

Leadership challenges of large-scale agile transformations

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ABSTRACT

Compelled by the digital transformation revolution and the need for organisational agility in environments of high unpredictability, many organisations are striving to achieve organisational agility by adopting agile practices and agile ways of working, and undertaking enterprise-wide agile transformations. While studies have investigated the challenges such undertakings face, there is little academic research on the experiences of leaders involved in such agile transformations, leading to concerns that research is not addressing challenges faced in practice, and organisations are missing opportunities to provide necessary support.

The research method adopted was qualitative and exploratory, limited to a case study of a single organisation in the South African banking sector undertaking an agile transformation. Thirteen in-depth interviews with leaders at senior levels within the organisation were conducted. The study found that leaders had to change leadership styles because of the agile transformation, away from command-and-control towards a combination of distributed, empowering, sharing and servant leadership styles.

The study contributes to the academic literature on the leadership of agile transformations for large corporates, and provides organisations with valuable input to improve the success of such undertakings, and to identify the critical leadership attributes for the agile, new ways of working.

KEY WORDS

Agility, Agile Transformation, Leadership Styles, Servant Leadership

DECLARATION

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

Thuto Mako

Signature

Date

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CHAPTER 1: INTRODUCTION TO RESEARCH PROBLEM

1.1 Purpose of the Research

The purpose of this research was to explore the challenges of large-scale transitions from the traditional ways to agile ways of working in organisations, from the perspective of leaders involved in such programmes. This will contribute to the academic literature on the leadership of agile transformations for large corporates. It will also provide organisations with valuable input to improve the rate and degree of success of such undertakings, and to identify the critical leadership attributes as well as their support requirements.

1.2 Introduction

Digital transformation is affecting countries and industries across the globe and has risen to the top of CEO's strategic plans (Siebel, 2017; Vial, 2019). Compelled by the digital transformation revolution and the associated need for organisational flexibility, adaptability and agility in an environment of high unpredictability, many organisations are striving to achieve organisational agility by adopting agile practices and ways of working, and undertaking enterprise-wide agile transformation programmes (Felipe, Roldán, & Leal-rodíguez, 2016; Sambamurthy, Bharadwaj, & Grover, 2003).

The adoption of agile methods was initially applied in the software development industry for single, small project teams following the principles of the Agile Manifesto (Beck et al., 2001; Serrador & Pinto, 2015). These practices have proven to be successful enough that not only have many organisations undertaken to adopt them for larger software development projects (Van Waardenburg & Van Vliet, 2013), but also to extend them to other non-IT functions across large organisations, undertaking what are known as *agile transformations* (Birkinshaw, 2018; Fuchs & Hess, 2018). This is also in recognition of the fact that technology itself is only a part of the changes organisations must undergo to remain competitive in a digital world (Vial, 2019).

A systematic literature review of large-scale agile transformation challenges and success factors found that while more and more large organisations are undertaking this agile transformation journey, there is still a shortage of academic research on

the topic (Dikert, Paasivaara, & Lassenius, 2016). In addition, in calling for organisational adaptability to be recognised as encompassing the need for organisations to be flexible, agile and adaptive in their responses to volatile and unpredictable changes in their environments, Uhl-bien & Arena (2018) point out that leadership for organisational adaptability has been neglected in the literature.

In response to such calls, this research study set out to explore the experiences of leaders who have been involved in the transition to agile ways of working across large organisations, specifically from the personal perspectives of leaders tasked with leading agile ways of working in their organisations. The study was undertaken as a case study on a single company in the South African banking sector, in line with the recommendation in the literature for case studies to assist with understanding “large-scale agile transformations better and how they are done in practice” (Dikert et al., 2016, p 106). The banking sector in South Africa was selected because it is composed of large corporates which are known to have been undertaking “large-scale transformation programmes aimed at improving customer experience, digital transformation, new ways-of-working and enterprise-wide cost reduction” in response to the threats of digital disruption (PwC, 2018, p 1).

1.3 Background to the Research Problem

In the context of a business climate characterised by high degrees of uncertainty, unpredictability, complexity and ambiguity, with customers who are increasingly digitally-savvy and demanding high levels of service excellence, digital transformation has become a strategic topic on the agenda of leaders in organisations (Vial, 2019; Warner & Wäger, 2019). This has been accompanied by the recognition that digital transformation has to be accompanied by transformation in the culture of the organisation in order to succeed (Hemerling, Kilmann, Danoesastro, Stutts, & Ahern, 2018) and that organisational agility is a key capability for organisations to remain relevant in a digital economy (Warner & Wäger, 2019).

Sambamurthy et al. (2003) defined agility as the organisation’s ability to sense and seize market opportunities with speed. Appelbaum, Calla, Desautels, & Hasan (2017) report that organisational agility increases the organisation’s ability to respond proactively to unexpected environmental changes, while a report on agile

transformations by consulting firm McKinsey (2018) recognised that organisational agility enables organisations to develop their products faster, and reallocate resources adroitly and more quickly. Denning (2018) also reports that firms which have been successful in implementing agile management have witnessed improved customer service levels and employee engagement levels.

One of the ways organisations use to foster organisational agility is to introduce agile methods (Fuchs & Hess, 2018). Agile methods began as a software development methodology for small teams, with uptake beginning in the IT department of large organisations (Birkinshaw, 2018; Rigby, Sutherland, & Hirotaka, 2016). These practices can be defined as a set of iterative and incremental software engineering methods (Cockburn & Highsmith, 2001; Dikert et al., 2016).

However, due to the need to be faster in response to market conditions and more flexible, many organisations are adopting agile practices and applying the principles from the agile software development methodology for larger teams and across non-IT functions in organisations (Karlson, 2018; McKinsey, 2018; Rigby, Sutherland, & Noble, 2018). In this sense, the notion of “agile” has evolved out of the strictly software development arena and grown to be adopted across other functions of organisations, and the transition to agile ways of working across the whole organisation has become an approach that many organisations are pursuing (Denning, 2018). For many organisations this includes digitalising their workplaces (Dery, Sebastian, & van der Meulen, 2017), and establishing networks of self-organising, autonomous teams (Parker, Holesgrove, & Pathak, 2015).

This transition to agile ways of working which foster organisational agility by applying structured agile methodologies is termed *agile transformation*, referring to a holistic change in the operating model and ways of working of an organisation to create value for the enterprise and customers (McKinsey, 2017; Olszewska, Heidenberg, Weijola, Mikkonen, & Porres, 2016; Paasivaara, Behm, Lassenius, & Hallikainen, 2018). These agile transformations can be undertaken across the entire enterprise, or within just a single function or business unit (Fuchs & Hess, 2018).

Accompanying this transformation to agile ways of working is the issue of leadership.

The transformation to agile ways of working puts leadership under the spotlight as leaders are presented with new challenges and different considerations. Organisational agility entails a change in the way the whole organisation is led, and requires a different kind of management (De Smet, Lurie, & St George, 2018; Denning, 2018b; Gandomani & Nafchi, 2016). The challenge for leaders in the agile organisation lies in leading large numbers of autonomous, self-organising teams to operate and cooperate in a coordinated fashion in pursuit of a common goal (Boehm & Turner, 2005; Denning, 2018b; Jovanović, Mas, Mesquida, & Lalić, 2017; Parker et al., 2015).

In the new, agile ways of working, there are requirements for a high degree of autonomy of teams. The role of the leader or manager changes from being the person all the individuals report into, to one of enabling self-organising teams to independently achieve goals set out to deliver customer value. The work is achieved through iterative, short cycles focused on delivering working solutions to the customer, allowing for early feedback from the customer and incorporating the feedback into the subsequent cycles. This cannot be achieved through the bureaucracy of rules and hierarchy of traditional management (Birkinshaw, 2018; Denning, 2016). In the 2019 industry report on business agility compiled by the Business Agility Institute, the respondents indicated that “leadership style is the biggest challenge to business agility adoption faced” by practitioners (Business Agility Institute, 2019, p 15).

1.4 The Research Problem

The business case for the adoption of agile practices and their benefits for modern organisations is well researched (Serrador & Pinto, 2015), and their adoption in financial services (Deloitte, 2015), and in South African financial services organisations in particular, is growing (Johnston & Gill, 2017; Noruwana & Tanner, 2012). However, there remains little academic research on the requirements upon leaders involved in such agile transformations, leading to concerns that research is not addressing the challenges that are being faced in practice (Gregory, Barroca, Sharp, Deshpande, & Taylor, 2016).

Leaders are critical to the success of agile transformations (Forbes Insights & Project

Management Institute, 2017). This means that if organisations are not aware of specific challenges peculiar to this group, they may be missing opportunities to provide the necessary and appropriate support (Gregory et al., 2016). For this reason, this research seeks to explore the insights, challenges and lessons learned of leaders involved in an organisational transformation to agile, new ways of working.

1.5 The Aim and Scope of the Research

The aim of the research was to explore the experiences of leaders who are involved in leading the transition to agile ways of working across a large financial services organisation in South Africa, to understand the required leadership attributes and changes in leadership styles. Therefore, the aims of the research were as follows:

1. Explore the challenges faced by leaders in a large-scale agile transformation
2. Identify the leadership attributes required for successful agile transformation from the perspective of leaders

The scope was limited to a single organisation in the South African banking sector, but one which is counted among the largest banks in the South African financial services industry. The research process was composed of in-depth interviews with leaders at senior levels within the organisation.

1.6 Conclusion

The rest of the document is structured as follows: Chapter 2 provides a review of the literature concerning the topic of large-scale agile transformations and their leadership challenges. Chapter 3 summarises the research questions which are derived from and supported by the literature review. Chapter 4 explains the research methodology followed, while Chapter 5 presents the results of the interviews completed and analysed. Chapter 6 presents an evaluation of the results in comparison with the literature of Chapter 2, and Chapter 7 concludes the document, with a declaration of limitations and suggestions for future research directions.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter provides a review of the literature on the major constructs pertinent to the research objectives of understanding the experiences and challenges for leaders involved in large-scale agile transformations in large organisations in the South African banking sector.

2.2 Agile Transformations

2.2.1 Agile practices

George, Scheibe, Townsend, & Mennecke (2018) lament the fact that the definition of “agile” varies greatly across organisations and industries, and that the term has become so popular and widely-used that there is danger of it losing its original meaning. Denning (2018) goes so far as to point out that some of the leading agile firms do not even use the label “agile” to describe their way of doing things, and rather use other labels such as “the Google way” or “our start-up culture”.

Dingsøyraab, Nerur, Balijepally, & Brede Moe (2012) explain that the emergence of the concepts of agility and agile methods began in the manufacturing industry. Their application in the IT software industry started to emerge in the 1990s in response to the growing complexity of software products and the need for continuous improvements in coping with continuous change (Boehm & Turner, 2005; Ebert & Paasivaara, 2017; Serrador & Pinto, 2015), with the word “agile” being used in combination with “software process” for the first time in 1998 (Dybå & Dingsøyraab, 2008). Cockburn & Highsmith (2001) explain that the term “agile” was coined to convey the connotations of a process that both creates change and responds rapidly to change, and therefore relies on responsive people and organisations. Since their establishment as a practice in 2001 following the Agile Manifesto, agile methods have been recognised as a key management practice that can be extended outside the IT domain (Denning, 2018a; Rigby et al., 2018). While also conceding that the concept of agile is used too broadly and is difficult to define, Gregory et al. (2016) nevertheless point out that in practice the values and principles declared in the Agile Manifesto are frequently used a guide to the meaning of the term.

The “Agile Manifesto” was initiated in 2001 by a group of software developers who wanted to devise alternatives to the documentation-heavy, plan-driven waterfall approach that was predominant at the time, and who then agreed on a set of values and principles that became known as the “The Agile Manifesto” (Beck et al., 2001; George et al., 2018), which were summarised as follows:

To Value:

1. Individuals and interactions → over processes and tools
2. Working software → over comprehensive documentation
3. Customer collaboration → over contract negotiation
4. Responding to change → over following a plan

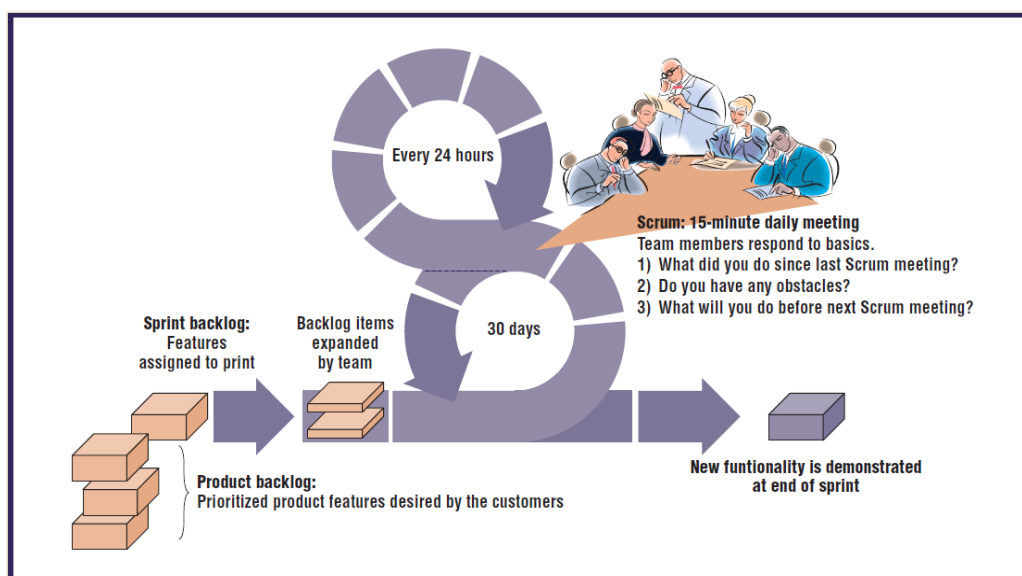
This declaration of values and principles emphasised trust and respect among the people working together, and also promoted collaboration for the benefit of the customer (Hoda, Salleh, & Grundy, 2018). These values were accompanied by a set of principles which also emphasised customer satisfaction as the priority (see Appendix A). In practice, the aim is to deliver working software solutions to users at regular intervals. This is achieved through iterative, short cycles called “sprints”, which are focused on delivering a working solution that can be offered to the customer, allowing for early feedback from the customer and for incorporating the feedback into the subsequent cycles (Dingsøyraab et al., 2012; Hoda et al., 2018; Laanti, Salo, & Abrahamsson, 2011).

The core production unit of the agile method is the small, self-organising, autonomous team composed of motivated, cross-functionally skilled members capable of delivering solutions independently as a team (Dingsøyraab et al., 2012; Parker et al., 2015; Rigby et al., 2018). According to Cockburn & Highsmith (2001), the key focus of the agile development method is the talent and skills of the individuals involved, with processes moulded to fit the people and the capabilities of teams rather than the other way around. Nerur, Mahapatra, & Mangalaraj (2005) even emphasise that agile principles will not work without a team of competent and above-average skilled personnel. The aim of this team configuration is to deliver greater value to customers through the ability to deliver working products at regular intervals by applying these agile manifesto values and principles. The team members would typically be co-located and empowered to decide on a delivery pace that

sustains their productivity and effectiveness (Dingsøyraab et al., 2012; Parker et al., 2015; Rigby et al., 2016). Through close collaboration with the customer, this method of work enables the team to respond rapidly in accommodating changes in requirements at any stage of the development cycle. According to Lee & Xia (2010), this is in recognition of the fact that customers will often change their mind about what they want and need, and it is also not possible to foresee all the challenges and opportunities that will be encountered in the future.

To achieve this, various methodologies have been developed in the industry, such as Scrum, Lean development, Extreme programming (XP), Kanban and others (G. Lee & Xia, 2010; Rigby et al., 2016; Sheffield & Lemétayer, 2013). While these methods have differences among them, all are based on the values and principles of agile (Gandomani, Zulzalil, Abdul Ghani, Abu, & Parizi, 2015). According to the 2019 State of Agile report, Scrum methodology is used by 72% of companies that have adopted agile methodologies (VersionOne, 2019). The scrum method is suited for projects where it is difficult to plan very far ahead and is typically structured into sprints of two to four-week periods. The process is managed through structured events, or ceremonies. These include the definition of the product backlog; the sprint planning session for the definition of sprint backlogs; the daily scrum meetings; review sessions at the end of the sprint; and retrospectives by the team at the end of a sprint (Boehm & Turner, 2005; Cho, 2008).

Figure 1: The Scrum process: An example of an agile process flow



Source: Boehm & Turner (2005)

In their comparison of the traditional method and the agile methods, Serrador & Pinto (2015) advise that a balance between the two is usually more appropriate, based on factors such as the size of the project and regulatory or safety requirements. For stable environments where future requirements are well known, traditional methods that rely on upfront planning are suitable. However, environments which are turbulent and subject to high degrees of change are more suited to agile methods that have less reliance on detailed upfront planning. Dybå & Dingsøy (2008) explain that this is because agile methods place a higher reliance upon people and their creativity rather than on processes, making them more suited for the challenges of an unpredictable world. Nerur, Mahapatra, & Mangalaraj (2005) emphasise that the accompanying management style needs to be collaborative, rather than the traditional command-and-control style (Table 1).

Table 1: Comparison between traditional and agile development

	Traditional Development	Agile Development
Fundamental Assumptions	Systems are fully specifiable, predictable, and can be built through meticulous and extensive planning.	High-quality software can be developed by small teams using principles of continuous design improvement and testing based on rapid feedback and change.
Control	Process-centric	People-centric
Management Style	Command-and-control	Leadership and Collaboration
Desired Organisational Form/structure	Mechanistic (bureaucratic with high formalisation)	Organic (flexible and participative, encouraging cooperative social action)
Role Assignment	Individual – favours specialisation	Self-organising teams – encourages role interchangeability
Customer's role	Important	Critical

Source: Adapted from Nerur, Mahapatra, & Mangalaraj (2005)

2.2.2 Scaling Agile practices

Due to the success of agile methods in improving team productivity, speed to market, customer satisfaction and product quality, in the period since the declaration of the Agile Manifesto many organisations have been adopting and attempting to scale agile practices across the enterprise (Olszewska et al., 2016; Rigby et al., 2018; Sommer, 2019). This has been undertaken across several fronts in organisations. The first being the adoption of agile practices for larger projects (Dingsøyr, Fægri, & Itkonen, 2014; Van Waardenburg & Van Vliet, 2013). The second has been the expansion of the adoption of agile practices across the entire software and IT development function of organisations, in multi-team settings (Fuchs & Hess, 2018; Sommer, 2019). The third and more recent wave of agile transformations has been the adoption of agile practices across the entire organisation to include non-IT functions such as HR, product development and marketing (Bharadwaj, A., El Sawy, Pavlou, & Venkatraman, 2013; Deloitte, 2018; Rigby et al., 2018; Smart, 2018).

However, it has been noted by both practitioners and scholars that, as the agile practices were initially developed for small, co-located and autonomous teams capable of self-organising, the attempts by organisations to expand their application across these fronts face challenges (Dikert et al., 2016; Gregory et al., 2016). Many of these challenges are due to the inertia of large organisations, which slows down the change process, and the existence of legacy systems, established processes and organisational structures (Gerster, Dremel, & Kelker, 2018; Paasivaara et al., 2018). Other challenges are that large organisations are often globally distributed, making physical co-location of teams difficult, and bringing a need to apply agile in distributed projects (Hanssen, Smite, & Moe, 2011).

To assist organisations to address these issues, recommendations on best approaches for scaling agile across the organisation have been proposed by management consulting firms, such as Deloitte (2015) and McKinsey (2015), but also by the likes of IBM (Ambler, 2010) and consortiums composed of academics and firms such as Microsoft, Ericson and Barclays that have undertaken successful large-scale transformations (Denning, 2016). Alongside these, several frameworks have also emerged in the industry to assist organisations wishing to scale up the adoption of agile practices. These include frameworks such as the Scaled Agile Framework (SAFe), Large Scale Scrum (LeSS), Scrum of Scrums, Spotify, Nexus and Scrum at

Scale frameworks, as well other frameworks such as Disciplined Agile Delivery or DAD (Conboy & Carroll, 2019; Dingsoeyr, Falessi, & Power, 2019; Smart, 2018).

However, as Conboy & Carroll (2019) explain, there is still very little empirical research that verifies the effectiveness of any of these frameworks, while Ebert & Paasivaara (2017) point to the paucity of independent empirical studies that explore how these frameworks work in practice or what circumstances are best suited to each. Nevertheless, despite this, many organisations are still adopting one or the other of these frameworks (Paasivaara et al., 2018), with 30% of companies in a 2019 survey saying they are applying SAFe methods for scaling agility, while Scrum of Scrums follows second in popularity (VersionOne, 2019).

Denning (2018), reporting on the outcomes of collaborative investigations by a consortium of companies including Microsoft, Barclay, and Ericsson, emphasises that agile needs to be understood as primarily a mindset, and that the agile mindset is itself more important than any specific agile methodology selected, or the processes, systems or organisational structures employed. On the other hand Gregory et al. (2016) highlight that the main issues facing practitioners are now less about adoption of agile, but rather about sustaining agile once adopted, as the temptation to return to old ways remains even after adoption, when challenges with the transformation are encountered.

2.2.3 Challenges of Large-Scale Agile transformations

In this report, the definition of “large-scale” follows the definition suggested by Fuchs & Hess (2018, p. 2) as “the usage of agile methods in large multi-team settings” and “the employment of agile practices and principles in firms as a whole”. This follows on the taxonomy established by Dingsøyr, Fægri, & Itkonen (2014), which defined large-scale as anything between two to nine teams and very large-scale as anything more than 10 teams adopting the agile practices in an organisation, where a single team is composed of seven plus/minus two people. It also aligned with the definition used by Dikert et al. (2016), that large-scale should be applied when there are at least six teams. The definition of transformation in the term agile transformation also follows what has been used by Fuchs & Hess (2018), referring to the rollout or adoption of agile methods to more members of the organisation, or the extension to

more business units within the organisation.

Companies that are “born digital”, which are companies that have leveraged off digital capabilities and technologies since their inception, tend to have high levels of agility by nature (Huang, Henfridsson, Liu, & Newell, 2017; Tumbas, Berente, & Vom Brocke, 2018). However, for traditional companies that are not “born digital” and not “born agile”, and have to add digital capabilities to their existing business models, there may not be the inherent levels of flexibility and agility that such “born digital” companies may have (Huang et al., 2017; Rigby et al., 2018). Therefore, there is pressure on them to develop adaptability by transforming their processes, ways of working and operating models to achieve that effect. According to Gerster et al. (2018), while the adoption of agile practices for start-ups and “born digital” companies will have their own challenges, for large enterprises there are different challenges due to the existence of legacy systems, historic data and well-established organisational processes, procedures and cultures.

Several research studies on the challenges of adopting and scaling agile practices in large organisations have been undertaken in recent years, from different perspectives. Some have had specific focus on the challenges encountered when there is the co-existence of both agile and plan-driven practices within the same enterprise, such as Van Waardenburg & Van Vliet (2013). The focus of other studies has been the challenges of migrating from a plan-driven, traditional waterfall approach to agile methods (Birkinshaw, 2018; Conboy, Coyle, Wang, & Pikkarainen, 2011; Kalenda, Hyna, & Rossi, 2018; Laanti et al., 2011; Nerur et al., 2005; Paasivaara et al., 2018; Petersen & Wohlin, 2010; Sommer, 2019). More recent studies have focused on agile transformations for large projects or large organisations, such as Dikert et al. (2016), which concluded with a comprehensive listing of the challenges and success factors for large-scale agile transformation following a systematic study of the available literature on large-scale agile transformations across multiple cases.

These large-scale agile transformations are often undertaken through the application of structured frameworks such as SAFe and the other frameworks already described above. However, these implementations are known to face many challenges (Conboy & Carroll, 2019; Gregory et al., 2016). The 2019 industry report on the state

of agile adoption across companies indicated that only 48% of companies that have undertaken the agile transformation journey reported success across most of the projects as a result of agile practices (VersionOne, 2019). Several studies have been conducted in recent times to investigate the challenges facing large-scale agile transformations, often concluding with proposals of frameworks for categorising the challenges encountered. The aim of these frameworks for categorisation of challenges are to assist practitioners and scholars to compare against their own findings in their investigations. A few of them will be discussed and compared here.

2.2.4 Frameworks to analyse challenges of agile transformations

As stated above, studies on the challenges of adopting and scaling agile practices in large organisations have been undertaken in recent years, with many concluding with some form of list of key challenges. As pointed out by Dikert et al. (2016) in their systematic literature review, almost 90% of their sources were experience reports, indicating a shortfall in the academic research. Nevertheless, a few frameworks have been suggested by scholars to represent the lists of challenges and barriers for agile transformations. Dikert et al. (2016) summarised their own findings into the framework of categories of challenges presented in Table 2 below. Out of this study, “the challenge categories that received the most mentions are *agile difficult to implement, integrating non-development functions, change resistance, and requirements engineering challenges*” (Dikert et al., 2016, p 106). Dikert et al. (2016) also identified that shortfalls in support from the middle management layers of an organisation were seen as among the most serious problems for agile transformations, as middle managers were in a position to undermine the entire effort if they did not understand it or felt threatened by it.

This categorisation from Dikert et al. (2016) has subsequently been used in amended formats as a popular framework by practitioners and scholars in discussions about challenges and success factors. For instance, Hoda (2019) reports that the participants of the 2019 International Conference on Agile Software used an adaptation of this same categorisation framework to rank the top challenges and success factors encountered by practitioners. The top three were found to be: ‘changing organisational culture’, ‘leadership’ and ‘engaging people’.

Table 2: Challenges for large-scale agile transformations

Categories	Challenges
Change Resistance	<ul style="list-style-type: none"> General resistance to change Scepticism towards the new way of working Top down mandate creates resistance Management unwilling to change
Lack of Investment	<ul style="list-style-type: none"> Lack of coaching Lack of training Too high workload Old commitments kept Challenges in rearranging physical spaces
Agile Difficult to implement	<ul style="list-style-type: none"> Misunderstanding agile concepts Lack of guidance from literature Agile customised poorly Reverting to old ways of working Excessive enthusiasm
Coordinating challenges in a multi-team environment	<ul style="list-style-type: none"> Interface between teams difficult Autonomous team model challenging Global distribution challenges Achieving technical consistency
Different approaches emerge in a multi-team environment	<ul style="list-style-type: none"> Interpretation of agile differs between teams Using old and new approaches side by side
Hierarchical management and organisational boundaries	<ul style="list-style-type: none"> Middle manager's role in agile unclear Management in waterfall mode Keeping the old bureaucracy Internal silos kept
Requirements engineering challenges	<ul style="list-style-type: none"> High-level requirements management largely missing Requirements refinement challenging Creating and estimating user stories hard Gap between long- and short-term planning
Quality assurance challenges	<ul style="list-style-type: none"> Accommodating non-functional testing Lack of automated testing Requirements ambiguity affects QA
Integrating non-development functions	<ul style="list-style-type: none"> Other functions unwilling to change Challenges in adjusting to incremental delivery pace Challenges in adjusting product launch activities Rewarding model not team-work centric

Source: Dikert et al. (2016)

Given the emphasis on people and human interactions over tools and processes as one of the main principles of the Agile manifesto, it is to be expected that human-related factors would at least be one of the key challenges encountered in a transition to agile methods, and studies with this focus have been done by the likes of Conboy, Coyle, Wang, & Pikkarainen (2011) and Gandomani & Nafchi (2016). Conboy et al. (2011) focused on the experience of developers and found that developers feared that their skill deficiencies would be brought to light through the transparency created by ceremonies such as standups and storyboards. There was also a broader set of skills required of them beyond their niche areas of software development. Other people-related challenges included:

- **Need for social skills** due to increased social interaction,
- **Lack of business knowledge** among the development team,
- **Lack of proper understanding of agile values and principles** beyond the practices and tools. Gandomani, Zulzalil, Abdul Ghani, Abu, & Parizi (2015) attribute the causes of this to inadequate and dysfunctional training.
- **Lack of developer motivation** to use agile methods due to a top-down approach for adoption
- **Issues with devolved decision making**, among managers and delivery teams, with managers fearing loss of power and authority, and teams lacking decision-making frameworks or guidelines to have confidence in their decision-making. Gandomani et al. (2015) also point to this dilemma as making devolved decision-making difficult.
- **Inappropriate performance evaluation systems** which focus on individual technical ability rather than team performance
- **Recruitment challenges** in recruiting specifically for agile skills, which are scarce, and exacerbated by the lack of suitably trained IT graduates.

Gandomani & Nafchi (2016) focused specifically on the human-related challenges and issues of an agile transformation and found that, with few exceptions, the majority of issues were not distinct from general human-related issues found in any large organisational change process. Gandomani & Nafchi (2016) concluded with a list of impediments consisting of the following: **lack of knowledge about agile**, its principles and values across the stakeholder list of team members, managers and customers; **organisational culture** issues, causing impediments regarding trust,

collaboration and the collective ownership levels required for successful self-organising teams; **resistance to change**, largely due to concerns about the security of roles in the future; **wrong mindset**, referring to a mindset misaligned with agile requirements, particularly the relinquishing of hierarchical authority and command-and-control forms of management; and **lack of effective collaboration**, leading to difficulties in setting up cross-functional teams.

Hekkala, Stein, & Rossi (2017) took this further to investigate the influence of organisational culture and organisational constraints on agile transformations, focusing on the organisational and managerial challenges. Their conclusion was that most of the challenges could be attributed to the conflicts between the assumptions and beliefs held by the management and development teams, which were exacerbated by the outsourcing of activities to several partners. Other issues included: **lack of enough and common training** on agile, leading to misunderstandings and assumptions about agile, such as misconceptions “that agile means anything goes”; **poor communication and coordination** across organisational boundaries; **management group still following old ways**, such as expecting status reports, even within sprints; and a **lack of guidelines for self-organising** teams to operate within organisational architectures

Fuchs & Hess (2018), building on the findings of Conboy et al. (2011), Dikert et al. (2016), Hekkala, Stein, & Rossi (2017) and Paasivaara et al. (2018), applied a socio-technical systems theory lens in their analysis of the challenges to agile transformations. They concluded with the proposal of a different categorisation framework which enables consolidation of the various challenges into the broad categories of method-related, technology-related, organisation-related, culture-related, ability-related, and motivation-related, to which commonly examined issues can then be assigned. See Table 3 below.

Table 3: Proposed categorisation of challenges of large-scale agile transformations

Category	Explanation: Challenges regarding...	Examples of Challenges
Method-related	...the appropriate application of agile methods and the respective employment areas within organizations.	<ul style="list-style-type: none"> • Misunderstanding of agile methods • Poor customization of agile methods

		<ul style="list-style-type: none"> • Inappropriate application area of agile methods
Technology-related	...the infrastructural features of firms and the supporting structures of technological tools within firms.	<ul style="list-style-type: none"> • Inappropriate technological equipment • Inappropriate IT infrastructure
Organisation-related	...the organizational structures, occurring coordination issues and organizations' overall management.	<ul style="list-style-type: none"> • Problematic coordination with other business units • Inappropriate organizational structures • Lack of top management engagement
Culture-related	...the social and overall cultural aspects of organizations.	<ul style="list-style-type: none"> • Inappropriate leadership dynamics • Incompatible social structures
Ability-related	...the abilities of organizational members involved in the agile transformation.	<ul style="list-style-type: none"> • Lack of hard skills • Lack of knowledge transfer
Motivation-related	...the attitudes about and opinions on the transformation of organizational members involved in the agile transformation.	<ul style="list-style-type: none"> • Missing agile mindset • Fear of consequences

Source: Fuchs & Hess (2018)

Furthermore, from the practitioner community perspective, the 2019 State of Agile report collected feedback from participating organisations on the challenges experienced in adopting agile (see Appendix B). The top three challenges were: organisational culture which is at odds with agile values, general resistance to change across organisations, and inadequate management support and sponsorship for the agile transformation, pointing to organisational culture as a key barrier (VersionOne, 2019). While this State of Agile report is not an academic publication, it is nevertheless well-respected within the practitioner community.

2.2.5 Conclusion

In conclusion, from this literature review it is evident that the challenges of agile transformations have been studied from various perspectives by various scholars, and different frameworks have been proposed for categorising the challenges. This activity is ongoing in the academic community (e.g. Jovanović et al., 2017) and the practitioner communities (e.g. Scrum-Alliance, 2018; VersionOne, 2019). However, Jovanović et al. (2017) point out that there is still no universally accepted framework in this regard. In light of this, there is the opportunity to verify the challenges of large-

scale agile transformations as presented in the literature through case studies of organisations that are actually undertaking or have recently undertaken such programmes, as requested by Dikert et al. (2016) at the conclusion of their study.

To guide the analysis of data gathered from such a case study, the outcomes of the various studies discussed above can be further consolidated and synthesised into a framework that categorises the challenges in relation to: culture, agile expertise, organisational structure, and change management challenges, as shown in Figure 2 below. As shown with the examples in Table 4, these key categories are capable of encompassing the range of challenges encountered across the literature.

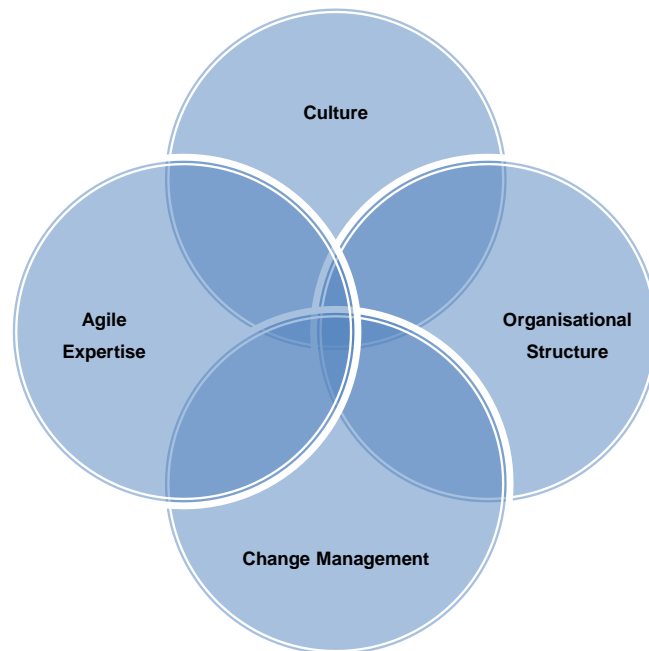


Figure 2: Proposed Categories of challenges of large-scale agile transformations

(Source: Researcher)

Table 4: Summary of Challenges of Agile Transformations

Category of Challenges	Examples of challenges discussed in literature			
	Dikert et al. (2016)	Gandomani & Nafchi (2016)	Fuchs & Hess (2018)	Hekkala et al. (2017)
Culture-related	<ul style="list-style-type: none"> Autonomous team model challenging Other functions unwilling to change Rewarding model not team-centric 	<ul style="list-style-type: none"> Organisational culture issues 	<ul style="list-style-type: none"> Inappropriate leadership dynamics Incompatible social structures Fear of consequences 	<ul style="list-style-type: none"> More leadership & guidance was expected by developers Conflicts were avoided Self-organised teams were not able to proceed with consensus
Agile expertise related	<ul style="list-style-type: none"> Lack of coaching Lack of training Misunderstanding agile concepts Lack guidance from literature Interpretation of agile between teams different Agile customized poorly Interpretation of agile between teams different 	<ul style="list-style-type: none"> Lack of knowledge 	<ul style="list-style-type: none"> Misunderstanding of agile methods Lack of hard skills Lack of knowledge transfer Poor customization of agile methods Inappropriate application area of agile methods 	<ul style="list-style-type: none"> Lack of experience with agile Agile practices were misunderstood and misused Little training
Organisational structure related	<ul style="list-style-type: none"> Interface between teams difficult Autonomous team model challenging Middle manager role unclear Internal silos kept Keeping old bureaucracy Using old & new side by side 	<ul style="list-style-type: none"> Lack of effective collaboration 	<ul style="list-style-type: none"> Problematic coordination with other business units Inappropriate organizational structures 	<ul style="list-style-type: none"> Hierarchical organisational structure not suitable for agile Old organisational borders prevailed after agile adoption
Change Management related	<ul style="list-style-type: none"> General resistance to change Skepticism towards new way of working Reverting to old ways of working Excessive enthusiasm Management still in waterfall mode Management unwilling to change 	<ul style="list-style-type: none"> Resistance to change Wrong mindset 	<ul style="list-style-type: none"> Missing agile mindset Lack of top management engagement 	<ul style="list-style-type: none"> Old organisational borders prevailed after agile adoption

Source: Adapted and synthesised from Dikert et al. (2016); Fuchs & Hess (2018); Gandomani & Nafchi (2016); Hekkala et al. (2017)

2.3 Leading Agile Transformations

The topic of leadership has been a subject of interest since ancient times, and in more recent times has been studied extensively by scholars from a number of different perspectives (B. J. Avolio, Walumbwa, & Weber, 2009; Dansereau, Seitz, Chiu, Shaughnessy, & Yammarino, 2013; Dinh et al., 2014). Despite this, there is still a significant amount of debate on leadership in academic literature and in practice, with a proliferation of leadership theories and yet no universally accepted theoretical framework for defining and understanding leadership (Banks, Gooty, Ross, Williams, & Harrington, 2018; Plowman et al., 2007). The focus of this review will be limited to leadership styles as they pertain to agile ways of working, as the breadth of existing literature on leadership makes a full examination of leadership unnecessary for this study.

There is acknowledgement among leadership scholars of the need to relook at the theories and definitions of leadership for the new world of work (Balda & Mora, 2011; Dinh et al., 2014). Ancona (2005) set forth a set of core assumptions that should inform leadership theories that are relevant for the modern world of work. These are worth mentioning in the context of this study.

The first assumption is that leadership is distributed, permeating all levels of the firm, and no longer restricted to being a quality of only the people at the top. The next assumption is that there is no single way to lead, but rather that leaders need to work with the capabilities that they have, while constantly making effort to improve on those capabilities. Then it is to work with the assumption that leadership develops over time, through practice, through reflection, mentorship and following of role models, seeking and receiving feedback and acting on the feedback. Finally, it is the assumption that the purpose of the leadership process is to create change, and that leaders can either actively create that change themselves, or else create the environments that enable and empower others to act to create the change (Ancona, 2005).

On this last point however, there is an added challenge for leaders. Given the pace and prevalence of change in the modern world, people with leadership responsibilities find themselves in a constant state of needing to change and adapt

themselves for their environments while also playing active roles in leading the changes in those environments (Yukl & Mahsud, 2010). There is danger for leaders to fail in this regard when they are not able to adapt to and learn new skills appropriate for their new environment or situation. Yukl & Mahsud (2010) highlight the dangers of this failure especially where the attributes and behaviours that may have been strengths in an earlier environment have the potential to become weaknesses if there is no flexibility on the part of the leader to adapt to new and different conditions. This is particularly pertinent for managers who have spent a long time in one type of environment. Yukl & Mahsud (2010) highlight the importance of leaders being able to change their behaviour appropriately in accordance with changing situations. This ability is referred to as flexible and adaptive leadership, but also as agile leadership.

2.3.1 Agile Leadership

From the early days of the uptake in agile methods, Nerur, Mahapatra, & Mangalaraj (2005) already made it clear that agile methodologies favour a leadership-and-collaborative style of management, in contrast to the traditional, command-and-control style. However, Denning (2018, 2015) decries how some organisations adopt only the language of agile and scrum but continue with the old management practices of a top-down, hierarchical, command-and-control type of organisation. According to Mason (2013), the command-and-control type of organisation and style of management were designed for a different world, one that no longer exists, as it was based on Frederick Taylor's scientific management view of the organisation as a predictable and controllable machine. For Mason (2013), this creates a problem for managers who must adapt and change for the new world of work, as many of them would have been brought up and trained in the old world view.

The core of the agile method is the self-organising team. Parker, Holesgrove, & Pathak (2015, p 1) provide a definition of a self-organised team as "a self-regulated, semi-autonomous small group of employees whose members determine, plan and manage their day-to-day activities and duties under reduced or no supervision". These team configurations are also interchangeably referred to as "self-directed" and "self-managed". An important point that was already raised early in the days of the agile methodology by Cockburn & Highsmith (2001) was that the success of the

autonomous, self-organising agile team model is founded on the talents and sophisticated skill levels of the team members. In other words, individual competency is a critical factor for the trust which enables “self-management”.

The fact of there being “reduced or no supervision” in self-organised teams has implications for leadership, regarding the appropriate leadership styles and the role of leadership. However, Parker et al. (2015) comment that despite the proliferation of rhetoric about the adoption of self-organised teams, research focusing on leadership models for self-organised teams is scant. They also point to the difficulties that organisations have with switching from a structure of traditional, hierarchical chains of command to one where decision-making responsibility is devolved to the team unit, suggesting that the reason is the perception of it being high risk for organisations.

According to Rigby, Sutherland, & Hirotaka (2016), it is essential for leaders to understand agile and its implications for leadership. A lack of understanding of agile results in leaders unwittingly continuing to apply conventional management practices that undermine an agile transformation. On the opposite end of this misunderstanding is that leaders may also associate agile with an absence of management altogether, or the notion that “everybody does what he or she wants to do” (Rigby et al., 2016, p 42). Instead, Van Waardenburg & Van Vliet (2013) propose that the leading of agile teams requires management to be adaptive and collaborative, and to act as facilitators and coaches, rather than be directive. However, they also support the view that leadership involvement is critical for agile practices to be implemented successfully, a view supported by Parker et al. (2015) with their statement that good leaders devote “an inordinate amount of time and effort to getting the team” performing successfully. Balda & Mora (2011) further point out the challenges of leading in a new world of work composed of knowledge workers, millennials and digitalisation, and the need for the application of participatory and collaborative forms of leadership in this new context.

Through a synthesis of the work of several scholars (B. Avolio & Gardner, 2005; Kouzes & Posner, 1995; Sergio & J., 1990), Parker et al. (2015) propose a list of principles of agile leadership that promote the successful operation of self-organised teams. These are: a guiding vision that serves as a guide for decision-making and

prioritisation for the team; teamwork and collaboration; a simple set of rules; open sharing of information; a light set of controls to foster emergent order, and vigilance.

2.3.2 Distributed or Shared Leadership

Avolio et al. (2009) make the case for the relevance of distributed leadership as a suitable model for the new world of work where hierarchical structures are being eliminated and team-based structures are replacing them. The term “distributed leadership” is often used interchangeably with terms such as “shared leadership”, “collective leadership” (B. J. Avolio et al., 2009), and “democratic leadership” (Spillane, 2005). These terms refer to a form of leadership where team members collectively lead each other, and the activity of leadership is distributed broadly within the group or team of individuals, rather than concentrated in a single individual who acts in the role of supervisor. In this way the leadership is then “a property of the whole system” (Avolio et al., 2009, p 432).

Drescher & Garbers (2016) and Avolio et al. (2009) both see “shared leadership” or “distributed leadership” as a relevant counterpart to the hierarchical, vertical forms of leadership as it emphasises attention to the team unit rather than focusing exclusively on the single leader. They describe the advantages of shared leadership as being that the knowledge and competencies of individuals are combined to lead collectively to higher team performance. Carson, Tesluk, & Marrone (2007) proposed that an environment that enables shared leadership must have three interrelated and mutually reinforcing dimensions, which are: shared purpose, social support and voice. Shared purpose refers to a commonly shared understanding of the primary objectives of the team, and social support refers to interactions which foster emotional and psychological strength for each of the members. The dimension of voice highlights the need for all voices in the team to be heard equally. With regard to the third dimension, Drescher & Garbers (2016) includes the need for equal participation of all teams members to the objectives.

The self-organising team fits the criteria proposed by Carson, Tesluk, & Marrone (2007) for an environment that enables shared leadership. There is an overlap with the view shared by Srivastava (2017) that the key characteristics of a successful self-organising team are autonomy, team orientation, shared leadership, redundancy and

learning. Hekkala et al. (2017) supports this with the view that self-organising teams with distributed leadership and decision making are key requirements for agile to function properly.

2.3.3 Empowering Leadership

As the world of work becomes more complex and cognitively demanding, relying more and more on highly skilled and educated knowledge workers as the core of the workforce, another way that organisations use to achieve the required levels of adaptiveness and flexibility is to transfer traditional leadership responsibilities to the team member level, applying principles of empowering leadership (Amundsen & Martinsen, 2014). Cheong, Yammarino, Dionne, Spain, & Tsai (2019) define these principles as sharing power and allocating autonomy to promote employee's motivation and individual autonomy through fostering psychological empowerment. However, while there is the element of sharing power associated with empowering leadership which may lead to an impression of its similarity with shared leadership, Cheong et al. (2019) distinguish it from shared leadership by pointing out that the level of analysis for the construct of empowering leaderships is the individual, while that of shared leadership is at the group or collective level.

2.3.4 Servant Leadership

The leadership style often associated with agile ways of working and self-organising teams is servant leadership (Parker et al., 2015). However, Chiniara & Bentein (2018) caution that academic research on servant leadership is still in its early stages, and this view is further supported by Eva, Robin, Sendjaya, van Dierendonck, & Liden (2019). This is despite the servant leadership construct being older than transformational leadership theory, which has occupied much of the focus of research in recent decades (Dinh et al., 2014).

The concept of servant leadership was originated by Robert Greenleaf in his 1970's paper, "The Servant as Leader", who defined it as a form of leadership characterised first and foremost by the natural feeling that one wants to serve, only afterwards followed by the aspiration to lead (Greenleaf, 1977). In this formulation, originally termed "servant as leader", the leadership role is undertaken by a person whose primary nature is to serve others, for the sake of improving their health, wisdom,

freedom and autonomy. Sendjaya & Sarros (2002) described it further as a distinction between the mental model that says: “I am the leader, therefore I serve” and the more prevalent one that usually says: “I am the leader, therefore I lead”. Based on the writings of Greenleaf, the ten basic attributes of servant leadership were defined as: listening, empathy, healing, awareness, persuasion, conceptualisation, foresight, stewardship, commitment to the growth of people, and building community (Russell & Stone, 2002).

The primary emphasis of servant leadership is the benefit of the individuals as a priority over that of the company. This distinguishes it from transformational leadership, whose primary orientation and motive is still the benefit of the company, despite the apparent emphasis on people (Chiniara & Bentein, 2018; Eva et al., 2019). Van Dierendonck (2011) criticises the fact that, despite the decades since the construct was first formulated, the definitions of servant leadership are still vague and indistinct, leaving it up to researchers to come up with their own definitions and models, and therefore resulting in there being many interpretations of servant leadership.

Based on a systematic literature review of the topic, Russell & Stone (2002) defined a list of 20 attributes that are distinctive to servant leadership, and serve to distinguish it from other leadership constructs. The list was separated into functional attributes, which are the operative and effective characteristics of servant leadership, and accompanying attributes, which supplement and support the functional attributes. The functional list was composed of vision, honesty, integrity, trust, service, modelling, pioneering, appreciation of others, and empowerment. The supporting attributes were defined as: communication, credibility, competence, stewardship, visibility, influence, persuasion, listening, encouragement, teaching, and delegation (Russell & Stone, 2002).

Russell & Stone (2002) provide a comprehensive definition of the various attributes in their paper, and so only a select few are briefly discussed here. The attribute of ‘service’ refers to the fundamental motivation of servant leadership: the desire to serve. It emphasises the choice the leader consistently makes between serving one’s own interest and serving that of others. ‘Stewardship’ refers to a caretaking attitude towards what one has responsibility over. It encompasses qualities of trust,

empowerment, partnership, and distribution of ownership and responsibility. 'Visibility' refers to the presence of the leader among their followers, interacting with followers, but also visibly embodying the qualities of service. Van Dierendonck (2011) adds to this list the qualities of 'humility', which reflects the leader's ability to put their own accomplishments aside and be able to draw on the expertise of others, and 'authenticity'. Van Dierendonck (2011) asserts that two these qualities, along with 'interpersonal acceptance', are what distinguish it most from the construct of transformational leadership.

According to Eva et al. (2019), despite the recent proliferation of studies on servant leadership, there continues to be a lack of coherence and clarity on the construct, adding to the earlier criticism of Van Dierendonck (2011) on the same issue. In addition, Van Dierendonck (2011) pointed out that in practice there remains the concern among managers about the possible negative connotations of the term 'servant', which in some cases may be seen to imply passivity and indecisiveness, and perhaps even servility. Particularly within the context of a post-colonial, developing-country setting, the word may connote "servitude" and be equated with forced and coerced activity (Balda & Mora, 2011). Within organisational leadership contexts, this may also suggest a loss of power, and present the individual as being soft and weak. Van Dierendonck (2011) suggests emphasising the characteristics of servant leadership to overcome these perceptions, as these characteristics highlight qualities that managers would recognise as relevant to modern leadership.

2.3.5 Conclusion

In conclusion, from this review of literature on leadership in relation to agile transformations there emerges the recognition of the imperative for leadership styles to evolve from the traditional, hierarchical, command-and-control forms of leadership which have the heroic individual leader at the center. There are several leadership styles that get mentioned in relation to agile methods and agile transformations. However, there is no consensus in the literature on which of these various leadership styles is the most appropriate among them for this new environment. Therefore, there is the opportunity to study people who are performing in leadership roles within organisations that have adopted agile methods or undertaken agile transformations to investigate what leadership styles are found to be most suitable in practice, with a

view to feeding back and contributing to the scholarly discussions. In this regard, Figure 3 below suggests a need consider which leadership styles are most suitable for an agile environment from among a constellation of leadership styles that are more appropriate and suitable for adaptability to the new world of work.

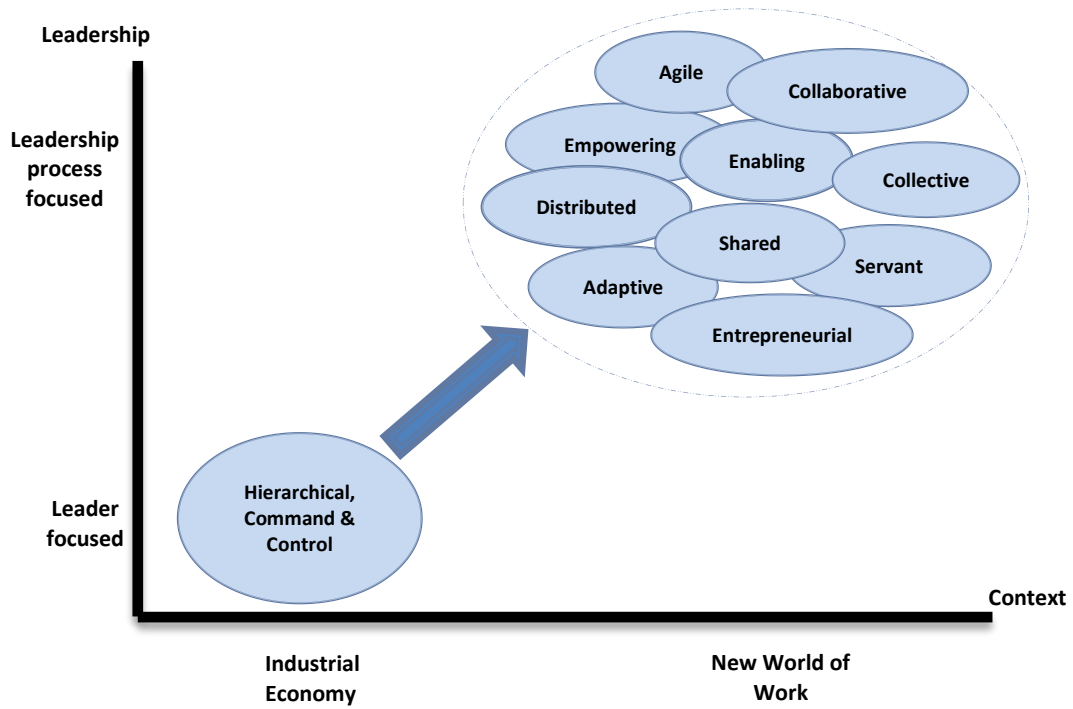


Figure 3: Evolving leadership practices

(Source: Researcher)

CHAPTER 3: RESEARCH QUESTIONS

The primary research objective is to understand the experiences of leaders involved in the organisational transformation to agile ways of working in a South African, financial services context.

3.1 Research Questions

3.1.1 Research Question 1:

What are the experiences of leaders involved in the transition to agile ways of working in a South African financial services organisation?

There exists a growing body of research work internationally on the challenges which organisations are facing in adopting, scaling and adapting to agile ways of working. Much of it is in the form of experience reports of practitioners, software development industry reports, single company case studies, as well as the subsequent academic literature reviews which consolidate insights from across the various sources (Abrar et al., 2019; Dikert et al., 2016; Paasivaara, Behm, Lassenius, & Hallikainen, 2018a). The opportunity exists to contribute to this body of work through a case study of an organisation in the financial services industry in South Africa that has undertaken an agile transformation, and to ask the question: are their experiences and challenges reflected in the research literature?

3.1.2 Research Question 2:

What are the required changes in leadership style for successful individual adaptation to agile ways of working in large organisations?

The aim is to understand the most appropriate leadership styles for agile transformations and agile ways of working. While leadership is mentioned as a key factor in each of the studies on the challenges and success factors for large-scale agile transformations reported on in the literature review, the topic of leadership style itself is insufficiently addressed in the literature, particularly in relation to self-organising teams, which are the core production unit of the agile method (Parker et al., 2015). With few exceptions, the more prevalent opinions on leadership of large-

scale agile transformations are provided by non-academic sources and consultants (e.g. De Smet, Lurie, & St George (2018), while the academic literature seems to be lagging on this topic.

CHAPTER 4: METHODOLOGY

4.1 Philosophy

This research aimed to understand the perceptions of leaders about their experience of the organisational transformation to agile ways of working in their organisation, through self-reporting by the individual subjects. As such, it was conducted as a qualitative study, using the case study method, and following an interpretivist research philosophy. This is because in studying the perspectives of leaders the aim was to “understand differences between humans in their role as social actors” (Saunders & Lewis, 2018, p 109), which is an aim best accomplished through qualitative methods.

The study made use of the single case methodology (Seawright & Gerring, 2008; Yin, 2009), as the entire study was conducted at a single organisation. The use of a single case for the study was suggested by the academic literature review presented in Chapter 2, particularly those dealing with the topic of large-scale agile transformations. The use of a single case study was recommended by Dikert et al. (2016) as a way to contribute to the understanding of such undertakings better and of how they are done in practice. The case study method is suitable for the empirical investigation of a contemporary topic or phenomenon within its real-life context (Saunders & Lewis, 2018). In this case it was used to enable the obtaining of an in-depth understanding of the topic of leadership in the context of agile transformation in organisations.

This study sought to explore the possibility of discovering new insights and to assess particular topics with regards to perspectives of leaders on agile transformations, as such the purpose of this study was exploratory (Saunders & Lewis, 2018). The dominant approach was inductive, as there is still limited academic research on the experience of transformations to agile ways of working from the perspectives of leaders involved in the transformation. The inductive method allowed for the collection of data, analysis of data gathered, and reflection on the potential theoretical frameworks the data suggested (Saunders & Lewis, 2018). This research study relied on theory about constructs such as agile methods, organisational agility, and leadership styles.

This case study method made use of the semi-structured interview as the primary data collection technique, making it a mono-method qualitative study (Saunders & Lewis, 2018). Other information regarding the environment and the background of the organisation's agile transformation was obtained through interviews, observations, and documentation that was made available.

The cross-sectional time horizon was applied, as there were time-constraints for the completion of the research. Cross-sectional design is where data is collected from a population at only one point in time (Saunders & Lewis, 2018).

4.2 Population

The population for a research study is the complete set of objects in the group under study (Saunders & Lewis, 2018). This case study's target population was the senior leadership population of a large South African bank that is undertaking an agile transformation. The ambition of a case study is to elucidate and represent the features of a broader population than what is in the case itself (Seawright & Gerring, 2008). Therefore, this case study's selected population group is intended to represent the total population of persons with senior leadership responsibilities employed within South African financial services organisations that have undertaken or are undergoing transformations to agile ways of working.

As this is an activity that is at various stages across South African organisations in the financial services industry (PwC, 2018), the total population size will likely be continually changing and increasing over time across industries.

4.3 Unit of analysis

The definition of the unit of analysis is recognised as a key part of the case study method as it helps to provide guidance on the relevant sources of data and the content they will provide (Yin, 2009). The unit of analysis is the object being observed or measured (Saunders & Lewis, 2018) and needs to be related to the research question (Yin, 2009). For this study, the unit of analysis was the perceptions and reported lived experience of leaders who are responsible for leading agile transformation programmes, processes and teams in the financial services

organisation under study.

4.4 Sampling method and size

A sample is a subset of the target population, and sampling is undertaken because it is often not practical to collect data from the entire population, especially when there is limited amount of time for the research (Saunders & Lewis, 2018). For this study, non-probability sampling, also called non-random sampling, was used. This is because the sample members were not selected randomly out of the target population (Saunders & Lewis, 2018).

As the research was conducted using non-probability sampling, purposive sampling was applied, which means the researcher applied their own judgement to actively choose those members of the population who were the most appropriate for answering the research questions (Saunders & Lewis, 2018). This was aided by the fact that a single organisation was used as the source for the sample, and a set of potential candidates was initially identified through informal interviews with core stakeholders prior to the start of the data collection process.

The participants of this study were all located in the divisional executive and functional heads layers of the organisation, depicted as Level 3 and Level 4 in Table 5 below. According to Dutton & Ashford (1993), both layers can be defined as the middle management layer, since the middle management layer is composed of those managers who operate in the intermediary layers between the top management of an organisation, which is composed of the CEO and one or two levels below the CEO, and the first line supervisor level. As such it can include general managers and divisional heads (Department of Labour, 2014; Dutton & Ashford, 1993; S. Lee & Teece, 2013), which in large organisations may still carry job titles with designations of senior manager or executive, as was the case with the case study organisation. This middle management layer is recognised as playing a pivotal role in linking ideas and activities between the top layers and the bottom layers in organisations, as well as in mobilising resources around new ideas (Dutton & Ashford, 1993).

Table 5: Organisational Levels

	Role	Example
Level 1	Group CEO	Group CEO
Level 2	Group Exco	Group COO; Group CFO; Group CIO
Level 3	Divisional Executives	Home Loans Executive Head; Divisional COO
Level 4	Function, Business Unit or Department Heads	Head of Card Issuing; PMO Head; HR Head
Level 5	Supervisory	Team lead
Level 6	Individual contributor	Developer

The original proposed sample size for the report was 15 interviews, based on a guideline of 3–16 participants for a single case study (Robinson, 2014). However, the interviewer started to realise data saturation from the tenth interview (see Figure 4 below). Saturation is reached when a researcher gathers data to the point where any additional sources will not add any new, additional data to what has already been gathered, i.e. nothing new is being added (Bowen, 2008; Robinson, 2014). Nevertheless, in this case the researcher continued with further interviews to allow for the possibility of discovering additional insights and different quotations on already discovered codes. In total, 13 interviews were conducted.

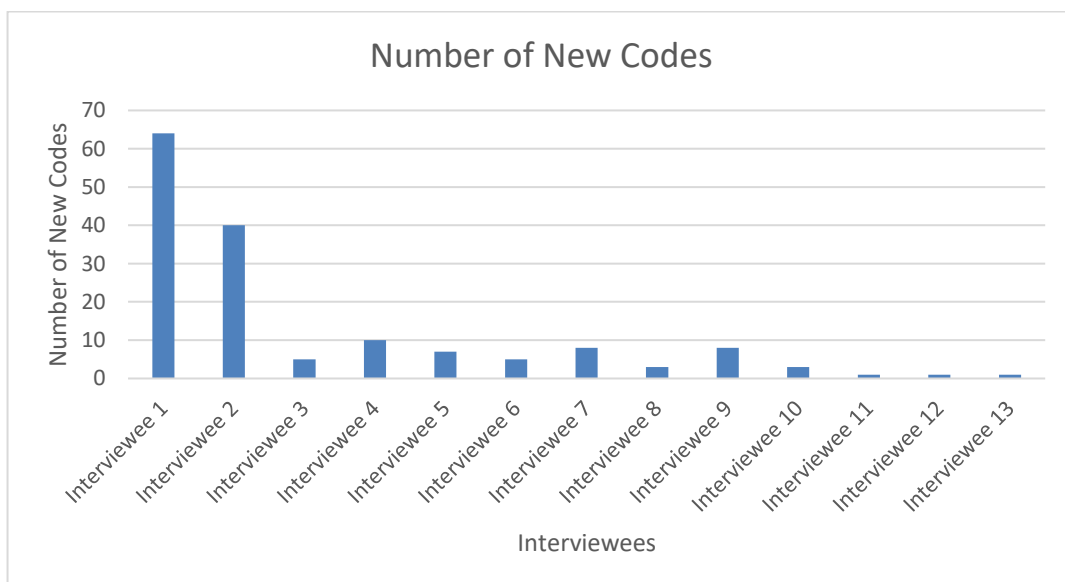


Figure 4: Number of New Codes for Interviewees

4.5 Data Validity

Data validity is a measure of the credibility or trustworthiness of the data collection method and the findings of the research (Creswell, 2007; Saunders & Lewis, 2018). For a case study, (Yin, 2009) suggests increasing the data validity by varying the sources of data as a means of triangulation. Aside from the interviews and their transcripts, data sources that were used in this study included notes taken during interviews and company documents.

Careful screening was conducted to ensure that the subjects selected for the study are representative of the research population, in terms of levels of seniority in the organisation, and their extent of involvement in the agile transformation. The participants were also selected across different functions of the organisation, to include perspectives from both the technology functions and the business functions. External consultants who were subject matter experts on agile transformations were also included in the sample of participants.

The researcher was also provided with documentation on the agile transformation journey of the company, created by the organisation, as well as the training material used for the roll-out of the new ways of working across the organisation. These documents were used to corroborate the information received from the interviews, and to complement it. This served as another means of triangulation. The risk to the validity of this research is that, as it was set in one organisation, the generalisability of the conclusions to other organisations will be limited, as each organisation has its own unique features and characteristics.

4.6 Data Reliability

Data reliability is determined by the degree to which the data collection and analysis methods used in the research will produce consistent findings if used on other occasions by other researchers (Saunders & Lewis, 2018). This remains a debated issue for qualitative research methods (Creswell, 2007). For this research, the semi-structured, face to face interview method was used for all participants, except for one interview which was held via Skype. There was concerted effort to keep the interview schedule consistent for all the interviews as much as possible, and recordings of the interviews were made, so that those interpreting the research findings would have

visibility on the process of arriving at the conclusions presented.

In addition, the research design, research strategy, methods, and data obtained have all been recorded in detail in this document, enabling future researchers to re-analyse the data collected or follow the exact process undertaken (Saunders & Lewis, 2018). However, Collis & Hussey (2013) call attention to the fact that reproducing results from qualitative studies based on interviews is always difficult as the data is gathered from an environment that is under constant change.

4.7 Data Collection

The organisation chosen for the study is one of the large banks in South Africa which had been undergoing an agile transformation process and implementing agile ways of working practices across some of its divisions for several years. This organisation became the source of the complete set of subjects for interviews. The research objectives were discussed with some executives in the organisation prior to commencing the research to obtain buy-in for the research.

Semi structured interviews with 13 individuals across the organisation were held with the intention to meet the aim of this study. The in-depth interviews were held between August and September 2019. All interviews were conducted face to face, except for one which was conducted via Skype. For all interviews the semi-structured interview schedule was used to guide the discussion. However, the interviewer also allowed discretionary room for interviewees to discuss beyond specific questions, with the possibility of discovering new insights.

4.7.1 Pilot

Following the approval of the proposed interview schedule through the University of Pretoria's ethical clearance process for research, a pilot interview was conducted with the first interviewee to test the validity and appropriateness of the questions in the interview schedule. The interviewee was informed beforehand of their role as the pilot subject, and their feedback was obtained at the end of the interview session, which led to adjustments to the initial interview schedule.

4.7.2 Interviews

Prior to commencing with interviews, consent was obtained from the interviewees (Crowe et al., 2011), with a standard informed consent form provided for them to sign and return to the researcher. The contents of the informed consent letter were read aloud again by the researcher at the start of each interview (see Appendix C). Permission to record the sessions was also obtained from all participants, with an explanation that these recordings would be transcribed and used for the data analysis.

On average the interview sessions lasted for 45 minutes, with some extending to over an hour while the shortest lasted only 20 minutes. All interviews were held face-to-face in meeting rooms at the organisation's premises, except for one session which was held via a Skype call.

The interview schedule was used as a guide for the researcher to manage the session and ensure the research questions were covered. While the format remained consistent, the interview questions were supplemented with follow up questions as the need arose.

4.7.3 Data Collection Tool

Based on the research objectives outlined in Chapter 1, supported by the literature review conducted in Chapter 2 and the research questions stated in Chapter 3, the researcher designed a preliminary schedule of questions for the interviews with the sample population as the data collection tool. The rough guide of the interview schedule is in Table 6 below, which also indicates the relevant research question addressed by each of the interview schedule questions (also see in Appendix D).

Table 6: Interview schedule

RESEARCH QUESTIONS	INTERVIEW QUESTIONS
<p>Research question 1</p> <p>What are the experiences of leaders involved in the transition to agile ways of working in a South African financial services organisation?</p>	<p>1. What has been your experience of the challenges of the agile transformation in the company?</p>
<p>Research question 2</p> <p>What are the required changes in leadership style for successful individual adaptation to agile ways of working in large organisations?</p>	<p>2. What are the changes you have had to make to your leadership style because of having to lead in an agile, new ways of working context?</p> <p>3. What additional attributes do leaders need to be effective in the agile, new ways of working?</p>

4.8 Analysis approach

The audio recordings of the interviews were transcribed into text format for analysis. The transcripts were then loaded onto the Atlas TI software application. Using the approach specified by Braun & Clarke (2006) as the framework, see Table 7 below, each interview transcript was reviewed to generate initial codes (Saldaña, 2013).

Given the research objectives of obtaining the views and self-reported experiences of leaders involved in agile transformations, the initial approach of data analysis was inductive for the first set of transcripts, allowing themes to emerge from the interviews. This approach is best suited to “studies that prioritize and honor the participant’s voice” (Saldaña, 2013, p 91). On the other hand, Fereday & Muir-Cochrane (2006) suggested combining the inductive approach and the deductive approach (which uses themes derived from the literature review) to ensure the rigour of the qualitative data analysis process. Therefore, the approach progressively became more deductive with the latter set of transcripts due to the recurrence of codes derived from the initial set (Saunders & Lewis, 2018). As a result, the data

analysis in this study combined both the inductive approach and the deductive approach.

These codes were then arranged into categories to identify trends and themes across the interviews. Analysis was done with the aim of identifying common themes among the interviews. See Appendix F for a copy of the code lists developed in the AtlasTI software.

Table 7: Phases of Thematic Analysis

Phase	Description of the process
1. Familiarizing yourself with your data:	Transcribing data, reading and re-reading the data, noting down initial ideas.
2. Generating initial codes:	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.
3. Searching for themes:	Collating codes into potential themes, gathering all data relevant to each potential theme.
4. Reviewing themes:	Checking if the themes work in relation to the coded extracts and the entire data set, generating a thematic 'map' of the analysis.
5. Defining and naming themes	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.
6. Producing the report:	Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

Source: Braun & Clarke (2006)

4.9 Limitations

The following limitations must be considered in the judgement of the findings from this research:

- As this study will be undertaken in a single organisation, the generalisability of its findings and conclusions will be limited.

- The researcher is not professionally trained in the skill of conducting interviews, and this shortcoming may have influenced the quality of responses from interviewees.
- As a purposive sampling approach was used, it will not be possible to make statistical inferences from the data.
- Due to the time constraints of the academic programme under which this study was undertaken, only a cross-sectional study of the phenomenon was undertaken.

Nevertheless, the researcher always tried to abide by research ethics and professionalism to ensure the validity and integrity of the research.

CHAPTER 5: RESULTS

5.1 Introduction

This chapter presents the results of the analysis of data gathered through the thirteen in-depth interviews conducted. Twelve of the interviews were conducted face-to-face, while only one was conducted via Skype. All interviewees submitted signed informed consent forms and consented to the recording of the sessions. The interview questions in the interview schedule were based on the research objectives explained in Chapter 1 and the literature review conducted in Chapter 2, which had contributed to the definition of the research questions in Chapter 3, the selection of the research methodology and data collection methods. The results are presented according to the research questions in Chapter 3, and their associated interview schedule questions.

5.2 Description of context and participants

The sample of participants was selected based on initial recommendations provided to the researcher by senior stakeholders within the bank who were consulted through informal interviews to construct the background narrative and context of the agile transformation in the bank. The following section provides the organisational context for the case study, the rationale for the sample of participants selected, as well as their classifications in terms of the categories of Run the bank, Transform the bank, and Disrupt the bank.

5.2.1 Organisational Context

Faced with the changing landscape of the financial services industry both locally and globally due to digital transformation and Fourth Industrial Revolution changes, as well as the threat of new entrants into the South African banking industry, this traditional bank undertook to ward off threats of disintermediation by new entrants, and to address the market perceptions of being a bank that is lagging behind the other large banks in terms of digital readiness. In 2016, the board of directors of the banking group appointed a Chief Digital Officer as a separate role from the incumbent Chief Information Officer (CIO) of the bank, to take accountability of the digital transformation of the bank.

The Chief Digital Officer was also tasked with reviewing the operating model of the organisation, to ensure an operating model that supports the digital initiatives that would be launched for the market. This review resulted in the formulation of several strategic implementation themes that would be necessary to support the digital transformation. These included a review of the product segmentation mix, a review of the organisational design in terms of middle, front and back-office functions. The other themes were related to the wealth of big data the company was already collecting about its clients and how to leverage that to better serve their clients. Others were related to the formulation of new partnership models to support a digital strategy, such as with financial technology (FinTech) start-ups.

Along with these strategic themes, there was also the recognition of the need to adopt new ways of working for the bank, including the transformation to agile ways of working, to be able to compete with entrants and incumbents who would be capable of launching new solutions every three to six months. As such, the adoption of agile ways of working fit into the broader digital transformation strategy of transforming the organisation for the future and it was therefore more than just a matter of using agile method practices for small software development projects.

To guide decisions on the approaches for the agile transformation, senior executives of the bank contracted the services of top-tier management consulting firms and conducted site visits to local and international organisations that had undertaken similar journeys, such the ING bank of Netherlands, Spotify in the music industry, and local banks (Birkinshaw, 2018; Johnston & Gill, 2017). Therefore, lessons were learned from other banks both locally and internationally, as well as from non-bank companies.

There was recognition among the decision-makers that while there were examples of banks such as ING that had undertaken a "big bang" overhaul of their organisation to transform the entire organisation into new ways of working (Birkinshaw, 2018), this approach would not be suitable for this company. Part of the reason was that the bank still needed to run efficiently and effectively, to continue to service clients, while finding new clients and complying with regulations. To test the method the bank

followed the “Spotify” method of chapters, squads and tribes centered around specific customer types.

There was also already a large-scale business transformation programme that had been running in the bank for several years, with the aim to update and upgrade the bank's legacy systems and operations. The nature of such business transformation programmes involves the transformation of technology, people practices, policies, processes, operating models, leadership styles and culture. It was described to the researcher by one of the respondents as "a typical Big Bang, old waterfall transformation programme, a multi-hundreds of millions of rand programme, a necessary evil that must happen because bank legacies are complex”.

At the same time, there was a directive to the Chief Digital Officer to digitise the bank and drive disruptive innovation. Therefore, these three streams were recognised as existing concurrently within the bank: Run the Bank, Transform the Bank, and Disrupt the Bank. These streams were supported by the other functions such as HR, Finance, Risk & Compliance, Project Office, and others.

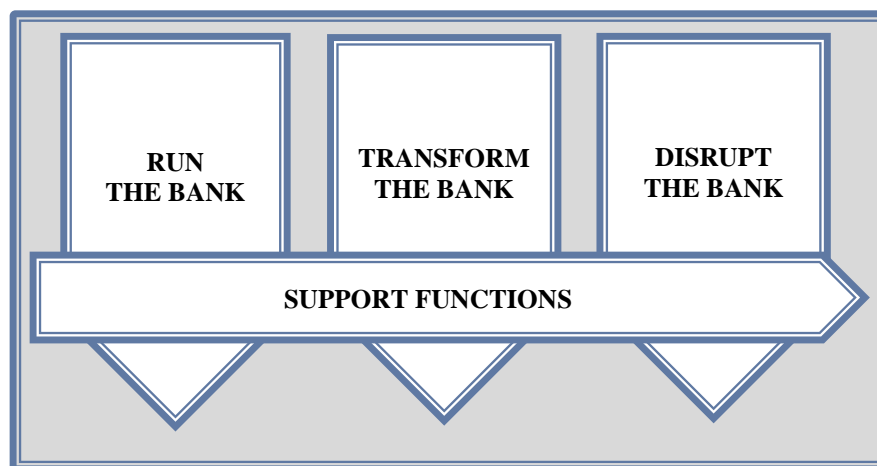


Figure 5: Organisational context of participants

5.2.2 Description of participants

The interview participants were selected based on judgmental sampling, to provide a spread of inputs across the organisational streams of Run the Bank, Transform the Bank, Disrupt the Bank, and the Support functions. There was consensus among the participants that the agile transformation journey in the bank had begun three years prior to the interviews, although no specific start date was given. Most of the participants had been with the bank and involved in the agile transformation during that period.

External consultants who were contracted into the bank as experts in the implementation of structured agile methodologies in large organisations, such as the Scaled Agile Framework (SAFe) methodology, were also included in the sample. Details of all the participants are presented in Table 8 below. As anonymity was promised to all participants, the table identifies each participant only in terms of the order in which they were interviewed.

Table 8: Interviewee details

Identifier	Male / Female	Age range	Organisational Stream	Organisational Role
Interviewee 1	F	30-40	Support	Executive
Interviewee 2	F	40-50	Disrupt	Executive
Interviewee 3	M	40-50	Transform	Senior Manager
Interviewee 4	M	40-50	Consultant/SME	Consultant
Interviewee 5	M	40-50	Transform	Senior Manager
Interviewee 6	F	40-50	Run	Executive
Interviewee 7	M	40-50	Run	Executive
Interviewee 8	F	30-40	Disrupt	Executive
Interviewee 9	M	40-50	Support	Executive
Interviewee 10	M	40-50	Consultant/SME	Consultant
Interviewee 11	F	40-50	Support	Senior Manager
Interviewee 12	F	40-50	Transform	Executive
Interviewee 13	M	40-50	Disrupt	Senior Manager

5.3 Presentation of Results

The presentation of results is arranged according to the research questions in Chapter 3, and their associated interview schedule questions. A total of 143 codes were created through the analysis of all the interview transcripts on Atlas TI. The analysis of the code data resulted in the formulation of four key themes that summarise the data, with a total of 23 categories associated with them.

Key Themes
❖ Organisational challenges
❖ Leadership challenges
❖ Leadership attributes
❖ Personal change for leaders

5.4 Results for Research Question 1

5.4.1 Interview question 1

What has been your experience of the challenges of this agile transformation?

For this interview question, the challenges expressed in the responses of the participants were analysed collectively, as the discussions regarding challenges of agile transformations tended to be distributed throughout the interview sessions, rather than restricted only to when this question was put to the interviewees. The analysis of code data resulted in the grouping of the responses into two themes: organisational challenges and leadership challenges.

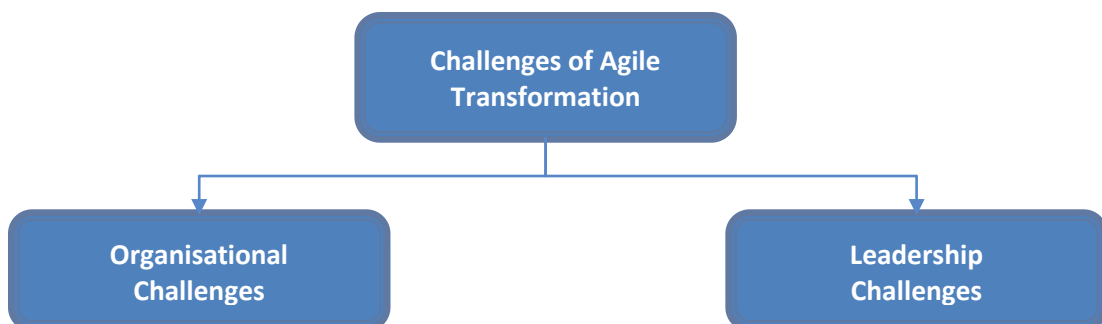


Figure 6: Challenges of Agile Transformations

5.4.1.1 Organisational challenges

The categories of issues classified under ‘organisational challenges’ were as presented in Table 9. The frequency column on the table indicates the number of codes that were associated with that category. Within each code there were quotes of statements from several of the interviewees.

Table 9: Organisational challenges

Rank	Challenge category	Frequency
1	Culture change	21
2	Different interpretations of agile	7
3	Diversity	6
4	Skilled resource shortage	6
5	Regulatory constraints	5
6	Autonomous team decision-making	5
7	Customer centricity	4
8	Support functions readiness	2
9	Different maturity levels in agile	1

❖ Culture Change

As per Table 9 above, the category of “Culture change” turned out to have the most number of codes mentioning it as a challenge for agile transformation. For example, according to one interviewee from the Run the Bank stream, what is lacking is the understanding that the agile transformation is a means to effect a change in the culture of the organisation, “it is just a way to drive it”, and yet people “get obsessed with the tool, not understanding what it actually is intended to do”. This was echoed by another interviewee from the Support stream who added that “agility (is) more of a mindset and a philosophy than an actual work guide on how to do your job, like an operational guide on how to do your job. It's a mindset more than anything else”. That being the case, according to another interviewee from the Transform the Bank stream, there was also then the lack of understanding that an agile transformation, as a culture change, is “a journey ... it's a multi-year journey. We're not going to get there overnight”. This also tied in with an acknowledgement that the agile transformation was a “mammoth task that had been underestimated in terms of cost,

complexity, time”.

Part of the challenge the organisation faces in changing the culture is that a large proportion of the staff, at various levels, have been with the organisation for a significant number of years, with one of the interviewees from the Disrupt the Bank stream commenting that the organisation:

“... has a very odd anomaly, that of 20-plus years of service. I've never been in an organisation that has tried to change with people who have been at the organisation that long. Can you, after the 20 years, change? Can you? To me, it's impossible because you have not got the world view. It doesn't matter how intelligent you are, you are blinkered by the fact that you have not weathered other storms, and you've only weathered the storms that you've lived through. ...even at the top levels. Have people not been here too long?... There is benefit to 20 years of understanding how the bank works. But that to me is one of the key questions from a leadership perspective. Are our leaders too old?”

The point of an ageing leadership was emphasized again by another interviewee who mentioned it as an impediment to culture change, and had the following to say:

“.. our current leadership teams and ... I'm talking about the Group Exco as well as the Group Exco's Manco, those two layers. Many of them find themselves within or nearing retirement. And naturally, when you have confirmed that before you leave, you will do xyz, you're not going to start to adopt things that might upset your promises to the board. And so that resistance has definitely been something that I think has come through a lot. It's quite strong in certain areas”

The challenge of a culture change was pointed out by an interviewee from the Support stream as something that goes beyond attending courses, but rather as something that requires interventions that will change people:

I don't think that there's enough practical intervention. We think because we go to a two-day offsite session, and we watch some videos about leadership, we talk

about leadership that we've changed the hearts and minds of people, there's a gap. You know, two days doesn't change hearts and minds. Reading, or seeing something doesn't change hearts and minds and think an intervention is required to change hearts and minds and meaningful intervention. - Interviewee 1, Support

There was the perception shared that the top management of the company had not been sufficiently engaged to champion the culture of agile ways of working, therefore affecting the success of the change:

We haven't had opportunity yet is to, to go back to (the Group CEO), because if we want to change the culture, it's useless using people in the middle of the organization, the lower ranks and guys, for our culture change. It has to happen at the highest level. If the CEO becomes the Agile champion, then it happens. So, there's definitely a lot of thoughts around how we can leverage (the Group CEO) as well as members of the Group Exco to say, yeah, now, this is the culture that we're now in, - Interviewee 13, Disrupt the Bank

❖ **Customer-centricity**

The culture change challenges were also associated with the fact that the agility mindset places focus on the customer, and this needs a shift away from product-centered to client-centered thinking across the entire organisation. The impact of this is that it also requires a shift to everyone in the organisation taking ownership of the customer journey and experience

That was a key fundamental shift. It's the client-centric stuff of how this organization must transform itself, not just be the old traditional bank, saying "here's our products". So, I'm selling you a home loan product, I'm not selling you a home. The client-centric mindset is: why do you want to buy a home? Yes, we can service you with financing, but why do you need a home? So that's what clients want. Yes, they want you to service them with the loan. But do you really understand the needs of the client when you are servicing them with the loan, because you could potentially understand your client better for something else that the bank has to offer? – Interviewee 2, Disrupt the Bank

❖ **Different interpretations of agile**

Due to the fact of there being “Different interpretations of agile” across the organisation, and the perceived lack of a common understanding, one of the respondents from the Support stream felt that agile is therefore often used as an excuse to not follow basic management practices. Another interviewee felt that too many “people are doing agile because it's the cool thing. You know, if you have a man-bun and you walk with slops, then you're the cool guy. If it's just us wearing our normal stuff, (then) you're not agile”. According to one of the consultants, this prevalence of different interpretations and attitudes could be related to the fact of the leaders of the organisation not having a common understanding of “why they want to undergo the transformation to become an Agile organisation. Because if there isn't necessarily a problem to be solved, so if they don't say, here's a problem we need to solve for, and we believe the way to solve for it is by becoming more agile, then it's very difficult.”

❖ **Different maturity levels in agile**

As described by one interviewee from the Run the Bank stream, the different interpretations of agile are also associated with the fact that “there's different maturity levels of agile and different maturity levels of new ways of working, at the same time” across the organisation. There is also the adoption of different methodologies by different groups in the organisation. So there is co-existence of new ways of working (NWOW), and old ways of working, put by one interviewee as a case of “a lot of the processes are not yet fully appreciating that (new) way and it doesn't make it easy in all cases, but it's there”. By this they were referring to the challenges of coordinating delivery of work across the organisation given the different interpretations and ways of working.

❖ **Readiness of Support Functions**

Related to the issue of different maturity levels was the fact of some of the key support functions were not ready for properly supporting the agile transformation, particularly the finance function and the HR function. This included issues regarding performance measurement processes and recruitment. One interviewee from the Disrupt the Bank stream expressed frustration with the recruitment process, which they felt was not supporting the pace that they were working at:

“(HR) need to understand why the squad needs the new resource (in) three or four weeks...from recruitment, into stepping a foot in the door in the bank, to onboarding. You can't transform if you still going to work in the old ways of Oh well, it will take us four months to get this person in. You know what I mean?”

Of concern in this respect was the finance function:

*“... because, you know, you want guys to work in a different way, but you want to control the money in the same way. So, you say: ‘have a scrum team, you must run at a cadence, you must be long running, you must look after your product. And by the way, you're going to come every time you want to launch something new and ask for money at a financial control board’. I understand you need financial controls but understand what you're asking these guys to do.”- Interviewee 5, **Transform the Bank***

❖ **Diversity**

Surprisingly, the issue of “Diversity” was raised by several of the interviewees. The first dimension was the issue of age, as already mentioned above. The matter of diversity was also raised in terms of improving the diversity of perspectives by bringing in new people into the organisation, “but also people of color, different genders, different in that middle (management) layer. This is a very standard... and it's not wrong... but it's this very big bunch of white males. Yeah, you need diversity, you need transformation in in diversity.” In addition, given that 11 out of the 13 respondents are in the 40 to 50 years old age range, the issue of managing millennials or a younger workforce came up several times, with one responded raising concerns that the HR function is not assisting with bridging the gap between the generations:

“It's a new type of leader, but it's a new generation also. And that's why I think HR is failing us in general. HR needs to help collaborate the different generations and recommend to the business that “you've got a bunch of millennials here that want you to feed them when they come to the squad room”. You know what I mean? In the interests of change I have so many millennials in my team, and they want to

talk to me about their personal lives, and I'm a traditional leader, no no its too much sharing now but they want that kind of stuff.” – Interviewee 2, Disrupt the Bank

❖ **Skilled resource shortage**

A major challenge the organisation faces in its agile transformation journey is the issue of “Skilled resource shortage”, raised by several of the interviewees as a key issue. In the new world of work, digital skills are becoming key. For a bank, these are “very different skills to the tellers, salespeople, process people and audit people” that were typical for a bank, as one interviewee from the Disrupt the Bank stream put it. There was acknowledgement across the interviewees that the issue is not unique to the company and is a general problem for South Africa. This was well expressed by one interviewee that “as a country, we have not really done very well in terms of preparing ourselves for the fourth industrial revolution, for this digital thing.”

Because of this, the organisation has a high dependency on externally sourced and contracted resources to make up for the shortfall in skills available internally. From the perspective of one of the respondents from the Run the Bank stream, this was an unsustainable model:

“The biggest piece that I'm disappointed with from a people point of view is that a large part of the team is external people, contractors. For me this is not a sustainable model. Because you're building that asset, you're building IP, building competence, and you retain none of that.” – Interviewee 7, Run the Bank

❖ **Autonomous team decision-making**

The core of the agile method is autonomous, self-organising teams. In the bank these were in the form of squads, following the Spotify method. While the key squads across the group were initially established with the support and sponsorship of the group executive team, including the CEO and COO, there were still several challenges. Some were related to decision-making frameworks for the teams, what several of the interviewees called the “guardrails”:

“So, I think if I look into what the teams really need is, because there's a lot of ambiguity, it is to create guardrails, it is to create guardrails that they understand. For instance, in scaled agile, it was to say: These are the things you as a squad may make decisions on, these are the things that you cannot make decisions on. So, as an example, a squad cannot decide the bank's strategy. But within the squad, they can make a decision around priority, they can make a decision around how the screen should flow, but they can't decide whether it should be a separate app or not, because that's a bank strategy. So, creating those guardrails for them to safely make decisions and understand what they are empowered for and whatnot. And then to protect them that when they want fail. The culture of you will be fired, consequence management etc, needed to be replaced. For the team to test and learn, to create those guardrails is important.” – Interviewee 6, Run the Bank

And that's what we say: autonomy. And making decisions within boundaries. I mean, you should also not go and say: I've got the full autonomy to make decisions, because it comes with experience to do it. – Interviewee 2, Disrupt the Bank

What are the guardrails within which I can operate? If I go outside of my guardrails, then there's a problem. And I think that is something that we are still establishing in many spaces, is these guardrails. I think at times we like to use rules to stop things unnecessarily – Interviewee 13, Disrupt the Bank

What agile is about is about the team taking decisions of the how on how they want to deliver something, they don't necessarily take the decision on why or what. And leadership still holds accountability for that. In addition, leadership still needs to hold accountability to enable the How to happen. the you know, the How is not a free for all, the How is within guard rails. You know, leadership's responsibility is setting those guardrails, understanding when the guardrails are too restrictive and inhibiting or understanding when the guardrails are too far apart, and actually causing more disruption than giving, helping in guiding the team. – Interviewee 12, Transform the Bank

❖ Regulatory constraints

Being a bank, the organisation operates within a highly regulated environment,

limiting its range of activities and operational decisions to what is compliant with statutory and regulatory requirements. There are also labour laws that limit their rate at which the bank can implement the necessary changes in line with the new ways of working:

“We're not like Google where we can come up with crazy things and... There's regulation... there's shareholders...and so we also have to be very tidy in that regard. I mean, they can't give us the keys and say run off and go crazy. And we can have a huge impact on our economy in South Africa, if we don't manage what we do here properly...” – Interviewee 1, Support

“I mean, also in South Africa, as you know, we are highly unionised. So, if you change a person's role, I mean, you've got to go through an extensive union process. Which has made the journey happen a lot slower than we initially anticipated.”- Interviewee 9, Support

5.4.1.2 Leadership challenges

Table 10: Leadership Challenges

Rank	Code Groups	Frequency
1	Distributed leadership	12
2	Lack of guidance on agile (merge ins	12
3	Middle management readiness	8
4	Role of senior executives	7
5	Resistance to change	7

❖ Distributed Leadership

According to all the respondents, the new, agile way of working calls for a distributed form of leadership, one which one interviewee described as a condition where “there isn't one set leader” and another described as where “leadership is everyone’s responsibility”. According to a participant from the Disrupt the Bank stream, it is a change in mindset, where “leadership is not just a hierarchical thing anymore”, but rather is a factor of being “accountable and responsible”. The participant summarised it well as

*“... there's a leader in every person, I believe.” - Interviewee 2, **Disrupt the Bank***

The distributed form of leadership is accompanied by the need for an empowerment of people:

*“a lot of the focus is on empowering people to deliver to their potential, harnessing the energy of the full team in terms of how they execute” – Interviewee 4, **Consultant***

*“And it comes down to, I think, we're quite hierarchical still, in my opinion. So, there's very much this chain of command. We don't, we haven't spread down the empowerment of the teams to decide in a lot of areas” – Interviewee 5, **Transform the Bank***

The challenge is for leadership to allow decision-making to move to the team. The challenge for leaders was succinctly highlighted by an interviewee who asked: “Now, if your team is making those decisions, collectively, why do they need you?”. As both the consultants put it:

*“That decision-making moves much closer to the people actually feeling the pain. So hopefully, they're enabled to make better decisions. I mean, in this journey, you have to allow people that are actually doing the work to tell you what it's going to take to do it and get it done and then manage the outcome rather than telling people what to do - – Interviewee 4, **consultant***

*“Because one of the principles of agility is that you want to create cadence or delivery which is sustainable in the long term. So, teams have to operate as teams, at a pace that is sustainable in the long run, because over time, that's shown to be the best outcome for the organization” – Interviewee 10, **consultant***

❖ **Lack of guidance on agile**

A challenge that was expressed by several of the interviewees was the need for effective guidance on practical application of agile ways of working. There seems to

be knowledge of the theory about agile, but there is lack of a practical guide on how to transform and implement the agile ways of working among the leaders. As one interviewee put it:

“It's like, our leaders need a handbook. You know, there's a lot of theory, there's a lot of sessions that are insightful. But practically, I'm not sure they know how to make that change...The leadership needs to be given some form of a framework, ... that almost guides them in terms of when can they be more flexible? And when do they need to stick to the rules and governance?”

However, this same need for a practical guide was given by one of the consultants as the reason the SAFe framework was chosen for the bank's agile transformation:

*So they chose SAFe and implemented SAFe because it gives more structure gives people some framework to work within. SAFe doesn't solve your problems, but gives you some framework to work in, which makes things easy, and people are used to actually having some guidance - **Interviewee 4, consultant***

The lack of guidance was linked also to a lack of sufficient training for the leaders on agile ways of working:

*I think that there needs to be, you know, we need to educate our leaders about what is agile? And how a leader in an agile environment shows up and behaves. We assume that they know, I think that's a bad assumption too.– **Interviewee 1, Support***

*In terms of leadership, I don't know whether we've spent sufficient time on teaching our leaders about agile. I think that they all know it, they know the 101. But each one has their own opinion. – **Interviewee 13, Disrupt the Bank***

❖ **Middle Management readiness**

The issue of the readiness of the middle management layers of the organisation for the new ways of working and the implications for their roles was raised in all interviews as a key challenge. There was the perception that this layer had not been sufficiently engaged and equipped with a proper understanding of “this is the new

way of how we want to do stuff”, and the “this is why you would want to do it”, contributing to a feeling of being threatened by the change. There was the view that this contributed to a blockage in the flow of communication between the top management and the lower ends of the organisation:

And I think our ability to penetrate this layer, all the way through consistently, is a challenge. Its, this (top to down) is not sufficiently happening. But more so, this (bottom to up) is not happening - Interviewee 6, Run the Bank

There was also the strong opinion among respondents that the middle management layer of the organisation was too big. As one of the consultants put it: “too many layers”. One of the interviewees from the Disrupt the Bank stream pointed out that “an agile organization is extremely flat. There is no these ten depth hierarchies, and the span is like so wide of control”, demonstrating a wide span of control with her arms. An interesting view was shared by another interviewee pointing out the impact of digitisation:

The big change is that we have a line management structure that is focused on management of people competencies. So the reality of our business, which currently has a workforce of about 32,000, staffing members, is that a lot of our sales service and operations are executed by large workforces of people, is that the key management competency that we have developed is a manager of people competency. In a digital world, a lot of that service delivery and those sales even take place in a digital world, and the competencies required to manage people versus managing a digital factory that gives you those digital outputs is entirely different. – Interviewee 8, Disrupt the Bank

❖ Resistance to change

Resistance to change was mentioned as a challenge that is found at all levels in the organisation. From a leadership perspective it manifested as an inflexibility regarding the controls. This was picked up by the consultant interviewees as follows:

*To an extent, I think what I see in this organization is there's talk of wishing to be agile and wanting to go there, but letting go of some of the controls and governance that I would say relates to working in the old way, there's a reticence to letting go of some of that stuff – **Interviewee 10, consultant***

*And that's where I think we find ourselves, that transformation is sometimes, it's more lip service yet than actually doing it. And in that is also that as much as we want everyone on the ground to transform as leaders we also have to transform. It's not easy, right? **Interviewee 4, consultant***

The large middle management layer in the organisation was also highlighted as a contributing factor to the degree of resistance to change, with messages from the top management not being passed down sufficiently to the bottom and getting obstructed in the middle, but also messages from the bottom also not making their way up to the top for the same reason. The causes were also related to the length of time people have been with the organisation:

*There in the middle layer of (this company) there are a large number of people who have been with the bank 16 to 20 years. And when the senior executives come with new things, they just go, We've done it this way, and we will continue to do. Which means the people below them never get the message about what are the new things, how do we need to transform etc. and ... we actually need significant transformation in that middle layer, in order for them to be receptive of the things that the executives want to do, and take it to the lower level, - **Interviewee 6, Run the Bank***

❖ **Role of senior leadership**

The role of senior leadership was brought up by all the interviewees as key challenge, with most of the input suggesting that there had been insufficient engagement of and by the senior executive layers of the organisation. The lack of active participation by the senior executive team in the agile transformation in turn results in a lack of alignment and efficient coordination across the organisation:

*One is senior executive sponsorship, because they kind of think these things just happen. But there has been no deliberate direction, if you can ask anybody in the bank, nobody has a consistent view of: this is what or how are we going to start doing things, and the inconsistency of adoption and approaches, makes it very hard to deliver. **Interviewee 6, Run the Bank***

*But the onus it put on leadership is of active participation, because if they don't understand where the organization wants to go, then you have a hundred different squads going in different directions. So there's some level of coordination still needed from a strategy perspective, to say these are the directions we want to move in. **Interviewee 4, consultant***

*I mean you still need the COO and the CEO. Yeah, it's just that they, they need to understand why the need to transform, why do you need to work in new ways of working, and they need to be open to it – **Interviewee 2, Disrupt the Bank***

*The leaders must themselves transform, you know what I mean? They must like lead by example. Now, I'm not saying leave your glass offices and stuff, but you need to support the teams. You need to be, the leadership needs to be there when a team needs a turnaround time on a decision within 24 hours, not within four or five months. You need to be present, you need to be engaged. **Interviewee 2, Disrupt the Bank***

There was also a concern raised that the lack of understanding of agile by senior executives results in a misconception of their role, expressed by one interviewee in this regard as “that basic good leadership is being lost” in the name of being agile, with “leadership believing that they have no responsibility for the delivery, or absolving themselves of the accountability and saying, “You are a self-managing team, why didn't you do it?”.

*So, for me, there's a misconception that if you end up agile, we don't require leadership. Self-management teams do not absolve people of their responsibility to lead and guide. - **Interviewee 12, Transform the Bank***

5.5 Results for Research Question 2

5.5.1 Interview Question 2

What are the changes you have had to make to your leadership style because of having to lead in an agile, new way of working context?

The objective of this question was to elicit self-reporting of personal experience from the interviewees on how the agile transformation journey had affected them as leaders in the organisation. It was presented as an open-ended question during the interviews, and in most cases was often followed up by clarification questions from the researcher to maintain the flow of the conversation. Out of the 13 interviewees, only two responded that they had not had to make a personal change, while the rest confirmed that they had found it necessary to change their style of leadership in some way.

Table 11: Summary of responses

Response	Number of respondents
No, I have not had to change my leadership style	2
Yes, I have had to change my leadership style	11

The reasons provided by the interviewees who had not felt a need to make changes to their leadership style were different from each other. For the first respondent, it was because their career had been built up from a background of solution architecture rather than project management and line management, so for much of their career they had always had to achieve their objectives through influence and relationships, through leading more than through managing:

“...I think it's very different if you come from a very strong line (management position), and you had line power. You know, if all your experience was in command-and-control, or that kind of style, ... by nature of the fact that you had like 100 people formally reporting into you, you had a certain amount of power. So

if you asked someone to do something they would do it, right. It's different when you're in a matrix, people don't directly work for you.... Everything you had to get done was through influence... Hence why I'm saying there's no change in my leadership style”

For the second person, their reason was that they were agile by personal nature:

“So for me, it wasn't a problem. I'm agile by nature. I've always been that way from the time I was a kid. Up until now, I'm still very agile. Yeah. So for me, it hasn't been a problem.”

For the remainder of the participants, there was a range of reasons given for the need to change. These are represented in Table 12 below as the summary of the change undergone by the individuals:

Table 12: I have had to change my leadership style

Summary of change	Sample Quote
I had to let go of the need to control	<i>“I quite like control, I'm a bit of a control freak, and I've really had to learn to let go”</i>
I learnt to fail fast and learn fast	<i>“In an agile environment, you have to fail and learn. And learn fast. And I think that was, that was also another thing I grappled with a little bit.”</i>
I re-invented myself to be agile	<i>“I was a traditional delivery person. I was a waterfall delivery person. When I got here, I got thrown in the deep end and.... so I had to, I had to reinvent myself to deliver in this mode”</i>

I stepped out of my comfort zone	<i>“You need to have the willingness to change. And that goes for leadership as well. Leadership needs to be willing to embrace change. And then (the change) needs to be led by example. Show that you are in your, in your uncomfort zone now as well. Otherwise, if you're in your comfort zone, then you're just going to (follow) the old ways of working”.</i>
I gave up line management responsibility; I learnt to influence	<i>“And the biggest challenge was that I had to give up line responsibilities. I mean, I went from managing very big teams, at some point about 120 people, project managers and stuff, to managing no-one directly. So, it changes to an influencing game versus actual command-and-control. So, probably the last three or four years of my career, I've not had line management. And I think it's both empowering and also scary”</i>
I learnt to focus on setting the vision	<i>“And you actually get to the point where you invest more time actually strategically trying to make people understand where you're going, rather than trying to tell them what to do. And if you get understanding right then people actually know how to take it further”</i>
I gave up having all the answers; I learnt to listen	<i>“...the behaviour that was really important for me to change was my ability to listen, and not always have the answers. So, my style was always like, I listened to the problem and I'll go like, oh this is the solution, this is how we can do it. But now to learn how to step back, allow the teams to talk and then get to the answer. And their answers have every time been better than my answer in my head. So, that was my biggest journey”</i>
I learnt to be okay with being vulnerable	<i>“..., learning that I can say: I don't know.”</i>

<p>I gave up hierarchical power; I learnt humility</p>	<p><i>“So, being in a hierarchy versus being next to each other, from a listening, decisioning and empowering perspective: that was my style change. And It is quite liberating. It's liberating”</i></p>
<p>I learnt to lead with purpose; I learnt to lead a younger workforce</p>	<p><i>“So, I mean, most of the people that I manage now are under the age of 40... the most talented of whom are, you know... it's a different animal, right? So, I mean, they're all professionals in their own right. So they certainly are not interested in being managed on a clock and also they have very high expectations, in terms of the purpose of their work, and doing things not because you just tell them to execute something, but because they understand why it matters in the broader scheme of things”</i></p>
<p>I learnt to lead technically skilled people</p>	<p><i>“It's perhaps more highly skilled people and therefore a different quality of leadership is required, a different style of leadership is required there, because you're no longer managing branch staff, you know, foot traffic, and (you're) managing technically skilled people... So, so our leadership skills and man-management skills remain relevant always, you know, but what is different is they are not sufficient for a digital world.”</i></p>
<p>I learnt to trust the team</p>	<p><i>“It is difficult for me to pull back, you know, and, and not... Because sometimes you see the solution. And you just want to tell the team," well, you have to do that". I find times where I have to consciously pull myself back. So, I have to consciously tell myself, give the team time to solve the problem, because they might solve it better than you can solve it yourself”</i></p> <p><i>“Or I have an answer, but let the team come to one and see whether it's the same. And as I said it was always better”</i></p>

5.5.2 Interview question 3

What additional attributes do leaders need to be effective in the agile, new ways of working?

On this question, the responses of the interviewees were categorised into 10 main attributes that leaders need to have or develop, as in the table below. The attributes that were discussed the most by the interviewees were ‘Hands-on leadership’, ‘Trust in the team’, ‘Supporting team autonomy’, having ‘Humility’ and having a ‘Willingness to change’.

Table 13: Leadership Attributes

Rank	Attribute	Frequency
1	Hands-on leadership	16
2	Trust the team	15
3	Support team autonomy	14
4	Humility	11
5	Willingness to change	10
6	Risk appetite	9
7	Ability to influence	6
8	Authenticity	4
9	Courageous conversations	3
10	Collaborative	2

In different ways, all the interviewees referred to the need for ‘Hands-on leadership’ as an important quality. This is referring to a style of leadership and management that involves standing side-by-side with the delivery team, expressed by one interviewee as the ‘need to be in the mix’ with the team, rather than a style of leadership that is ‘far away from what’s going on’. This was also expressed by one interviewee as: ‘it’s not a ‘swallow management’ thing where you are flying up there,

then swoop down, you crap on the team, and you swoop back up like a bird”, and by another as supporting the “notion of having less lookers, and more doers”. It was expressed by the other participants in different ways:

*So, I like going to see what the team's doing on the floor. Because I trust that if you talk to the people... then you'll get first-hand information - **Interviewee 4, Consultant***

*What I try and do is I try and be on the floor frequently, listening to what's happening and, in the moment, - **Interviewee 6, Run the Bank***

*I believe that I had to be close to that squad...And it mattered to me ... And they had an open door to me at any point in time to come and share. And I think that is for me a model that works. - **Interviewee 7, Run the Bank***

*The skill sets also mean that you have to be hands-on. So, you know, this command-and-control, hierarchical structure is no longer as relevant as it was. - **Interviewee 9, Support***

‘Trust in the team’ was discussed in terms of leaders needing to let go of the need to control the activities and decisions of the team, and the need “to solve the problem for them or direct them”. Several of the interviewees expressed in different ways how they discovered that teams working together were able “to solve problems way better than me”, with one interviewee admitting that “it humbled me”.

*I am learning the value of a cross-functional team is the fact that they're all highly skilled, and they can help solve problems way better than me. So yeah, I think you have to learn to keep quiet. And you also need to be respectful of the team's decisions - **Interviewee 1, Support***

*You've got to step back and lead from the back. You know, that's the easiest way I can put it into a sentence. So lead from the back, and the team works ahead, you will support the team, when they fall, will provide the necessary infrastructure, in order for them to perform effectively, will take the punches for the team. That's your servant leader - **Interviewee 11, Support***

In this way “Trust in the team” and “Supporting team autonomy” are closely related. However supporting team autonomy also emphasises the need to support the team in terms of “(providing) the necessary infrastructure” and removing organisational obstacles that may come in their way, so that even if parts of “the organisation are not ready, you have to fight to give the team the space to go and do” what they need to do, and the leader’s “onus is to take the obstacles out of the way so that they can go and do it. And then you have to trust them to do it.” On this point, one interviewee expressed that “sometimes that trust is not reciprocated in delivery” by the team, which makes the trust issue complex for the leaders because often their credibility is also on the line.

The “Trust in the team” also needed the quality of “Humility” in leaders, which also came out strongly among the interviewees. A significant part of it is in leaders realising they “don’t have all the answers anymore” and needing to be comfortable with that. Especially for executives, who will often “have strong opinions, ... strong views, ... not holding back and sharing it at times”, some found that working with agile squads “just confirmed it: that all your views are not the right views”. Part of it is because:

*In the knowledge work industry, which a lot of our financial services organisations are about, you certainly don’t know more. Because if you’re senior, often you know less because you’re removed from the detail. And often younger, and more talented people are close to where the work’s happening - **Interviewee 10, Consultant***

The following table is a summary of the rest of the attributes mentioned, with a brief description and sample quotes from the interviewees

Table 14: Leadership attributes and quotes

Attribute	Brief Description	Sample Quotes
Willingness to change	Refers to a need to shift from a command-and-control style of leadership	<i>“A lot of these things are self-directed. So the self-direction means leadership has to change, right? Because you have to</i>

		<p><i>create the environment in which people can be self-directed and may go down the path you wouldn't have anticipated as a leader but allow them to explore other ways, find a better way" - Interviewee 4</i></p>
Risk appetite	<p>Refers to a need to have tolerance for experimenting, with the possibility of failure, both in relation to internal processes and ways of working, as well as in relation to customer needs</p>	<p><i>"You have a view, and you go and test the view, you gotta test it with customers and (then you find) it's not like remotely working. Which was for me eye-opening in a lot of cases. But you do it quickly, get to the realization quickly and you try alternatives" - Interviewee 7</i></p>
Ability to influence	<p>Absence or reduction of hierarchical power requires the leader to be able to persuade and influence across the organisation</p>	<p><i>"But it's just about keeping on engaging and keeping on engaging until people start working with you to get to the right thing" - Interviewee 7</i></p> <p><i>"Because leading is not about controlling and demanding, it's not about the reporting structure, is not about who reports to who, it's not about who manages who. So, at the end of the day, it's about the ability to influence others, to drive towards a common goal. It's very much more difficult to influence than control"</i></p>

Authenticity	Refers to building relationships based on authentic and honest representation of oneself	<p><i>“So, to come back and be your own, And not just fit into the organisation. But to really be your own and bring your value contribution and be free to be who you are, not to be boxed, is something that people are really, really fearful of.” – Interviewee 6</i></p> <p><i>“ in an agile environment if your actions don't support your words, I think you show up in that way very quickly. It's, it's because there's a lot of transparency. You know, with the sort of ceremonies that you follow, there's a lot of transparency. So you can't hide behind saying one thing and then doing another” - Interviewee 1</i></p> <p><i>“So you need to talk from the heart as a leader, I mean I didn't come here with a script or anything to chat to you. So you need to go there and talk to people without anyone in your marketing team having prepared a script for you” - Interviewee 11</i></p>
Courageous conversations	Refers to an ability to deliver unwelcome messages yet maintain productive and positive relationships	<p><i>“But it's also for me the ability to be direct and honest “- Interviewee 7</i></p> <p><i>“People in the team learning to have objective discussions about ‘I disagree with you. This is what I need ... this is what I expected from you. This is what you expected from me’. - Interviewee 6</i></p>
Collaborative	Ability to build effective working relationships across organisational boundaries, internally and externally	<p><i>“It's about the ability to work with multiple stakeholders. Because there are many people that play a role here” - Interviewee 7</i></p> <p><i>“The new ways of working is not like... I'm payments, I'm home</i></p>

*loans. You actually collaborate across. Collaboration is a big thing, to break that silo mentality”
- Interviewee 2*

5.6 Conclusion

This chapter presented the findings from the in-depth interviews conducted with thirteen senior leaders. The findings were presented according to the main research questions of this study, and their associated interview questions. In the next chapter, the results will be interpreted and compared against the literature which is pertinent to the topics discussed and results obtained.

CHAPTER 6: DISCUSSION OF RESULTS

6.1 Introduction

The primary research objective was to understand the experiences of leaders involved in the transition to agile ways of working in a South African financial services company. This chapter presents an analysis and interpretation of the results that were presented in Chapter 5 from the interviews conducted. It compares the results against the literature that was reviewed in Chapter 2 regarding the topic. The layout of this chapter is arranged according to the two research questions presented in Chapter 3.

The questions that were used in the interviews to gather the data for both research questions were put to the interviewees in a broad and open-ended manner, as the researcher was primarily interested in the sharing of personal experiences by the interviewees regarding the topic of the challenges they had experienced as a result of their direct involvement in the agile transformation journey of a large corporate, rather than responses that were coming from literature which they had come across in academic and non-academic sources, or that the researcher had come across. As a result, a wide range of topics was covered by the interviewees, from a wide variety of angles, which were presented in summarised format in Chapter 5.

6.2 Discussion of results for Research Question 1

RQ1: What are the experiences of leaders involved in the transition to agile ways of working in a South African financial services organisation?

The objective of this research question was to explore the challenges faced by leaders in a large-scale agile transformation. For this discussion the challenges that were presented in Chapter 5 were aligned with the grouping of challenges previously represented in Chapter 2, which were a synthesis of material from Dikert et al. (2016), Fuchs & Hess (2018), Gandomani & Nafchi (2016) and Hekkala et al. (2017). The groupings presented in Chapter 2 were: culture-related, agile expertise related, organisational structure related, and change management related.

Table 15: Categories for Research Question 1

Category of Challenges	Chapter 5 Findings
Culture-related	<ul style="list-style-type: none"> • Culture change • Autonomous team decision-making • Distributed leadership • Customer centricity • Diversity
Agile expertise related	<ul style="list-style-type: none"> • Different interpretations of agile • Different maturity levels in agile • Lack of guidance on agile • Insufficient training • Skilled resource shortage
Organisational structure related	<ul style="list-style-type: none"> • Support functions readiness • Role of senior executives • Middle management readiness
Change Management related	<ul style="list-style-type: none"> • Resistance to change • Return to old ways of working
Other	<ul style="list-style-type: none"> • Regulatory constraints

6.2.1 Culture-related

The study by Dikert et al. (2016) recognised that changing the organisational culture is a key challenge and a success factor for agile transformations, relating it to the keeping of old bureaucracies and the fact of other functions in the organisation being unwilling to change. This was brought up in various ways by the participants of the case study, who recognised that the agile transformation needs to be understood as primarily “a mindset and a philosophy” change more than just a tools and methods change. The participants also highlighted the barriers created by the other functions in the organisation that continued to operate in the old ways, such as the finance function which insisted on the agile squads keeping to the old financial controls, and other support functions processes that could not support the pace of agile squads.

Conboy et al. (2011) on the other hand focused specifically on the issues related to implementation of the self-organising team model, and raised decision making constraints as one of the main challenges. From the team perspective it is a challenge if there are not clear guidelines on what they are required and allowed to

make decisions on, and what they are not. This issue was also brought up as a key factor by the participants in the case study organisation, who honed in specifically on the struggles the agile teams faced with implementing the rapid decision-making processes required of an agile team within the confines of rigid organisational controls and processes. The participants often used the term “guardrails” to refer to this issue. From the management perspective, Conboy et al. (2011) highlighted that managers had fear of losing power and authority from allowing decision-making by the teams. This was also brought up in the interviews, with one interviewee summarizing it well with the question: “Now, if your team is making those decisions, collectively, why do they need you?”.

Associated with the mindset and philosophy of agile ways of working and self-organising teams is the issue of required changes in leadership style. For success in agile, the traditional, hierarchical, command-and-control leadership styles are compelled to shift to leadership styles that are “distributed”, “shared”, “empowering”, “participative” and “collectivist”, as expressed by several of scholars reviewed above (Drescher & Garbers, 2016; Parker et al., 2015; Srivastava, 2017). The participants in the study also pointed to the importance of this shift in leadership style. But there was a commonly shared view that, as an organisation, “we're quite hierarchical still... (and) we haven't spread down the empowerment for the teams to decide in a lot of areas” and also that the necessary “guardrails” to guide decision making by the agile teams were lacking.

With one of the fundamental shifts brought by agile mindset being a transition from a product-centered outlook to a customer-centered one (Denning, 2015), the squads that were set up in the organisation were centered around customer types. While they faced their own challenges in terms of coordinating and collaborating across the organisation, or what Fuchs & Hess (2018) referred to as the problematic coordination of different business units, there was the needed shift in the sense of a collective ownership of the customer across the organisation:

And the customer doesn't just become a delivery team's responsibility or a frontline team's responsibility. Everyone owns the customer, and its like who owns the customer? Frontline. No! Everyone owns the customer. The person who's processing an invoicing there owns the customer, or sends out the bill

*or a statement, that person understands why we're delivering to the customer.
So that's the kind of culture and transformation shift that needs to happen*

However, there was the consensus view among the participants that the top management of the organisation had themselves not yet sufficiently transitioned into this thinking, which makes the transition in the rest of the organisation more difficult. This aligned with the view of Fuchs & Hess (2018) who included the lack of top management support and engagement as one of the key barriers for successful agile transformations:

And I think it starts at the top. So I think the Group Exco all needs to really wrap their minds around this and really understand what is expected from them to help the organization with changing here...And I'm not, I'm not seeing that we've crossed over, we are still very federated.

An interesting outcome was the emergence of diversity as a factor in the agile transformation of the company. This was discussed by participants in terms of the age of the workforce, which was perceived as very aged at the higher levels of top management, thus impacting the degree and pace of the cultural change of the organisation to align with agile principles and support the agile transformation. It also arose in the context of some of the participants, a majority of whom were in the senior management layers of the organisation and in the 40-50 age group range, sharing their challenges with leading and managing a younger workforce that is often composed of millennials. The issue of diversity was also raised in terms of race and gender. This was not a topic that was specifically addressed in the literature dealing with the agile transformation journeys of companies, although the issue itself often is discussed in leadership literature. For instance, Balda & Mora (2011) discuss the challenges of leading in the new economy, with particular focus on the need to change leadership styles for the younger, millennial workforce.

6.2.2 Agile expertise-related

The issue of agile expertise as a challenge for agile transformations was discussed by Dikert et al. (2016) in terms of organisations not investing in the levels of training and coaching required for successful agile transformations, often resulting in the

prevalence of misconceptions about what agile is. As discussed previously, the core success factor for the agile way of working is a team of skilled and competent individuals (Cockburn & Highsmith, 2001), who can then be trusted to self-manage and self-direct. However, for the case study organisation the shortage in skilled resources was mentioned as a key challenge for their agile transformation. Because of this, the organisation relied on contingent or contract workers, who made up a significant proportion of the agile teams and squads. This was raised as a concern by a business executive who, reflecting on the fact that the team had used contractors, then asked: “how do I get continuity for the next time I want to run (an agile squad)?”. This is an issue that was also raised as a challenge by Gandomani & Nafchi (2016), as a lack of hard skills. This is an issue that was also seen by the participants as not unique to this organisation, but rather one that is affecting companies in the South African environment, which has a recognised shortage in skills. As one interviewee said it, South Africa had not been preparing sufficiently for the fourth industrial revolution in terms of skills development.

6.2.3 Organisational structure-related

Regarding organisational structure related challenges, Fuchs & Hess (2018) refer to the problems arising when coordinating between different business units. Dikert et al. (2016) also refers to it as a challenge caused by organisations keeping their old bureaucracies and retaining internal silos. This limits the degree of responsiveness possible for the team as it relies on other functions in the organisation that are not as responsive. Hekkala et al. (2017) made a similar point about organisations retaining old organisational boundaries subsequent to adoption of agile ways being one of the challenges for successful agile transformations.

In the case study organisation the issue raised by the participants was that the squads that were set up were still required to operate within the existing siloed structures of the broader organisation and were often dependent on other functions that were not operating in an agile way. Besides other delivery teams within the organisation not being as responsive, what also emerged as issues in relation to organisational structures was the role of the support functions such as HR and Finance, which had all retained their procedures and governance controls that the agile teams still needed to coordinate with. This limited the degree of responsiveness

of the teams, thus supporting the findings in the literature. One respondent spoke of the “unnecessary bureaucracy or red tape that's been evident in the organization for a long time.”

6.2.4 Change Management-related

Gandomani & Nafchi (2016) included resistance to change as one of the challenges for agile transformations, resulting out of concern for job and role security due to organisational structures and leadership styles required. This was recognised as a common issue whenever there is organisational change, and Gandomani & Nafchi (2016) found that the majority of issues related to this were no different to any large organisation change process. However, because the values and principles of agile emphasise close human interaction and collaboration, the people-centered approach makes this issue more critical. Dikert et al. (2016) refers to the challenge of people being quick to revert to old ways of working when confronted with the challenges in the transformation.

In the case study organisation, the view of the respondents was that the challenges with change management for the agile transformation were less at the lower levels and more at the levels higher up in the organisation.

And that's where I think we find ourselves, that agile transformation is sometimes, it's more lip service yet than actually doing it. And in that is also (the fact that) as much as we want everyone on the ground to transform, as leaders we also have to transform. It's not easy, right?

6.2.5 Other

Regulatory constraints

This issue arose in the context of the bank needing to remain compliant with regulatory requirements, and therefore being limited in the pace of agile transformation it can undertake. It was also raised in the context of the broader regulatory environment for South Africa companies, for instance labour laws which place limits on the scale of workforce changes companies can make, also potentially limiting the pace and scale of agile transformation that companies can undertake if there is possibility of it leading to job losses.

Although this issue of regulatory constraints for financial services wishing to adopt agile ways of working was not discussed as a specific topic among the key authors included in the literature review (i.e. Dikert et al., 2016; Fuchs & Hess, 2018; Gandomani & Nafchi, 2016; Gregory, Barroca, Sharp, Deshpande, & Taylor, 2016; Hekkala et al., 2017), it is a topic that has been addressed in practice by the management consultancies such as Deloitte (2015) and McKinsey (2017), and was also included in the 2019 list of challenges to adoption that was compiled from surveys done for the State of Agile report (VersionOne, 2019)(see Appendix B). It is an issue that is recognised by the practitioner community, but seems to be neglected by the scholarly community.

6.2.6 Conclusion

The results of the study for the most part supported the literature on the challenges of large-scale agile transformations, even though this investigation was specifically from the perspective of senior leaders involved in agile transformations. It was possible to summarise most of the findings on the challenges encountered by leaders into the categories of culture-related challenges, agile expertise-related challenges, organisational structure-related challenges, and change management challenges. There were some exceptions with other challenges that did not fit into any of these categories, particularly regulatory factors which affect the pace and extent of the transformation, which senior leaders are more likely to encounter than leaders and managers at lower levels in large organisations. There was also the emergence of diversity as a significant theme, which had not been given much emphasis in the literature on agile transformations. However, the issue still fit within the category of culture-related.

6.3 Discussion of results for Research Question 2

RQ2: What are the required changes in leadership style for successful individual adaptation to agile ways of working in large organisations?

6.3.1 Learnings of leaders

According to the results presented in Chapter 5, the majority of leaders interviewed indicated that they had found it necessary to change and adapt certain aspects of their leadership style because of having to lead in an agile, new way of working context. This was not surprising, as almost all scholars writing on agile transformations indicate the need for management and leadership to change to accommodate the agile ways of working. This is most often explained to be a result of needing to change from a “command-and-control” form of management that is typical of traditional, hierarchical organisations to a more facilitative, collaborative and empowering role required by agile organisations which emphasise the self-managing, self-directing, autonomous team as the core unit of production (Cockburn & Highsmith, 2001; Nerur et al., 2005; Parker et al., 2015; Rigby et al., 2016; Van Waardenburg & Van Vliet, 2013).

The interesting outcomes of the investigation therefore was their views on leadership in agile organisations, and in particular, which aspects of their own leadership styles they had found necessary to change, or which new behaviours they had found necessary to adopt or develop as they became involved in the agile transformation. The consensus among all the interviewees was that a “command-and-control” style of leadership was outdated and inappropriate for an agile way of working, which was supporting and was supported by all the literature reviewed on this topic. However, what was most interesting was the view expressed by several of the interviewees that in fact this change in leadership style had not been so much due to the agile transformation alone as much as it had also been a factor of needing to change leadership styles to be more relevant to the modern world of work in general, which has a different set of values, requirements and challenges to previous generations. Nevertheless, it was acknowledged that “agile just makes it an explicit requirement. That’s because in the agile context, command-and-control kills agile, because command-and-control takes away the (ownership and accountability for the) how from your team”.

The leaders each expressed a number of behaviours and attributes they had needed to change as a result of their direct involvement in the agile transformation, with each one contributing at least one unique change that was different from the others. This was excluding the two interviewees who had indicated that they had not had to make any changes to their leadership style as a result of agile. In total the full list of personal changes and learnings across all the interviewees was composed of the following summaries represented as “I” statements for consistency:

Table 16: Learnings of leaders on an agile transformation

Summary of personal change
❖ I had to let go of the need to control
❖ I learnt to fail fast and learn fast
❖ I re-invented myself to be agile
❖ I stepped out of my comfort zone
❖ I gave up line responsibility
❖ I learnt to influence
❖ I learnt to focus on setting the vision
❖ I learnt to listen
❖ I gave up having all the answers
❖ I learnt to be okay with being vulnerable
❖ I gave up hierarchical power
❖ I learnt humility
❖ I learnt to lead with purpose
❖ I learnt to lead a younger workforce
❖ I learnt to lead technically skilled people
❖ I learnt to trust the team

While each of the qualities expressed in the list above would find correlation within the literature, the researcher was not able to locate a similar consolidated listing of personal learnings from leaders who had been involved in agile transformations within the literature. This has placed a limit on the researcher’s ability to compare and contrast this finding as whole against the literature, and may indicate a potential

gap in the literature for future exploration.

The personal change that is labelled as “I had let go of the need to control” is related to the notion of giving up a controlling type of management style and replacing it with the distributed, shared and empowering styles of leadership discussed by Drescher & Garbers (2016), Avolio et al. (2009) and Amundsen & Martinsen (2014). It is also dependent on developing a trust in the team. “I gave up line responsibility” and “I gave up hierarchical power” are also related to the distributed and shared style of leadership discussed by these authors, but also it is worth noting that it is these changes that brought to the fore the need for “I learnt to influence” as a result of the persons not having positional authority to refer to anymore. It also aligns with the call of Ancona (2005) for recognition of leadership that permeates all levels of the organisation without regard to hierarchical positions.

“I gave up having all the answers”, “I learnt to trust the team”, “I learnt humility” and “I learnt to listen” are qualities that are associated with the servant leadership style, and correlate with the attributes of servant leadership expounded by Russell & Stone (2002). “I learnt to fail fast and learn fast” and “I re-invented myself to be agile” are related to the call by Van Waardenburg & Van Vliet (2013) for leaders in agile settings to be adaptive, as well as the requirement expounded by Yukl & Mahsud (2010) for leaders to be flexible and able to adapt to changing situations. It also relates to servant leadership through the need for humility to acknowledge that one still has room to learn, and in this way is also related to “I learnt to be okay with being vulnerable”. “I learnt to lead a younger workforce” is corroborated by the explanations of Balda & Mora (2011) that leaders will need to adapt to a new world of work composed of knowledge workers, millennials and digitalisation, where participative and collaborative styles of leadership will be more appropriate. “I learnt to focus on setting the vision” correlates well with the principles of agile leadership expressed by Parker et al. (2015), which included setting a guiding vision as a key principle. The setting of vision is also considered a functional attribute of servant leadership by Russell & Stone (2002).

The learnings that had not been explicitly mentioned in the leadership literature that was reviewed for this study was “I learnt to lead technically skilled people”, which became a requirement for people with business and operations backgrounds who

needed to engage directly and frequently with technical resources as part of the squads and agile delivery teams they were involved with. However, in one way it was related to the point that was raised by Conboy et al. (2011), who mentioned the struggles of developers that lacked business knowledge as one of the challenges for agile transformations. The learning that was raised here is pointing to the other angle of view on the same challenge: of business people also needing to develop technical knowledge.

In conclusion, the personal learnings of leaders regarding their leadership styles in an agile transformation journey can be related to the literature on leadership and on agile transformations. The leadership style changes required of the leaders reflected the rise in prominence of leadership qualities that are characteristic of distributive, sharing, collaborative, and servant leadership styles. However, there was no literature available to analyse the list holistically, as there is no literature with a similar consolidated listing of personal learnings from leaders who had been involved in agile transformations, as opposed to individual qualities.

6.3.2 Additional leadership attributes for agile

When interviewees were asked to elaborate on additional attributes that leaders need to have to be effective in the agile, new ways of working, the responses that were given were analysed and summarised into the list of the table below. These attributes were then analysed against the literature review conducted and related to relevant leadership styles, which are also presented in the second column of Table 17 below.

Table 17: Leadership Attributes

Attribute	Leadership style
Hands-on leadership	Servant
Trust the team	Empowering; Distributing/Sharing
Support team autonomy	Empowering
Humility	Servant
Willingness to change	Adaptive
Risk appetite	Adaptive
Ability to influence	Servant
Authenticity	Servant
Courageous conversations	Servant
Collaborative	Servant; Distributing/Sharing

The leadership style that is most represented by the attributes in the list is servant leadership, which supports the literature from Parker et al. (2015) on the leadership style most suitable for an agile environment set up for self-organising team structures. As discussed in Chapter 5, all the interviewees referred to the need for “Hands-on leadership” as an important quality, which is referring to a style of leadership and management that involves standing side-by-side with the delivery team. It is related to the qualities of “humility” and “ability to influence”, which are represented by a leader who abandons hierarchical authority and power to be close to the team, to encourage and influence through their presence and visibility, through listening and trusting. The qualities are supported by literature which places them among the distinctive attributes of a servant leadership style expounded by Russell & Stone (2002). However, one respondent had then asked the researcher a very important question during the interview:

“I just want to ask you something. Irrespective of what methodology you have, isn't the servant leader far more appropriate?”

While acknowledging that “what agile does is force a servant leader type of leadership” onto the situation and make it even more pertinent, their view was that the principle itself remained that it was an appropriate style of leader regardless of the delivery methodology in use. The attributes of “trusting the team” and “supporting team autonomy” fit into the definitions of empowering leadership that were proposed

by scholars such as Cheong et al. (2019) and Amundsen & Martinsen (2014), as qualities which foster psychological empowerment, leading to better motivation and engagement. Thus, they are also supported by the literature. The attributes of “willingness to change” and “risk appetite” reflect the qualities of the flexibility and adaptability that Yukl & Mahsud (2010) explained, and therefore are also supported by the literature on agile leadership. However, in as much as the same question was not asked with regards to the other leadership styles of empowering, sharing leadership, and flexible leadership, the same question lingers over these ones as well: irrespective of the methodology, are these leadership styles just not more appropriate for today’s world of work anyway?

6.3.3 Conclusion

In conclusion, the findings on the changes that leaders needed to make could be supported by the literature on leadership styles. The consensus among all the interviewees was that a command-and-control style of leadership was inappropriate for an agile way of working, which supported the literature. However, analysis of the range of personal changes reported by the interviewees revealed a set of attributes that are categorised under different leadership styles, such as distributed and shared leadership, empowering leadership, flexible and adaptive leadership, and servant leadership. This suggested that there may not be a single style of leadership that is appropriate for agile ways of working, but rather that leaders need to be able to embody the different styles to fit the situation. Nevertheless, a significant number of attributes could be classified under the servant leadership style, pointing to the possibility of it being the dominant form required. However, this would need to be tested through further empirical studies.

Similarly, when the list of additional leadership attributes required for agile were drawn up based on the input from interviews, the leadership style that emerged as the most prominent was the servant leadership style, but accompanied by empowering, sharing and agile leadership. This supported the literature, but also supported the suggestion that, rather than one style of leadership being the most suitable for agile environments, there is a constellation of leadership styles that leaders need to embody in an agile environment. However, questions were raised as to whether this is limited to agile environments, or is a requirement of the modern

world of work in general. This would be another potential area for further study.

While literature on agile transformations had brought up the issue of developers needing to develop business skills as a challenge for agile transformations, what was found in this study, but which had not been addressed in the literature reviewed, was the need for business leaders who participate in agile teams to also develop technical knowledge that is relevant for the digital economy.

CHAPTER 7: CONCLUSION

7.1 Principle findings

The aim of the research was to explore the experiences of leaders who are involved in leading the transition to agile ways of working across a large financial services organisation in South Africa, to understand the challenges encountered, the required leadership attributes and what changes in leadership styles, if any, are required. This was based on a review of the literature on agile transformations which showed that while there was growing application of agile methods in large corporates, who were also extending agile beyond the IT function, the research on the topic was still lagging behind practice.

In light of this, there was the opportunity to verify the challenges of large-scale agile transformations as presented in the various literature through the case study of an organisation that was undertaking such a programme. There was also the opportunity to study the personal experiences of senior leaders within an organisation that had adopted agile methods and undertaken an agile transformation to investigate what leadership styles were found to be most suitable in practice. The aims of the research were therefore approached as two research questions: to explore the challenges experienced by leaders in a large-scale agile transformation, and to identify the leadership attributes required for successful agile transformation from the perspective of leaders.

The findings of the study were that the challenges experienced by leaders in South African organisations undertaking agile transformations are to a large extent reflected in the existing literature, with only a few exceptions. This was after the outcomes from the study were compared against the literature of Dikert et al. (2016), Fuchs & Hess (2018), Gandomani & Nafchi (2016), Hekkala et al. (2017) and Conboy et al. (2011). The challenges discovered in the case fit into the categories of organisational culture factors, availability of agile expertise and knowledge, organisational structure factors and change management. Within culture-related factors, the main issues related to lack of sufficient involvement of top management in the change of culture for agile. A strong criticism of the top leadership of the company was that in terms of their ages they may not be motivated to drive and

champion significant changes. This makes it challenging to drive the understanding that the agile transformation is essentially a mindset change more than tools and methods. Other culture-related issues related to the challenges of implementing the model of self-organising, autonomous teams within the context of rigid structures and controls of a traditional organisation when other functions in the organisation had not transitioned to the new ways of working. This presents particular challenges to agile teams who found the lack of decision-making frameworks or guardrails for that context challenging. Surprisingly, the issue of lack of diversity in terms of age, race and gender arose frequently as a factor. This was one issue that had not been made explicit in the literature reviewed for agile transformations.

While the issue of lack of sufficient, specific agile skills was also raised in both the literature and the case study, the issue seems to be particularly important within the South African context, where there is already an existing skills shortage, with added concern that the country is not doing enough to develop the skills necessary for the Fourth Industrial Revolution. The organisational structure-related factors found in the case study organisation supported those raised in the literature, with the continuation of old organisational boundaries and bureaucracies hindering the kind of collaboration required for successful agile transformation across the enterprise. There were also change management-related issues. However, these were deemed to be issues common to any large organisational change process, with few issues raised that were unique to an agile transformation.

In relation to leadership, the study found that most leaders had found it necessary to adjust their leadership styles in some way or another to be effective in an environment of agile ways of working, given the vast working history of most of them and that most of that work history would have been in traditional, hierarchical environments where command-and-control styles of management would have been the predominant style practiced as the norm. It was found that an agile environment, with its emphasis on creating and enabling the autonomy of self-organising, self-managing teams, placed an emphasis on leadership behaviours that were characteristic of distributed, shared, empowering and servant leadership styles. In other words, among the range of leadership styles expounded in the leadership theory literature, there was not one style of leadership that was found have the sole claim of being the most suitable for agile. At the same time, there were no leadership

characteristics required in an agile environment that did not already fit into the known forms of leadership. What the agile environment did was to force an emphasis on particular styles of leadership that promote collaboration, trust, equality, empowerment, and community in shared purpose. It also forces a shift away from a singular type of leadership and calls for an appreciation for an ability to embody a constellation of leadership styles. That being said, for this case study company, the leadership style that stood out as being first among equals was the servant leadership style.

This research study should add to the work that has been done on the adoption of agile methods within South African contexts, such as by Noruwana & Tanner (2012) and by Johnston & Gill (2017), but also to the broader literature on agile transformations and the leadership of agile transformations.

7.2 Limitations of the research

- The researcher's limitations in terms of lack of training and prior experience with conducting qualitative research studies involving in-depth interviews and coding of data to support content analysis should be kept in mind as possible limitations on the finding of this study.
- While there were valid academic recommendations to conduct single case studies on the topic of challenges of agile transformations, the fact that data was drawn from a single organisation should be kept in mind when considering the generalisability of the findings presented. Other factors of limitation to the generalisability to consider are
 - The sample size of the research – thirteen in-depth interviews were conducted
 - The industry – this was limited to a large, traditional organisation in the financial services industry which is also a highly regulated industry.

7.3 Future Research Considerations

- The focus of this study was on the Future research could perform an analysis of an agile transformation as an organisational change effort. The objective would be to determine if it displays any peculiar characteristics that distinguish it from what is already known in the organisational change or business transformation

literature.

- The core of the agile method is the agile team, and a key success factor of the agile team is the team members – their skill levels and motivation. Future research could investigate the impact of a systemic shortage of skilled resources in the South African context on agile transformations and application of agile methods. This can be either in terms of the impact on the pace of the transformation, or the scale of the transformation that companies can undertake, or perhaps the success levels of such undertakings in that context.
- As this study was performed in the financial services sector, the research pointed to the regulatory framework as having some impact on the pace and scale of an agile transformation. Future research could investigate the impact of the regulatory environment on the pace of agile transformation.
- A list of changes that leaders had to make to their leadership styles was presented in the findings and discussion of findings of this study. However, this was presented with no quantitative data on the prevalence of each, nor on their perceived importance. Future research could investigate which of these changes in leadership styles are most prevalent and which are perceived as the most critical changes to make. This can be tested through quantitative methods with surveys to test the validity of the listed qualities, as well as their prevalence and importance.
- The frameworks that list challenges of agile transformations that were included in this document were compiled outside of South Africa, and, as far as the researcher is aware, have not been tested with quantitative methods within the South African context. Future research needs to be performed in the form of a survey across a wide range of companies in the South African context to test the results of these frameworks
- The focus of this study was on the middle management layer of a large corporate, excluding the top management or senior executives above and the delivery teams below the middle layer. A similar exercise can be undertaken focusing on the experiences of the top management layer of a large corporate. Alternatively, the layer below the middle management layer in large, hierarchical corporates could also be the focus of a similar study as this one. Another alternative is to conduct a similar study on another large organisation in different industry.

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APPENDICES

APPENDIX A – The Agile Manifesto

Principles behind the Agile Manifesto

We follow these principles:

Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.

Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.

Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.

Business people and developers must work together daily throughout the project.

Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.

The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.

Working software is the primary measure of progress.

Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.

Continuous attention to technical excellence and good design enhances agility.

Simplicity--the art of maximizing the amount of work not done--is essential.

The best architectures, requirements, and designs emerge from self-organizing teams.

At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.

APPENDIX B – State of Agile Report 2019

Figure 7: State of Agile Report on challenges experienced adopting agile



Source: VersionOne (2019)

APPENDIX C – Informed Consent letter



INFORMED CONSENT LETTER

My name is Thuto Mako. I am an MBA student at the University of Pretoria's Gordon Institute of Business Science, conducting research on the experience and insights of leaders in an agile transformation journey.

Thank you for agreeing to participate in this research. **Please note you may at any time decide to withdraw from this study without any penalty.** All data collected will be confidential and stored in a manner which ensures anonymity. In the research report all data will be reported without identifiers. The findings of this research will be used solely for academic purposes.

If you have any concerns, please contact my supervisor or me. Our details are provided below.

Your honest opinion and perspective on this matter are very important to this research. This will not take more than an hour of your time.

Researcher

Name: Thuto Mako

Email: 18309373@mygibs.co.za

Cell: 083 212 9833

Research Supervisor

Name: Andee Deverell

Email: Andeed@nedbank.co.za

Cell: 082 887 9897

Participant

Name: _____

Position: _____

Location: _____

Email: _____

Cell: _____

Signature of participant

Date:

Signature of researcher:

Date:

APPENDIX D – Interview Guide

RESEARCH QUESTIONS	INTERVIEW QUESTIONS
<p>Research question 1</p> <p>What are the experiences of leaders involved in the transition to agile ways of working in a South African financial services organisation?</p>	<p>1. What has been your experience of the challenges of the agile transformation in the company?</p>
<p>Research question 2</p> <p>What are the required changes in leadership style for successful individual adaptation to agile ways of working in large organisations?</p>	<p>2. What additional attributes do leaders need to be effective in the agile, new ways of working?</p> <p>3. What are the changes you have had to make to your leadership style because of having to lead in an agile, new ways of working context?</p>

APPENDIX E – Ethical Clearance Approval Confirmation Letter



18 July 2019

Thuto Mako

Dear Thuto

Please be advised that your application for Ethical Clearance has been approved.

You are therefore allowed to continue collecting your data.

Please note that approval is granted based on the methodology and research instruments provided in the application. If there is any deviation change or addition to the research method or tools, a supplementary application for approval must be obtained

We wish you everything of the best for the rest of the project.

Kind Regards

GIBS MBA Research Ethical Clearance Committee

APPENDIX F – Code Book

Code Group 1	Code
Attributes of leaders	Ability to influence
Attributes of leaders	Authenticity
Attributes of leaders	Collaborative
Attributes of leaders	Courageous conversations
Attributes of leaders	Create safe space
Attributes of leaders	Dealing with VUCA
Attributes of leaders	Hands-on leadership
Attributes of leaders	Humility
Attributes of leaders	Risk appetite
Attributes of leaders	Someone new to the organisation
Attributes of leaders	Support team autonomy
Attributes of leaders	Trust the team
Attributes of leaders	Willingness to change
I've had to change	Gave up control
I've had to change	Gave up having all the answers
I've had to change	Gave up hierarchical power
I've had to change	Gave up line responsibility
I've had to change	Get out of comfort zone
I've had to change	Learnt to be vulnerable
I've had to change	Learnt to lead with purpose
I've had to change	Reinvented oneself
Leadership Challenge: Distributed Leadership	Decision making is moved to the team
Leadership Challenge: Distributed Leadership	Empowering people
Leadership Challenge: Distributed Leadership	Leadership is found anywhere, not hierarchical
Leadership Challenge: Distributed Leadership	Not one set leader, but shared
Leadership Challenge: Feeling threatened	Leaders are frightened of agile
Leadership Challenge: Feeling threatened	Leaders feel threatened
Leadership Challenge: Feeling threatened	Needs leadership with multi skill in tech, ops and commercial side
Leadership Challenge: Insufficient training	Different definitions and understanding of agile and agility
Leadership Challenge: Insufficient training	Different interpretations of what NWOW policy requires of leaders
Leadership Challenge: Insufficient training	New way of work is Challenging for leaders
Leadership Challenge: Insufficient training	Not enough intervention done
Leadership Challenge: Insufficient training	People are not prepared enough for agile
Leadership Challenge: Insufficient training	Role of leadership in agile organisation

Leadership Challenge: Insufficient training	Role of middle management in agile
Leadership Challenge: Lack of guidance on agile	Agile is used as excuse to not do the basics of management
Leadership Challenge: Lack of guidance on agile	Assuming leaders know what to do
Leadership Challenge: Lack of guidance on agile	Bums in seats mentality
Leadership Challenge: Lack of guidance on agile	Leaders not sure what to let go of and what to hold on to
Leadership Challenge: Lack of guidance on agile	Leadership has been prepared for the change
Leadership Challenge: Lack of guidance on agile	Leadership needs a guiding framework of how to implement the new way
Leadership Challenge: Lack of guidance on agile	Leadership support is not enough
Leadership Challenge: Resistance to change	Change resistance
Leadership Challenge: Resistance to change	Leadership is changing from command-and-control
Leadership Challenge: Resistance to change	Leadership is saying the right things but not acting it
Leadership Challenge: Return to old ways	Leaders fall back to old ways under pressure
Leadership Challenge: Return to old ways	Threat of falling back to old ways
Leadership Challenge: Role of Senior Executives	Goal has to be clear
Leadership Challenge: Role of Senior Executives	Leadership needs to set strategic direction
Leadership Challenge: Role of Senior Executives	Need CEO and COO support
Leadership Challenge: Role of Senior Executives	Need strong executive to drive it
Leadership Challenge: Role of Senior Executives	Needs strong executive support
Leadership Challenge: Role of Senior Executives	Needs strong leader to overcome resistance
Leadership Challenge: Role of Senior Executives	No senior executive sponsorship
Motivations for agile	Create purpose driven work or organisation
Motivations for agile	Need for speed and agility
Motivations for agile	Need it also to attract the right talent
Motivations for agile	Need to self-disrupt
Motivations for agile	Needed Operating Model review
Motivations for agile	Needed to be competitive
Motivations for agile	Needed to use a different delivery approach
Motivations for agile	New BU to disrupt the traditional
Motivations for agile	Not spend years creating new software
Motivations for agile	Reason for agile
Motivations for agile	Seeking competitive advantage
Motivations for agile	Threat of new entrants

Org Challenges: Accountability and Ownership	Accountability and ownership changes
Org Challenges: Accountability and Ownership	Create sense of ownership of work
Org Challenges: Agile methodology selection	Methodology selection
Org Challenges: Autonomous, Self-organising teams	Self-autonomous teams
Org Challenges: Autonomous, Self-organising teams	Sizing of agile teams
Org Challenges: Autonomous, Self-organising teams	Squad owns the solution end to end, including commercialisation
Org Challenges: Culture change	A new mentality of delivery is required
Org Challenges: Culture change	Agile is following what the Silicon valley companies have done
Org Challenges: Culture change	Change takes time
Org Challenges: Culture change	Command-and-control
Org Challenges: Culture change	Competency of people is key
Org Challenges: Culture change	Coordinating across multiple teams
Org Challenges: Culture change	Culture change is required
Org Challenges: Culture change	Developing culture of experimenting
Org Challenges: Culture change	Faster learning
Org Challenges: Culture change	Fear of failure
Org Challenges: Culture change	Its a long term journey, this agile transformation
Org Challenges: Culture change	Low emphasis on hierarchy
Org Challenges: Culture change	Managed transformation, not big bang
Org Challenges: Culture change	Missing of deadlines is taken casually
Org Challenges: Culture change	Need for collaboration
Org Challenges: Culture change	Not found in a text book, based on experience
Org Challenges: Culture change	Physical artifacts
Org Challenges: Culture change	Risk accompanies speed
Org Challenges: Culture change	Transformation is about culture change
Org Challenges: Culture change	Transformation takes time
Org Challenges: Customer centricity	Customer experience is everything now
Org Challenges: Customer centricity	Customer-centricity
Org Challenges: Customer centricity	Design thinking becomes key
Org Challenges: Customer centricity	Everyone owns the customer
Org Challenges: Different interpretation of agile	Mindset is more important than tool
Org Challenges: Different interpretation of agile	Mismatch between theory and practice
Org Challenges: Different interpretation of agile	Need to adapt it to your company
Org Challenges: Different interpretation of agile	No consistent method for agile

Org Challenges: Different maturity levels	Different maturity levels
Org Challenges: Diversity	Age of senior leaders matters
Org Challenges: Diversity	Generational preferences
Org Challenges: Diversity	Leading younger workforce
Org Challenges: Diversity	Millenials behave differently to traditional
Org Challenges: Diversity	Need for diversity
Org Challenges: Diversity	Need to lead juniors who earn more than you
Org Challenges: Middle management readiness	Entrepreneurial mindset is required
Org Challenges: Middle management readiness	Middle management readiness
Org Challenges: Regulatory constraints	Board appointed role of Digital Officer
Org Challenges: Regulatory constraints	Business decision on MVP
Org Challenges: Regulatory constraints	New definition of banking
Org Challenges: Regulatory constraints	Regulatory constraints
Org Challenges: Skilled resource shortage	Different skill set now required
Org Challenges: Skilled resource shortage	Digital skills becoming key
Org Challenges: Skilled resource shortage	General skill worker rather than specialist
Org Challenges: Skilled resource shortage	Skilled resource shortage
Org Challenges: Support functions readiness	Finance challenges
Org Challenges: Support functions readiness	HR practice challenges
Org Challenges: Top management readiness	Top management readiness
Org Challenges: Top management readiness	Traditional project management disciplines are still required
Personal change	I haven't had to change
Personal change	I've had to change