the customers? Do we have to do everything? I think maybe "do we have to?" is the question we ask most of the time.*

One of the informants expressed that the short duration of the sprints created room for flexibility. Changes in circumstances can be easily accounted for, should the initial plan not meet the expectations. Moreover, flexibility also extends to decision-making with regard to using appropriate methods and adjusting the timeline for achieving optimum results. It is possible to shift focus between projects, pause, and revisit when necessary.

*Because we have these shorter sprints. It's easier just to say okay this is our priority now for these three more months. If it doesn't pan out or something, you can kind of shift the direction in the next sprints. So instead of like data gathering a year to create something and then finding out that it's not relevant anymore. So, I think the shorter time span is nice for flexibility.*

*I think it's really flexible. You just have to communicate what you need to change and or what kind of methodology you want to use or add to do different projects. And yeah, it is possible to change. So just this fall, I had one project that I last week decided to not do... to just stop for now. We will start up again in three weeks, and that is just because I want to be more clear about what is most important for us. We have done all the research that we needed to do about how this customer testing should be done. But we're not ready to test yet. So, it's better for me and for all the other people within the project to stop and do other things. It needs time, but not now. So just do whatever you need, and we will start up again.*

At the same time, it was found that if new ideas emerge externally during the sprints, they are put on the waiting list of ideas which are reviewed every six months. This indicates that while there is a great amount of flexibility in running the projects, there are also some pre-determined processes that the bank strictly follows.

*If there's an idea like now, in the middle of a sprint, it would take until the start of the next sprint. So in terms of this sprint, it would be in January. So yeah, like two months I guess roughly.*

## **Kanban**

Bank Inc. uses the lean kit, especially the Kanban framework for visualizing work and managing tasks. Cards with different tasks are placed on the board which are then moved around to indicate the level of progress. This enables team members to get an overview of the tasks that are completed and or pending. The Kanban board or lean board (see figure 1, page 46) is used as a reference point at internal team meetings allowing members to make efficient use of their time. These meetings have a hard limit of 30 minutes and take place every second week. Most project teams work with the lean board, but also focus on doing what is most practical under the circumstances.

*I used the Kanban board. So that's a lean way of working. So you have lean principles. But in practice, we use them and you're trying to be lean and you really have really effective meetings. Half an hour meeting every second week. So really short and really strict meetings, we're just going to the Kanban board. What is done and what is not done in the different, you know, different cards that you have on your board. And you have sub-cards on all these sub-projects and you can see how everything is floating - what is done, what is not done, what should we do and what the new dates are. So we use some lean principles. But I would say that we use these principles and then we do what's practical in each project.*

Also, a common practice among developers at the firm, the lean board is said to be a useful tool for breaking down problems and focusing on the tasks at hand.

*We are three developers. So yeah, it is just that we don't really plan exactly what we're going to do in those two sprints. But we have like, this tool where you can create like cards which are placed on a board, where you can say what you're working on, and what's completed. Similar to Trello, but then we can define this. This is a sprint of two weeks and after those two weeks, we've kind of cleared the board...a fresh start every two weeks and that helps us break down the problems and only focus on what we're working on now. So that's a common way to work in development.*

The lean board adopted by the project teams is an open way of monitoring progress, where tasks, deadlines, and members responsible for tasks are visible to everyone. Regular meetings are at the core of running the projects where the status on every task is discussed with team members.

*We also use the lean kit board. That's an important tool in the project. And the lean kits are all about - we put the mandates down, we'll put the delivery dates there, we put the tasks there, and we put who's responsible for each task and we set up timelines for when it's supposed to be finished. And then, we take the board up in every meeting and we say - OK, this is what we do here. What's the status? And we ask the people responsible to fill in some facts and status things. So the way to run the project is, it's basically meetings. And the lean board shows who is responsible for what, and the timelines.*

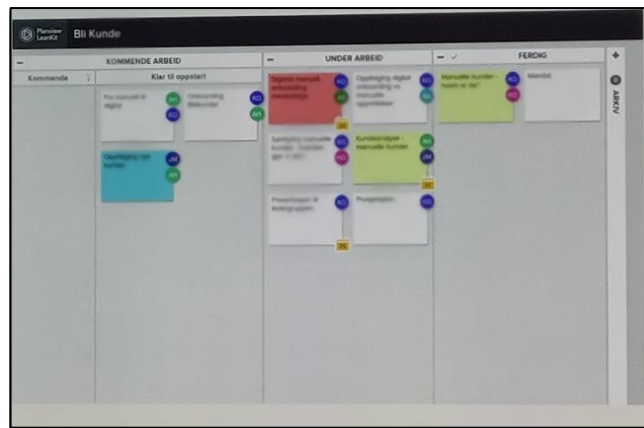
The Kanban board is also used as a form of reporting and information sharing, where members can easily communicate and stay abreast of the latest developments on projects based on the contents of the board. It is understood to be an efficient replacement for traditional meeting minutes and emails for sharing information. With the Kanban board, members can easily understand the bigger picture without having to seek help from fellow team members.

*I think when I have a lot of sub-projects or sub-tasks, I think it's a good tool to show people what they should do now, and what they should do later on, and what is really important. It is a lean way of sending information. So I can write a summary of a meeting in the Kanban board instead of sending mails in an in-depth way. Everybody can see what is happening in the meetings that they're not in. And if you don't find the email I sent you because it's not that easy to search for mail in Outlook, you know that you can find it on the board. So, I think it's much better for you for information sharing and look at the process and overall. You don't need to personally help people see the bigger picture, you don't need it. So, it's both for information sharing and to help people see what is important and what's not.*

The decision to use the lean board on projects depends on the tasks at hand and people involved in the projects. It has to be compatible with both for it to work.

*And if you have a small project or just a task that should be done, or you have a project where you know that people will not use the board no matter how hard you try, it's no point. So you have to look at the task and the people mostly.*

*Figure 1: Kanban Board*



### *Process mapping*

As part of AWW, Bank Inc. also uses lean methods in projects to reduce waste and increase efficiency. A separate interview with a project leader in charge of workstreams was conducted to specifically discuss the lean approach the firm is employing to deliver solutions. First, it is revealed that every new project is evaluated against three overarching dimensions. These include process, leadership, and culture. All three dimensions are interconnected and need to be considered simultaneously for the success of any project.

*It's all depending on those three dimensions whether you will have success or not with change. So if you are going to do something with your process, you need to have the leaders on board, because if you don't, you will fail. And if you have a culture that is where people don't have the right mindset, you will also fail.*

Second, the firm uses a three-phase framework in tackling the project at hand involving diagnosis, design, and implementation. The project systematically moves through each phase.

The project manager emphasizes that it is critical to spend sufficient time in the beginning, diagnosing the problem to avoid the risk of ending up with the wrong solution.

*And what we do in the diagnosis phase, that's maybe one of the most important steps, because they will actually see what is the reason of the problem or the issues we have today. So, if you don't take enough time here then you probably will end up with the wrong solution.*

The time spent on the diagnosis phase can be anywhere between two weeks to two months. In this phase, the team spends substantial time in the field conducting interviews to get to the root of the problem, where every little detail around the process is questioned. Here process mapping is employed to make each step in the given process visible and subsequently identify gaps. For this, the teams use Visio, a diagramming software tool for creating visual maps in instances such as identifying customer journey (see figure 2, page 48).

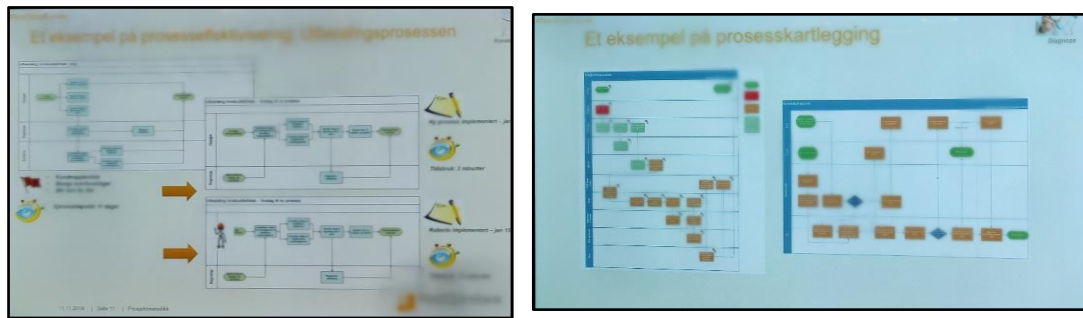
*We had the interviews that took a lot of time, and we also joined meetings in the committee to see how they worked. We analyzed data - "Big deal", to know what we actually are talking about and not just thinking or imagining things. And we had surveys. We had the interviews. We had a form that we'll have to cross every 15 minutes. How do you use your day? And we also did some processing maps. Customer journey. We draw things in Visio to show people, because when somebody says - "it doesn't take a long time and it's few people involved, it only takes 10 minutes. So why bother?" And when we actually dig into it and we can see that there's 10 people involved and it's not 10 minutes. It's much more. So, the visibility is very important. And to actually know what you're talking about. So, we will use a lot of time to analyze things in order to be heard afterwards.*

Through process mapping, teams are also able to determine the optimum duration of a typical process as well as eliminate steps that are redundant and time-consuming.

*It (process mapping) helps both, how long it (the process) should take and whether all the steps are necessary.*

On completing the diagnosis phase, the project moves into the design phase where the team comes up with a solution to problems identified earlier. This is followed by the implementation phase. Both phases can last up to two weeks each depending on the size of the project.

*Figure 2: Process Mapping*



### *Stand-up meetings*

A very important aspect of AWW as described by the informants is the stand-up meeting. Since its introduction as part of the sprints, stand-up meetings have been repeatedly described as a game-changer with regard to how reporting and information-sharing are carried out. To understand in-depth how these meetings are conducted and what they encompass, I requested to attend and observe one of the stand-up meetings. Observations from this meeting proved to be valuable in supplementing evidence gathered from informants' descriptions of the phenomenon.

Stand-up meetings take place every 14 days in the common area at the firm and all employees are welcome to attend and observe (see figure 3, page 49). They last for 30 minutes and every project-team is expected to give a short update on their work. Project leaders and team members walk the audience through their respective projects with the intention of sharing information with everyone interested. Largely a verbal style of reporting, the stand-up meetings have replaced the conventional written reports running for pages. Here, hand-drawn illustrations are used to explain the status of the projects. These can be found glued to the walls of the meeting area visible to everyone. Every week, the illustrations are updated to display the progress on the projects. During the stand-up meetings, team members take turns to provide updates on their respective projects, each lasting only a few minutes. As the stand-up meetings have a set time limit, teams are expected to keep their updates to the point.

The stand-up meeting I attended had over 20 attendees. Employees from other departments of the firm who did not have any connection with projects also took the time to attend. People present at the meeting carefully listened to the updates and appeared very engaged. The style



of communication was open and transparent, and even cases where the optimal result was not achieved were discussed.

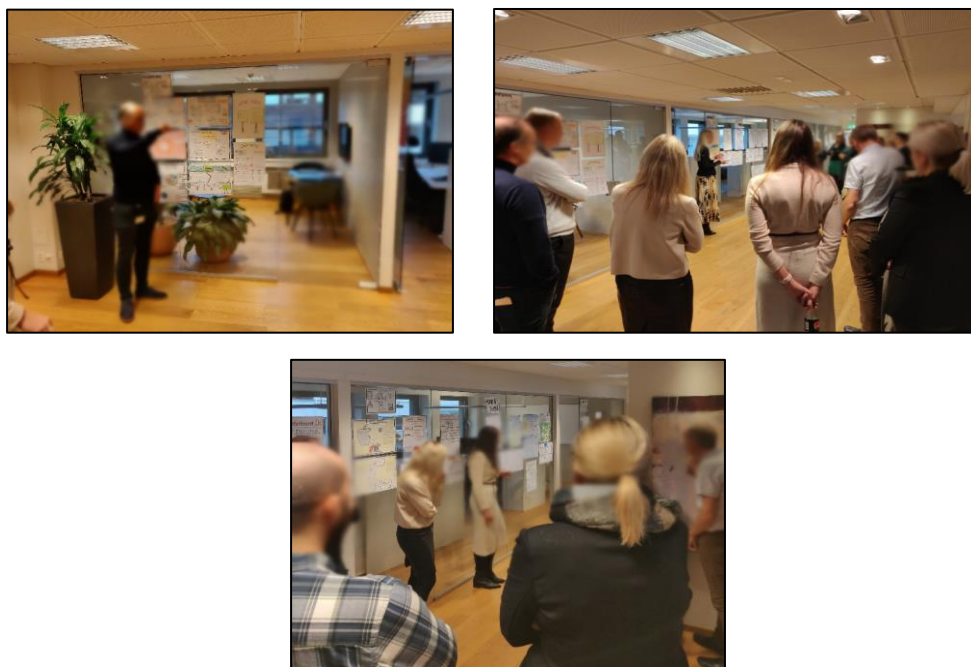
Reporting in the form of stand-up meetings is understood to drive progress as team members have to openly discuss past and upcoming tasks with the rest of the firm. Not fulfilling the tasks as promised can be embarrassing in this context, thus urging the teams to give their best performance.

*And the reporting is also helping us to get the structure because we have to say what have we done, and what we're supposed to do for the next 14 days. So that basically sets the standards of what we deliver. And it's quite embarrassing to have a report saying...Okay, in the past 14 days we haven't done what we were supposed to. And we also have to report whether we have control or not. So yeah, that's the way we do it.*

An informant disclosed that the stand-up meetings create transparency and a culture of listening.

*I think it's a good culture of listening to people. I think it's also possible to...you don't have to be all positive. You can say what you actually mean. Have a discussion. Get answers.*

*Figure 3: Stand-up meetings held in the common area at the firm*



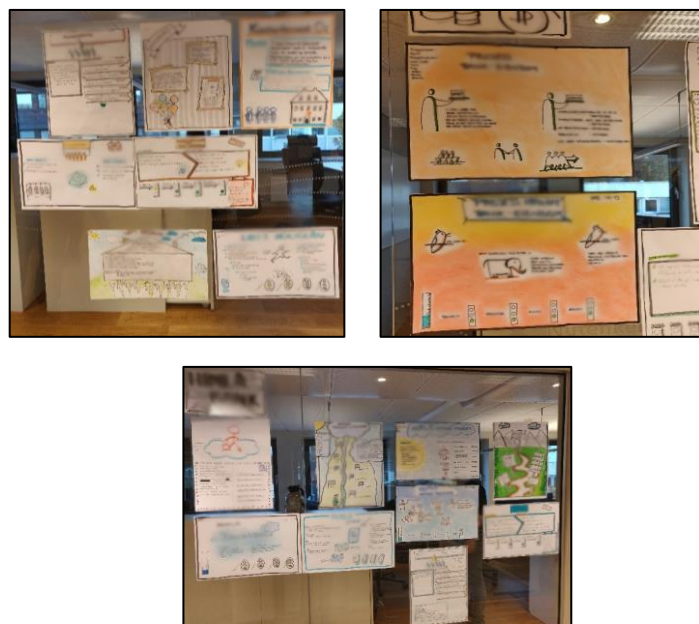
## Visualization

In addition to using the lean board as a visual tool for internally monitoring work in progress, Bank Inc. has also adopted a visual approach for reporting at stand-up meetings. As described earlier, the hand-drawn illustrations serve as a point of reference during stand-up meetings. Core information and new updates around each project are represented by engaging drawings on white paper with short and catchy text descriptions prepared by the team members themselves; these drawings are found on the walls within the firm (see figure 4 below). The bank has invested in training resources to prepare such illustrations. When it comes to the sprints, the management no longer expects teams to compile lengthy reports and instead stresses on the visualization of all content.

Drawings are seen as an easy way to communicate ideas and are considered flexible when it comes to making modifications. Drawing allows teams to be more creative and express their ideas in a way that could be easily understood by everyone. As described by one of the informants, it also allows for quick updates and creates enthusiasm.

*I think it's a good way of working, and all the drawings can make a quick update. Just going through lunch every day and check out how the projects are going. So, I think it makes more and more enthusiasm for the processes going on.*

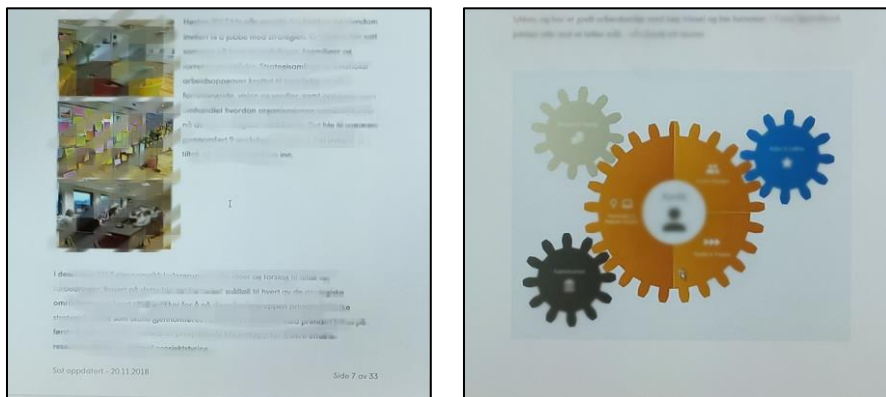
*Figure 4: Visualization - Drawings on the walls at the firm*



To support AWW, Bank Inc. has also adopted a visual approach in presenting its strategy document (see figure 5 below). This is primarily done to communicate the short-term and long-term goals of the firm. Not only is the strategy more concise with a clear indication of goals, actions, and future plans, but it also accompanied by visuals including pictures and illustrations of the progress made in different projects. An informant expressed that the new way of presenting the strategy document has it made it possible for all the employees to stay informed.

*So with this document, we visualize our strategy in terms of a plan on how to get there for the next half year. This helps all the employees understand the plan of action and progress made. We say something about our business idea and we say something about our vision, our values, our strategy for the future and our target in the long run and goals. And then we say something about how can we measure it during the year. These are our five strategic areas that we say we will have to focus on - Kroner, customer, digital, people, and society. And we say what we have done and what we are going to focus on. And we have put on some KPIs that everybody can follow and it's updated monthly.*

*Figure 5: New strategy document – examples of visualization*



### 4.1.3 Culture

Culture is identified as the third prominent theme under AWW. The culture within project-teams is noticeably different from the rest of the firm. This can be strongly attributed to AWW.

Project-teams function at a high tempo and follow an unorthodox style of working. The informants spoke highly about the culture within the teams. The qualities that often stood out were high performance and dedication. There is a common understanding among team members that working on projects can be very demanding due to the fast pace. Therefore, there is a need to maintain a strong dedication to the role as well as a high trust level, and only those who are self-driven can thrive in such a setting without burning out. Members also hold themselves to high standards when it comes to producing quality work and achieving results in a short time.

*I think it's a good culture because everyone wants to do this one hundred percent. So, if you have some people who don't want to do this, they will not be able to keep up the good work and do all the work that they have to do. So maybe we have to take them out and bring someone else. But I think you have to be driven by... especially this last year...by the high tempo and trust level. If not, you will be exhausted because there is a lot of things to do in a short time. So, I think you have to be up for it and you should really want to do this 100 percent.*

*We have a much more hectic everyday life at work, and I think that we have really high standards of what we have to be able to produce and within which time. Very often, if you have people from other parts of the bank in the projects, they will think that we are really effective as we have really, really, high talks about what could be done in a really short time span.*

Members often work closely with each other in tight-knit teams, consequently developing a strong bond. The culture practiced within such teams has also been described as a lifestyle. Team members possess a strong work ethic and are willing to go above and beyond in their roles.

*In the beginning, it was a little bit...we didn't know each other that well. But, (in a small team) you can be informal. You don't have to be that formal.*

*I could describe it... I think it's open. I think we have a sense of somehow being like a small family together. I think we're quite caring. We want each other well. And I also think that we are more open to ideas and we are also very dedicated to our jobs. We work 24/7. And some other departments may say, "I don't want the phone from the bank, because that means that I maybe have to pick up the phone after 4:00 pm". And here, it's like if I have an e-mail at 11 o'clock in the evening. So*

*what, I answer it. So, it's yeah, it's quite a different culture regarding...the work ethic in a way or the joy of working here. It's more like a lifestyle.*

There is a general consensus regarding the positive spirit at work. Employees are satisfied with their jobs and appreciate working with each other. This is also reflective in the director's account of low sick leave within the firm and that employees show a positive attitude towards work.

*(The culture is) very good, I would say. I think that everyone comes to work every day. Everyone's happy to work every day. I think it's because we like each other. I think the team is working. I think we are very busy, but we always also have a little bit time to have fun and drink coffee. And the mood is good. I think humor is important in the department. I think everyone cares for each other. I think that's good. I think everyone wants to be here.*

*I have very low sick leave. People seem generally happy. They want to stay here. They want to work.*

#### 4.1.4 Top management support

The fourth major theme identified under AWW is top management support. Support from top management (TM) on projects can be seen at various stages. Not only was AWW first introduced by TM, but they also play a crucial role in continuously setting the necessary direction and providing resources. TM is involved right from the approval of sprint ideas, organizing kick-off meetings, allocation of team resources and funds, through to ensuring legitimacy and giving the project teams the necessary space and capacity to thrive.

Ideas for sprints may come from different departments at the firm but is mainly led by the innovation department with the responsibility for organizing and prioritizing them. These are later vetted by the TM who often recommend changes before seeking final approval from the board.

*Usually, the innovation department is telling about different projects that should be done or is interesting, or that can be done, and then different departments within the bank can tell us about a project they want us to do. And so, we have all these projects set up and then we will start allocating them and give a clear prioritization*

*about what we think should be done. And so it's easier to forward it to the top leaders to look at it, and then they will look at it and they have to change some things. Then they will send it to the board, who might change something, but less than the leaders usually do. And then we will start.*

Once the ideas are approved, the TM has the final say in the allocation of resources to the projects. Generally, employees have the freedom to choose the projects they wish to work on, however, the TM signs off on the final team resources and structure with some advice from project leaders.

*In the beginning of a sprint, we have the projects that the department thinks that we should do, which is set up on the board. And then the administration and the board of the bank is looking at that and they come to an agreement. Then people are able to tell on a survey which project they want to work within. And then, the director will say if this could be a good match. And then, the director would talk with the project leaders asking - Does this make sense to you? Do you need other resources? Or do you think they will be a good match? Do you think this could be a good group size? Are they able to do their job?*

Further, TM is also responsible for organizing kick-off meetings at the beginning of the sprints to work on aspects that are essential for team building, such as trust and psychological safety. Every kick-off meeting involves a new topic. At these meetings, the director who is a part of TM, uses different methods to positively stimulate group dynamics.

*We always have a kick-off when we start a sprint. Then we go to Solstrand, and we stay there for two days and go through the sprint, and we do a kind of a kick-off. But now, they are so into the sprints, we are not working on sprints when we do the kick-off. We work on trust, psychology... more like the social aspects. This time, we worked on values. One kick-off, we worked on motivation, to understand, because people are so different. What drives them... and to really understand, and to work good together, you have to understand why we're different. I see that the teams have a high level of trust, and then we could discuss these kind of topics. I went to the Solstrand program, so I'm kind of getting very into the psychological process, so I use a lot of the methods. And what I learn there about power of how to get groups to work, I use a lot of that into the group.*

Teams see it necessary to keep TM well informed in order to receive their support on important matters shaping the projects. In addition to allocating resources, TM is also actively involved in providing access to funds. Teams are expected to present a case for the required funding in order to get approval.

*It's important for them (TM) to understand why we're doing this, and why it's important, and which results we can get from this project. So that we're able to use the money that we need or people we need to use. So it's really important to have them informed and to have their support in what we're doing. And it's easy to set that early on. So that's why we're setting the project with the management and with the board early on. So everybody's happy.*

*It (TM involvement) is a little bit different from project to project. It all depends on of course the money. If we need money, we have to present why and ask if it's OK. Then we use the leaders to get the top leaders to say if that's OK or not.*

TM stays abreast with the latest developments on projects by either attending the stand-up meetings or through separate meetings with the teams. An informant indicated that it is essential to keep TM updated such that they can legitimize and communicate important matters around the projects.

*And we actually are quite often in the leader meetings just with information about the project. Some of the leaders, I think come to the stand-ups and are updated that way. But sometimes, it's some of the info that the leaders need that we don't say here. In some of the projects, I think, it's maybe three or four times just informing and updating. Sometimes, you need the leaders to tell all the other employees that this is important.*

As for the involvement of TM in the day-to-day activities, the informants expressed that TM is not concerned about the details, and steps in only when there are roadblocks that need to be fixed. Project leaders are expected to regularly report to TM with the status of projects.

*The innovation director is not detailed...involved in the project, but they're supervising it with the reports and we tell them in person if something goes wrong or when we have difficulties. We also report to the leader group every now and then. So, we are supposed to be there twice during the sprint to update them on the status and tell them how we're doing.*

In order to facilitate quicker and more efficient communication with the teams, the director of innovation sets aside an hour every morning, where members can freely drop in without making a prior appointment. Members typically use this time to discuss matters around ongoing projects as well as receive quick approvals. The director expressed that setting aside this time allows them to catch up with the resources on a daily basis.

*They don't have to book a meeting...because when they look into my calendar, it's crazy. So then I have that slot every morning 9:00 to 10:00, and then they get signatures if they're going to buy stuff or they have to borrow a credit card. During the hour, maybe four or five people come every day. But it's a very efficient way. And then some people just come over to say hi. You know more like – “I have a travel expense. Can you please just sign off?” And we talk a little bit ...it is a very nice way to see people.*

The teams also receive the space and capacity they need to run the sprints without being interrupted by daily operation tasks. With support from the director, the teams are able to fully focus on the project at hand.

*And because everybody is getting tasks from the wrong department, you have ideas that just pop up and we have to do this. But then we say sorry, we have a team project. The calendar's full. And also, it makes it easier for the innovation director to say just forget about it because it is already decided this is what we're going to do.*

## 4.2 Outcome: Change capacity

In this section, the findings are analyzed to identify the effects of AWW on Bank Inc's change capacity. In doing so, it was found that different agile methods and approaches practiced by the firm have directly influenced change capacity at the organizational and individual level. The investigation revealed positive effects as well as some risks. In the following segments, change capacity is first analyzed at the organizational level followed by the individual level.



### 4.2.1 Organizational level

At the organizational level, it is observed that AWW positively influenced change capacity by creating a *shared understanding* at the firm and by enabling *quick results*. Further, there are also positive implications on the firm's dynamic capabilities of *sensing* and *seizing*. At the same time, *backlog of work* is identified as a risk.

#### *Shared understanding*

Prior to the sprints, different departments within the firm worked in isolation with little knowledge about ongoing change projects. Now, with the stand-up meetings and visual display of progress, it is easy for members to learn about various projects. Everyone at the firm is welcome to attend stand-up meetings, ask questions as well as contribute, thus allowing all employees to feel involved. Moreover, it has created transparency, where knowledge about projects and persons responsible is readily available to everyone. All in all, this form of open communication has created a shared understanding throughout the firm.

*Yes, everyone also has a better understanding of what everyone else is working on. Before, people used to sit at their desks and think they are working harder than the other one. But now they know what everyone is doing and that everyone's contribution is important.*

*If you are thinking about the transparency in the organization, we have...the way we hear about the progress and we draw the reports, everyone can come and listen and see what we are doing.*

*Yeah, I think it's a very good thing. It's more open, it makes people more aware of all the projects going on...and you can also have good inputs when you include everyone. We also started these stand-ups on Fridays just to inform people, because it seems like you can never give enough information. You can send it in mails and get a certain understanding of what's going on, but people want to be included. So I think it's a very good way of doing it.*

Employees working outside of projects also have the opportunity to attend and ask questions at stand-up meetings and feel included as the projects evolve, especially when it is regarding matters concerning their work. This eases them into understanding and accepting change than when it is imposed on them at a later stage. For example, when a project team is working on a

brand-new process for handling customers, those departments that generally have customer contact might be affected and would ideally like to know in advance why and how the new process is being developed. This is much easier and efficiently done when these employees are kept in the loop right from the beginning rather than when the finished version is imposed on them later on. This form of information sharing is largely made possible through stand-up meetings.

*Now with the stand-up, I think that's a good thing to do because then all the co-workers can come see what's going on and get a little bit more information about what's going on in different sprints and the projects. Maybe they feel a little bit more included, and it answers a lot of things going on and what's in the different projects. And not just like pushed out, like "oh come on, let's go. This is a new thing, you gotta learn this." And then we move on to the next one, and then we push it out. So I think these stand-up meetings are good for including everyone. We don't have all these questions afterwards - why this and why that - since now they are included in the earlier level.*

Another aspect that played a major role in creating a shared understanding of project objectives and progress, was visualization. The teams were sticklers for drawing roadmaps and illustrating progress. This created a far better understanding of goals and actions with respect to change without discrepancies in perceptions.

*Drawing grabs attention. It makes changing more accessible. It is visible for everyone to see. And it's fun!*

*We have many ideas and it is easy to show it to everyone by drawing them. It is possible to take people through what you are thinking. It gives clarity. It is also flexible, as drawings can easily be changed. People grasp things better when things are more visual.*

Before the sprints, the flow of information regarding change projects was described as unclear and inaccessible. This prevented the ordinary employee from getting information about ongoing projects. Now with drawings available for everyone to see, people are more up to date with everything that is happening. This is a significant advantage when it comes to understanding and accepting change.

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*A project could take a lot more...much longer time and people were not sure about who had the project or who was the project manager. It was all a bit diffused. Everything. So you kind of had a long-term goal but you were not sure who was in charge and you were not sure which projects were going on? People had no overview of that... now they're hanging on the wall, so people can come up and see. All project managers are open and willing to tell, so I think it's a really big change and a big advantage for change.*

One of the informants pointed out that keeping everyone well informed is critical in creating a favorable perception of change. The transparent approach that the firm follows in communicating frequent project updates allows members to precisely understand the nature of the change they are dealing with.

*We have like an openness to all this. People can ask and they can come see what we're doing and on the intranet. We've put out like, "OK, this is how long we have, this is how far we have come in this project", and we keep giving the employees a little bit of information all the way. And then I think everyone is more ready for the change, if you give them a little bit of information all the way. So I think that's the key for the changes. You have to keep everyone well informed of what you're doing and why you're doing it.*

Prior to the implementation of AWW, the firm's strategy document was long and hard to comprehend, automatically discouraging employees from feeling involved. But now, the strategy document is presented in a more convincing, visual format clearly indicating the short-term and long-term goals with necessary information about the projects. This has also led to creating a shared understanding within the organization.

*I don't think for maybe just three or four years ago...I don't think that the organization actually knew what the strategy was. I think that it was... strategy was some kind of document that the leader and the board were connected to and you didn't even bother to read it because it was long and when you read the whole thing, you were like "OK. Did I actually understand what it was?"*

*It's much more easier now. I think it goes from maybe a couple of hundred slides to now to 30 -40 pages ...and it's pictures. We use the sprint to say - it's short term instead of long term. So you can feel it more on your body what is supposed to*

*happen the next six months, than what are we thinking is supposed to happen in two years. So I think that and the way that we use the drawings on the walls and everything. I think that if you work here and you don't know what we're working on, then you'll deliberately close your eyes and don't want to know. So yes, the strategy document is practically hanging on the walls. So I think it's short and it's easy to read. And so yes, I think it's definitely better because now everyone knows that. Every half a year we update the strategy and this is our new strategy for the next six months.*

Further to create a shared understanding, the top management urges employees to stay updated with the strategy document and learn about the goals and plan of action. An informant stresses that it is critical for everyone to be on board with the strategy in order to effect change, as it allows members to better understand their role in the bank and how valuable their contributions are in achieving the goals. The leaders' intervention is considered valuable in this regard.

*So this document is updated and then we have a new one. So this is online on the intranet, so everybody can read it whenever they want. And they're also being asked to read it. They are being questioned about it from the leaders. So when they have a follow up meeting with employees, they will ask about. Have you read the strategy document? Because if you want to make a change and if you want people to know where are the goals and what are we going to achieve. What's the meaning of life. Then if you don't understand the strategy, you won't succeed because this gives meaning and this also gives the employees a feeling of - 'oh I can relate to this. I understand it. It's important for the bank. I can see myself here.' I believe that's where the leaders come in.*

### **Quick results**

The findings indicate that Bank Inc. is able to deliver solutions rapidly as a direct outcome of AWW. Specifically, the high tempo on projects induced by short-timelines and the cross-functional team set-up allowed for quick execution of projects. Seeing results therefrom has contributed to creating a favorable perception towards change within the organization.

As the sprints are time-limited, it is important to constantly exchange feedback such that necessary changes can be made in time to strengthen the viability of the end product. It is

pointed out that the cross-functional nature of the teams makes it possible to receive feedback quickly as all members with the necessary skillsets are placed on the same team. Consequently, the teams are able to adjust their tasks rapidly and produce results sooner.

*I found the combination of working in these long sprints and our short sprints, being really nice because we could quite rapidly get feedback from the stuff we were doing. But also show like a steady progression toward others, so that they could adjust their tasks accordingly.*

*I think the best thing about this is that we are different people and are set together to work in order to get something in place. So we have marketing people, the developer, the product manager, and the staff that really can....the products are all mixed together. So if we haven't done this, I'm not sure whether we could have produced things so rapidly as we do now.*

*We are working together with I.T., the developers, the market department, the customer service, and the digital team, and we are all part of the same unit that innovation and development team leads now. That gives us the opportunity to follow from an idea until it's released to the customer. So we can follow the whole journey so that we don't miss up on anything. So we can have quick feedback about - is this good, is it not good? I think it's brilliant.*

Seeing results sooner appeared essential in motivating organizational members to collectively accept change. Previously, projects lasted for years together, making it difficult to picture the end. Now due to the sprints, it is possible to get work done faster and see the end result sooner.

*I think it's because we have this high speed and tempo now, and the people see the end of the project much sooner, because we're working more intense like it's not spreading over for like a year or two. So, when you work on one project with a timeline that is short and efficient, I think that's the main thing to get all work done and the change as well. So, if you tell people why you're doing this and all that, then the people will be ready for the change much sooner.*

There is favorable perception towards change due to the convincing results that the projects have produced. However, it is also important that such projects are run adequately.

*Yeah, definitely (we are more open to change). Because we can see the effect of what we are doing. And I think, also the people working in the projects can see the improvement we have done from when we started to now. And to see how efficient we can be in a short time period. As long as you have like a good setup, like a good timeline, what tasks to do, who is doing it. I think that's the main thing to get this to run.*

One of the informants expressed that the success of the sprints has resulted in the organization welcoming change more than it used to before its introduction.

*When we see that the sprints are successful, then we get used to the idea of OK, this is changing. But I think that organization is definitely more compatible of changing now and it was three years ago.*

Another informant acknowledges that implementing change can be challenging, especially given the natural predisposition of people towards it. In this context, change is referred to as the new style of working in sprints. At the same time, it is important to note that every sprint in itself involves one form of change or another. Additionally, it is observed that some people take longer than others to accept change and require a great deal of proof that it is working. This is especially true for those not working in the sprints. Despite the initial skepticism, AWW has produced convincing results at the firm. What used to earlier take a year to finish, is now delivered within 12 weeks.

*When I said earlier that I think we change more often than we actually realize, I think some of the people that are very you know- "we can't change this. This has to be this way". And I think that more and more are getting used to that. If you change that one, then maybe we can change this. And some do that quickly. Some need a very long time. But I think that the culture is changing a little bit all the time, and they see that it works. Yeah, but I think someone needs a lot of proof that things are working. That it makes sense that we get things done even though we just stand and draw on the walls \*laughs\*. I think maybe someone in the beginning thinks that, "OK. This is crazy." We can use all the time to draw drawings or have meetings when planning what to do. I think many people think in the beginning thought what can you do with this. But I think it's better every time we do something good and people see that. OK this is working. They can deliver. I actually think that we may be used one year before... it is now delivered in ten - twelve weeks.*

## Sensing

In order to examine if AWW has influenced the firm's sensing capabilities, the informants were asked questions with regard to mechanisms of sourcing new ideas and picking up signals from the external environment. It appears that there is a good level of alertness about changes in the environment including technological advancements, regulations, and competition. The firm is a lot more proactive in sensing new opportunities since the introduction of AWW, as they have become more open to ideas, and due to the lean method, they are accustomed to asking questions with a curiosity for new solutions. However, the findings indicate that sensing as of today is mostly set within the operational context and that there is a need to further dedicate time and resources to fully optimize it.

Ideas for new projects can come from anyone and anywhere within the organization and outside of it, implying that sensing new opportunities also extends to all employees. Ideas may spread across different topics including customer, society, internal processes and so on.

*It could be what happens in society - what is brand new and fresh and exciting, and what should we do as a bank, in terms of making solutions for the customers that make sense for them. It could also be that we have...had some issues at work that people are talking about but not doing anything about it. But we say, 'hey, we need to do something here.' The leader meetings could often come up with something we need to work with. And we can come up with ideas ourselves, or our customers come with something. It could be complaints that this is rubbish. So it is different angles.*

AWW has also helped with observing competition and evaluating effective responses. The firm displays a curiosity for learning and holds regular dialogues with its competitors.

*I think that we are (able to pick up signals in the external environment and stay competitive). Because we work in smaller projects and we were very conscious on what do others do, where can we separate from others, and where can we do exactly the same but just with another twist. So, I think that we utilize the market, the competition, where we need to use. Or do some of the same processes and some of the same customer development and everything...and we are often out visiting others asking - what do you do? What do you do?*

There is increased awareness and understanding that to survive they should be good at observing competitors and planning a suitable course of action. They are also aware of their limitations and agree that being proactive is necessary to keep up with change.

*We have to be (good at picking signals from the external environment). I don't think we'll ever be the first one to launch something new. But we have to be ready for joining in on something. So I think like if we don't see outside our bank, we won't last for much more. Because we have to be curious about what's going on and what can we do in our bank to make the same service...have the same systems for the clients, the customers. Yeah, I think so (this way of working has made that happen) because...like have you heard of PSD2? So that's a typical thing. I think we have to have it, but we're not the first one to launch it. So, then we have to look - Okay, maybe we have to look up the banks that are the same size as us. And a little bit bigger to see okay - what are they doing to this?*

AWW has enabled interactions with both internal and external stakeholders allowing the firm to consider new opportunities. Further, it has stimulated innovative thinking and openness to change. Informants draw comparisons to the situation before AWW and express that their approach to sensing has drastically changed.

*We are outside the house, so we are not just involved internally. I think we have, in this term, we have our own Lean Board and work with third party providers. So, we are actually very involved now looking into the world. But if you look back a half year from now, we didn't do that because we had no time for it. But now we said we need to prioritize it.*

*Absolutely. And I also think that the way we work now also makes us more innovative in our head, because we are more open to changes and changing rapidly the way we work. Because the speed here is quite high, and we take in new things. We are just much more open to third parties. We have meetings with them. We are looking into the world. We didn't do that before. So I think it's done something with us.*

Some of the informants admit that the firm's sensing capabilities are not at the optimum level as it requires time, and employees are usually busy attending to daily operations and projects. Innovation is not on every employee's agenda nor in their job description, hence not creating



the need and urgency for it. Nonetheless, they acknowledge that it is an area that can be improved.

*It's difficult for a normal employee to come up with nice, good ideas because they are busy, and I don't think innovation is in the top of their foreheads. And that's maybe one of the things that we should work more within the innovation board because we run quite a lot of projects. And it's easy to be drawn into everyday life projects.*

*If we have eight and 20 projects that we are running here, we are not so many people, of course there is a danger of not being able to use some time on innovation itself. We say that this kind of work makes you more open to new ideas and more intimate, but you have to set a time for it as well. So I think that's maybe where we could be better.*

## **Seizing**

The findings are also analyzed to explore whether AWW has enabled Bank Inc. to respond strategically to changes in the external environment. From the findings, it is apparent that the firm is better equipped to seize opportunities within a short time as a consequence of AWW. It appears that the primary responsibility for seizing lies in the hands of TM who prioritizes projects consistent with strategic goals and mobilizes resources to implement it. As previously mentioned, final approvals for implementing new projects are dependent on TM who continuously determine and evaluate the direction the firm is headed in. This is also visible in the firm's strategy document.

Every six months, Bank Inc. refreshes its focus based on the relevant opportunities or problems at hand. Following this, new projects are prioritized and initiated to deliver results within a short time. The sprint format allows the firm to rapidly move from ideation to final delivery in six months or less, further enabling the firm to act quickly especially concerning important matters affecting the business. In doing so, as previously mentioned, TM also allocates resources to implement the projects. AWW has made it possible for the firm to react and make rapid changes where it is most needed.

*And every half year, we have a meeting with the leadership in the bank, where we have a proposal to what we are going to do for the next half year. And they prioritize... this is the focus. We need to set the sprint.*

*Because that (sprints) gives us the opportunity to make rapid changes. And take on new projects or new tasks that need to be fixed quickly. And we need to be able to change rapidly.*

Not only does Bank Inc. have a sound strategic framework for the evaluation and implementation of ideas every six months, TM also updates the strategy document simultaneously incorporating the short-term goals associated with the sprints. This is meant to clearly set the direction the firm is headed both in the short-term and long-term.

*And we got all the different ideas up here and that was kind of a start in the process. Then, we write the new strategy and the strategy is very easy. It has like the long-term goals that are based on our values and our purpose and our vision. That's what drives the strategy in the long run. And then we have the sprints which is the five different areas, and then we have to describe a little bit in the sprint. What kind of project are we going to run? Why was that a mandate? Why are we doing it? Why is it important? So the strategy is rewritten two times a year.*

### ***Risk: Backlog of work***

At the organizational level, AWW poses the risk of backlog of work. Rapidly moving from one project to another may create a list of unfinished tasks that usually require final improvements. As teams are constantly focused on creating new products and processes, older projects may sometimes be put on the backburner. From the evidence, this mostly applies to developers. However, an informant argues that they are conscious of the repercussions and try to set aside time for attending to the backlogs.

*At least for code. As I mentioned programming is never done. So it's easy to have like half-baked code or code that could be much improved. Having to stop working on it, because there is something new. It creates sort of like a backlog of things we need to improve, but we haven't had the time to do it yet. So with this kind of rapid projects, I mean we need to be able to say - Okay, now we need time to fix the stuff*

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*we promised to fix, instead of just creating new stuff all time. Well, luckily there is a good understanding about that here. But we need some time to fix the bugs and improve the general quality. Of course that does take that creativity down, but it's better to do that than rush along and have like years of bad code.*

#### 4.2.2 Individual level

At the individual level, some significant effects of AWW are also observed, where AWW has positively influenced change capacity by developing *readiness to change* and *trust* among members. On the downside, it has also created certain risks such as *stress* and *fatigue* among others. These results are limited to members actively involved in AWW at the firm.

##### *Readiness to change*

As a result of being exposed to multiple sprints over a period of time, members working in the sprints visibly exhibited a readiness to change. Being involved in several projects at the same time, allows members to absorb the reality of change and the pace at which it is happening. Change readiness is also attributed to regular reflection on previous assignments and finding newer and more efficient ways of performing tasks. The possibility of engaging in self-reflection and learning new things has also created a sense of enthusiasm among team members.

*It's made me more aware that the changes are happening very rapidly. And there's a lot of different things going on that we need to be aware of all the time. Because if I had been on one project for one year, maybe I'd just be focused on that at that point and nothing else. But now I have the opportunity to be a part of many different projects in a shorter period or the same period of time...*

*We look back on what we did last time and what we have to do better. What was very successful, what wasn't. Where did it get more hectic than we planned. So we adjust from every sprint. So I think not only do we learn much about how to do a sprint, we do learn how to connect with the other project. But we also learn very much about ourselves. What do I need to do to get better? Well, I need to learn. So, I think in terms of development, we learn much more than we did before. When we*

*just didn't work this way. So I think yeah definitely the speed and the excitement of working. I think actually positive things have come from this.*

*I think that we are good at taking pauses and asking if this is right. And as the sprints are very short ...that we can say OK, what's this. Was this the right choice? Do we need to change anything?*

Reflecting on the results post-execution of projects is considered as one of the main goals of the sprints. Interestingly, the ability to do this is linked to individual change capacity. This is said to largely differ from individual to individual, where some may choose to reflect afterwards on what could be improved and others may not. The teams are actively reinforcing this capacity for change such that members are more likely to engage in reflection and welcome changes.

*Yeah, the main goal is to have people thinking afterwards - can I do this a different way? Can we do this a better way? That's the main goal in the end when you're finished and you're leaving the table. But some people do not afterwards, and some people do, because we're different and we know also that the capacity of changing is different from person to person. But we are trying to build capacity of change in each and every one.*

The lean method employed by teams allows members to think critically and question the status quo. This not only allows for finding more efficient solutions, but it also enables individuals to personally recognize the need for change.

*The way we work with the lean method...about why do we do it. Could we do it differently? It's also a part of increasing your ability to change. Yes, absolutely. Now that lean method is also maybe a way of getting the other people to make or to be more able to change as well. If we continue asking the questions - Why do you do it? Why do you do it? Why do you do it?*

*With the lean way of thinking, we do things differently. I think - why do you do that? - is a very important question to ask and that will also make the changes in the head. Now we want to change.*

One of the informants expresses that working in sprints has enabled members to get more acclimatized to constant change as it is common to change direction and experiment. While this may feel chaotic in the beginning, individuals learn from experience and become more efficient over a period of time.

*If I compare it with how we work before, I think it's another way of saying we get better off changing, because we change all the time. And I think maybe actually we change more often than we realize ...because we go left, we go right, we go left, right, and we go right again. So we do that all the time. I think at the beginning you get a little bit stressed out because, 'oh my God, do we have control over this?' But then you do it a couple of times and I think – 'Ah! yes! I can do this.' And we can do a lot more, and we can do actually more projects in a shorter time because it's intensive but fun.*

Another informant accredited TM for enabling change in a rapid manner. TM plays an important role in making AWW the new normal, further encouraging members to accept it.

*About how you will be able to make people change rapidly...what the leader has done here is quite amazing, because it's left, right, left, right, left, right. And in the end, you think - "oh, this is normal".*

Informants admit that they are more open to change now than they were prior to the implementation of AWW. The variety of projects has allowed them to be more flexible and readily accept change.

*Yeah, I think I'm more flexible for change now, or the change in the work, or what I'm working on now than I would have been if I haven't worked this way.*

*It definitely has made the ability to change here. Definitely, because the way we work is...well, there's no week similar to the other week, and we do a lot of stuff. Because we do that and become more flexible. By just the way we're working - the agile way of working is making capacity of change in my opinion.*

A more welcoming attitude towards change is seen among individuals, especially when they learn from experience that change efforts can bring desired results. Moreover, there is a personal realization that change is inevitable and therefore it is best to jump on the change bandwagon rather than avoid it. Individuals are aware that change is important for the long-term survival of the business and their own job security.

*I think that the experience that you get when you see that change is working, and you see that change is coming either way if you want it or not. So it's better to*

*change with it then trying to stop it. So I think we learn something every day and we need to change with the time.*

*When we look back at 2016 until now, we see a huge positive attitude towards change. People understand that change is important, projects, quick sprints are important for our long-term security. I think in the beginning, individually, they did not understand why it was important to do that. But it is important for our job security. If we need to survive then we have to be in a change in some way...we have to have all these new processes and new ways of working. We are a small organization and we are competing with other banks, so we have to be...we are much more open to change.*

## *Trust*

One of the notable benefits of adopting AWW is the establishment of high trust levels among members. While the kick-off meeting prior to the commencement of the sprints serves as a starting point for initiating trust, the rapid timelines, cross-functional and tight-knit teams, regular meetings, and high pressure have contributed towards further actualizing trust among individuals.

The limited-time duration on sprints urges members to perform their tasks rapidly and to high standards without having to constantly be supervised. Members are conscious of their own responsibilities and also rely on one another to do their job well. Mutual understanding and trust are understood to be the foundation for successfully delivering projects.

*So because of the short period, we had to have good control of what each one was doing. So if you got one thing to do, you had to do it well. So everybody is relying on everybody to do their job, because otherwise we cannot get through with this.*

Due to the cross-functional nature of the teams, individuals from different backgrounds are assigned specific tasks. An informant expressed that given the situation, all members rely on each other to fulfil their respective duties.

*Everybody is comfortable and everybody is relying on that the other team members are doing or fulfilling their tasks. Yeah, different tasks in the project, so that everybody relies on each other...*

The sprint set-up typically involves team meetings on a regular basis to discuss progress. At such meetings, members update each other on their tasks thus creating an understanding of what is being done. The responsibilities of each member are different yet intertwined; therefore they must rely on each other to do the job well in order to succeed as a group. This approach is said to create a trusting relationship.

*But we tried to make it like... either have meetings where only the necessary people are involved. Or have meetings where we kind of explain the top level of what we're doing. And I think that's great because it creates like an understanding but still like a trust. You can kind of trust that the other people know what they're doing. And then you have this like... trusting relationship.*

There clearly appears to be psychological safety with regard to how honest team members are with each other and how comfortable they feel with being so. They are not afraid to acknowledge challenges and mistakes. One of the informants expressed that facing roadblocks is common and discussing it out loud is a part of how they work. This allows them to find solutions collectively and rise above the challenges.

*I think we are really frank with each other. So if you think it's not working, we say it out loud and that's a part of our business. It's more brave to say if something is not going the right way. Like today, I had a meeting where I told them that I don't think that we have used enough time on this the last week and it's my fault. So we need this week to be better. I think that's just a great way of working.*

### **Risks: Stress and fatigue**

The informants overall displayed a strong positive outlook towards AWW and are convinced by its positive influence on individuals as well as the organization. At the same time, they admitted that certain challenges come with it. As the standard sprint timelines are applied to all projects irrespective of the nature of complexity, members sometimes find it challenging to cope with delivering particularly complex projects within the given time. This is said to create stress among individuals.

*You always have the feeling of having a really, really, short time. So it can be, I think for some people, it can be really stressful because you want to have these*

*weeks and when you only have these weeks... the projects will be in different sizes. So some things they're really able to do. We've done this in 16 weeks, and some will be impossible in those 16 weeks. We talk about all sprints in the same way. So I think it can be really stressful for people.*

The nature of the sprints demands that individuals quickly adapt to changes that come with every new project. Those that are not familiar with changing at high pace may find it challenging.

*People who are not used to change as well might have a more difficult time to take in the change when it's such a short period of time. Maybe before when it took a year to do the project, they had better time to adjust and get familiar with the change. But now we work on something for six months or four months and say that's the way. People might be more reluctant to get used to the change.*

The capacity to work at such high tempo differs from individual to individual. The high-pressure environment may lead to burn-outs among individuals who may not be accustomed to this style of working.

*I'm always thinking about the human perspective, because when you're working on a project you have such a short term or timeframe. It's much more work. So not all people are made to or have the capacity to work that much. So we have seen that it's been too much stress and people have been burned out.*

Additionally, as individuals are generally involved in more than one project at any given time, it promotes a good general understanding of the different functions within the organization, however, it may hinder the opportunity to specialize and gain in-depth knowledge in one particular area.

*Well, it demands a lot of the employees. Because the employees need to like quickly adjust to new projects, and I guess you wouldn't have like a deep knowledge of some part of the organization because you're kind of involved with a lot of things. But that might be a strength and might be a disadvantage.*

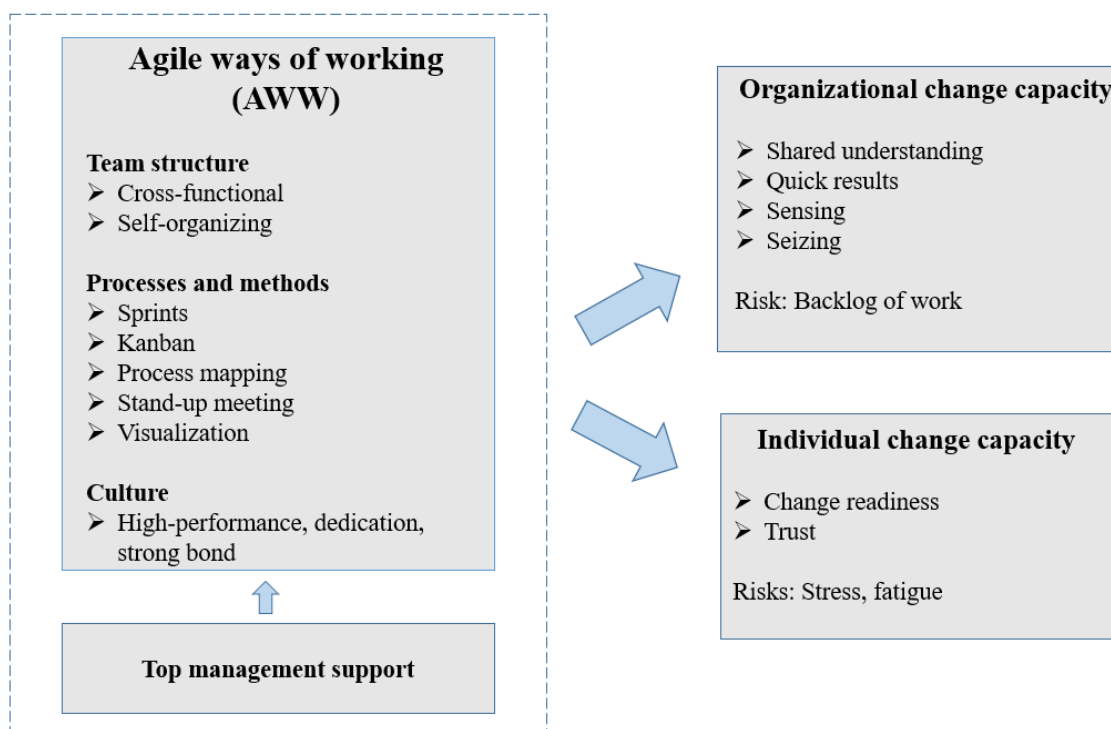


## 5. Discussion

*In this section, the findings of the study are organized and analyzed with the objective of making comparisons to existing literature and presenting new insights. A model is created based on the findings. First, I examine the actions taken by the firm that constitute AWW and compare it with existing literature on agility. Second and third, I explain how AWW has influenced organizational and individual change capacity respectively. Here, I draw on change capacity literature to support my findings. Finally, I address the role of top management in enabling change capacity at Bank Inc.*

Based on the findings in the previous section, a model is developed (see figure 6 below); on the left side of the model, the actions taken by the firm in the form of agile ways of working (AWW) are presented. On the right side, the outcome is presented as organizational change capacity and individual change capacity. The discussion is structured according to the model, where I first outline AWW as implemented by Bank Inc. Second, I examine how these actions have influenced organizational and individual change capacity. Here, the elements that create capacity and risks that may deter it are explained in detail. Throughout the discussion, I indicate where my findings support existing literature and where they provide new insights.

*Figure 6: Research findings model*



## 5.1 Agile ways of working (AWW)

My findings started by capturing how AWW originated at Bank Inc. in 2018 and how it is currently being implemented. Bank Inc. is seen employing a series of agile methods to rapidly find solutions to existing problems as well as create new processes and products altogether. It is no surprise that the approach used by the firm, including the different methods and characteristics tied to it, are indeed synonymous with what existing literature typically associates with AWW. As shown in the model, these findings are grouped under three distinct themes of team structure, processes and methods, and culture. Top management support is identified as a crucial factor guiding AWW at the firm, therefore this is discussed separately. With the support of existing literature, each of the themes is explained with an indication of the different components that fall under them. In doing so, I also highlight instances where Bank Inc. has adapted the methods to suit its purpose.

### Team structure

The findings indicate that every six months, Bank Inc. reviews and prioritizes the opportunities at hand. Based on this, members are allocated to projects according to their interests and expertise. Here, the skills of members are matched with project requirements to ensure the right team composition for tackling the opportunities. In that, resources are moved around, and new teams are created for every project, rather than assigning a fixed team throughout. This shows the firm's ability to allocate resources in a flexible and efficient manner, further supporting Doz & Kosonen's (2008) argument that agile organizations exhibit resource fluidity. Consistent with existing literature, the teams are found to be cross-functional which has enabled problem-solving, better access to resources, and quicker feedback (Le May, 2019; Rigby et al., 2016; Sherehiy et al., 2007). Also consistent with arguments of scholars, teams display a high level of autonomy with regard to planning and organizing their tasks (Boehm & Turner, 2006; Harraf et al., 2015). Moreover, teams enjoy flexibility when it comes to choosing an optimum working style. It is also found that in the case that the projects are too large, they are sub-divided into multiple smaller sprints where teams are allocated with specific mandates. Here, informants strongly claimed that smaller teams of up to four members are almost always more efficient than larger teams. This is not surprising, as a study conducted by Zia and colleagues (2018) showed that within an agile set-up, smaller teams are more effective as they do not face communication and coordination issues that teams with more than 10 members usually encounter.

## Processes and methods

Bank Inc. evidently follows the sprint method for tackling new opportunities, which is strikingly similar to what Schwaber & Sutherland (2017) attribute to the scrum agile method. The sprints at the firm vary in duration between 16 weeks and six months depending on the nature of the project. This contradicts the arguments of Schwaber & Sutherland (2017) who insist that a sprint should not last for more than one month, given that external changes may put the viability of the project at risk if the time horizon is longer. However, the informants claimed that the chosen duration provides them with a sufficient window to incorporate any changes within the ongoing project, and in some cases, changes are incorporated in the next sprint altogether. The firm is thus seen adapting the sprint method to suit its purpose. This finding supports Lan and colleagues' (2009) arguments that in order to truly realize the benefits of agile methods, they must be tailored to meet specific project requirements and working style of teams. Outside of agile literature, the findings also support change literature that organizations often customize change components to fit the business unit context (Stensaker & Falkenberg, 2007). While the sprint period itself is described as hectic, its time-boxed format allows teams to reflect on results post-completion, evaluate the scope for improvements, and plan ahead. In doing so, there is an emphasis on continuous improvement, where teams strive to learn and improve with every project. This is similar to what Davis (2013) describes as retrospective, where teams within an agile set-up continuously reflect on performance and processes between each cycle with the objective of making improvements. Moreover, the sprints also allow for flexibility, where it is possible to pause, revisit and shift direction on projects as the situation evolves. The findings support arguments in existing literature that describe flexibility as one of the core characteristics of AWW, allowing the firm to adjust its focus or switch the order of activities based on changing circumstances (Vokurka & Fliedner, 1998; Holbeche, 2015). At the same time, my findings reveal that in the case that new opportunities emerge mid-sprint, they are evaluated and taken into consideration only in the following sprint cycle that takes place every six months. This indicates that the level of flexibility is limited to changes within and between existing projects.

The findings on Kanban and its uses are also consistent with agile literature. The teams use the Kanban board as a visual tool to regularly track progress on projects and have an overview of all the tasks. As expected, this has allowed for efficient management of workflows and information sharing (Leopold & Kaltenecker, 2015). Moreover, it helps the teams to break

down tasks and narrow down their focus while understanding the big picture. The Kanban board is only used in projects where it is compatible with the team members involved and the tasks at hand, again indicating a level of freedom and flexibility to choose tools fit for the purpose.

Studies on agility discuss combining lean thinking with agile methodology; the findings support literature where the firm is seen using lean methods to eliminate wasteful activities and increase inefficiency (Bente et al., 2012). The firm borrows from practical frameworks such as process mapping to diagnose problems before implementing new solutions.

When it comes to the stand-up meeting, Rigby and colleagues (2016) indicate that it is common to have stand-up meetings within the team on a daily basis. The firm applies the concept of stand-up meeting rather differently, where it is conducted openly on a fortnight basis with a view to promote free flow of information regarding ongoing projects. While these findings are in line with agile literature that encourages customization of processes whenever necessary (LeMay, 2019; Lan et al., 2009), it is worth recognizing the benefits of this novel approach taken by the firm not previously mentioned in literature. Firstly, it has created transparency, where information on all projects is shared and discussed in an open forum within the organization. Secondly, it has created a sense of involvement among organizational members, wherein even those who are not involved in the sprints are welcome to join. Overall, this approach has contributed towards creating a shared understanding within the firm, which I will further explain in the organizational change capacity section of the discussion.

As a part of AWW, Bank Inc. is seen taking a visual approach to creating roadmaps and communicating periodical progress. This includes drawings prepared by the members themselves. This technique is used to stimulate creativity, engagement as well as clearly communicate regular updates on projects. Furthermore, drawings are seen as an effective replacement to lengthy reports, making it possible for everyone to capture the essence of the projects by quickly skimming through them. This is in line with the arguments of agile practitioners and scholars that emphasize on the use of different visualization techniques for knowledge sharing and raising awareness (Paredes et al., 2014; Davis, 2013). Additionally, to support the firm's agile practices, a visual story-telling approach is also taken in presenting the firm's strategy document. From the responses, it appears that the use of visuals has helped to create a shared understanding at Bank Inc. and has also made change more accessible. This will be further discussed in the organizational change capacity section.

## Culture

It is interesting to learn that AWW has created a unique culture at Bank Inc. This is particularly reflected in the attitudes and beliefs of the teams involved in the projects. The culture within these teams is clearly characterized by a strong dedication to their work, where members hold themselves to the highest standards when it comes to quality and performance. Team members share a strong bond and indicate a high level of trust between them. Furthermore, despite the hectic nature of their jobs, members show a positive outlook towards work. These findings support arguments in literature that teams within an agile organization display a high level of trust and dedication, and show high job satisfaction (Rigby et al., 2016; Cummins, 2017; Le May, 2019).

## Top management support

Top management support is evident throughout in successfully actualizing AWW at Bank Inc. TM plays an important role in approving ideas for sprints, prioritizing projects as well as allocating resources. TM also ensures that the teams receive adequate funding and the space to thrive. With the help of TM, teams are able to focus on projects without interruptions from daily operations. Moreover, by communicating important matters around the projects, TM also continuously legitimizes AWW at the firm. It is interesting to see that TM's involvement comes at varying degrees. While regular updates on projects are non-negotiable, TM grants teams with plenty of autonomy to run the projects and only steps in when there are roadblocks. Moreover, through the organization of workshops, TM aims to activate trust and synergies within the teams. TM's involvement is thus seen as empowering rather than forceful. This supports the arguments of Rigby and colleagues (2020) that leaders within an agile set-up should coach and not command. Each of the points mentioned above is also consistent with arguments in literature on the active role of top management in effectively implementing AWW (Holbeche, 2018; Rigby et al., 2016).

Overall the first part of my findings indicates that AWW implemented by Bank Inc. is consistent with literature on specific agile methods and their characteristics. As we are interested in finding out how this way of working influences change capacity, in the second part of my findings, I provide a detailed explanation of these effects in the form of organizational and individual change capacity. Both are addressed separately in the following sections.

## 5.2 Organizational change capacity

The analysis revealed specific effects of AWW on organizational and individual change capacity. In this section, organizational change capacity is analyzed. In doing so, I analyze the influence of AWW on the organization as a whole, where departments and employees not involved in projects are also included. Whereas for individual change capacity, the analysis extends to only those individuals involved in AWW. As shown in the model, AWW has influenced organizational change capacity through shared understanding, quick results, and enhanced sensing and seizing capabilities. At the same time, backlog of work is identified as a risk.

### Shared understanding

A novel contribution to literature, this study reveals that AWW has increased change capacity by creating a shared understanding within the organization. Specifically, stand-up meetings and visualization techniques used by the firm are identified as major contributors. The transparent form of communication at the stand-up meetings has enabled members to better understand the nature of change and how the firm is collectively working towards achieving its goals. Employees not working on projects are also invited to these meetings giving them the opportunity to feel included. Bank Inc. thus utilizes the stand-up meetings to keep everyone well informed and create a shared understanding, and not just about ongoing projects, but also about potential changes that might affect them in the future. Moreover, the visual approach used in the form of drawings has made it easier for everyone to understand precisely what the projects entail. The importance of this is previously mentioned in literature where Eriksson & Fundin (2018) insist on the use of visuals in communicating the vision and progress for clear and shared interpretation of change programs. One of the informants claimed that the use of visual illustrations has made change more accessible from an organizational perspective. It is also pointed out that before the implementation of AWW, information regarding projects was not easily accessible, but now due to the stand-up meetings and open display of drawings, it is possible for everyone to learn about ongoing projects and to also be on the same page. Furthermore, to support AWW, the strategy document now includes clear and concise information also in the form of visuals, making it more reader engaging. This has also created a better understanding of the goals within the firm. Overall, the findings are consistent with Buono & Kerber's (2010) arguments that change capacity can be enhanced by creating a shared understanding of the goals. Furthermore, by continuously communicating the overall strategy

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and goals, TM has also contributed to developing this further. This is in line with Klarner and colleagues' (2007) arguments that change capacity can be built by its management where powerful leadership is an important process determinant.

## Quick results

Previously, change projects at the firm were typically planned on a long-term basis running the course of many years. Now with the implementation of sprints, projects are completed in a few months, allowing employees to see the end sooner and evaluate results thereof. The short-timelines and cross-functional team set-up especially made it possible to promptly exchange feedback and produce results rapidly. As teams started churning out a series of successful projects, even employees who were initially resistant welcomed the idea of change. As rightly claimed by Kotter (1996), creating short-term wins was very useful in overcoming change resistance. Similarly, Jansen (2004) argued that highlighting short-term progress can yield to better change results. Projects that were especially successful created a favorable perception in the minds of organizational members, further encouraging them to collectively participate in the change process. Moreover, it is interesting to learn that this mindset has also trickled down to parts of the firm that are not actively involved in the sprints. One of the informants also admitted that the organization is more capable of changing now than it was prior to the implementation of AWW, especially due to its success. This study provides new insights that seeing good results sooner as a direct consequence of AWW can increase organizational change capacity.

## Sensing

Since the introduction of AWW, Bank Inc. is seen engaging in high-quality dialogues with stakeholders for identifying new opportunities. In change literature, Teece and colleagues (2016) associated these actions with the dynamic capabilities of sensing. This is also very similar to what Doz & Kosonen (2008) described as strategic sensitivity. They argued that in order for a firm to be strategically agile, sensing is one of the meta-capabilities that needs to be fully met. It is interesting to learn that prior to the implementation of AWW, the actions that typically encompass sensing were not treated with the same vigor. AWW has induced a high level of curiosity among members regarding competition and changes in the external environment. Furthermore, ideas for new projects are sourced from employees throughout the organization, implying that sensing is the responsibility of all employees. This finding supports

literature that within an agile organization, sensing also extends to the operational level, where it is the duty of all members to actively look for new opportunities and threats in the interest of the organization's future (Cummins, 2017). At the same time, employees admitted that there is scope for further improving their sensing capabilities. The challenges in this context are typically associated with insufficient time and resources. An explanation for this based on existing literature on change capacity is the possibility of low slack within the organization (Judge & Blocker, 2008). The data indicates that while exploring new opportunities is on the agenda of the management, the firm lacks resources to fully realize its potential. A possible solution for improving this could be by introducing more slack into the organization, where resources can be dedicated to the task of 'exploring' and further strengthening the organization's sensing capabilities. This is also in line with Sutherland & Woodroof (2009) arguments that while sensing may extend to all employees at the operational level, appointing specialized personnel may be more effective. Overall, it is evident that the firm exhibited a renewed sense of alertness since the implementation of AWW, however there is not enough evidence to fully support that this further led to making strategic decisions. When compared to the condition before AWW, it can be said that the firm's sensing capabilities have developed to a certain extent. However, it is important to note that the firm must continue to optimize them by dedicating more time and resources.

## Seizing

The findings indicate that AWW has allowed Bank Inc. to not only identify new opportunities in the external environment but to also respond to them in a quick and effective manner. This is evident in the firm's swift movement from ideation to delivery of the final solution within a short period. As previously mentioned, Bank Inc. has a set process in place to evaluate new opportunities every six months, where management converts the relevant ones into actionable sprints by assigning resources to them. This is similar to what Teece and colleagues (2016) describe as seizing, where firms address new opportunities by mobilizing resources. Moreover, the natural speed associated with AWW has allowed the firm to tackle a series of opportunities over a period of time. Baskarada & Koronios (2018) argue that seizing primarily lies in the hands of TM who generally use different strategic management approaches to pursue it. According to Teece (2007), top managers are decision-makers when it comes to determining whether the firm should invest in a certain opportunity at the given time or not. In the case of Bank Inc., this can be seen in TM's initiative of prioritizing ideas periodically to match the



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strategic goals before converting them into sprints. Baskarada & Koronios (2018) also argue that seizing involves business model and strategy transformations. As far as the strategy is concerned, TM revisits and sets the strategic direction every six months incorporating the short-term goals driving AWW. From the findings, it is evident that the Bank Inc. is in a better position to react to change rapidly and seize new opportunities as a result of AWW. This is considered as a new contribution to literature.

### **Risk: Backlog of work**

Adopting AWW has allowed the firm to reap several benefits at the organizational level. However, it is interesting to learn that there is also a risk associated with it. This is a new insight not previously mentioned in literature. The sprint format followed by the firm creates a time pressure with the challenge of delivering projects in short cycles. Moreover, the teams are used to moving swiftly from one project to another with little time to spare in between. This has resulted in creating a list of unfinished tasks that may potentially risk the functionality of the newly created products or processes. While this is not perceived to directly decrease organizational change capacity, it is a risk that practitioners should be wary of.

## **5.3 Individual change capacity**

In this section, I explain how AWW has influenced individual change capacity at Bank Inc. As shown in the model, readiness to change and trust are identified as key elements creating individual change capacity. At the same time, stress and fatigue are seen as risks.

### **Readiness to change**

At the individual level, it is observed that AWW has positively influenced change capacity by developing a readiness to change. This is considered as a novel contribution to literature. Multiple projects in the form of sprints have allowed members to get used to the idea of constant change. One of the informants even admitted that the dynamic way of working and continuous adaptation to changes is now viewed as normal within the organization. Furthermore, to the informants, AWW is proof that change efforts can bring desired results. During the sprints, members are generally presented with a variety of challenges, as well as opportunities to learn from them. As AWW was new to a majority of the members at first, they attempted to learn by

experimenting. The lean method has urged members to think critically and identify the need for change when it comes to creating and revamping processes. Members also place special importance on self-reflection post project completion, where they assess their own performance and identify potential areas of improvement. From the responses, it is apparent that there is a continual focus on finding more efficient ways of performing tasks. This further indicates a strong motivation and willingness to change at the individual level. In an earlier study, Cunningham and colleagues (2002) confirmed that individuals who took an active approach to problem-solving in their work role exhibited a higher readiness for organizational change. However, informants also pointed out that the capacity for change differs from individual to individual, where some might choose to reflect and learn, and others might not. A possible explanation for this from existing literature is that individual change readiness is highly dependent on the personal characteristics of the participant including personality traits and intrinsic motivation (Judge et al.,1999; Oreg et al., 2011).

## Trust

The informants indicated the presence of a high level of trust among members working on projects. Agile literature describes trust as an important element of the culture within an agile set-up. This is apparent in the informants' accounts of the prevalent team culture. But it is interesting to learn that AWW has further heightened trust among individuals. This is observed in various instances. Starting with the cross-functional teams, which has led to grouping together individuals with varying skillsets where responsibilities are assigned according to expertise. This means that team members have to trust each other to perform their respective tasks to the highest standards for the success of the projects. This is in line with Rigby and colleagues' (2016) arguments that cross-functional teams help build trust among team members. Not to mention, with the time pressure, it is also critical for everyone to work closely and pull together as a team. In doing so, the members also display active collaboration in tackling tasks and solving issues that emerged on the go. Here, the presence of psychological safety is evident among individuals with regard to openly discussing challenges and conveying feedback. Vakola (2014) stresses the importance of creating an atmosphere of trust and open communication among employees for enhancing individual change readiness. This study sheds light on another new insight that the tight-knit cross-functional groups and collaboration style aided by AWW has enhanced trust among individuals consequently increasing their capacity

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for change. It is expected that members feel more comfortable taking on even more challenging projects in the future, given that there is high psychological safety and trust.

### **Risks: Stress and fatigue**

As new contributions to literature, this study also reveals some risks of AWW from an individual perspective. It is found that the short timelines and rapid manner of moving through projects may occasionally lead to stress and fatigue among members. These risks are mostly attributed to individuals who are not accustomed to working in high-pressure environments such as the ones induced by AWW. An explanation for this can be found within the change readiness literature, where Cunningham and colleagues (2002) argued that workers in demanding positions often experience emotional exhaustion during the course of change. This may have a negative effect on individual readiness to change, if not managed appropriately. Moreover, there was also an indication that some individuals may find it challenging to adapt to a series of changes within a short period. However, as pointed out by the respondents, it is important to acknowledge that the ability to cope with change highly varies from individual to individual. What some may find stressful and overwhelming, others may find manageable. Interestingly at the same time, the evidence of low sick leave shows that overall employees are happy and invested in their jobs. Therefore, instances of stress and fatigue are only seen as risks. Additionally, it is found that AWW hinders developing specialized knowledge about organizational functions. As resources worked on a series of projects, they were able to develop a good general understanding of the different functions within the organization. However, since they did not spend too much time in any specific area, they were unable to develop in-depth knowledge. From the findings and support from existing literature, it can be inferred that stress and fatigue may have the potential to hinder change capacity at the individual level if not managed effectively. However, there is not enough evidence to support that the lack of opportunity to specialize can lead to the same.

Lastly, it is worth highlighting the role of TM in enabling change capacity. As previously mentioned, TM support and involvement is seen throughout the implementation of AWW. However, certain actions are particularly identified as enablers in building change capacity. Firstly, TM continuously communicates the goals in connection to the sprints, as well as updates the strategy document every six months to reflect these, hence contributing to creating a shared

understanding at the firm. Secondly, TM provides the teams with necessary resources to function; with TM support, teams are able to overcome challenges in projects and subsequently deliver results without losing much time. Thirdly, TM actively legitimizes AWW such that members view the constant adaptation to change as the new normal. This has contributed to creating change readiness. Lastly, by giving teams the freedom to run the projects independently, TM demonstrates trust further allowing teams to flourish. TM also takes an active interest in triggering productive team dynamics by organizing focused workshops. All the aforementioned actions taken by TM in the course of AWW have directly and indirectly contributed to building change capacity both at the individual and organizational level.

## 6. Conclusion

*In this section, I provide an answer to the research question while also highlighting new insights as contributions to literature. Further, managerial implications, potential areas for future research, and limitations of the study are addressed.*

The objective of this thesis was to explore the influence of AWW on change capacity, which has previously not been addressed in literature. To sufficiently answer the research question, this thesis took a case study approach that allowed for the examination of agility in practice. Data was collected from both primary and secondary resources from a single firm in the form of interviews, observations, and company documents.

Existing research was used to establish an initial understanding of the concept of agility, AWW and its characteristics. Change literature was also reviewed to explore prevalent theories on change capacity and elements that influence it. While both AWW and change capacity are largely discussed topics, no visible link was found explaining the influence of AWW on change capacity. The main objective behind performing this study was to investigate that missing link and consequently discover new insights useful to both academics and practitioners.

The first part of the findings supports existing literature on agility, including AWW and its characteristics. Here, it was interesting to learn how the firm was also able to adapt AWW to match its purpose. A new finding in this regard was the unique approach taken by the firm towards stand-up meetings which allowed for transparency and creating a sense of involvement among organizational members. The visual presentation of reports in the form of drawings appeared to have similar benefits in addition to enhanced creativity and engagement. In the second part of the findings, more new insights were discovered, where it was found that several aspects of AWW including team structure, processes and methods, culture, and top management involvement have influenced organizational and individual change capacity. These are considered as novel contributions to literature. At the organizational level, change capacity was enhanced through shared understanding and quick results. Positive effects were also seen on the organization's dynamic capabilities of sensing and seizing. When it comes to sensing, it is important to acknowledge that while these capabilities were enhanced to an extent due to AWW, there is still a need to optimize them at a strategic level by dedicating time and resources. Existing literature recommends introducing organizational slack to further

strengthen these capabilities. The evidence also shows that the firm is in a better position to react to changes quickly and flexibly indicating enhanced seizing capabilities. At the individual level, AWW positively influenced change capacity by developing readiness to change and trust among members. Some risks were also observed. As a direct consequence of AWW, the organization faced the challenge of unfinished work. At the individual level, risks of fatigue and stress were observed. Furthermore, the study highlights the role of top management in not only supporting AWW at the firm but also contributing to building change capacity. Overall, AWW shows a strong positive influence on change capacity.

This study also provides valuable insights for practitioners. First, it explains how AWW is practiced in reality and how firms can benefit from its implementation. Second, it indicates how specific elements of AWW can contribute to building organizational and individual change capacity. Third, it informs managers regarding potential risks. Finally, it highlights the role of top management in the successful implementation of AWW and building change capacity.

Several potential areas of research were also identified in the course of this study, including further investigation on the use of agile visualization techniques and its effects on change capacity. This study discussed the influence of AWW on the dynamic capabilities of sensing and seizing, however, there is scope for strengthening this in addition to studying transforming capabilities in a similar context. Some risk factors of AWW were identified; future research can use this as a starting point for further investigation and exploration of mitigation measures.

The study is also subject to a few limitations. The data was collected from informants who had the experience of working in sprints; it is important to note that the firm also has several other employees working in daily operations that are not involved in the sprints. Therefore, the results at the individual level are limited to only those involved in the firm's agile practices. In the future, there is scope to explore differences in individual change capacity based on the exposure to AWW and lack of it. Further, the study involved a firm relatively small in size. This has implications for adopting AWW. It is possible that going agile and reaping similar benefits is easier for a smaller firm than a bigger one. Bigger firms are normally seen as less flexible hence making it difficult to fully realize the potential of AWW. Future research could also focus on this, perhaps by performing a comparative study of differently sized firms. The case study was set within the banking industry; though a very popular practice in the IT and manufacturing industries, AWW is now being adopted across other industries and it is expected that there are differences with regard to how it is being implemented. Bank Inc. was seen using a combination

of agile techniques in addition to its own approach. Due to possible differences, it may be difficult to generalize the impact of AWW and make conclusions therefrom.

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## 8. Appendix

### 8.1 Appendix A – Interview guide

#### Background Information

1. Please tell me about your current position and what your work consists of. What is your background; education, previous positions in or outside of the company?
2. We notice that many organizations now are trying to work the agile way. Why is this way of working (sprints) adopted by the bank?
3. Please describe how working on such sprints is different from the traditional way of working?

#### Agile ways of working

1. Please give me an example of one of the projects you are working on/have worked on that went excellent according to you:
  - a. Please walk me through the process
  - b. How were the timelines on these projects? from ideation—prototype—end product?
  - c. Are there any set guidelines or a structure that you follow?
  - d. Would you describe the way of working as flexible, where changes can be made easily, such as adding or removing tasks or is it difficult to make changes?
  - e. Do you continuously try to improve processes? If yes, how?
  - f. How are teams set up?
  - g. How are resources moved from one project to the other?
  - h. Have you worked in both big and small teams? How would you compare the two?
  - i. Would you describe the teams as self-organizing or does someone give you instructions?
  - j. How would you describe the culture? Is it different from the rest of the organization?
  - k. How does the team interact with the rest of the organization?

1. Can you describe the involvement of top management in such projects?
2. Now for the challenging project that you worked on:
  - a. What would you say was different compared to the excellent one?

### **Change Capacity**

1. In your view, does the agile way of working increase the organization's capacity for change? If yes, how so?
2. Does it increase individual capacity for change? How/why?
3. Does it speed up change? How/why?
4. Does it reduce the costs of change? How/why?
5. Does it enable you to implement change more quickly? How/why?
6. Are there any risks to working the agile way?
7. In your view, does the agile way of working in any way decrease/limit the capacity for change? How so?
8. Is there any risk that you become so focused on delivering your "sprint" that you miss signals about important developments in the environment?



## 8.2 Appendix B – Consent form

### **Informed consent form – FOCUS research program**

#### **NHH Norwegian School of Economics**

The FOCUS-program is a collaboration between NHH Norwegian School of Economics and Norwegian-based multinational firms. One goal of the research program is to develop knowledge on the topics of international integration, managing knowledge workers, dynamic control systems and change capacity.

We invite you to participate in an interview lasting up to one hour. The interview will be recorded, and notes will be taken during the interview. The interview will then be transcribed. Any information that could identify individuals will be removed (eg. your name). Only persons participating in the interviews will have access to material that can identify informants.

Participating in the project is voluntary. You can withdraw at any time. The researchers in the FOCUS program will have access to the transcribed interviews, and they have signed confidentiality agreements. In some cases, a follow-up study will be carried out. If so, you will receive new information and a new invitation to participate.

The data will be used for research, i.e. production of scientific articles and reports.

By signing this form, you consent to participate in the study. If you have any questions regarding this invitation, or you wish to be informed about the results of the study, please contact me at the address below.

Kind regards,

Samyuktha Kamath, NHH Norwegian School of Economics

E-mail:

Phone:

Informed consent form:

I have received written information and I am willing to participate in this study.

Signature ..... Phone number .....

Printed name: