What Factors Influence the Transition from SAFe 4.5 to SAFe 5.0 in a Large-Scale Financial Services Organization

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ABSTRACT

As customer needs evolve and the competitive landscape becomes more challenging for large-scale financial services organizations to meet customer demands and remain competitive. Large-scale financial services organizations must respond quickly to market changes and be agile in product and service delivery.

This study investigates the factors influencing the transition from Scaled Agile Framework (SAFe) 4.5 to SAFe 5.0 within a prominent large-scale financial services organization. The study, anchored in the qualitative research paradigms of interpretivism and constructivism, revolves around an in-depth case study, delving into the multifaceted complexities and subtleties associated with transitioning to SAFe 5.0 in a large-scale financial organization setting. Using the Organizational Agility Conceptual Model, the study examined various elements crucial for a successful transition.

This model encompassed agility drivers, agile enablers, agile capabilities, and agile practices. Notably, the study identified that SAFe 5.0 competencies that are revolving around customer centricity, namely Agile Product Delivery, Team, and Technical Agility, Continuous Learning Culture, and Lean Portfolio Management, are vital factors that influence the transitioning to SAFe 5.0 across all the themes of the organizational agility conceptual model.

Furthermore, organizational factors, including leadership, culture, and technological infrastructure, emerged as significant enablers. The

organization's inherent agility capabilities and preparedness for change are critical determinants in effectively managing the transition to SAFe 5.0. The study underscored the challenges encountered in breaking down departmental silos, synchronizing business processes with agile methodologies, and extending agile practices beyond IT-centric domains. These challenges, were offset by a noticeable organizational leaning towards adapting agile practices and a commitment to fostering a customer-centric innovation culture in line with SAFe 5.0 competencies.

This study substantially contributes to both the academic field and practical aspects of organizational agility and the transition to SAFe 5.0. It equips decision-makers within large-scale financial organizations with a thorough, actionable understanding of the factors influencing agile transitioning. By comprehensively outlining the factors influencing the transition from SAFe 4.5 to SAFe 5.0, the study emerges as an indispensable resource, offering foundational insights for organizational leaders and scholars, focusing on the intricacies of agile transitions in a large-scale financial organization context.

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1. CHAPTER 1 - INTRODUCTION

1.1. Background

In the dynamic and ever-evolving landscape of modern business, the relentless surge of digital technologies and the perpetual evolution of customer demands reshaped the competitive arena for organizations at an unprecedented pace (Anand & Mantrala, 2019; Galazova & Magomaeva, 2019). The widespread adoption of digital technologies fueled a pervasive need for global connectivity among customers, compelling organizations to reassess their strategies to remain relevant and resilient in this era of constant transformation. Traditional methodologies, exemplified by the rigid waterfall methodology in software development, increasingly proved inadequate in meeting the agility demanded by the relentless pace of the digital age, necessitating a paradigm shift (Christopher & De Vries, 2020).

In response to this seismic shift, agile software development (ASD) methodologies emerged as a linchpin for organizations, not merely as a means to adapt but as a strategic imperative to thrive amidst the tumultuous and rapidly evolving expectations of today's dynamic markets (Pargaonkar, 2023). The essence of ASD lies in the fundamental philosophy of frequent and iterative delivery of software products and features. This approach allowed organizations to pivot swiftly and remain agile in response to the ever-changing tapestry of customer demands,

ensuring survival, sustained relevance, and innovation (Younas et al., 2020).

Originating as a solution for small co-located teams, ASD fostered collaboration and nurtured dynamic synergy between development teams and stakeholders. This approach ensured that the agile delivery of software was indispensable to meet the market's exigencies and the contemporary consumers' insatiable appetite for innovation and responsiveness (Kuhrmann et al., 2021; Przybylek & Kowalski, 2018; Younas et al., 2020). The evolutionary trajectory of ASD, transitioning from its nascent roots in small, localized teams to its robust application in large-scale, distributed projects and teams, gave rise to the transformative phenomenon of agile scaling frameworks. This phenomenon reflected a business environment where strategic dispersion of agile teams occurred across diverse geographical areas, and various organizational or non-development departments actively embraced and embodied the tenets of agile principles. Remarkable frameworks that organically emerged from this phenomenon included the SAFe, Large Scale Scrum (LeSS), and Disciplined Agile Delivery (DAD) (Putta, 2018).

Challenges persist amidst the success stories of integrating agile software development into large-scale organizations. Large entities grapple with the intricacies and complexities of implementing agile methodologies effectively in their unique and often complex contexts. The transition

from traditional methods to agile scaling frameworks, like moving from SAFe 4.5 to SAFe 5.0, is driven by the need for organizations to be more adaptable, efficient, and responsive to rapidly changing market demands. SAFe 5.0 introduces improvements over 4.5, focusing on customer-centricity, Lean-Agile leadership, and enterprise agility, helping organizations deliver value more effectively and stay competitive in fast-evolving environments (Wińska & Dąbrowski, 2020).

In transitioning from SAFe 4.5 to SAFe 5.0, large financial institutions confront unique challenges, primarily due to their complex regulatory environments and the imperative for digital innovation. The shift towards SAFe 5.0 necessitates an overhaul and a cultural and procedural transformation to enhance agility and responsiveness to rapidly changing market demands. This process involves reevaluating traditional project management approaches, favoring more iterative, customer-centric practices that facilitate quicker adaptation, innovation, and faster time to market. Studies on large-scale agile transformation highlight the importance of leadership commitment, cross-functional collaboration, and continuous learning within these organizations to successfully navigate the complexities of agile transformation (Hoeseb & Tanner, 2020; Karpik, 2018; Sebola & Khoza, 2022).

Successfully navigating this transition necessitates an understanding and insight into the factors that influence the effective implementation and

adaptation of agile methodologies within the intricate, multifaceted context of these large, dynamic, and complex organizations.

1.2. Problem Statement

In the rapidly evolving landscape of contemporary business, large-scale financial organizations face notable challenges in adopting agile scaling frameworks. The transition from the established SAFe 4.5 to the more advanced SAFe 5.0 marks a pivotal moment for these organizations as SAFe 5.0 offers updated methodologies that better meet modern demands, emphasizing customer-centricity and organizational agility, which are essential for maintaining competitiveness in a rapidly evolving market. While the merits of agile methodologies in fostering adaptability and responsiveness are widely acknowledged, the challenges inherent in seamlessly integrating these methodologies into the fabric of large-scale financial organizations are complex and multifaceted (Ahmad et al., 2023).

Key challenges include aligning distributed teams across various locations, ensuring effective communication between development teams and stakeholders, and adapting to changing customer demands. Furthermore, extending agile principles beyond development departments and tailoring them to the financial sector's specific needs is significant (Al-Saqqa et al., 2020). While success stories abound in agile implementation within smaller settings, translating these successes to

the grand scale and intricacy of large financial institutions poses unique challenges (Alojaiman, 2023).

The transition may involve technical adaptation and strategic shifts in organizational culture, processes, and technology (Reginaldo & Santos, 2020). A detailed understanding of these factors is crucial for large-scale financial services organizations to leverage agile frameworks fully. The absence of a specific transition roadmap may lead to operational delays and misalignments with organizational objectives (Karnik et al., 2022).

This research study explored broader challenges, including leadership strategies, change management, and cultural aspects, to provide a comprehensive view of the transition process from SAFe 4.5 to 5.0. This detailed examination is vital for large-scale financial services organizations aiming to be agile, innovative, and customer-centric in the dynamic financial services sector.

1.3. Primary Research Question

What factors influence the transition from SAFe 4.5 to SAFe 5.0 in a large-scale financial services organization?

1.4. Secondary Research Question

- **RQ1:** What are the agility drivers for transitioning from SAFe 4.5 to SAFe 5.0 in a large-scale financial institution?

- **RQ2:** What are the agile enablers for transitioning from SAFe 4.5 to SAFe 5.0 in a large-scale financial institution?
- **RQ3:** What agile capabilities are needed by a large-scale financial institution to transition from SAFe 4.5 to SAFe 5.0?
- **RQ4:** What agile practices must a large-scale financial institution adapt to transition from SAFe 4.5 to SAFe 5.0?

1.5. Research Objectives

This empirical study aimed to examine the factors of transitioning from the established SAFe version 4.5 to the more advanced SAFe 5.0 within the context of a large-scale financial institution. This exploration extended beyond a mere technical shift, aspiring to provide an understanding of the multifaceted factors that demand meticulous consideration during this transformative journey. Key objectives included:

- To uncover the internal and external factors influencing large-scale financial institutions' transition from SAFe 4.5 to SAFe 5.0.

Achieving this objective implies delving into the strategic imperatives, market dynamics, and technological advancements that drive organizational agility in the ever-evolving financial landscape.

- To identify the enablers supporting transitioning from SAFe 4.5 to SAFe 5.0 in a large-scale financial institution.

Achieving this objective involves investigating the organizational elements, technological infrastructure, and human capital facilitating this transition. It also requires the evaluation of the role of leadership, technology, and organizational culture in enabling the adaptation of SAFe 5.0, considering their impact on the agility trajectory of large financial institutions.

- To identify the agile capabilities needed by large-scale financial institutions to transition from SAFe 4.5 to SAFe 5.0

Achieving this objective involves examining large financial institutions' strengths, competencies, and resources that could be harnessed to navigate the transition effectively. It also gauges the organizational readiness and capacity for change, identifying potential enhancement or consolidation areas to optimize the transition process.

- To identify the agile practices that large-scale financial institutions must adapt to the transition from SAFe 4.5 to SAFe 5.0

Achieving this objective entails conducting an in-depth analysis of agile methodologies, frameworks, and collaborative practices that prove instrumental in achieving the goals of transitioning to SAFe 5.0. It also requires investigating the applicability and adaptability of agile practices within the specific operational and cultural context of large financial

institutions, offering tailored recommendations for a seamless transition.

This study aims to uncover the technical intricacies of transitioning between SAFe versions (4.5 to 5.0) and provides a holistic understanding of the organizational, cultural, and strategic dimensions that underpin successful transformations. By addressing these research objectives, the study aspired to contribute actionable insights, equipping decision-makers in large financial institutions with a comprehensive guide to navigating the complexities of transitioning from SAFe 4.5 to SAFe 5.0, fostering enduring organizational agility.

1.6. Research Importance

The significance of this research is embedded in its pivotal role, acting as a guiding compass for large-scale financial organizations embarking on the journey toward achieving strategic organizational agility. In the contemporary financial sector landscape, characterized by the relentless march of digitalization and the dynamic evolution of customer expectations, understanding the intricacies of transitioning from SAFe 4.5 to SAFe 5.0 is paramount. The research may empower decision-makers with a comprehensive understanding of the complex web comprising agility drivers, enablers, capabilities, and practices (Ahmad et al., 2023).

The research facilitates informed decision-making in a landscape where rapid technological advancements and shifting market dynamics demand proactive responses. Armed with the insights gleaned from this study, leaders within large-scale financial organizations could make strategic choices that resonated with their organizations' dynamic needs and challenges. Furthermore, the research might significantly enhance operational efficiency and effectiveness within these large institutions (Karnik et al., 2022). Organizations may streamline their processes, optimize resource utilization, and cultivate a culture of continuous improvement by identifying, analyzing, and addressing the critical factors influencing the transition.

Notably, the research took on the role of a proactive navigator, helping organizations anticipate and mitigate challenges associated with large-scale agile transitions. It offered a foresighted approach, allowing decision-makers to implement preemptive measures and navigate the transition from SAFe 4.5 to SAFe 5.0 with resilience and efficacy. Beyond the technical intricacies, the research emphasized the cultural and organizational transformation inherent in the transition process. The insights gleaned from the study were instrumental in guiding leaders to foster an agile mindset and cultivate a corporate culture that was amenable to change and thrived on innovation, collaboration, and adaptability.

The competitive advantage derived from successfully navigating this transition is a pivotal outcome of this research. Large-scale financial organizations that absorbed and implemented the findings stood to gain substantial ground in the competitive landscape. The study may equip organizations with the strategic knowledge to harness agile principles, enabling them to respond swiftly to market dynamics, innovate rapidly, and meet the evolving needs of their clients (Sebola & Khoza, 2022). Additionally, from an academic standpoint, this research significantly contributes to the broader discourse on organizational agility. It enriched the academic community with empirical evidence, practical insights, and an understanding of the challenges and opportunities associated with transitioning between SAFe versions.

This study specifically examines the transition from SAFe 4.5 to SAFe 5.0 within a large-scale financial organization. While the primary focus is on this specific case, the findings may provide insights into generalizable patterns or principles applicable to other transitions within the SAFe framework.

In summary, this research transcended its immediate organizational impact and assumed the role of a guiding narrative for large-scale financial organizations navigating the complexities of digital transformation. It offered a survival guide and a roadmap for thriving in an era of constant change. It heightened customer expectations,

solidifying its position as a foundational resource for organizational leaders and academic scholars.

1.7. Research Context

Introducing key competencies, including Customer Centricity, Design Thinking, and Continuous Learning Culture, marked the transition from SAFe 4.5 to SAFe 5.0. These elements significantly influenced the factors and practices required for successful implementation, making this transition distinct from previous iterations.

In exploring the transition from SAFe 4.5 to SAFe 5.0, this study focused on a large-scale financial services organization in Namibia with two banking subsidiaries operating in Namibia and Botswana and other subsidiaries and associates offering associated and complementary financial products and services. This organization, characterized by its multinational operations, presented an exciting setting for understanding the complexities of agile transformation, specifically transitioning from SAFe 4.5 to SAFe 5.0. The study aimed to provide grounded insights into the specific factors this large-scale financial services organization faced in its journey toward enhanced organizational agility.

Within the fabric of the contemporary financial landscape, the research unfolded against a backdrop defined by the accelerating pace of digital transformation, unprecedented technological disruptions, and the ever-

evolving expectations of customers. Large-scale financial services organizations at the forefront of this dynamic ecosystem faced a pressing need for organizational agility (Mrugalska & Ahmed, 2021). Rapidly changing market dynamics, competitive pressures, and the seismic shift toward digitalization in the financial sector underscored this imperative.

The context was further enriched by the pervasive influence of agile methodologies, particularly the SAFe, as a strategic approach to software development and organizational transformation. The transition from SAFe 4.5 to SAFe 5.0 emerged as a critical focal point within this context, representing a technological upgrade and a strategic evolution in response to the demands of an increasingly digital and interconnected financial landscape. The financial sector's unique intricacies, marked by stringent regulatory frameworks, complex operational structures, and the data security imperative, added complexity to the transition process. Large-scale organizations had to navigate these complexities while aligning with industry-specific standards and compliance requirements. The research was contextualized within this web of challenges and opportunities, acknowledging the sector-specific factors that influenced the dynamics of organizational agility.

Moreover, the broader socio-economic context, influenced by global events, geopolitical shifts, and the emergence of fintech disruptors, imparted an additional layer of complexity to the research context. As financial institutions grappled with macroeconomic uncertainties and

geopolitical dynamics, the need for agility became a strategic advantage and survival imperative (Sebola & Khoza, 2022). Acknowledging the multifaceted nature of large-scale financial organizations further enriched the research context. These entities functioned as stewards of economic stability, custodians of vast datasets, and facilitators of complex transactions in the global economy. The interplay of these roles in transitioning between SAFe versions underscored the need for a holistic understanding beyond the technical aspects to encompass organizational culture, leadership strategies, and the strategic vision driving the transition (Mrugalska & Ahmed, 2021).

In essence, the research set itself against a rich and dynamic context where the financial sector's unique challenges converged with the transformative potential of agile methodologies. Within this tapestry, exploring factors influencing the transition from SAFe 4.5 to SAFe 5.0 unfolded, offering insights that resonated with the complex reality of large-scale financial organizations navigating the currents of digital disruption and organizational evolution.

1.8. Structure of the Dissertation

The researcher prepared this dissertation to guide the reader in comprehensively exploring the factors to consider during the transition from SAFe 4.5 to SAFe 5.0 in a large-scale financial organization. The structure follows a well-defined flow, encompassing key elements contributing to a holistic understanding of the research subject.

1.8.1. Chapter 1 - Introduction

The journey commences with a robust introduction that sets the stage, providing an overview of the contemporary business landscape, the relevance of agile methodologies, and the specific challenges large-scale financial organizations face. The introduction culminates in articulating the primary and secondary research questions, framing the subsequent chapter.

1.8.2. Chapter 2 – Literature Review

The second chapter is a comprehensive literature review, delving into existing scholarship and industry discourse surrounding organizational agility, agile methodologies, and the intricacies of transitioning between SAFe versions. This section forms the theoretical foundation, offering insights into relevant concepts, frameworks, and best practices.

1.8.3. Chapter 3 – Theoretical Framework

This chapter unpacks the Organizational Agility Conceptual Model, the study’s theoretical backbone. It outlines the model's components: Agility Drivers, Agile Enablers, Agile capabilities, and Agile practices. This chapter provides a clear understanding of the model's relevance and application in guiding the study's investigation into the factors influencing the transition from SAFe 4.5 to SAFe 5.0.

1.8.4. Chapter 4 – Case Study Organization

The fourth chapter presents a detailed examination of the case study organization, providing essential background and context. This chapter outlines the organization's profile, including its industry position. The foundational overview of the case organization sets the scene for a deeper exploration of the organization's SAFe transition journey.

1.8.5. Chapter 5 – Research Methodology

Following the case study organization, the research methodology chapter delineates the approach to investigate the research questions. The methodology encompasses the research design, data collection methods, sampling strategies, and data analysis techniques. A detailed explanation of the rationale behind these methodological choices provides transparency and robustness to the research process.

1.8.6. Chapter 6 - Empirical Observations and Findings

The chapter on empirical observations and findings serves as the focal point of the dissertation, presenting the outcomes of data analysis derived from the chosen research methods. This section provides a rich narrative of the agility drivers, enablers, capabilities, and practices identified during the transition from SAFe 4.5 to SAFe 5.0 in large-scale financial organizations.

1.8.7. Chapter 7 – Analysis and Discussion

The analysis chapter builds upon the empirical findings and scrutinizes the data critically. It explores patterns, correlations, and implications, offering a deeper understanding of the intricacies involved in the transition process. This chapter bridges raw data and actionable insights, fostering a comprehension of the research subject.

1.8.8. Chapter 8 – Conclusion and Recommendations

The dissertation culminates with a closing chapter synthesizing crucial findings, emphasizing their significance, and articulating overarching conclusions. The chapter proposes recommendations for future research avenues, ensuring the work's legacy extends beyond the immediate scope. It also serves as a reflective space, inviting the reader to contemplate the broader implications of the research.

2. CHAPTER 2 - LITERATURE REVIEW

2.1. Introduction

In the ever-evolving landscape of project management and organizational development, adapting Agile methodologies has emerged as a transformative approach, redefining how businesses tackle complex projects and respond to dynamic market demands. Agile's rise to prominence in the last decade has been marked by its principles of flexibility, customer-centricity, and iterative progress, making it a preferred methodology for a wide array of industries and organizations (Alam et al., 2017). This literature review explores Agile methodologies in depth, primarily focusing on the SAFe and its role in large-scale financial services organizations.

2.2. Purpose and Significance of the Literature Review

This literature review aims to provide an in-depth overview of agile methodologies, focusing on their application in large-scale enterprises, mainly financial services organizations. It highlights Agile's theoretical foundations, practical implementations, and the specific importance of the SAFe framework in addressing the complex needs of such organizations. Additionally, it emphasizes organizational agility as crucial for adaptability and responsiveness in the competitive business landscape. This review is a critical resource for decision-makers, practitioners, and researchers navigating agile adaptation and

transformation within the financial sector (Antil, 2023; Baumeister et al., 2017; Cao et al., 2009; Carroll et al., 2023).

2.3. Brief Overview of the Structure

The researcher meticulously designed the subsequent sections of this literature review to provide an in-depth exploration of agile software development (ASD) and the relevant methodologies or frameworks. After the introduction, the researcher explores agile's fundamental principles and methods, referencing relevant studies published within the last five years (Chan & Thong, 2009). This section examines organizations' challenges when adopting Agile and the methodologies employed to scale agile in large organizations. It also follows a detailed analysis of the SAFe and its evolution, referencing the latest literature.

Furthermore, the literature review investigates the specific challenges and benefits experienced by financial services organizations during the adaptation of SAFe. A dedicated section unravels the concept of organizational agility and its significance in today's business landscape (Chugh & Chugh, 2023). We then dissect the impact of SAFe adaptation on organizational agility, citing studies and reports from recent years. Finally, we explore the transition from SAFe 4.5 to SAFe 5.0 and the fundamental changes, implications, and considerations related to this progression. By adhering to this structure, the literature review aims to provide a comprehensive and up-to-date analysis of the selected themes, serving as a valuable resource for academics and practitioners.

The following section covers Agile's foundational principles and methodologies, providing a basis for understanding the broader challenges.

2.4. Agile Methodologies and Frameworks

In this section, we explore the definition and principles of Agile, provide an overview of prominent Agile methodologies such as Scrum, Kanban, and Extreme Programming (XP), and examine the Agile framework encapsulated in the Agile Manifesto.

2.4.1. Definition and Principles of Agile

Agile is not a singular methodology but rather a set of guiding principles and values that promote a more adaptive and customer-centric approach to project management. It represents a fundamental shift from traditional, plan-driven project management to a more dynamic and responsive approach (Conboy et al., 2010). The Agile Manifesto, a foundational document created in 2001 by leading software developers, encapsulates the core principles of Agile. It emphasizes four fundamental values (Drury-Grogan et al., 2017):

- Individuals and Interactions over Processes and Tools;
- Working Software over Comprehensive Documentation ;
- Customer Collaboration over Contract Negotiation;
- Responding to Change over Following a Plan.

These principles underscore the core philosophy of agile, guiding organizations to pursue more effective and efficient project management.

2.4.2. Overview of Agile Methodologies

The overview of Agile methodologies acknowledges various approaches to project management, with Scrum, Kanban, and Extreme Programming (XP) being prominent. Each offers distinct practices for iterative development and project management efficiency. Central to Agile methodologies is the Agile Manifesto, guiding principles promoting adaptability and customer-centric development. This background sets the stage for exploring scaled agile frameworks, especially SAFe, which extends these Agile principles to accommodate the complexity and scale of large organizations, emphasizing the need for a strategic approach to agile adoption and transformation (Gregory et al., 2016; Guerrero-Ulloa et al., 2023; Ismail & Wediawati, 2023; Milašinović & Fertalj, 2018).

While Agile methodologies offer noteworthy benefits, they come with a fair share of challenges impacting the adoption rate. The following section explores common obstacles organizations face when adopting Agile practices.

2.5. Challenges with Agile Adoption

The adoption of Agile methodologies is not without its hurdles. While Agile principles promote flexibility, customer collaboration, and iterative progress, organizations often encounter challenges when implementing Agile practices. This section unpacks the common challenges faced during Agile adoption and provides case studies and real-world examples to illustrate these issues (Drutchas & Eppinger, 2023).

- Resistance to Change: One of the most prevalent challenges in Agile adoption is resistance to change. Employees and management accustomed to traditional, plan-driven project management may find it challenging to embrace the Agile mindset (Gandomani & Nafchi, 2016). Resistance can manifest as skepticism, reluctance to alter established processes, or fear of losing control over project outcomes.

- Lack of Agile Expertise: Agile methodologies require a certain level of expertise for successful implementation. Many organizations lack Agile coaches or experienced Agile practitioners, leading to difficulties in understanding and effectively applying Agile practices. Inadequate training and knowledge gaps can impede adaptation (Kalenda et al., 2018).

- Organizational Culture: The existing corporate culture can clash with Agile principles. A culture that values hierarchy, strict processes, and departmental silos can be incompatible with Agile's emphasis on

collaboration, adaptability, and self-organizing teams (Iivari & Iivari, 2011).

- Incomplete Adaptation: Some organizations struggle with partial or incomplete Agile adaptation. They may implement Agile practices on the team level but fail to extend these practices to higher levels of management or throughout the organization, which leads to misalignment and inefficiencies (Kamath, 2023).

- Lack of Commitment: Commitment from top management is crucial for successful Agile adaptation (Kalenda et al., 2018). Without leadership support, organizations may not allocate the necessary resources, time, or funding to implement Agile effectively.

- Scalability Challenges: As organizations grow or work on larger projects, scaling Agile can become challenging. Managing multiple teams, dependencies, and complex projects within an Agile framework requires a well-defined strategy, and many organizations struggle with this aspect (Kalenda et al., 2018).

These challenges can be amplified in large-scale organizations. Scaling Agile across such enterprises introduces additional complexities, as discussed in the next section.

2.6. Scaling Agile in Large Organizations

Scaling Agile in large organizations is a compelling endeavor that necessitates a deep understanding of Agile principles and sizable enterprises' unique dynamics (Edison et al., 2021). This section introduces the concept of scaling agile, provides an overview of prominent methods and frameworks used for this purpose, and explores the associated benefits and challenges (Popli & Chauhan, 2012).

Recent literature underscores the significance of scaling Agile as enterprises worldwide seek to enhance their agility and responsiveness to changing market demands. Scaling Agile extends Agile methodologies and practices from individual teams to larger, more complex organizations. While Agile principles are practical at the team level, they may not directly translate to the scale and complexity of larger enterprises (Reginaldo & Santos, 2020). Thus, the need for methods and frameworks to apply Agile practices across the organization becomes evident. Several techniques and frameworks have emerged in recent years that have been designed to address the challenges of scaling Agile.

Some of the most notable ones include:

- SAFe: SAFe is one of the most widely adopted frameworks for scaling Agile. It provides a comprehensive approach to Agile adoption at the enterprise level, offering guidance on roles, responsibilities, and practices at different levels of the organization. SAFe encompasses

principles from Agile, lean, and product development flow to provide a well-structured framework for large-scale Agile implementations (Rosenberg, 2010).

- Large-Scale Scrum (LeSS): LeSS is an approach that extends the principles of Scrum to large organizations. It simplifies the complexities of scaling by adhering to the core principles of Scrum while allowing for coordination among multiple Scrum teams. LeSS encourages transparency, empiricism, and continuous improvement across the organization (Poth et al., 2019).

- Disciplined Agile Delivery (DAD): DAD is a process decision framework that helps organizations make choices about their Agile practices and tailor them to their specific context. It acknowledges that not all parts of an organization may need the same degree of agility and provides a range of lifecycles to support different types of work (Santos & de Carvalho, 2022).

These methods and frameworks offer a structured approach to scaling Agile, aligning teams, and coordinating efforts across large organizations. They guide roles, ceremonies, and artifacts, facilitating collaboration and agile practices.

The benefits of scaling Agile in large organizations are considerable. It enables the organization to respond more rapidly to market changes and

customer needs. By promoting cross-team collaboration and alignment, large organizations can reduce duplication of efforts, enhance productivity, and improve the overall quality of their products or services. Scaling Agile can also foster a culture of continuous improvement and customer-centricity, leading to higher customer satisfaction and competitive advantage (Siqueira et al., 2017).

The journey of scaling Agile is not without its challenges. Large organizations often grapple with the following:

- Resistance to Change: Resistance to Agile principles can be more pronounced in larger organizations, where deeply entrenched processes and hierarchies may hinder change (Chan & Thong, 2009).
- Coordination and Communication: Scaling Agile involves coordinating the work of multiple teams, which can be complex. Effective communication and alignment are essential but challenging to achieve (Tikayat Ray et al., 2023).

- Role Redefinition: Organizations may need to redefine or adapt traditional roles to fit within Agile frameworks, which can meet with resistance or confusion (Pinton & Torres Junior, 2020).

- Tool and Technology Integration: Large organizations may need to integrate existing tools and technologies with agile practices, which can be complex and challenging due to compatibility with existing

tools and technologies, a cultural shift that is required to align with existing processes and systems, and a potential skills gap which requires additional training and development efforts (Da Silva et al., 2018).

- Cultural Transformation: Leaders and teams in an organization often face resistance and need time to instill a cultural shift towards greater transparency, collaboration, and empowerment when scaling Agile (Iivari & Iivari, 2011).

Scaling Agile in large organizations enhances agility, responsiveness, and organizational effectiveness. The methods and frameworks available offer structured approaches to address the complexities of large-scale agile adaptation. Organizations seeking substantial benefits from agile should actively prepare to address the challenges of scaling Agile for a successful transformation (Rosenberg, 2010).

Recent literature underscores the importance of addressing these challenges to effectively navigate the journey of scaling Agile. The literature aligns with the study's objective of exploring the factors influencing scaling agile in a large-scale financial organization to achieve organizational agility. It highlights critical aspects like agility drivers and practices essential for decision-making and boosting operational efficiency.

Having explored the various kinds of scaling agile frameworks and the challenges encountered. The following section focuses on adopting SAFe within large-scale financial services organizations, highlighting its unique implementation considerations and organizational impact.

2.7. SAFe Adoption in Large-Scale Financial Services Organizations

Adopting the SAFe in large-scale financial services organizations is a compelling topic in the current business landscape. SAFe adoption in the financial sector focuses on agility, responsiveness, and efficiency enhancements. It reveals significant themes such as improved time-to-market, strategic alignment, and customer satisfaction. It also identifies gaps, such as scalability challenges and the integration of SAFe with legacy systems.

These findings highlight the benefits and underscore unresolved issues in adapting to SAFe practices, emphasizing further research to develop strategies or frameworks that address these challenges within large-scale financial organizations (Drutchas & Eppinger, 2023; Ittner et al., 2003; Jäävalli, 2019; Santos & de Carvalho, 2022).

2.7.1. Impacts and Results of SAFe Implementation

The adaptation of SAFe in financial services organizations has yielded a range of significant impacts and results:

- Improved Time-to-Market: SAFe has enabled these organizations to expedite the delivery of products, services, and software, responding more swiftly to changing market demands (Gandomani & Nafchi, 2016). This reduced time-to-market has given financial institutions a competitive edge.

- Enhanced Customer Satisfaction: Many financial services organizations have reported significant improvements following the implementation of SAFe to enhance customer satisfaction. The ability to deliver value more rapidly and respond to customer feedback has contributed to higher client contentment (Pinton & Torres Junior, 2020).

- Efficient Regulatory Compliance: The financial sector faces stringent regulatory requirements (Smith, 2020). SAFe's structured approach has helped organizations maintain compliance with these regulations while remaining flexible and adaptive.

- Streamlined Operations: SAFe has led to more efficient and streamlined operations in financial services organizations (Cobb, 2023). By eliminating bottlenecks, improving collaboration, and reducing waste, SAFe has resulted in cost savings and operational efficiency.

- Cultural Transformation: SAFe's emphasis on collaboration, transparency, and continuous improvement has fostered a cultural shift within financial institutions. Teams have become more empowered, and a culture of innovation and customer-centricity has emerged (Pinton & Torres Junior, 2020).

In summary, SAFe adaptation in large-scale financial services organizations has demonstrated its potential to revolutionize these institutions' operations. Through case studies and real-world examples, we have observed the tangible benefits of SAFe implementation, including improved time-to-market, enhanced customer satisfaction, efficient regulatory compliance, streamlined operations, and a transformative cultural shift. The financial sector's experience with SAFe underscores its value in adapting to the challenges and opportunities presented by the rapidly evolving economic landscape.

Building on the benefits of scaling agile in large-scale organizations, the following section examines the evolution of SAFe from version 4.5 to 5.0, highlighting the key updates and differences between the two versions.

2.8. SAFe Framework (Including Version Changes)

The SAFe has emerged as a comprehensive and widely adapted framework for implementing Agile practices in large-scale organizations. It provides a structured approach that enables enterprises to align their teams, coordinate efforts, and deliver value more effectively (Carroll et

al., 2023). The SAFe framework consists of seven core competencies focusing on lean-agile leadership, team and technical agility, agile product delivery, enterprise solution delivery, lean portfolio management, organizational agility, and continuous learning culture. These competencies highlight leadership skills, creating agile feature teams, delivering valuable products through continuous delivery pipelines, managing large-scale solutions, aligning business strategy with execution, and fostering an environment of relentless improvement and innovation (Scaled Agile, 2023).

At its core, SAFe emphasizes alignment, collaboration, and value delivery at scale. It introduces the concept of Agile Release Trains (ARTs), which are teams of Agile teams that work together to deliver value in a timely and synchronized manner. SAFe guides roles, responsibilities, and practices at different levels of the organization, enabling effective collaboration and coordination among teams (Drury-Grogan et al., 2017). It incorporates Agile principles, such as iterative development, frequent feedback, and customer-centricity, to facilitate the delivery of high-quality products and services. SAFe's structured approach ensures organizations can scale Agile practices while aligning with business objectives and strategies (Ozkan et al., 2020).

This section explains the SAFe, its evolution, critical changes in various versions, and the pivotal role SAFe plays in large-scale Agile transformations.

2.8.1. SAFe version 4.5

When it comes to updating the framework, the primary objective of Scaled Agile Inc. is to help organizations get better business results faster and more reliably. SAFe 4.5 incorporates learnings from lean and systems thinking advances, agile development, product development flow, DevOps, and continuous delivery. SAFe 4.5 has thus been named "SAFe for Lean Enterprises". SAFe 4.5 introduced four (4) out-of-the-box configurations that organizations can adapt, namely (Knaster & Leffingwell, 2018):

- Essential SAFe: This is the most basic setup of SAFe, with various roles, artifacts, events, and a mindset to deliver solutions as part of an ART for organizations just starting on the SAFe journey.

- Large Solution SAFe: This configuration coordinates multiple ART's, which includes vendors with a strong focus on capturing requirements for organizations already building significant solutions with SAFe.

- Portfolio SAFe: This configuration aligns business strategy with value streams (**Figure 1**). A value stream is a structured process through which value gets continuously delivered to the stakeholders or customers.

- Full SAFe: This configuration combines all the configurations and is suitable for building and delivering extensive and complex solutions using all of the features that SAFe offers.

SAFe 4.5 also focused on innovation through Lean Startup and Lean UX practices, emphasizing the importance of agile and customer-centric design approaches. It also brought scalable DevOps and the Continuous Delivery Pipeline into the framework to enhance delivery capabilities. Additionally, SAFe 4.5 introduced the Implementation Roadmap, guiding the adoption and implementation of the framework effectively within organizations (Knaster & Leffingwell, 2018).

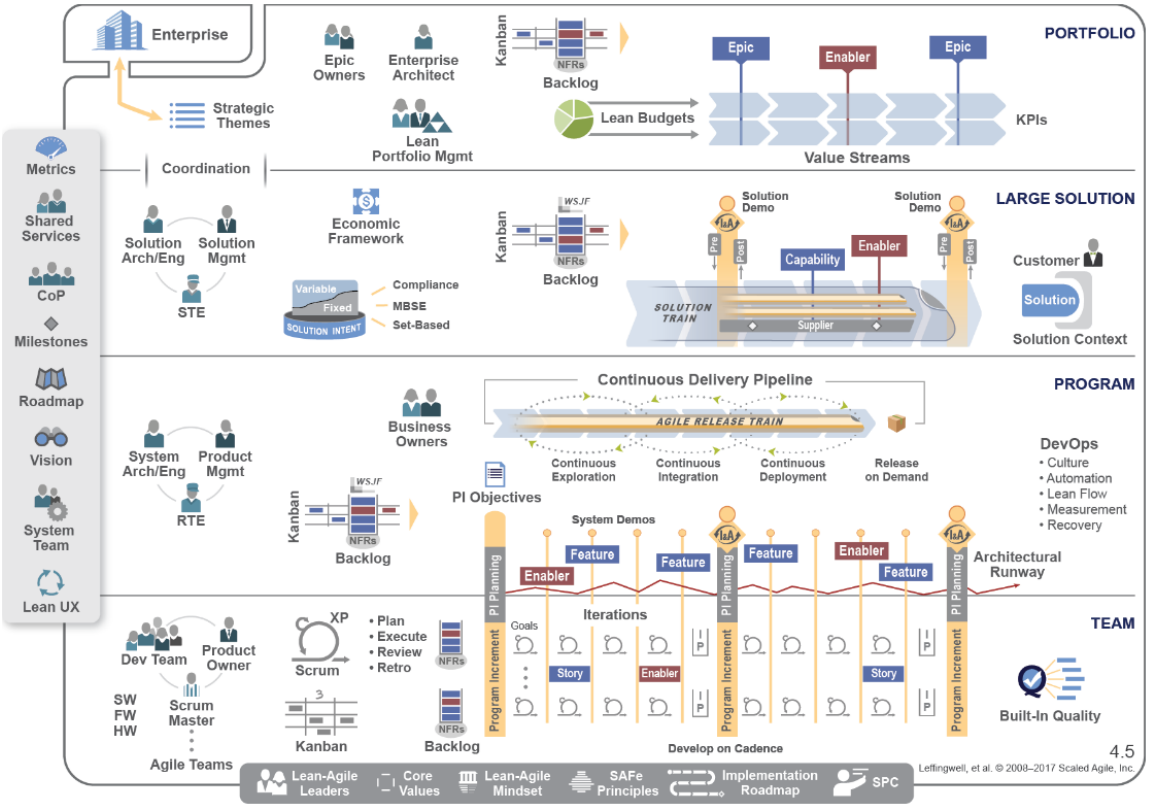

Figure 1: SAFE 4.5 – Portfolio Configuration (Knaster & Leffingwell, 2018)

2.8.2. Evolution and Key Changes in SAFe 5.0

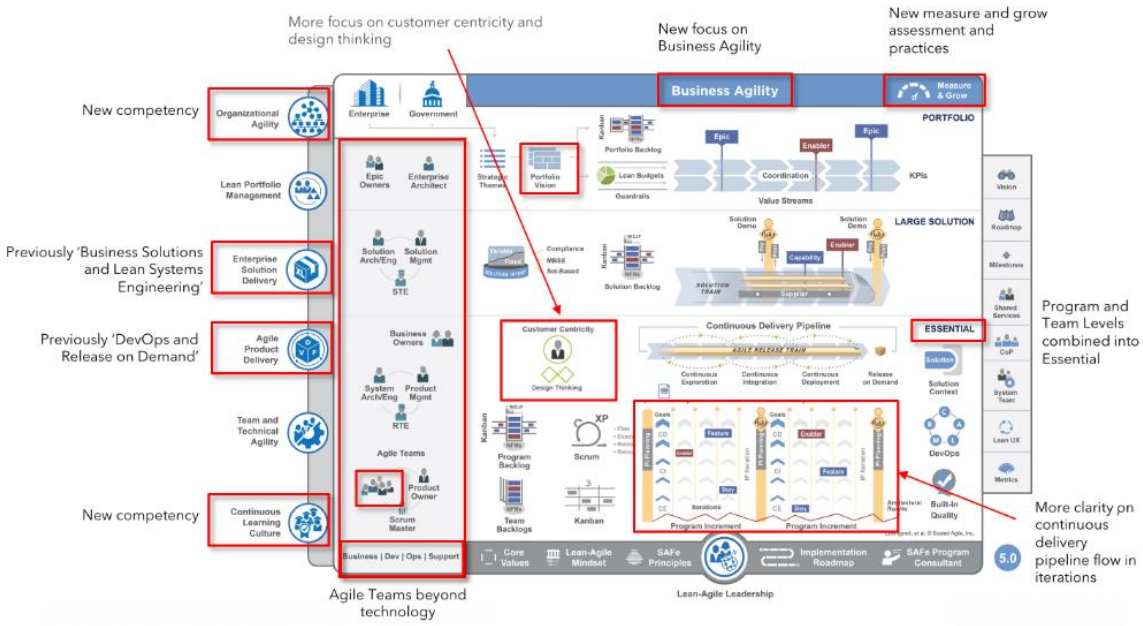

Figure 2: SAFe 5.0 – Portfolio Configuration – New Big Picture (Scaled Agile, 2022)

SAFe has evolved over the years to address the changing needs and challenges of the industry. The framework has undergone vital changes in various versions to incorporate new practices and refine existing ones. For instance, SAFe 5.0 (**Figure 2**) introduced the concept of Business Agility, recognizing the need for organizations to be agile in all aspects of their operations, not just in software development. It emphasized the importance of fostering a culture of innovation and adaptability throughout the organization (Guerrero-Ulloa et al., 2023).

Moreover, SAFe 5.0 provided additional guidance on Lean Portfolio Management, emphasizing the need for organizations to align strategy and execution, prioritize investments, and foster operational excellence.

It aimed to streamline the flow of work from ideation to delivery, enabling organizations to optimize their portfolio strategy and maximize the delivery of customer value (Mellem et al., 2022).

SAFe plays an indispensable role in large-scale Agile transformations. It serves as a unifying framework that aligns teams, synchronizes work, and facilitates value delivery at scale. SAFe enables organizations to embrace a more holistic approach to Agile, fostering collaboration, innovation, and continuous improvement across the enterprise. By providing a structured and proven framework, SAFe guides organizations through their Agile transformations, ensuring that Agile principles are effectively implemented and integrated into the organization's fabric. In large-scale Agile changes, SAFe is pivotal in fostering a culture of collaboration, transparency, and adaptability. It encourages organizations to embrace continuous learning and improvement, enabling them to respond more rapidly to market changes and customer needs (Ismail & Wediawati, 2023).

By aligning teams and establishing clear communication channels, SAFe empowers organizations to deliver value more efficiently and effectively. In summary, the SAFe is a robust and versatile framework that enables organizations to navigate the complexities of large-scale Agile transformations. Through its evolution and critical changes in various versions, SAFe has adapted to the changing needs of the industry, emphasizing the importance of business agility and Lean Portfolio

Management and fostering a culture of innovation and adaptability. Its role in large-scale Agile transformations is instrumental in guiding organizations towards successful Agile implementations and fostering a culture of continuous improvement and customer-centricity.

SAFe presents significant opportunities for scaling Agile practices within large-scale financial services organizations, but it also introduces unique challenges that organizations must navigate to realize its benefits fully. This next section explores both the obstacles encountered and the advantages gained.

2.9. Challenges and Benefits of Adaptation of SAFe in Financial Services

Adapting the SAFe in the financial services sector brings unique challenges and substantial benefits (Gregory et al., 2016). Financial organizations operate in a highly regulated and complex environment, adapting to Agile practices a distinctive journey. In this section, we explore the specific challenges financial institutions face when adapting SAFe and the benefits and advantages experienced in the financial sector.

2.9.1. Strategies for Financial Organizations to Overcome SAFe Adaptation Challenges

- Regulatory Compliance: Financial institutions are subject to stringent regulatory requirements that demand transparency, traceability, and

compliance with specific processes. Adhering to these regulations while implementing Agile practices can be complex (Putta et al., 2018). The challenge lies in aligning Agile principles with regulatory requirements without compromising the organization's agility.

- Cultural Transformation: Financial organizations often have well-established and traditional corporate cultures that may resist change. Shifting towards Agile and SAFe requires a cultural transformation, embracing new values of collaboration, flexibility, and customer-centricity. Overcoming cultural resistance is a significant challenge (Carroll et al., 2023).

- Data Security and Privacy: Financial institutions handle sensitive customer data and must maintain high levels of security and privacy. Balancing the Agile value of openness and transparency with safeguarding customer information presents a unique challenge (Putta et al., 2018). Financial organizations must find ways to ensure data security while fostering Agile practices.

- Legacy Systems: Many financial organizations rely on legacy systems and technologies that may not easily align with Agile methodologies. Integrating these systems with Agile practices can be technically challenging (Poth et al., 2019). Overcoming the constraints of legacy systems while transitioning to SAFe is a hurdle financial institutions face.

- Risk Management: Managing risk is fundamental in the financial sector. The dynamic nature of Agile may be perceived as a risk factor in a risk-averse industry (Cao et al., 2009). Financial organizations need to find a balance between Agile principles and robust risk management practices.

2.9.2. Benefits Experienced in the Financial Sector

- Enhanced Customer Experience: SAFe adaptation enables financial organizations to become more customer-centric (Poth et al., 2019). By delivering value faster and responding to changing customer needs, these organizations can enhance the overall customer experience.

- Increased Speed-to-Market: Financial services are subject to fast-changing market conditions. SAFe enables organizations to accelerate their speed-to-market by streamlining processes, improving coordination, and reducing waste (Chugh & Chugh, 2023). This agility allows financial institutions to respond swiftly to new market opportunities and regulatory changes.

- Improved Regulatory Compliance: While regulatory compliance is a challenge, the structured nature of SAFe provides a framework for organizations to leverage the Lean Portfolio Management (LPM)

feature of SAFe and align their agile practices with regulatory demands more efficiently. LPM helps streamline compliance processes and ensures that development efforts remain within the bounds of industry regulations (Da Silva et al., 2018).

- Cost Efficiency: When implemented effectively, Agile practices can lead to cost savings through reduced waste and improved resource allocation. In an industry where efficiency is crucial, financial organizations benefit from cost optimization through SAFe adaptation (Alam et al., 2017).

- Risk Management: Contrary to initial concerns, SAFe can enhance risk management practices in the financial sector. Organizations can proactively address risks and adapt to changing circumstances by fostering continuous improvement and transparency (Putta et al., 2018).

Financial organizations face unique challenges when adapting to SAFe, particularly in regulatory compliance, culture, data security, legacy systems, and risk management. The benefits of SAFe adaptation in the financial sector are substantial, including enhanced customer experience, increased speed-to-market, improved regulatory compliance, cost efficiency, and more effective risk management (Antil, 2023). These advantages position financial institutions to thrive in an

increasingly dynamic and competitive landscape while maintaining the highest security and compliance standards.

Having explored the challenges and benefits of SAFe in financial services, the following section shifts focus to the broader concept of organizational agility and its significance.

2.10. Organizational Agility and its Significance

Organizational agility refers to an entity's ability to swiftly and effectively respond to change, capitalize on opportunities, and navigate uncertainties in an ever-evolving business landscape. It is a critical capability for staying competitive and ensuring long-term sustainability (Chan & Thong, 2009). Organizational agility holds paramount importance. In today's dynamic environment, businesses must adapt rapidly to shifting market conditions, evolving customer preferences, and emerging technologies. Agile organizations can seize opportunities, mitigate risks, and continuously innovate. Moreover, they foster a culture of collaboration, transparency, and adaptability that aligns with the values of the Agile Manifesto (Walter, 2021).

The role of Agile and SAFe in enhancing organizational agility is instrumental. Agile methodologies, including SAFe, provide the framework and principles that guide organizations toward becoming more agile. These methodologies encourage iterative development,

customer feedback, and frequent adaptation, which are fundamental aspects of organizational agility.

2.10.1. Impact of SAFe Adaptation on Organizational Agility

Adapting the SAFe influences organizational agility. SAFe provides a structured approach for enterprises to align their strategy, execution, and delivery, fostering a culture of agility and adaptability.

- Improved Collaboration and Transparency: SAFe promotes collaboration among cross-functional teams, enabling them to work together seamlessly to deliver value) (Cobb, 2023). Agile Release Trains (ARTs) within SAFe facilitate synchronization and coordination, enhancing transparency and alignment. This improved collaboration and transparency enhance organizational agility, as teams can make informed decisions and respond swiftly to changes (Gustavsson et al., 2022).

- Faster Delivery of Value: SAFe emphasizes iterative development and value delivery in short increments. This approach accelerates organizations' response to customer needs and market shifts (Chan & Thong, 2009). Rapid value delivery enables organizations to stay ahead of competitors and capitalize on emerging opportunities.

- Continuous Improvement Culture: SAFe instills a culture of continuous improvement and learning Agile retrospectives, and the Inspect and Adapt (I&A) workshop within SAFe allows teams to reflect on their performance and identify areas for enhancement (Drury-Grogan et al., 2017). This focus on continuous improvement aligns with the core principles of organizational agility, where adaptability and learning are paramount (Harsch & Festing, 2020).

- Enhanced Adaptability: SAFe encourages organizations to embrace a mindset of adaptability and resilience (Putta et al., 2018). By providing a structured framework for Agile practices, SAFe enables organizations to navigate change with agility and remain responsive to market dynamics (Kowalczyk et al., 2022).

2.10.2. Case Studies Demonstrating Improved Organizational Agility Through SAFe

Themes from case studies on SAFe adaptation across various industries highlighted a significant improvement in organizational agility. These include more rapid adaptation to regulatory changes, shortened product development lifecycles through process optimization and collaboration, and improved strategic adaptability in portfolio management. These findings underscore SAFe's efficacy in promoting collaborative, transparent, and value-driven operational models, fostering a culture tending towards relentless improvement and agility, which is crucial for

remaining competitive in today's dynamic business landscape (Chan & Thong, 2009; Holbeche, 2019; Pinton & Torres Junior, 2020).

2.11. Transition from SAFe 4.5 to SAFe 5.0

The transition from SAFe 4.5 to SAFe 5.0 (**Figure 2**) represents a significant evolution that introduces fundamental changes, providing organizations with new tools and practices to enhance their Agile journey (Guerrero-Ulloa et al., 2023). This transition has profound implications and considerations for organizations seeking to embrace the latest version of SAFe.

2.11.1. Overview of Key Changes in Transitioning from SAFe 4.5 to SAFe 5.0

- Introduction of Business Agility: SAFe 5.0 strongly emphasizes Business Agility, recognizing that organizations must be agile in all aspects of their operations, not just in software development. Business Agility is when organizations can compete in the new digital era. It enables organizations to respond to market changes and emerging opportunities through innovation promptly and effectively (Scaled Agile, 2022). The framework acknowledges that agility should permeate the organization beyond IT departments.

- Lean Portfolio Management: SAFe 5.0 introduces Lean Portfolio Management as a core competency. This change aims to help organizations align strategy and execution, prioritize and optimize

investments, and maximize the delivery of customer value. Lean Portfolio Management (LPM) is a strategic approach within the SAFe framework that aligns an organization's strategy with its execution. It focuses on applying lean principles to managing an organization's portfolio of epics and products, optimizing value flow, and ensuring that investments align with business strategy. LPM emphasizes decentralized decision-making, encourages team autonomy, delivers customer value, and establishes Lean budgets and guardrails to guide investment decisions at a portfolio level. LPM actively fosters an environment where innovation is encouraged by strategically allocating resources to meet business objectives (Scaled Agile, 2022).

- Agile Release Trains (ARTs): SAFe has always considered ARTs (Agile Release Trains) a fundamental concept, but SAFe 5.0 further refines them. An (ART) is typically a group of 50-125 people who work together in a synchronized and structured process to deliver value during a Program Increment (PI). The ART requires alignment and collaboration to provide value across multiple agile feature teams. (Mehta & Sood, 2023).

- Lean-Agile Mindset: SAFe 5.0 emphasizes the Lean-Agile mindset as the foundation for success. A mindset is how people interpret information and make decisions. There are two types of mindsets: the fixed mindset and the growth mindset. The fixed mindset believes everything is static and does not support change. In contrast, the

growth mindset evolves around change and learning from the changes, whether it is challenging beyond one's abilities. Recognizing and understanding one's mindset is the first step to change, alongside the belief that developing and refining our mindsets for the better is possible. It underscores the importance of cultivating this mindset at all levels of the organization, from leadership to teams (Scaled Agile, 2022).

2.11.2. Implications and Considerations for Organizations Making this Transition

- Cultural Shift: The transition to SAFe 5.0 necessitates a cultural shift toward embracing a Lean-Agile mindset (Harris, 2020). Leaders should approach this cultural change carefully by securing buy-in from leadership and engaging at all levels.

- Training and Education: Organizations must invest in training and education to ensure their teams and leadership understand the principles and practices introduced in SAFe 5.0. Training programs should align with the new competencies and roles in the framework (Scaled Agile, 2022).

- Portfolio Management: The introduction of Lean Portfolio Management means that organizations must reevaluate how they manage their portfolios of initiatives (Pinton & Torres Junior, 2020). It

involves strategic changes in investment decisions, prioritizing, and optimizing.

- Alignment with Business Goals: SAFe 5.0 strongly focuses on aligning Agile practices with business objectives. Organizations must ensure their Agile teams and ARTs work efficiently and contribute directly to realizing business goals (Scaled Agile, 2022).

2.12. Conclusion

The transition from SAFe 4.5 to SAFe 5.0 represents a pivotal moment in the evolution of the SAFe, with a stronger emphasis on Business Agility, Lean Portfolio Management, and a lean-agile mindset. SAFe 5.0 provides organizations with the tools and practices needed to excel in an ever-changing business landscape. As organizations consider this transition, they must prepare for a cultural shift, invest in training and education, realign their portfolio management strategies, and ensure a tight alignment between Agile practices and their overarching business goals. SAFe 5.0 reflects the dynamic nature of the Agile world and the need for organizations to embrace agility holistically. As this transition unfolds, organizations must be mindful of these changes, adapt their practices, and reap the benefits of enhanced agility, innovation, and a more responsive approach to delivering value. The journey towards agility is ongoing, and SAFe 5.0 represents a significant milestone towards organizational agility.

3. CHAPTER 3 – THEORETICAL FRAMEWORK

The theoretical model of organizational agility by Žitkienė and Deksnys (2018) provides a comprehensive framework for understanding and evaluating organizational agility. This framework is particularly pertinent to this study's context, which focuses on transitioning from the SAFe 4.5 to SAFe 5.0 within large-scale financial services organizations.

The researcher selected this theoretical model of organizational agility for this study because agility is a core enabler, unlike traditional change management theories, which focus primarily on processes and strategies for managing change (Cameron & Green, 2019). The organizational agility conceptual model emphasizes flexibility, adaptability, and responsiveness, closely aligned with SAFe principles of fostering business agility across large-scale enterprises (Scaled Agile, 2022; Žitkienė & Deksnys, 2018).

The theoretical framework was a robust basis for addressing this study's primary and secondary research questions. The framework offers a perspective for examining the factors that influence the transition from SAFe 4.5 to 5.0, focusing on how this shift affects agility drivers such as market and competition, agile enablers such as processes and networks, agile capabilities such as sensing and response capabilities, or agile practices such as employee empowerment or customer enrichment. It

aids in identifying specific organizational characteristics impacted by the transition and their contribution to overall agility.

3.1. Organizational Agility Conceptual Model

Businesses navigating the complexities of today's dynamic and ever-evolving markets now emphasize organizational agility (Gyemang & Emeagwali, 2020). Organizations are constrained to develop skill as an essential goal in a scene characterized by fast, swift technological advancements, shifting shopper inclinations, and extreme worldwide rivalry. The organizational agility conceptual model (**Figure 3**) crafted by Zitkiene and Deksnys (2018) digs into the challenging aspects of mastering agility. The model, grounded in a far-reaching collection of writings, is organized around four high-level themes: Agility Drivers, Agile Enablers, Agile Capabilities, and Agile Practices. Each subject embodies essential components from insightful conversations, offering a distinct point of view on the complex idea of hierarchical spryness (Žitkienė & Deksnys, 2018).

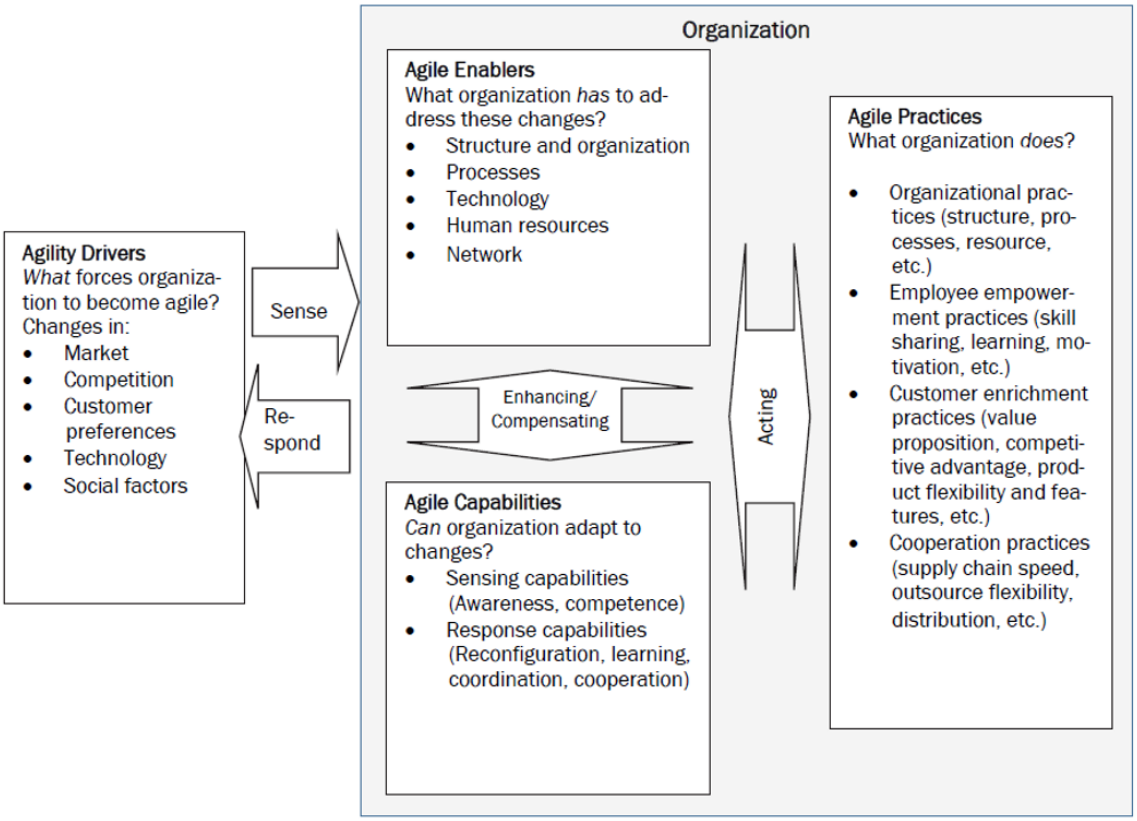

Figure 3: Organizational Agility Conceptual Model (Žitkienė & Deksnys, 2018)

3.2. Agility Drivers

Agility drivers have the unique power to convince organizations to adjust in a quickly evolving scene or market. Established in market patterns, contests, and technological advancements, these drivers impel essential reactions and authoritative advancement (Tseng & Lin, 2011).

- **Market:** The ever-changing market landscape compels businesses to enhance their adaptability, aligned to SAFe 5.0, to adapt to new opportunities quickly. Fluctuating consumer preferences, evolving

trends, and shifting demands characterize today's business environment. To remain pertinent, organizations must continuously refine their strategies and operations in response to these changes. The ability to foresee market trends and rapidly tailor offerings to meet evolving customer needs is a critical factor driving companies to prioritize agility (Kordic, 2008; Scaled Agile, 2022).

- **Competition:** An organization's agility determines its success in an intensely competitive environment related to SAFe 5.0: innovation and customer-centricity. This landscape is dynamic, marked by competitors introducing innovations, adopting new strategies, and responding to market fluctuations. Organizations must swiftly react to competitors' actions and proactively influence market conditions to gain a competitive edge. Agility is vital for organizations to outmaneuver rivals and establish a strong market position (Brand et al., 2021; Scaled Agile, 2022).

- **Customer Preferences:** In an era characterized by rapidly evolving consumer tastes and expectations, organizations must swiftly adapt their products and services to meet these changing preferences, highlighting the importance of continuous engagement and feedback in the development process, which is central to SAFe 5.0. Quickly responding to shifts in consumer

demand is essential for maintaining a strategic edge (Fawzy & Saad, 2023; Scaled Agile, 2022).

- **Technology:** The need for organizational agility is driven, in part, by the rapid pace of technological advancements, which necessitate a more flexible framework to incorporate digital transformation effectively, as seen in SAFe 5.0. Organizations engaged in technology-driven fields or those utilizing technology must continually adapt to new and emerging technologies. Adaptability involves embracing technological change and effectively integrating it into various organizational strategies (Franco & Landini, 2022; Scaled Agile, 2022).

- **Social Factors:** Societal dynamics play a crucial role in shaping the environment for organizations' workplace expectations and the need for a more inclusive and learning-oriented culture, one of the principles underlying SAFe 5.0. Shifts in social structures, values, and norms necessitate organizational agility to respond effectively, capitalize on emerging opportunities, or mitigate challenges arising from evolving social contexts. In the study context, shifts in social structures, values, and norms might lead organizations to rethink and adapt their strategies by fostering a more inclusive, dynamic, and responsive culture. Fostering an inclusive, responsive culture can be achieved through implementing flexible work policies, enhancing diversity and inclusion efforts, and engaging more deeply with community and social issues. These shifts drive

organizations to rethink their strategies, operations, and engagement models to remain relevant, competitive, and aligned with societal expectations and values (Abdallah & Ayoub, 2020; Scaled Agile, 2022).

3.3. Agile Enablers

Agile enablers refer to tools, practices, or cultural elements that support and facilitate adopting and effectively implementing agile methodologies. At the same time, agile drivers are external or internal pressures that motivate an organization to adapt to agile practices or methods (like technological advancements). Supportive partnering and impact systems form the foundation of agility. Research indicates that these critical components, encompassing everything from flexible architectures to advanced technologies, equip organizations to respond rapidly to external changes (Patel et al., 2018).

- **Structure and Organization:** A more adaptive and responsive setup is crucial for embracing a broader range of business agility characteristics introduced in SAFe 5.0, like creating new functional areas with more specialist hires to add expertise due to business growth. Establishing effective structures fosters agility and adaptiveness. This transformation involves reevaluating traditional hierarchical systems, adopting decentralized models, and encouraging cross-functional collaboration. The focus is on creating an environment that promotes swift decision-making,

encourages experimentation, and supports the free flow of ideas (Patri & Suresh, 2017; Scaled Agile, 2022).

- **Processes:** Agile processes are the cornerstone of organizational adaptability as they enhance the flow of value and support the more extensive collaboration and alignment goals of SAFe 5.0. Streamlined and flexible workflows enable organizations to respond swiftly to changes, ensuring efficiency and effectiveness in product or service delivery. Process agility allows for rapid adjustments in strategies and operations to meet evolving demands (Patel et al., 2018; Scaled Agile, 2022).

- **Technology:** Effective information and communication systems are crucial enablers of agility as technology infrastructure and tools are necessary for digital and agile transformations, as emphasized in SAFe 5.0. Organizations require systems that facilitate the smooth transfer of accurate information throughout various departments (Patel et al., 2020; Scaled Agile, 2022). Technologies that enable real-time data analysis, collaborative platforms, and efficient communication tools enhance an organization's ability to respond to changes in the external environment.

- **Human Resources:** An agile workforce, acting as a pivotal enabler, extends beyond the skills and qualifications of individual employees. It encompasses fostering a culture of innovation,

continuous learning, and employee empowerment (Scaled Agile, 2022). Investment in employee development, nurturing creativity, and granting teams the autonomy to make decisions and adapt are essential elements of this approach (Kavitha & Suresh, 2019).

- **Network:** A solid and interconnected network is vital to organizational agility. Building and maintaining strategic partnerships, such as relationships with vendors within and outside the organization, enables access to diverse resources, knowledge sharing, and collaborative innovation. Such networks facilitate the flow of information and resources, enhancing an organization's ability to respond rapidly to external changes (Khatri et al., 2018; Scaled Agile, 2022).

3.4. Agile Capabilities

Agile capabilities signify the internal competencies essential for managing uncertainty. Skills in strategic navigation, innovation, and foresight are crucial for an organization's ability to proactively respond to evolving landscapes, as recent literature highlights (Yusuf et al., 2020).

Sensing Capabilities

- **Awareness:** Cultivating a keen understanding of the external environment, encompassing market trends, competitor movements, and economic factors, is crucial. Such awareness ensures the organization can anticipate shifts and identify potential

opportunities aligning with SAFe 5.0's emphasis on business agility. (Scaled Agile, 2022; Yusuf et al., 2020).

- **Competence:** Effectively interpreting and analyzing information from the external environment is essential. Competence involves understanding the implications of changes and how they relate to the organization's objectives. It requires understanding complex environments, enabling better decision-making aligned with SAFe 5.0's broader strategic focus (Ravichandran, 2018; Scaled Agile, 2022).

Response Capabilities

- **Reconfiguration:** Agile organizations can rapidly adjust their internal structures and processes in response to identified changes. Reconfiguration involves altering strategies, reallocating resources, and modifying operational workflows. Reconfiguration allows for the agile restructuring of processes and teams, essential for SAFe 5.0's more adaptable organizational models (Scaled Agile, 2022; Žitkienė & Deksnys, 2018).

- **Learning:** Organizations must cultivate a continuous learning culture where insights gained from experiences, be they successes or failures, contribute to ongoing improvement. This constant learning process is vital for achieving and maintaining agility. It promotes continuous improvement and innovation, aligning with

the learning culture of SAFe 5.0 (Scaled Agile, 2022; Srinivasan et al., 2020).

- **Coordination:** Effective coordination is crucial to ensure a synchronized organizational response to change across various functions. It entails aligning efforts, resources, and strategies to address challenges in a unified manner. It enhances cross-functional teamwork and alignment across the enterprise, which is crucial to achieving the collaborative goals of SAFe 5.0 (Moi & Cabiddu, 2021).

- **Cooperation:** Internal and external teamwork enhances an organization's agility. Building cooperative relationships with stakeholders, partners, and industry peers enables collective adaptation to environmental changes. Cooperation in SAFe 5.0 enhances alignment and execution efficiency, ensuring that all parts of the organization work towards common goals (Scaled Agile, 2022; Vishnubhotla et al., 2018).

3.5. Agile Practices

Agile Practices constitute the tangible actions that enhance an organization's adaptability to agile practices. Ranging from lean methodologies to collaborative approaches, as documented in the literature, these practices emphasize the essential steps organizations undertake to foster continual change and improvement (Vallon et al.,

2018). To embody agility, organizations implement a diverse array of practices across various dimensions.

Organizational Practices

- **Structure:** Agile organizations often adopt flexible structures that enable quick decision-making and change adaptability. Quick decision-making makes organizations more responsive and responds to opportunities faster. Structure refers to organizing teams and resources to enhance agility and responsiveness. It's about creating flexible, cross-functional teams that adapt quickly to changes, aligned with SAFe's lean-agile principles (Fuchs, 2019; Scaled Agile, 2022).

- **Processes:** Enhancing and streamlining processes contribute to varying degrees of agility. Efficient processes allow for effective responses to evolving situations and make the value flow more seamless from concept to delivery. Processes involve adapting practices that encourage continuous improvement, rapid feedback loops, and collaboration across all levels of the organization (Reginaldo & Santos, 2020; Scaled Agile, 2022).

- **Resource Management**: Effective management and reallocation of resources in response to changing needs enable organizations to maintain agility and maximize any new opportunity. Effective resource management strategically aligns and reallocates people,

budgets, and technology to maximize value delivery and organizational agility. Resource management involves adapting resources to evolving priorities and market demands, ensuring that teams have what they need to innovate and respond to change quickly (De Silva & Seneviratne, 2022; Scaled Agile, 2022).

Employee Empowerment Practices

- **Skill Sharing:** Fostering a culture of knowledge exchange enables employees to bring diverse skills and viewpoints to the table, thereby nurturing a more adaptable workforce. Building cross-functional teams capable of adapting to and managing complex environments requires skills sharing amongst agile team members (Malik et al., 2021; Scaled Agile, 2022).

- **Learning Initiatives:** Continuous learning programs ensure employees stay informed about the latest industry trends, enhancing their capacity to adapt to changes, which speaks to the continuous learning culture emphasized in SAFe 5.0 (Muduli, 2017; Scaled Agile, 2022).

- **Motivation:** Motivated employees are more likely to embrace change with enthusiasm. Motivation is critical in cultivating varying degrees of agility within an organization. Having motivated employees means you have people with a lot more confidence and

commitment to drive the adaptation of agile practices and foster an innovative culture (Brand et al., 2021; Scaled Agile, 2022).

Customer Enrichment Practices

- **Crafting Value Proposition:** Agile organizations excel in creating compelling value propositions that align with customer needs and expectations, ensuring sustained relevance and loyalty, and aligning product development with customer needs and market demands. Understanding and articulating the unique benefits and solutions that a product or service offers ensures that what is delivered is of high quality and significant value from the customer's perspective.(Ghezzi & Cavallo, 2020; Scaled Agile, 2022).

- **Building Competitive Advantage:** Maintaining a competitive edge involves continuously innovating product flexibility and features and adjusting strategies to match market trends and customer behaviors. This adaptability in product attributes ensures responsiveness to ever-changing customer demands. Leveraging the SAFe framework's principles to innovate continuously, rapidly adapt to market changes, and deliver exceptional customer value enables organizations to quickly identify and capitalize on opportunities, differentiate their offerings, and sustain their market position (Rrucaj, 2023; Scaled Agile, 2022).

Cooperation Practices

- **Supply Chain Speed:** Implementing adaptable practices in the supply chain, such as swift information exchange and streamlined collaborations, contributes to overall agility. It involves optimizing and streamlining the supply chain to ensure rapid information exchange and cooperation, thus enabling the organization to respond quickly to market demands and changes (Alzoubi et al., 2022; Scaled Agile, 2022).

- **Outsource Flexibility:** Managing outsourcing relationships ensures that organizations can adjust their external collaborations in response to evolving requirements. This flexibility ensures organizations can efficiently manage external collaborations to complement their internal capabilities, maintain agility, and deliver value effectively (Diebold et al., 2019; Scaled Agile, 2022).

- **Distribution:** Agile organizations adopt responsive distribution strategies that quickly adjust to changes in market demand, and distribution channel dynamics distribution focuses on adopting agile practices to ensure that products and services are delivered efficiently and meet market demands. Distribution involves using responsive strategies to adjust quickly to demand and distribution channel changes, ensuring that the organization can effectively reach its customers and maintain a competitive edge (Scaled Agile, 2022; Vallon et al., 2018).

The Organizational Agility Conceptual Model, derived from the scholarly work of Zitkiene and Deksnys (2018), offers a detailed understanding of the multifaceted nature of agility in modern organizations. This model elucidates how Agility Drivers, Agile Enablers, Agile Capabilities, and Agile Practices interact to shape organizational agility. Market dynamics, the competitive environment, and technological advances, as highlighted by (Felipe et al., 2016), compel organizations to adopt an agile approach. Agile enablers lay the groundwork for adaptability through organizational structures, information systems, and human capital. Meanwhile, agile capabilities such as adaptability and innovation empower organizations to navigate changes effectively. Agile practices, encompassing lean methodologies and cross-functional collaboration, bring agility to life, enhancing efficiency and responsiveness (Brand et al., 2021).

In the context of this study, the model guided the thematic analysis of data collected through semi-structured interviews and document analysis. It also guided the formulation of the secondary research questions. It facilitated data categorization according to agility dimensions and identified emerging themes relevant to the transition process. Utilizing the theoretical model of organizational agility by Žitkienė and Deksnys (2018) provided a structured and theory-driven approach to exploring the transition from SAFe 4.5 to SAFe 5.0. It offered a comprehensive framework for understanding the multifaceted nature

of organizational agility, thereby enabling a thorough and insightful examination of the research questions.

4. CHAPTER 4 – CASE STUDY ORGANIZATION

4.1. Case Organization Background

FOrg, established in 1982, has grown from its banking origins to become a regional financial services leader. A Namibian-owned entity listed on the Namibia Stock Exchange (NSX), FOrg's influence extends beyond its two banking subsidiaries in Namibia and Botswana, encompassing a network of subsidiaries and associates delivering various financial products and services. This expansive group caters to a diverse clientele, including individuals, large corporations, and small and medium enterprises (SMEs), demonstrating a commitment to serving various market segments.

The organization's value proposition revolves around customer-centricity, emphasizing the development of services tailored to customer needs rather than a product- or channel-focused approach. This strategy has been central to FOrg's evolution, particularly in leveraging data and digital technology to meet future customer demands.

4.2. SAFe Adoption and Transition at Case Organization

FOrg's adoption of the SAFe in 2018 marked a significant shift in its operational paradigm. Transitioning from a waterfall software delivery model to agile methodologies, the organization embraced a culture of continuous improvement and adaptability. The transition to SAFe, particularly from version 4.5 to 5.0, was a strategic move towards

embedding agility across the organization. This step was in response to internal operational needs and aligning with the changing dynamics in the financial services industry, emphasizing digital transformation and customer responsiveness. The SAFe 5.0 model is integrated into the flow of work at FOrg is shown in **Figure 4** below. FOrg operates on three layers: the Portfolio, Platform/Program, and Team level.

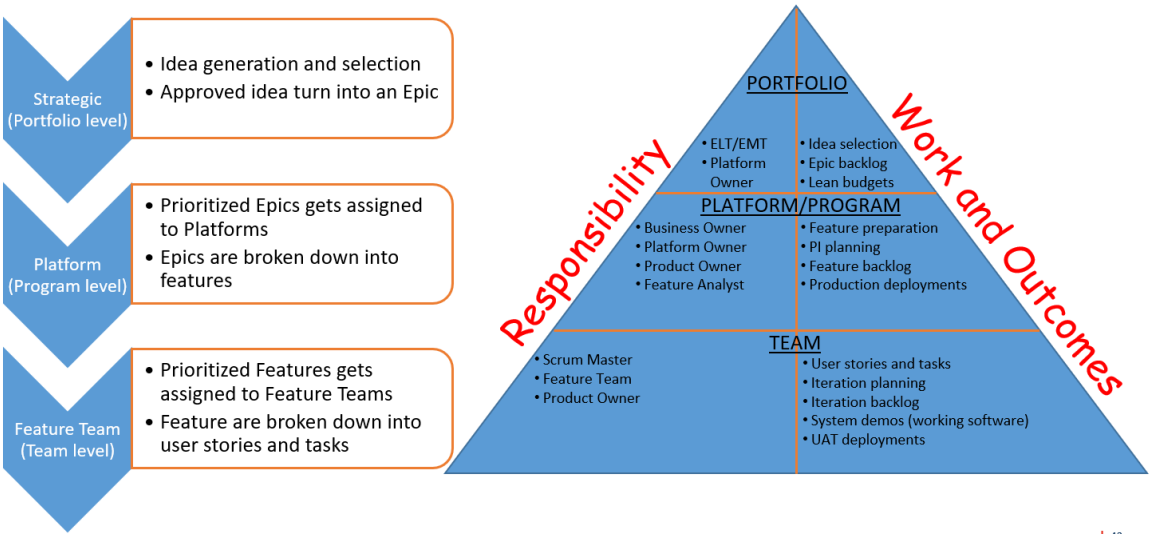

Figure 4: How "Work" is created and managed at FOrg

4.3. DevOps as Anchor for the IT Operating Model at Case Organization

The case organization adapted to DevOps as its IT operating model. The case organization actively integrated development and operations to enhance collaboration and efficiency. This strategic move aims to enhance agility, improve efficiency, and increase the speed of delivery of products and services aligned with business needs. As shown in **Figure 5**, the intended outcome of adopting the DevOps operating model at the case study organization is always to put the customer 1st plus have high

velocity in terms of speed of delivery and high quality while consistently innovating and scaling. The case organization embedded various principles into its culture to reach the intended outcomes.

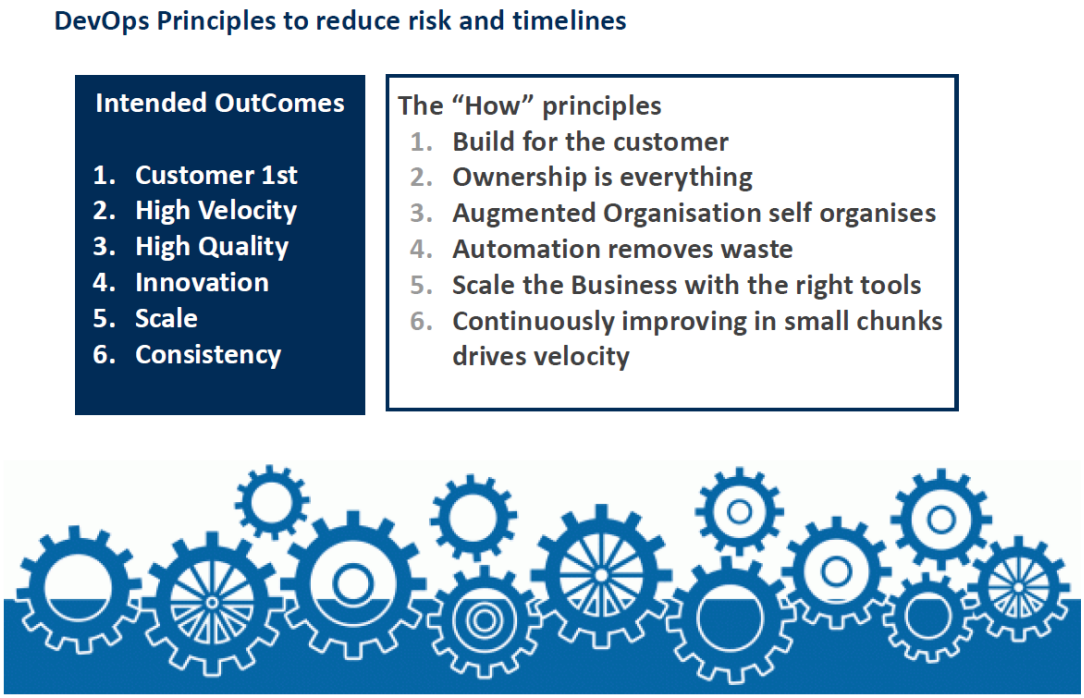

Figure 5: DevOps Principals to reduce risk and timelines at FOrg

4.4. Participant Selection at Case Organization

The participants for the study on FOrg's transition to SAFe were carefully selected to capture a comprehensive view of the process. This selection included diverse roles such as Business Owners, Product Managers, Product Owners, Scrum Masters, Feature Analysts, and Developers, ensuring various perspectives from different organizational levels and functions. The case organization has specific requirements in a agile/squad team as shown in **Figure 6** below. Their insights provided a

rich understanding of the transition to SAFe 5.0. The sampling and criteria are discussed in sub-section 5.5.

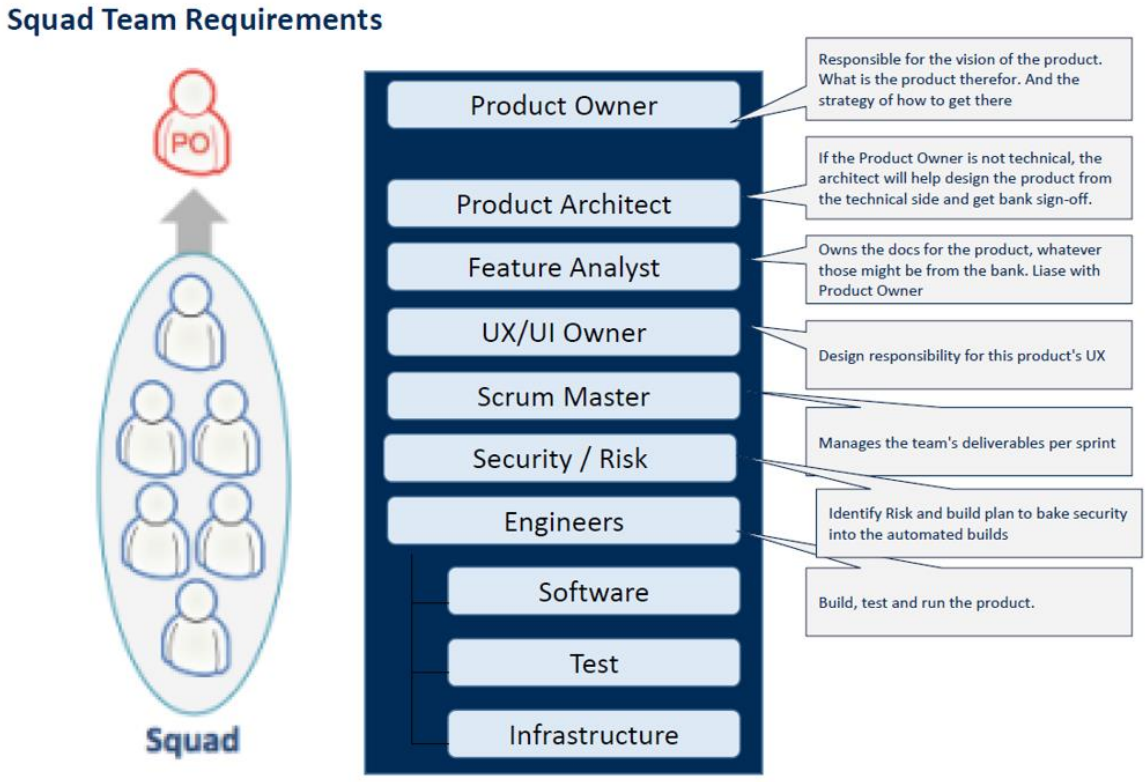

Figure 6: Agile/Squad Team requirements at FOrg

4.5. Business Activities and Strategic Focus at Case Organization

FOrg offers a broad spectrum of financial services:

- **Transactions**: Streamlining payment processes for a diverse customer base.
- **Loans, Credit, and Deposits**: Provides a range of credit, loans, and savings or investment products.
- **Asset Management**: Managing and investing assets for clients.

- **Advisory Services**: Delivering investment banking and advisory services.
- **Bancassurance**: Offering comprehensive short and long-term insurance products.
- **Foreign Exchange and Trade Finance**: Facilitating access to global currency markets.

FOrg's strategic focus on digital transformation and customer experience has enhanced customer interactions and operational efficiencies. The organization prioritizes investment in digital channels and future-fit IT architecture, ensuring it remains agile and responsive to market demands. This focus aligns with customers' expectations for seamless and intuitive experiences across all channels. Despite the evolving role of physical branches, FOrg continues to invest in digital innovations while maintaining a robust customer-centric approach, which is essential for thriving in a challenging operating environment.

The commitment to developing adaptable, highly skilled personnel is a cornerstone of FOrg's strategy, vital for value creation and long-term sustainability. This focus on human capital and strategic digital and operational initiatives position FOrg as a forward-thinking, adaptable player in the financial services sector.

5. CHAPTER 5 - RESEARCH METHODOLOGY

In this section, the researcher outlines the selected research methodology and design, emphasizing the rationale behind this choice for the study. The primary aim was to address the research questions effectively and precisely. The discussion begins by delving into the epistemological and theoretical underpinnings that form the foundation of the study. This section comprehensively explains the chosen research approach and methods, demonstrating how these decisions support the overall research design and analytical framework.

Furthermore, the researcher thoroughly examines various facets, including the employed sources, sampling design, data collection methods, and analysis process (Almeida & Espinheira, 2021). The researcher critically assessed these elements to ensure their alignment with the research objectives and questions. The section culminates with a detailed discussion of the strategies implemented to enhance the reliability and validity of the research findings, ensuring that the study's outcomes are credible and can be trusted. This detailed presentation of the research methodology and design is pivotal in demonstrating the rigor and thoroughness of the research process.

5.1. Philosophical Foundation

The philosophical underpinnings of this research are grounded in interpretivism and constructivism, approaches that are particularly

relevant to the qualitative nature of the study. This research explores the factors influencing the transition from the SAFe 4.5 to SAFe 5.0 in a large-scale financial services organization, specifically focusing on understanding the subjective experiences and interpretations of this transition by individuals within the organization (Svejnar, 2002).

Interpretivism is an epistemological stance positing that reality is not objective but constructed through social interactions and individual experiences (Bryman, 2016). This viewpoint aligns with the nature of the current study, which seeks to understand the diverse perspectives and meanings that individuals in the organization attribute to the SAFe framework transition (Wiseman et al., 2013). By adopting an interpretive approach, this research acknowledges the complexity of human understanding and the significance of the context in which individuals operate (Bleiker et al., 2019; Saunders et al., 2016).

Constructivism, as a philosophical approach, complements interpretivism by emphasizing the role of the researcher in constructing knowledge through interaction with the research context and participants (Creswell & Poth, 2016). This perspective recognizes that the researcher's background and experiences, influenced by an epistemological belief in the subjective nature of knowledge, shape their interpretations (Fosnot, 2013; Saunders et al., 2016).

5.2. Research Approach

The research approach for this study is qualitative, centered around a single case study within a large-scale financial services organization. This approach is particularly suited to exploring the implications of transitioning from the SAFe 4.5 to SAFe 5.0, focusing on understanding the subjective experiences and interpretations of this transition by individuals within the organization (Carlson, 2017).

Qualitative research provides depth and detail, offering rich insights into complex issues (Creswell & Poth, 2016). It is instrumental in exploring phenomena' meanings, patterns, and descriptions, especially when dealing with the subjective nature of human experiences (Bryman, 2016). In the context of this study, the qualitative approach allows for an in-depth exploration of perceptions, attitudes, and behaviors related to the transition to SAFe 5.0, enabling the researcher to understand the impact on organizational agility (Svejnar, 2002).

5.3. Research Design

The research design for this study is a single case study, focusing on a large-scale financial services organization that underwent a transition from the SAFe 4.5 to SAFe 5.0. This design is selected to facilitate an in-depth understanding of the complex process of organizational change toward enhanced agility (Schüll et al., 2023).

A case study is an empirical inquiry investigating a contemporary phenomenon within its real-life context, mainly when the boundaries between phenomenon and context are unclear (Yin, 2018b). The case study design in this research is particularly relevant as it allows for a comprehensive exploration of the transition process in a specific organizational setting. The unique opportunity to study the dynamics of SAFe implementation in a real-world context justifies the choice of a single case study (Putta, 2022).

The case study focuses on the particular circumstances of the chosen financial services organization, including its culture, structure, and the specific challenges and opportunities it faces in transitioning to SAFe 5.0 (Schüll et al., 2023). This emphasis on context provides a rich understanding of the practical aspects of implementing agile methodologies in large, complex organizations.

5.3.1. Case Study Phases

The single case study approach followed the guidelines presented by (Yin, 2018a). The procedures involve six key phases: Plan, Design, Prepare, Collect, Analyze, and Share. Below, the researcher expands on the six phases:

i. **Plan:** The researcher defined the research questions in this phase as outlined in sections nr. 1.3 and 1.4 above. The researcher also

determines the objectives and scope of the study, as covered in section 1.5 above.

ii. **Design:** The researcher defined the data collection methods, chose the interview instruments, and performed the sampling and data analysis in this phase. These are outlined below in sections 5.5, 5.6, 5.7, and 5.8.

iii. **Prepare:** This phase involved getting ethical clearance from relevant authorities to perform the study and preparing the interview protocol together with the supporting documents required for data collection to commence. Section 3.11 below outlines these.

iv. **Collect:** This phase involved collecting data through the research instruments mentioned in the design phase. This study made use of semi-structured interviews as outlined in section 3.8. below.

v. **Analyze:** This phase involves the analysis of the data collected. This study uses thematic analysis to identify themes and patterns using NVIVO 12 as outlined in section nr. 3.10 below.

vi. **Share:** The researcher shared this phase's empirical observations and findings as a written report. Section 4 below reports the findings from this study

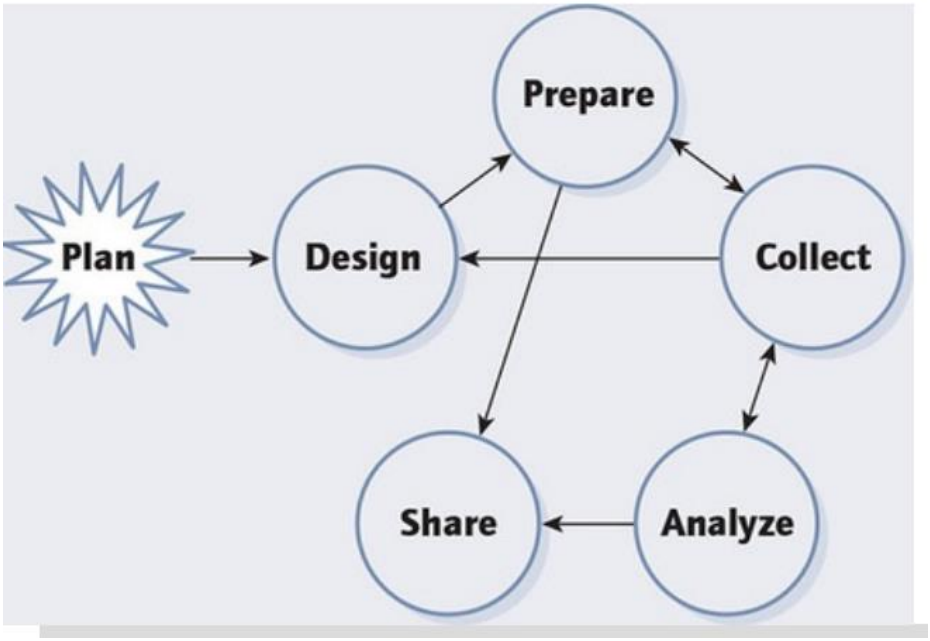

Figure 7: Case Study Phases (Yin, 2018a)

5.4. Case Study Research

In the dynamic and complex world of financial services, adopting and evolving agile methodologies stand as a beacon of organizational adaptability and progress. This research embarks on a comprehensive case study at a prominent financial services organization, where the researcher is an integral part of the daily operations. With its significant presence in two countries and subsidiaries dedicated to asset management services, the organization presents a relevant case for examining the transition from the SAFe 4.5 to 5.0.

This study, rooted in the foundational insights of (Flyvbjerg, 2006), seeks to bridge the gap between theoretical frameworks and practical realities

encountered in an organization undergoing a major agile framework shift.

5.4.1. Addressing Common Misunderstandings in Case-Study Research

- **Theoretical vs. Practical Knowledge:** This research navigates the complex terrain of case-study research, underscoring the synergistic relationship between theory and practice. It leverages the deep insights gained from being an insider in the financial services organization to illuminate and refine theoretical concepts through real-world experiences.

- **Generalization from a Single Case:** This study capitalized on the organization's unique position undergoing the SAFe 5.0 transition. While acknowledging the limitations in generalization, it focuses on deriving context-specific insights that provide an understanding of scaling agile practices in large organizations.

- **Hypotheses Generation vs. Testing:** This study balanced hypothesis generation and testing. It starts with existing theories in agile methodologies and organizational change but is open to the emergence of new ideas reflecting the dynamic nature of organizational shifts.

- **Bias Toward Verification:** The study incorporates reflexivity, acknowledging potential biases due to the researcher's role within the organization and critically reflecting on the researcher's positionality and preconceptions throughout the research journey. This approach aims to mitigate bias and enhance the rigor and validity of the research findings.

- **Summarizing Case Studies:** The study committed to a detailed and comprehensive presentation of findings, capturing the intricacies of the SAFe transition process. This approach ensures a rich portrayal of the multifaceted dynamics of organizational change.

5.4.2. Unit of Analysis

The primary focus of this research is the organization's transition process from SAFe 4.5 to 5.0. The scope of the study encompassed an in-depth examination of the changes in organizational structures, processes, team dynamics, and the overall impact on software product delivery. The choice of this transition as the unit of analysis is pivotal in understanding the challenges and opportunities inherent in shifting from an established agile framework to an updated version.

This case study is a testament to agile framework transitions and their layered nature in large-scale organizational contexts. By aligning with the seminal work by Flyvbjerg (2006), the study deepens the empirical understanding of agile methodologies. It serves as a guiding light in

navigating the complex landscape of case-study research. Through reflective practice and a balanced integration of theoretical and practical insights, this research offers valuable lessons and perspectives on the challenges and opportunities of large-scale organizational change initiatives, contributing significantly to both the specific context of the financial services industry and the broader discourse on agile methodologies and organizational transformation.

5.5. Sampling Technique

This study employs a purposive sampling technique to select participants directly involved in transitioning from SAFe 4.5 to SAFe 5.0 within a large-scale financial services organization. Inline with the agile/squad team requirements covered in sub-section 4.4 above, the researcher chose purposive sampling to identify individuals with specific knowledge and experience of SAFe 5.0 framework (Saunders et al., 2016). This technique allows for the selection of participants who can provide in-depth insights into the organizational transition and its impact on agility (Sebola & Khoza, 2022).

5.5.1. Choice of Respondent Roles:

5.5.1.1. Business Owners, Product Managers, and Product Owners

- These roles are critical in the SAFe framework as they bridge the gap between organizational strategy and team-level execution (Leffingwell, 2010). Business Owners and Product Managers are

pivotal in defining vision, aligning team efforts with organizational goals, and ensuring value delivery. Product Owners translate this vision into actionable backlogs for development teams. The literature emphasizes the importance of these roles in ensuring the successful implementation of SAFe, as they provide both strategic direction and operational oversight (Vlietland & van Vliet, 2015).

5.5.1.2. Scrum Masters and Feature Analysts

- Scrum Masters and Feature Analysts are essential for facilitating agile processes and ensuring teams adhere to agile practices (Schwaber & Sutherland, 2017). Scrum Masters serve as coaches and facilitators within their teams, while Feature Analysts play a crucial role in breaking down features into manageable tasks and clarifying requirements. Their perspectives are invaluable for understanding the day-to-day challenges and adaptations required to transition to SAFe 5.0 (Block, 2023).

5.5.1.3. Developers

- Developers are at the core of the agile process, responsible for creating products and services. Their feedback is crucial in understanding how changes in the framework affect the technical and operational aspects of product development (Kniberg & Skarin, 2010).

The study reached out to individuals in these roles, leveraging organizational channels and networks to identify potential participants.

The selection criteria include their level of involvement in the transition to SAFe 5.0, their experience in their respective roles, and their willingness to participate in the study (Sebola & Khoza, 2022). Focusing on these specific roles, the study aimed to comprehensively understand the transition from various organizational perspectives, covering strategic, operational, and technical viewpoints (Almeida & Espinheira, 2021).

The purposive sampling technique and selecting respondent roles are robust methods for gathering rich and relevant data. This approach ensures that the study captures a holistic view of the transition to SAFe 5.0, encompassing insights from different levels of the organization and various functional areas within the SAFe framework (Block, 2023).

5.6. Research Site

The study encompassed fourteen participants affiliated with FOrg and geographically spread across Namibia and South Africa. Access to the research location was straightforward, and there were no obstacles in securing a suitable study venue. Interviews were conducted in person and through Microsoft Teams, accommodating the geographical spread of participants. Before the commencement of the study, the Researcher obtained formal permission from the participants and management hierarchy.

The Researcher submitted a formal request for permission to conduct the research study on the organization's premises (Annexure A).

5.7. Data Collection

The data collection process for this study, focusing on the transition from SAFe 4.5 to SAFe 5.0 within a large-scale financial services organization, was meticulously planned to ensure comprehensive coverage of the research questions. The study employed two primary data collection methods: semi-structured interviews and analysis of organizational documentation. This approach aligned with the triangulation method in qualitative research, enhancing the credibility and depth of the findings (Saunders et al., 2016).

Data collection occurred between the 07th of December 2022 and the 9th of March 2023. Eight interviews were conducted in December 2023, four interviews in January 2023, and the final two interviews in March 2023.

The average time for all interviews was 17 minutes. The most extended interview was a total of 35 minutes, and the shortest interview was a total of 7 minutes. Rough notes were taken during the interviews and played an essential role in enhancing the understanding and interpretation of the data collected. These notes were part of the triangulation strategy but were not directly analyzed.

They significantly contributed to the overall insights and findings, thus ensuring that the themes explored were comprehensively understood. This methodological approach further strengthens the study's outcome despite the shorter interviews. The researcher encountered a technical oversight during the interview process for Res 3 and Res 4. Although the interviews were conducted successfully, a technical malfunction occurred as the computer mic was inadvertently on mute, and the interview was not recorded.

Although the average interview duration was approximately 17 minutes, the questions in the interview were well-defined and allowed respondents to provide precise and relevant insights. As subject matter experts, the respondents could articulate their responses succinctly without requiring extensive elaboration. The respondents also received the interview questions in advance to prepare their responses via the meeting invite, as covered in the next section.

5.6.1 Meeting Invites to Respondents

The researcher used Microsoft Outlook to send out meeting invites to the respondents with a Microsoft Teams link embedded. The following documents were attached to the meeting invites (**Figure 8**):

i. Research Permission Letter from Case Study Organization
ii. Ethics Approval Letter from The University of Cape Town
iii. Research Problem Statement and Objectives Document

iv. Data Collection – Interview Questions document

v. Consent Letter to Participate

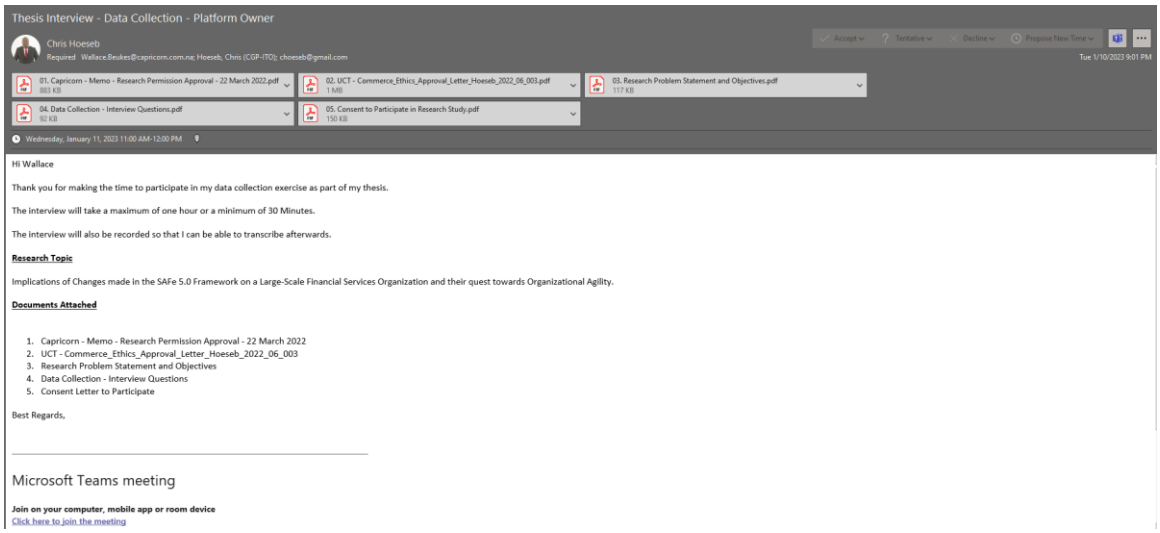

Figure 8: Respondent Interview Email Invites

5.6.2 Respondent's Years of Experience and Training

This section provided an overview of the respondents' years of experience at the case study organization, their years working in an agile environment, and whether they had received any SAFe training (refer to Table 1 below). The respondents' expertise and familiarity with the SAFe and agile methods helped them understand their perceptions and experiences related to the research study subject matter.

In **Table 1** below, the researcher displays the years the respondents had worked at the case study organization, their involvement in an agile environment, and whether they had received any SAFe training. Their

level of experience and expertise may have influenced their views and perceptions on the subject matter.

Code	Respondent	Role	How many years have you worked at the case study Organization?	How many years have you worked in an agile environment?	Have you received any SAFe training? (Yes/No)
Res 1	Respondent 1	Scrum Master	4 years	8 years	Yes
Res 2	Respondent 2	Product Owner	4 years	4 years	No
Res 3	Respondent 3	Head: IT Architecture and AMO	13 years	5 years	Yes
Res 4	Respondent 4	Chief Technology Officer	4 years	4 years	Yes
Res 5	Respondent 5	Scrum Master	17 years	5 years	Yes
Res 6	Respondent 6	Senior Software Developer	5 years	4 years	Yes
Res 7	Respondent 7	Product Owner	8 years	5 years	Yes
Res 8	Respondent 8	Business Owner	24 years	3 years	No
Res 9	Respondent 9	Business Owner	7 years	5 years	No
Res 10	Respondent 10	Platform Owner	7 years	5 years	Yes
Res 11	Respondent 11	Product Owner	2 years	8 years	Yes
Res 12	Respondent 12	Scrum Master	2 years	8 years	Yes
Res 13	Respondent 13	Senior Feature Analyst	3 years	3 years	Yes
Res 14	Respondent 14	Scrum Master	6 years	7 years	Yes

Table 1: Respondents' Years of Experience and Training

5.6.3 Semi-Structured Interviews

- The primary data collection method used was semi-structured interviews. These interviews aimed to gather detailed responses from participants about their experiences and perceptions of the transition to SAFe 5.0.
- The researcher carefully crafted the interview questions to align with the organizational agility conceptual model/framework proposed by Žitkienė and Deksnys (2018), ensuring they covered critical areas such as agility drivers, enablers, capabilities, and practices related to the SAFe transition.
- Respondents included individuals in roles like Business Owners, Product Managers, Product Owners, Scrum Masters, Feature

Analysts, and Developers. Their diverse perspectives provided a multifaceted understanding of the transition process.

- The interviews were conducted in person and via Microsoft Teams, accommodating the geographical dispersion of participants across Namibia and South Africa.

5.6.4 Documentation Review:

- The second data collection method involved reviewing organizational documentation, focusing on the department's structure and the roles within the Agile Release Train.
- While the documentation didn't specifically detail the transition to SAFe 5.0, it offered valuable context about the organizational setup and the interplay of roles within the Agile framework, which is crucial for understanding the baseline of the SAFe 5.0 transition.
- The documentation reviewed included the case study organization IT strategy, which had a wealth of information in understanding the flow of work and the structural changes in the feature teams.

5.6.5 Research Instrument Design:

- Designing the research instrument, especially the interview guide, was critical to the data collection. The researcher crafted the interview

questions to resonate with the constructs of the organizational agility conceptual model/framework of Žitkienė and Deksnys (2018).

- This design ensured that each question was purposefully aligned with the research objectives and the theoretical framework, allowing for targeted exploration of the specific aspects of organizational agility affected by the SAFe transition.
- The interview guide underwent a meticulous review process, including pilot testing with two individuals familiar with the SAFe framework to ensure its clarity, relevance, and comprehensiveness. The repondents in the pilot interviews indicated that the questions in the interview guide were clear, thus the interview guide was not updated afterward.

5.8. Data Analysis

The data analysis phase of this study, which focused on the transition from the SAFe 4.5 to SAFe 5.0 in a large financial services organization, played a critical role in synthesizing the gathered information and deriving meaningful conclusions. This chapter outlines the Researcher's systematic approach to analyzing the data collected from semi-structured interviews and organizational documentation (Carlson, 2017).

5.7.1 Recording and Transcribing of Interviews

The Researcher used Microsoft Teams to record and transcribe the semi-structured interviews. The transcription process consisted of three phases:

- Microsoft Teams automatically did the first phase of transcription.
- The second phase used the Otter.ai software tool, employing artificial intelligence for automatic transcription (Hydén & Várhelyi, 2000).
- In the third phase, a professional transcriber manually transcribed the audio files, editing the Otter.ai files to ensure correct spelling and grammar (Khoza & Marnewick, 2023).

Each respondent's folder contained four versions (**Figure 9**) of the transcription in Microsoft Word format: from Microsoft Teams, Otter.ai, the professional transcriber, and the anonymized version by the Researcher before importing into NVIVO 12 for analysis and coding.

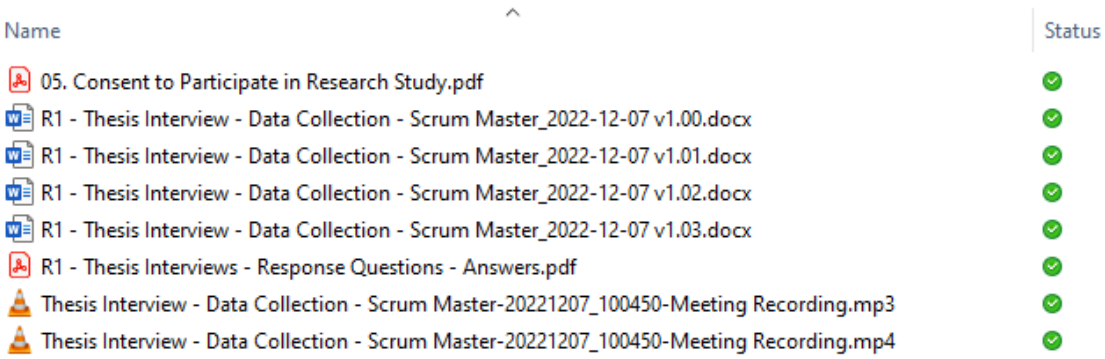

Figure 9: Example of Files in Respondent Folder

5.7.2 Thematic Analysis

- The primary method of data analysis employed in this research was thematic analysis. This approach facilitated identifying, analyzing, and reporting patterns (themes) within the data (Clarke & Braun, 2013).
- The process began with a thorough reading of the interview transcripts and documentation to gain an initial understanding and immerse the Researcher in the data (Sebola & Khoza, 2022).
- The Researcher generated initial codes by systematically working through the data and applying descriptive and interpretive codes to segments relevant to the research questions (Hydén & Várhelyi, 2000).
- After completing the coding, the Researcher reviewed and organized these codes into the relevant organizational agility conceptual model themes and sub themes. This process involved collating all data relevant to each possible theme and considering the relationships between different themes (Carlson, 2017).
- The Researcher then reviewed and refined the themes to ensure they accurately represented the data and the research questions.

5.7.3 Use of NVIVO

The Researcher utilized NVIVO, a qualitative data analysis software, to aid in the organization and analysis of the data. NVIVO assisted in managing, coding, and categorizing the data efficiently, thereby enhancing the rigor and transparency of the analysis process (Bazeley & Jackson, 2019).

5.7.4 Alignment with Organizational Agility Framework

- The Researcher guided the data analysis using the organizational agility conceptual model/framework proposed by Žitkienė and Deksnys (2018). This approach ensured a focused exploration of the dimensions of organizational agility as the transition to SAFe 5.0 impacted them (Khoza & Marnewick, 2023).

- The Researcher mapped the themes identified through thematic analysis against the constructs of the organizational agility framework. This process examined how these themes related to agility drivers, enablers, capabilities, and practices within the context of SAFe (Hydén & Várhelyi, 2000).

This research study followed the guidelines of Braun and Clarke (2006) on conducting thematic analysis in six phases, as shown in **Figure 10**.

Phase	Description of the process
1. Familiarizing yourself with your data:	Transcribing data (if necessary), 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 (Level 1) and the entire data set (Level 2), 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:	The final opportunity for analysis. 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.

Figure 10: Thematic Analysis Phases (Braun & Clarke, 2006)

5.7.5 Familiarising with Data

The first phase involved immersing the Researcher in the data, which meant transcribing interviews, reading and re-reading transcripts, and reviewing organizational documents (Kamath, 2023).

5.7.6 Generating Initial Codes

Using NVIVO, the Researcher systematically coded the data, breaking it down into meaningful segments and attaching concise labels (codes) to these segments. The coding process was both data-driven and theory-driven, considering the conceptual framework of organizational agility (Khoza & Marnewick, 2023).

5.7.7 Searching for Themes

After coding, the Researcher started to look for broader patterns or themes, using NVIVO's coding query and matrix coding features to collate codes into potential themes (**Appendix D**). This phase was iterative, moving back and forth between the dataset, coded extracts, and placing it under the correct themes (Kamath, 2023).

5.7.8 Reviewing Themes

The Researcher reviewed and refined the themes, ensuring they accurately reflected the essence of the data. The researcher split the codes into Level 2 for the initial codes and Level 3 for the refined themes. This includes renaming, collating, or deleting codes that are no longer

relevant (Khoza & Marnewick, 2023). The codes between Level 2 and 3 were reduced after the refinement, as shown in **Appendix E**.

5.7.9 Defining and Naming Themes

The Researcher clearly defined and named each theme, developing a detailed analysis that identified their relation to the research questions and respective themes (Kamath, 2023).

5.7.10 Producing the Report

The final phase involved writing the findings with a detailed theme analysis. NVIVO's 'diagrams' feature helped create diagrams for the thematic analysis, adding depth to the report (Kamath, 2023).

The use of Braun and Clarke (2006) thematic analysis method, supported by NVIVO, provided a structured and rigorous approach to analyzing the qualitative data from this study. It allowed for a deep understanding of the organizational transition to SAFe 5.0, ensuring comprehensive analysis closely aligned with the theoretical underpinnings of the research (Khoza & Marnewick, 2023).

The data analysis chapter describes a structured and meticulous approach to thematic analysis, supported by NVIVO software and aligned with the organizational agility conceptual model. This approach ensured that the analysis was thorough, systematic, and directly relevant to the study's research questions, providing insightful and credible findings on

the transition to SAFe 5.0 in the organizational context (Hydén & Várhelyi, 2000).

5.9. Reliability and Validity

Ensuring reliability and validity is crucial in qualitative research. The chapter discusses how the research addresses construct validity, internal validity, external validity, reliability, and objectivity (Khoza & Marnewick, 2023).

5.8.1 Construct Validity

Construct validity was ensured through multiple sources of evidence and the development of interview questions grounded in the organizational agility conceptual model/framework (Kamath, 2023; Yin, 2018b).

5.8.2 Internal Validity

The Researcher addressed internal validity by providing a detailed and transparent explanation of the data collection and analysis processes (Maxwell, 2012).

5.8.3 External Validity

The Researcher enhanced external validity by providing a rich, detailed description of the context and findings, enabling readers to assess the applicability to similar contexts (Bryman, 2016; Khoza & Marnewick, 2023).

5.8.4 Reliability

Reliability was ensured by documenting the research process in detail and using NVIVO for a transparent and traceable means of data coding and theme development (Golafshani, 2003; Kamath, 2023).

5.8.5 Objectivity

Objectivity involves recognizing and addressing the biases and subjectivities of the Researcher, primarily achieved through multiple information sources and consistent questioning (Malterud, 2001).

5.10. Ethical Considerations

Ethical considerations were paramount in the study on the transition from the SAFe 4.5 to SAFe 5.0 in a large financial services organization (Khoza & Marnewick, 2023). This chapter outlined the ethical measures and protocols implemented.

5.9.1 Confidentiality

- Protecting the confidentiality of the case study organization and individual respondents was a primary concern. All identifying information, including the organization's and participants' names, was kept anonymous throughout the study and in subsequent reports or publications (Kamath, 2023).

- The Researcher stored data collected during the research securely in a location accessible only to him. The Researcher protected electronic

data with appropriate security measures, including password encryption and secure backups on Microsoft Onedrive (Khoza & Marnewick, 2023).

5.9.2 Consent

- Informed consent was a cornerstone of the ethical research approach. All participants in the study were required to provide written consent before participating. The consent form clearly explained the purpose of the research, the nature of their involvement, and their rights as participants, including confidentiality and the voluntary nature of their participation (Khoza & Marnewick, 2023).

- The consent form also informed participants of the potential uses of the research findings and assured them that their withdrawal from the study at any stage would not have negative consequences (Saunders et al., 2016).

5.9.3 Voluntary Participation

- Participation in the research was entirely voluntary. The Researcher informed the respondents that they could withdraw from the study without penalty or consequence. The Researcher included this assurance in the study's verbal explanation and the written consent form (Kamath, 2023).

5.9.4 Ethical Approval and Clearance

- Before commencing the research, the Researcher obtained ethical clearance from the appropriate university ethics committee. This clearance served as an independent review of the research plan, ensuring it adhered to ethical standards in research involving human subjects.
- The Researcher provided a copy of the ethical clearance certificate to the top management team of the case study organization and all respondents. This step demonstrated the study's commitment to ethical research practices and building trust with participants.

By adhering to these ethical considerations, the research ensured the protection of participants, the integrity of the data collected, and the credibility of the research process. These measures reflected the commitment to conducting research that was rigorous, respectful, and ethically sound.

5.11. Conclusion

This chapter outlined the research methodology employed in the study, detailing the case study approach used to investigate the transition from SAFe 4.5 to SAFe 5.0 within a large-scale financial organization. The researcher discussed the rationale for selecting a qualitative case study design. The key data collection methods, including interviews and supplementary data sources such as organizational documents, were described and aligned with the study’s objectives. The chapter also addressed the data analysis process, highlighting how the conceptual framework guided the organization and interpretation of findings.

Consideration was given to the study's ethical dimensions, ensuring the research's credibility, reliability, and validity. This methodological foundation provided a robust basis for the findings and discussions presented in subsequent chapters.

6. CHAPTER 6 – EMPIRICAL OBSERVATIONS AND FINDINGS

6.1. Introduction

This chapter presents the empirical observations and findings from the data collected from the respondents via semi-structured interviews. The primary research question for this study is**, " What factors influence the transition from SAFe 4.5 to SAFe 5.0 in a large-scale financial services organization?"**.

To answer the primary research question, the researcher crafted the following secondary research questions using the organizational agility conceptual model defined in Chapter 3 above and also employed them in the data collection process:

- **RQ1:** What are the agility drivers for transitioning from SAFe 4.5 to SAFe 5.0 in a large-scale financial institution?
- **RQ2:** What are the agile enablers for transitioning from SAFe 4.5 to SAFe 5.0 in a large-scale financial institution?
- **RQ3:** What agile capabilities are needed by a large-scale financial institution to transition from SAFe 4.5 to SAFe 5.0?
- **RQ4:** What agile practices must a large-scale financial institution adapt to transition from SAFe 4.5 to SAFe 5.0?

This chapter discusses the high-level themes that emerged from the interview data, focusing on agility drivers, agile enablers, agile capabilities, and agile practices.

The findings were further reinforced and contextualized through insights derived from supplementary sources, including the organization's IT Strategy document, which aligned closely with the areas of the theoretical model used in this study.

For example, the strategy document provided valuable information on how workflows were structured, directly speaking to agility drivers by emphasizing the need for streamlined processes and responsiveness to change. It also highlighted the role of IT as an enabler for the business, outlining key technology building blocks such as cloud-based solutions and automation tools that support organizational agility.

Additionally, the adoption of DevOps principles within the strategy document reflected elements across all areas of the model, including Agile capabilities and practices. These principles emphasized continuous integration and delivery, fostering collaboration between IT and business units and reinforcing the interview findings on aligning IT initiatives with broader business goals. This integration of documentary evidence provided depth to the findings and strengthened the study's conclusions on the transition to SAFe 5.0.

Finally, the chapter synthesizes the findings of the primary and secondary research questions.

6.2. Agility Drivers

6.2.1. The Market as an Agility Driver

Interview excerpts provided different perspectives on the organization's responsiveness to changing market demands. This changing market demand, highlighted by the need for digitalization and catering to the younger generation, catalyzed this shift. This market demand necessitated an agile approach to deliver customer-focused solutions, thus driving the organization towards adapting to SAFe 5.0. The organization's responsiveness toward these evolving market demands requires the organization to stay competitive in the digital landscape. These perspectives revealed different approaches to staying responsive to evolving market needs. The findings around the market sub-theme as an Agility Driver were as follows:

- **Influences of Demographics on Market Responsiveness:** The analysis revealed that demographic trends, particularly of younger, tech-savvy customers, significantly shaped the organization's market responsiveness. Res 1 highlighted that the younger generation was a critical external driver influencing the organization's strategic priorities. This demographic trend emphasized the need for enhanced agility and responsiveness, prompting the organization to adopt SAFe 5.0 to better address these evolving market demands. By leveraging SAFe 5.0's focus on agility and customer centricity, the organization aimed to innovate and digitize its services more effectively, aligning

with the expectations of a younger customer base. This reflects a broader organizational recognition of the imperative to modernize and digitize operations to maintain a competitive edge in an increasingly digital ecosystem.

"The main reason I think banks are driven to excel in countries is because there's a push from the younger generation to make them become digital." – Res 1

- **Digitalization and Technological Advancement:** The organization's transition towards digital services was a recurring theme from the respondents (e.g., Res 13, Res 2, and Res 9). Res 13 mentioned self-service kiosks (SSK) and mobile banking enhancements, exemplifying strategic alignment with market demands for convenience and technological innovation. Furthermore, these digitalization efforts directly responded to competitive market pressures and customer preferences for online and mobile banking services. Embracing digital technological advancement initiatives like the SSK and mobile banking enhancements played a significant role in the organization's transition to SAFe 5.0. These initiatives highlighted aligning with customer demands for convenience and technological innovation. This transition addressed competitive pressures and capitalized on the growing preference for online and mobile banking services.

"We now have self-service kiosks... and on the mobile side, you're able to do most of what other banks are able to do." – Res 13

- **Competitive Market and Agility:** Res 6 asserted that the organization exhibited agility by quickly adjusting and offering competitive services to capture market share in a competitive environment. This suggested that agility involved adopting the latest technologies and responding nimbly to market conditions and competitive pressures in this context. R6 responses highlight the need to incorporate SAFe 5.0 principles during transitioning to a competitive environment. SAFe 5.0's focus on enhancing organizational agility supports rapid adaptation to new technologies and quicker response times to market shifts. The adaptation in the ever-evolving competitive market aligns with the need for the organization to stay competitive by swiftly adjusting its offerings.

"In our market, our organization is very flexible, very agile, and providing much more competitive services to the market and adjusting very quickly." - Res 6

- **Organizational Strategy and Market Demands:** Some respondents, like Res 7, acknowledged that the organization's existing strategies might not have been as responsive to market shifts due to longer-term planning cycles, such as a three-year strategy and fixed budgeting processes. The organizations' strategy potential misalignment with an

ever-evolving market, emphasizses the need for more agile planning processes. The transition to SAFe 5.0 addressed this gap by promoting shorter, more adaptive planning cycles and budgeting processes with lean guardrails to respond to market shifts.

"We're not very responsive to market shifts or demands, as our organization develops a three-year strategy and fixed budget to implement change accordingly." – Res 7

- **Customer Engagement and Feedback Mechanisms:** Res 10 and others touched on the organization's methods for engaging with customers, such as surveys, which helped understand and keep up to date with customer demands. This approach suggested a layer of agility in capturing and responding to the voice of the customer. SAFe 5.0 emphasizes customer-centricity and lean-agile principal practices. The organization’s customer engagement via surveys illustrates an inherent layer of rapidly adapting to customer demands and incorporating customer feedback into the development processes.

"The organization is to some degree responsive to what the market demands... engaging customers via surveys to understand what the requirements and needs are." – Res 10

- **Potential Over-responsiveness and Market Alignment**: Res 11 introduced an interesting angle by suggesting that the organization

might have been responding too proactively, potentially overstepping in trying to match markets that were more advanced than the actual market they served, which could have led to mismatches in service delivery. Res 11's observation highlights a critical consideration for the transition to SAFe 5.0. The observation cautions against the over-adaptation of transitioning to SAFe 5.0. It emphasizes that organizations should strategically asses and match their agility levels and service offerings with market demands and the maturity of their business environment.

"We were looking at markets that are far more advanced and competing at that level... that may not be as accessible or will have as much actual access and connectivity." – Res 11

These findings collectively suggested that while the organization strove toward agility in the face of market demands, there were different perspectives on how well and quickly these adaptations took place. The younger generation's preferences, the competitive nature of the banking industry, customer engagement strategies, and technological advancements stood out as primary drivers of agility. The organization's strategic planning process and potential misalignment with market capabilities also posed challenges in achieving optimal responsiveness. SAFe 5.0's emphasis on customer centricity, lean agile principles, and continuous learning culture address the drivers highlighted above by the respondents by facilitating a more responsive and innovative

organizational strategy. The SAFe 5.0 framework assists in navigating challenges like strategic misalignment and ensures that planning processes are adaptable and aligned with market needs.

6.2.2. Competition as an Agility Driver

Respondents signified that organizations were proactively enhancing their agility and competitiveness in response to market dynamics. Strategies included team expansion, restructuring technology environments, and researching competitors. These strategies align with SAFe 5.0 Lean-Agile principles, encouraging a cultural shift towards continuous learning and adaptability, ensuring swift customer-centric software delivery. The findings around the competition sub-theme as an Agility Driver were as follows:

- **Restructuring for Technological Adaptability**: SAFe 5.0 emphasizes that organizations adapting to the lean-agile mindset, core values, principles, and practices in business and technology domains can realize a benefit. Res 10 highlighted the need for financial institutions to realign their technological frameworks to stay competitive. The focus had shifted to delivering services and products that met the current demands, such as digital transactions, to replace traditional in-person banking. Res 5 noted the trend of financial institutions diversifying their offerings and increasing digitization. This strategy was an answer to changing customer needs and a measure to stay

ahead in the competitive finance landscape, thus aligning with SAFe that business agility affects not just development but every part of the organization.

"Being able to transact via electronic channels... that's one of the aspects that the organization has moved into, in order to remain competitive" – Res 10

"We're definitely diversifying our portfolio... and our digitization from a retail competitive perspective" – Res 5

- **Continuous Competitive Analysis and Advanced Solutions**: Res 11 sheds light on the organization's continuous efforts to benchmark its capabilities against competitors. This strategic move was necessary to keep pace with the leading entities in the market.

  "We're remaining or trying to remain competitive with markets... where we as a Namibian bank, have to sort of catch up" – Res 11

- **Cultural Shift Towards Learning and Adaptation**: Res 12 stressed the significance of a cultural transformation within organizations, emphasizing the importance of continuous learning and adherence to Agile principles. This shift was fundamental for organizations aiming to stay agile in rapidly evolving market conditions. A continuous

learning culture is one of the seven core competencies in SAFe 5.0 that organizations need to master to achieve Business Agility.

"Continuous learning and consistent implementation... [are] what it is that needs to be implemented from an agility perspective" – Res 12

- **Internal Process Optimization**: Res 13 pointed out that organizations could enhance workflow efficiency by modifying reporting structures and team divisions. These internal changes were pivotal for quickly adapting to market shifts and keeping up with competitors. Internal process optimization, aligned with lean portfolio management in SAFe 5.0, emphasizes that the portfolio must be aligned with the overall business strategy to deliver maximum customer value.

"We have changed our way of working... we are not far behind with what the market is providing" – Res 13

- **Embracing SAFe for Enhanced Delivery**: Res 7 detailed the strategic implementation of SAFe 5.0 to improve the IT organization's delivery capabilities. The aim was to ensure a steady delivery pace that matched business objectives and sustained competitive progress. Res 9 discussed adopting Agile methodologies to sync with market trends and allocate resources judiciously—the agile approach allowed for a

'fail fast' mindset, enabling cost-effective and strategic resource management.

"We've adopted the Scaled Agile Framework to assist us in faster delivery of IT solutions" – Res 7

"It is mandatory to move with the market and spend money intelligently... fail fast" – Res 9

- **Ensuring Service Parity with Competitors**: Res 6 addressed the importance of providing services that were on par with or superior to those offered by larger banks. Achieving service parity was crucial for customer retention and competitive sustainability. SAFe 5.0 strongly emphasizes customer centricity and design thinking, which keeps the customer at the center of every decision and solution design. In an environment where customers are easily lured to a competitor because of a feature/capability that is not available in your offerings, it is required from the case study organization to always be on par with competitors.

"We make sure that we can provide the exact same services and if not better than the competition" – Res 6

In transitioning from SAFe 4.5 to SAFe 5.0 within a large-scale financial services organization, these findings underscored the significance of

competitive pressures as catalysts for advancing organizational agility. The agility drivers identified were integral to the organization's responsive strategy to stay competitive and relevant, supporting the overarching aim of achieving organizational agility.

6.2.3. Customer Preferences as an Agility Driver

The interview excerpts suggested that the case study organization prioritized customer centricity and design thinking as embedded in SAFe 5.0 to enhance customer experiences. They focused on accessibility, digitization, and customer-centricity to make banking processes more efficient. Many organizations deliver digital channels and mobile apps to meet evolving customer needs. Moreover, the study highlighted the significance of responsive and adaptable organizations continuously seeking feedback. Common themes included customer-centricity, ease of use, automation, and proactive development. Organizations aim to create positive customer experiences by aligning their strategies with user needs, leveraging technology, and incorporating design thinking methodologies. The findings around the customer preferences sub-theme as an Agility Driver were as follows:

- **User-Friendly and Intuitive Applications:** Multiple respondents (Res 1, Res 10, Res 11, Res 12) emphasized the shift towards delivering user-friendly and intuitive applications. The transition toward SAFe 5.0

achieved the case study organization's requirement for user-friendly and intuitive applications.

"We do that by delivering user-friendly and intuitive applications... for our remote solutions where we catering for people who can onboard themselves...especially for our remote solutions where we catering for people who can onboard themselves from the on a mobile app." – Res 1

- **Customer-Centric Product Development:** Several respondents (Res 11, Res 6, Res 7, Res 9) mentioned the products and services were developed based on customer needs, sometimes even custom-tailored to an extreme extent, as per Res 6. Res 9 noted using design thinking to deeply understand customer needs, showing a commitment to aligning products closely with customer expectations. Doing the design thinking sessions to understand the customer needs aligns with the goals of SAFe 5.0 customer centricity and design thinking in understanding customers' needs and pain points.

"We are still quite adopting a customer-first mindset, so understanding what are the customer-centric processes and then building throughout." – Res 11

- **Digital Transformation:** The digital transformation initiatives like automating processes, reducing paper usage, and having more innovative engagement strategies highlighted by Res 12, Res 2, Res 10, Res 5, and Res 13 underscore the strategic push towards SAFe 5.0 to meet evolving customer needs and offer efficient banking services. By engaging in these transformation initiatives, the organization's strategy is aligned with SAFe 50's principles for lean and agile operations, showcasing how it is leveraging SAFe 5.0 to achieve a competitive edge.

"Making life a bit easier for the customer in the sense of not having to fill out a lot of forms, having a lot of physical documentation, trying to digitize and automate some of those processes." – Res 12

"The aim is to make the product or services... accessible from anywhere, whether we might be closing the country or out of the borders." – Res 10

"We are now able to transfer my e-wallet money to my account... most of our functionalities now can be found on mobile apps." – Res 13

- **Customer Feedback and Application of Design Thinking:** The emphasis on customer feedback and design thinking, as highlighted by Res 8 and Res 9, aligns with the SAFe 5.0 principles. A Customer-centric

approach to innovation and continuous improvement incorporated from the customer insights and design thinking sessions highlights the strategic move towards an empathic and engaged product development aligned with SAFe 5.0.

"The organization is quite active in listening to the feedback... and there's continuous updated changes and releases on those to cater for customer needs." – Res 8

"The beauty with the design thinking methodology, which was utilized, was to create personas for customers, understanding...really trying to get the understanding and expectations of the customers." – Res 9

These findings underline a concerted effort among financial service organizations to foster a customer-centric approach that leverages technology for greater accessibility, efficiency, and customer engagement, all while responding proactively to market dynamics and feedback.

6.2.4. Technology as an Agility Driver

From the respondents' viewpoints, technology delivery in financial organizations depends on affordability and scale. Larger banks have an advantage due to the size of existing resources plus the ability to acquire

new resources quickly, while legacy systems and processes hinder swift integration. Local development is advantageous for customization, and agile methodologies have expedited deployment. Local teams excel in integration and planning, balancing the perceived slower delivery compared to international competitors. The findings around the technology sub-theme as an Agility Driver are as follows:

- **Budget and Size Constraints:** The organization's size and budgetary constraints in a competitive market propelled the shift to SAFe 5.0 as they impact agility driven by technology investment. Larger organizations with more resources can adapt IT solutions faster. SAFe 5.0 and its scalable approach enable organizations to manage resources better, streamline processes, and enhance agility despite budget and organizational size limitations. SAFe 5.0 can level the playing field in a competitive environment.

"Larger competitors have more extensive resources to allocate to IT, which allows them to deliver solutions at a much quicker pace" – Res 1

"Our old governance and funding approaches are not conducive to agility, a contrast to what might be happening in larger firms." – Res 2

- **Legacy Systems and Processes:** Res 10 highlighted the inhibiting role of legacy systems and processes in the organization's technological agility, suggesting that the time required for transformation can slow down product and feature delivery compared to competitors. The outdated nature of the legacy systems inhibits the transition to SAFe 5.0 as their outdated nature and complexity in updating them can significantly slow down the pace of adapting agile practices, thus impacting the ability of the organization to deliver products and features faster. This lag places the organization at a disadvantage compared to the competitors, who may have more modern systems that support faster and more flexible development cycles.

"The drag of legacy systems on our agility is undeniable, especially when it comes to the speed of delivering new products and features"
– Res 10

- **Technology Reusability and Development:** Res 12 and Res 8 suggested that competitors benefit from reusing existing technology solutions implemented in other countries, like rolling out the MobileApp implemented in another country this side. At the same time, their organization often builds from scratch, impacting the speed of delivery despite doing well with available resources. Technology reusability illustrates the benefits of scalable and adaptable technology frameworks, thus acting as a driver for transitioning to SAFe 5.0. Aligning with agile principles for efficient resource use and

rapid response to customer needs makes the organization more competitive.

"Competitors often repurpose technology from abroad, while we tend to start from scratch, which can be a setback in our delivery speed" – Res 12

- **Self-Sufficiency and Local Innovation:** Res 13 and Res 8 conveyed a sense of pride in the organization's self-sufficiency and local technological development, positing that, given their unique context, they deliver effectively and are not significantly behind competitors. Res 14 acknowledged that while their organization learns valuable lessons from competitors, their smaller teams and the learning curve associated with new technology approaches affect their readiness and response time. Despite being slower than competitors with access to reusable technologies, the pride in self-sufficiency and developing technology locally reflects a strategic approach to leveraging SAFe 5.0.

"Our local innovation and self-reliance might be undervalued, but they are pivotal to our effective delivery" – Res 13

"While we gain valuable insights from competitors, our capacity and scaling efforts are influenced by our team size and learning pace with new technologies" – Res 14

- **Requirements Gathering and First To Market:** Res 7 and Res 9 noted that external consultancies and comparisons with competitors reveal a bottleneck in requirement development and a tendency to follow rather than lead in technology implementation. The transition to SAFe 5.0 was necessitated by the identified bottlenecks and aligned with lean agile principles and innovation.

"External consultancies have exposed our requirement development as a bottleneck," Res 7

"Our comparisons with competitors often show us trailing in technological leadership." – Res 6

These findings indicate that while there are perceived limitations in budget, size, and legacy processes, there is a concurrent recognition of the progress made through agile practices and DevOps. Moreover, respondents appreciate the local innovation and tailored technological solutions their organization has achieved. The common thread suggests that despite resource constraints relative to larger competitors impacting delivery speed, the organization shows evident improvements in agility and is competitively positioned in its local context.

6.2.5. Social Factors as an Agility Driver

Social factors were not drivers for the transition towards SAFe 5.0. They did enable the organization to enhance its compliance. Dedicated IT compliance departments are effective in implementing regulatory requirements. The financial industry is transitioning to modern technology for compliance, including online systems for reporting and data collection. Adapting SAFe 5.0 enables financial institutions to balance regulatory requirements with the need for innovation, leveraging agile methodologies to ensure compliance is met efficiently and deadlines are adhered to. Automated checks and reporting streamline compliance processes. The respondents mentioned that their organization excels in compliance, emphasizing the avoidance of fines and upholding their reputation. Balancing regulations and innovation is crucial in the financial industry. The findings around the social factors sub-theme as an Agility Driver are as follows:

- **Regulatory Compliance**: Regulatory changes demand swift and precise adaptability. As highlighted by Res 1, the current organization exhibits a robust response to regulatory changes compared to their previous organization due to a dedicated compliance department, which not only interprets new laws into technological requirements but also prioritizes these changes effectively, facilitating a swift implementation. Res 11 pointed out the slow adaptation to agile methodologies, indicating a disparity between the advancement in certain areas and lagging in others, which affects the organization's overall agility. Some of SAFe 5.0's key aspects, like lean agile

leadership, lean governance, agile product delivery, and continuous learning culture, enable organizations to pivot quickly in response to changes, including regulatory demands.

"Compliance within my current organization has been handled very well due to a dedicated compliance platform... they can decompose requirements and put into a system perspective very easily." – Res 1

"...I don't believe we adapt very fast to it from my experience." – Res 11

- **Proactive Regulatory Compliance**: Several respondents (Res 6, Res 7, Res 8) stated that the organization prioritizes compliance and regulatory requirements, ensuring it remains ahead of regulatory deadlines. Security considerations are integrated into the agile process in line with the Built-in quality principle of SAFe 5.0, as Res 12 indicated; this is echoed by Res 6 and Res 7, who mentioned that regulatory and security items are of "top three priority" and are given top priority to avoid "receiving fines from the regulator," respectively. Respondents also acknowledge efforts to meet regulatory demands, thereby maintaining agility preemptively.

"We ensure that we don't get fined...for reputational purposes, that we abide to the regulation – Res 5

"We do daily checks... to make sure that we screen our customers" for AML compliance – Res 13

These findings from respondents illustrate a multifaceted approach to maintaining and enhancing agility in the face of social factors such as regulatory changes. There is a clear recognition of the benefits of having specialized compliance platforms, the importance of security, and the need to prioritize. Challenges remain, notably in the pace of adaptability and the continuing presence of manual processes, indicating areas where improvement is required from an agility perspective.

6.3. Agile Enablers

6.3.1. Human Resources as an Agile Enabler

During the interviews, human resources was not raised as a critical enabler for transitioning from SAFe 4.5 to 5.0. Still, various respondents discussed the role of human resources as a strategic partner in agile transformation. Some emphasized HR's involvement in training and development as essential for successful agile delivery and continuous learning to support agile practices. Others expressed concerns about an existing divide between IT and non-IT departments, indicating that HR should have played a more significant role in bridging this gap. Skill gaps and challenges within HR were also highlighted, emphasizing the importance of addressing these gaps to embrace agile methodologies fully. Respondents also mentioned introducing new roles recommended

by agile frameworks as a positive step, leading to more effective agile teams. Some suggested the need for flatter organizational structures and communities of practice to enhance agility. In contrast, others emphasized the importance of stability in HR to enable faster delivery and agile methodology implementation. The findings around the human resources sub-theme as an Agile Enabler are as follows:

- **Continuous Learning and Training:** Res 1 articulated HR's role in promoting agility. The respondent underscored the necessity of constant learning, emphasizing the crucial role of HR in facilitating a continuous learning environment conducive to agile practices and, by extension, SAFe 5.0. Res 10 supported the sentiments of Res 1 and shed light on HR's strategic role in IT resource development, which is essential for forming effective agile teams. Res 1 highlighted the need for structured training to harness the potential and deliver agile solutions with increased speed and quality. Res 6 voiced concerns regarding skill gaps within the organization, a sentiment that was supported by Res 9. Res 9 emphasized that addressing the skills gap would enable stability and agility in HR practices. Res 2 noted the positive impact of adapting to the roles recommended by the SAFe 5.0 framework.

"Delivering Agile is one thing but accepting and training continually is needed to continue to support agile delivery." – Res 1

"You acquire certain resources or skill sets... but it still needs to be developed." – Res 10

"There's a really big lack of skills in some places... this huge skill gaps that need to be filled and not being filled." – Res 6

"Adopting the recommended roles by the framework has really helped in the whole agility process." – Res 2

"Having skilled resources... and getting more stability in the human resources... ensure faster delivery and enablement through agile methodology." – Res 9

- **Organizational Structure:** Res 8 pointed out that the organization is still set up in the old waterfall way of doing things, whereas a need for flatter organizational structures enables a more agile and lean governance model in line with SAFe 5.0. They advocated for flatter structures and communities of practice to foster innovation and quicker decision-making.

"We are structures are still very much set up in the old way of doing things." – Res 8

- **Divide between departments:** On the opposite side, several respondents, including Res 11, indicated a divide between various

departments and a lack of integration. The lack of integration between multiple departments can impede the implementation of SAFe 5.0, as cross-departmental collaboration is vital to achieving organizational agility.

"There is still that divide between other areas like HR, like finance, like product, even legal and compliance." – Res 11

In summary, the findings revealed that while HR was instrumental in adapting to the agile practices through continuous training and development initiatives, addressing structural impediments and skill gaps and ensuring cross-departmental integration were necessary to realize organizational agility fully. Introducing new roles and stabilizing HR practices were essential in the organization's agile transformation to SAFe 5.0.

6.3.2. Team Network as an Agile Enabler

Respondents acknowledged the effectiveness of tools such as Microsoft Teams and Azure DevOps in fostering collaboration and distributed development, which stands out as a critical enabler for transitioning to SAFe 5.0. Cross-functional teamwork and agile practices require frequent interactions between IT and business units to enhance the organization's

ability to meet business needs. The findings around the team network sub-theme as an Agile Enabler were as follows:

- **Global Collaborative Infrastructure:** Deploying collaborative technologies like Microsoft Teams and Azure DevOps enhanced agility and aligned with SAFe 5.0 emphasis on scalability and adaptability in a distributed environment. This adaptation demonstrated the team's network effectiveness in supporting distributed agile frameworks, as Res 1 highlighted.

  "Teams sitting in 35 countries... our organization provides the tools to enable this such as Microsoft Teams, repository software." -Res 1

- **Cross-Functional Agile Integration:** One of SAFe 5.0's competencies is Team and Technical agility. This competency emphasizes having high-performing, cross-functional teams. This competency aligns with sentiments highlighted by Res 2, who indicated that regular and meaningful engagement between IT and other business units had facilitated a deeper understanding of business processes and their Agile transformation, revealing the importance of cross-functional collaboration as an Agile network enabler in transitioning to SAFe 5.0.

  "Planning sessions... more frequent and regular sessions with the business unit to continuously unpack the business processes." – Res 10

- **Agile Mindset Across the Organization:** Res 11 indicated that a broader organizational understanding and adaptation to Agile practices, particularly a top-down Agile mindset starting with management, were required to enhance network agility and ensure a consistent approach to Agile across all departments. The lean-agile leadership competency of SAFe 5.0 emphasizes that the organization's managers, executives, and other leaders play a crucial role in adapting to the organization's growth mindset. Having the growth mindset in place enables a smoother transition to SAFe 5.0.

"If we had all the different teams understand and have a better understanding... of Agile and why are we practicing the way we are." – Res 11

- **Operational Efficiency in Agile Networks:** Res 12 indicated that IT operational services, such as password management, were critical to avoiding disruptions in development workflows and meetings, thus maintaining the network's support for Agile operations. Addressing operational challenges underscores the importance of operational efficiency in supporting Agile operations and the transitioning towards SAFe 5.0.

"Changing of passwords... if something like that can be implemented, then that would be great." – Res 12

- **Standardization and Process Refinement:** The Enterprise Solution Delivery (ESD) competency describes how organizations can use Lean-Agile principles and practices to specify, develop, deploy, operate, and evolve sophisticated software solutions. One of ESD's dimensions is coordinating ART and suppliers to a shared business and technology mission. Aligned to ESD**,** Res 9 alluded to the fact that there was a need for process standardization and refinement, particularly in engaging with external suppliers, to ensure alignment across all teams on business objectives, which consist of internal and external resources, thereby strengthening the network's role in Agile enablement.

"Different methods... makes it a bit difficult for suppliers to familiarize themselves with our way of working." – Res 9

These distilled findings underscored the critical nature of the organization's cohesive, well-equipped, and Agile-oriented network. The network's ability to transition to SAFe 5.0 hinged on global technological integration, cross-functional collaborations, a unified Agile mindset, operational efficiencies, and standardized processes. Each finding from the study aligned with the organizational shift towards the SAFe 5.0 framework and the ESD competency, highlighting areas of strength and pinpointing opportunities for enhancing organizational agility.

6.3.3. Processes as an Agile Enabler

The interview responses reflected a range of perspectives on aligning organizational processes toward transitioning to SAFe 5.0. Respondents highlighted the need for a significant shift in business processes, adapting agile ceremonies and practices, better alignment between IT and business processes, and implementing processes allowing small, incremental deliveries and issue resolution. These highlights aligned with the SAFe 5.0 core competencies: Agile Product Delivery, Team and Technical Agility. Some respondents suggested that traditional mindsets and processes limited agility. In contrast, others called for refinement and alignment to realize agile potential fully, in alignment with the continuous learning culture competency of SAFe 5.0. The findings around the processes sub-theme as an Agile Enabler were as follows:

- **Process Re-engineering and Standardization:** Res 1 indicated that there had been an attempt to adapt existing business processes for agility, but more radical changes were needed to support the dynamic nature of IT and Agile methodologies fully. Implementing processes that helped small, incremental deliveries was seen as beneficial for tackling issues and facilitating agility. According to Res 13, this allowed flexibility and responsiveness to changes. Res 8 and Res 9 mentioned a call for refining processes, especially in governance, to avoid delays and enable faster approvals, supporting the Agile principle of quick iterations. Res 9 further indicated a desire to standardize processes

across different teams to foster a uniform approach to Agile practices. All of the points raised by the respondents act as enablers from the SAFe 5.0 Team and Technical Agility and Lean Portfolio Management competencies, which are vital in transitioning to SAFe 5.0.

"We have to rebuild our business processes to adapt... very hard to implement them to their full potential using existing business processes without changing them drastically." – Res 1

"We deliver small by small which makes it easier for us to make changes... able to tackle problems way faster." – Res 13

"The time that we spend into governance to actually get the budget... could do with a bit of refinement... so that you can get to the desired result and then scale up sooner." – Res 8

- **Incorporation of Agile Ceremonies and Practices:** Customization of the SAFe framework to suit specific organizational needs was essential for this transition, according to Res 10. Outside of the recommended SAFe ceremonies (PI Planning, Iteration Planning, Daily Stand Up, System demos, Solution Demo, etc.), the organization introduced a Weekly KanBan session where senior IT and Business stakeholders get together to discuss and address any dependencies, escalate any issues or coordinate activities across teams.

"We introduced a lot of the ceremonies that are recommended by the SAFe framework... We've customized... to enable agility in business." – Res 2

- **Alignment between IT processes and Business Processes:** Res 11 and Res 12 highlighted the misalignment between IT processes, which were often Agile-ready, and business processes that still operated with a traditional mindset, particularly in budgeting and project costing. Business processes still operate in a fixed mindset (waterfall), whereas IT is operating with a growth mindset. To transition to SAFe 5.0, all parties need to adapt to a growth mindset to influence leaders ability to grow and mature with SAFe 5.0.

"From an IT perspective, the processes are all supporting definitely... we're still very much in a waterfall costing mindset to deliver in an agile way." – Res 11

These findings underscored the complexity of integrating Agile processes in a large-scale financial services organization. The transition from SAFe 4.5 to SAFe 5.0 demanded an evolution of business processes, adaptation and customization of Agile practices, alignment between IT and business, and refinement of processes for agility. The varied responses reflected the ongoing efforts and challenges in achieving organizational agility through process adaptation.

6.3.4. Structure and Organization as an Agile Enabler

The interview responses revealed that organizational structures enabled cross-functional teams to be formed and integrated with diverse skill sets, forming part of the Team and Technical Agility competency to transition to SAFe 5.0. Structure and Organization also played a role as enablers in transitioning to SAFe 5.0 by adapting to a customer-centric mindset and Lean-Agile Leadership. The findings around the structure and organization sub-theme as an Agile Enabler were as follows:

- **Formation of Cross-Functional Teams and Integration of Diverse Skills Sets:** Res 2 highlighted the shift from traditional functional silos to cross-functional teams. The transition to SAFe 5.0 necessitated this change. This shift, especially noted within IT departments, led to the creation of IT platforms, namely the eChannels, Process Automation, Card, Core Banking, and Information Analytics platforms, that encouraged collaboration among people with various skill sets, thus enabling more agile and responsive team dynamics. Furthermore, Res 11 emphasized the integration of professionals from multiple disciplines, including business, legal, and compliance, into agile teams. This approach improved cross-functional collaboration but needed further improvement and focused integration from different business areas.

"We had to create that shift, you know, to having these cross-functional collaborative teams..." – Res 2

"Bringing in the business stakeholders and the product houses and other areas like legal compliance..." – Res 11

- **Agile Mindset, Customer-Centricity, and Broader Organizational Adaptation:** Res 12 pointed out a significant shift towards a growth agile mindset, focusing on customer value. Adapting to a growth mindset included creating value streams to deliver products and services and aligning more closely with customer needs. Res 6 observed that while IT departments had made significant strides in adapting to agile structures, other departments like HR were lagging. For example, HR could adapt agile structures involving agile recruitment practices, iterative performance management, and flexible role definitions, thus aligning HR processes more closely with the dynamic needs of IT agile teams.

"Creating value streams, versus a team just working on a particular epic..." – Res 12

"But from an organizational point of view... most of the organization like HR hasn't really yet become very agile yet." – Res 6

- **Role of Leadership and Organizational Support:** Res 8 noted the importance of leadership and organizational support in forming agile teams. The introduction of programs like design thinking encouraged the inclusion of diverse perspectives in solution design, thereby enhancing the effectiveness of the teams. Leaders are vital in enabling the organization to transition to SAFe 5.0. Leaders must apply Lean Portfolio Management to understand the current state and develop a deliberate plan to evolve to a better and differentiated future state, SAFe 5.0.

> *"The introduction of design thinking, and the program...creates a roundtable where you've got different sets of skill sets..." – Res 8*

These findings aligned with the primary theme of Agile Enablers by illustrating how the structural and organizational changes within the financial services organization had facilitated the transition to SAFe 5.0. The emphasis on cross-functional teams, integration of diverse skills, and a shift towards a more agile and customer-centric approach highlighted the critical role of structure and organization in achieving organizational agility.

6.3.5. Technology as an Agile Enabler

The Enterprise Solution Delivery (ESD) competency in SAFe 5.0 consists of three dimensions: Lean Systems and Solution Engineering, Coordinating Trains, and Suppliers, and continuously Evolve Live Systems. In line with ESD, respondents determined that the organization had the necessary technology and integration capabilities to provide value to customers rapidly but faced a global skills shortage in IT. Adapting microservices technology was prevalent to reduce dependencies and enhance cost-effectiveness. Adapting microservices enabled the transition to SAFe 5.0 as the organization had to architect for scale, modularity, reliability, and serviceability. The organization prioritized continuous enhancements, automation, and mobility to remain competitive. Collaboration and communication tools fostered integration within teams. Azure DevOps and technology trends sped up development and promoted agility. Challenges in coordination led to delays in delivering customer value. Streamlining processes and coordination were essential. The findings around the technology sub-theme as an Agile Enabler were as follows:

- **Technology Availability vs. Skills Shortage:** Res 1 noted that an organization's robust technology infrastructure is essential for delivering customer value. They highlighted a global IT skills shortage that hindered the effective utilization of these technologies. By acknowledging the global IT skills gap, the organization recognized the need to mitigate it through comprehensive training programs in SAFe methodologies, fostering a workforce capable of effectively leveraging

advanced technologies. The training aligns with SAFe 5.0's emphasis on continuous learning and adaptation.

"Our organization definitely does have the technology and integration to deliver value to customers fast, I just think we're struggling with proper skills to consume that technology to deliver." – Res 1

- **Adoption of Microservices and System Integration:** Res 10 and Res 9 described the transition to microservices technology, facilitating better system integration and reducing dependency on a single enterprise service bus (ESB) as key enablers of technology, thus by extension impacting the transition to SAFe 5.0. This change aided in the efficient delivery of diverse products and services. Res 9 pointed out the necessity for continuous product and service development improvement, especially in harnessing microservices for efficient and cost-effective customer value propositions.

"We've adopted a technology landscape... with microservices technology, which is really able to reduce dependency on a single ESB." – Res 10

"From a product and services perspective, we still have significant room for improvement... in creating CVPs quickly and introducing them into the market." – Res 9

- **Continuous System Enhancements and Automation:** Res 11, Res 12, and Res 7 reported ongoing enhancements in systems and infrastructure, including the automation of deployments, which is crucial for SAFe 5.0 continuous integration and deployment, thereby increasing agility. Continuous integration forms part of ESD and should be applied as early as possible.

"There's been a lot of improvement... in automated deployments, contributing to delivering faster continuous integration and deployments." – Res 12

- **Mobility and Accessibility for Agile Work:** Res 13 emphasized the importance of mobile technology and system accessibility, which allow them to work flexibly and respond swiftly to stakeholder needs. Flexibility is emphasized in SAFe 5.0 and is essential for collaboration and communication across teams and ARTs.

"I'm able to be mobile and work from anywhere because I have access to systems that enable me to analyze features easier, design, and provide solutions." – Res 13

These findings demonstrated the relationship between technology and organizational agility in transitioning to SAFe 5.0 in a large financial institution. While the organization possessed robust technological

capabilities, challenges such as skill shortages, integration complexities, and continuous improvement and coordination remained critical to address to achieve enhanced agility.

6.4. Agile Capabilities

6.4.1. Response Capabilities

To transition from SAFe 4.5 to SAFe 5.0 effectively, large-scale financial organizations must develop agile capabilities to respond to the ever-evolving market changes and technological advancements. Fostering continuous innovation and learning in the organization requires teams to be adequately equipped to conduct ongoing research and development. In the interviews, respondents highlighted the importance of constant research, business case development, and awareness of market trends to stay competitive. These insights offered a multifaceted view of the challenges and opportunities inherent in the organization's journey towards improved agile capabilities. Despite existing efforts and strategies to adapt to market changes, obstacles such as internal resistance and perceived innovation deficit were evident. The responses underscored the importance of a proactive, agile approach to technology adaptation and market responsiveness, aligning with the strategic goal of agility in the organization's evolution.

6.4.2. Sensing Capabilities

Transitioning to SAFe 5.0 requires organizations to develop enhanced sensing capabilities that enable them to respond swiftly to evolving market needs and technological advancements. Developing sensing capabilities is crucial for organizations to navigate the complexities of delivering value in a customer-centric competitive market. In line with customer centricity in SAFe 5.0, the case organization engaged with customers through extensive research, and analyzing data were vital strategies to align with customer needs and continuously improve services across various entities within the organization. The findings around the sensing capabilities sub-theme as an Agile Capability were as follows:

- **Proactive and Reactive Customer Engagement:** There was a recurring emphasis on balancing proactive and reactive approaches to customer engagement, as highlighted by Res 1, Res 10, and Res 13. This balance was crucial in addressing customer challenges and effectively leveraging feedback. The design thinking sessions emphasized by SAFe 5.0 involve empathizing with customers' pain points and using those highlighted pain points to address customer challenges proactively.

"We experience their issues on a daily basis... We tried to work closely with our customers to incorporate their feedback into our future design." – Res 1

"I think opportunities to sort of perhaps make that more evolved...to be able to detect issues or challenges based on trends." – Res 10

"...noting down that there is something wrong with a process that we are doing." – Res 13

- **Integration of Digital and Traditional Feedback Mechanisms:** As Res 8 and Res 9 discussed, transitioning from traditional to digital methods for capturing feedback is crucial for enhancing the organization's responsiveness and agility. Enabling customers to provide feedback via electronic channels (Mobile App, Internet Banking, SSK, etc.) allows the organization to receive crucial feedback conveniently from customers. Enablic digital feedback mechanisms are compared to the traditional paper-based process in branches or sending bulk emails.

"...we need to get to a point where these capturing or sensing what the challenges are, has to be real time." – Res 8

"...feedback components which the CVP team is doing. So getting customer feedback, actually engaging with customers." – Res 9

- **Research and Data-Driven Decision-Making:** Extensive research and data analysis was vital for understanding customer interactions and improving services, as Res 2, Res 5, and Res 7 indicated. This research

enables customer-centricity and better decision-making, which aligns with SAFe 5.0.

"...noticing the matrix to be asked to keep track of how long does it take to open an account?...So I think that sensing is mostly been done through that sort of researching." – Res 2

"...predictive analysis, and whether we have that capability...A lot of the times we are reactive to things that's already happening to us or that's happening to our customers." – Res 5

"...they do extensive research around the ease of doing business. These insights feed back into the organization when we're developing our solutions." – Res 7

- **Leveraging Technology for Enhanced Sensing:** Leveraging advanced technologies such as AI and machine learning to sense customer needs and trends was a focus area highlighted by Res 6, Res 10, and Res 12. Leveraging AI and Machine learning aligns with SAFe 5.0's emphasis on customer-centricity and agility, enabling a more responsive and adaptive organizational approach to a rapidly evolving business environment.

"...if you look at the reviews, right of the mobile app, you can see it actually gets like…I think was really rated badly. But now the stars are like, I think that's a four star rated app..." – Res 6

"...based on trends, based on machine learning capabilities." – Res 10

"I think for now, we are still being a bit a bit reactive...we can actually be a bit more proactive when we follow like a delivery guidance where we train these people properly..." – Res 12

These findings illustrated the multifaceted approach to sensing capabilities within the organization. Balancing proactive and reactive strategies, integrating digital feedback mechanisms, conducting thorough research, and leveraging technology were key aspects that contributed to the organization's agility. These strategies were pivotal for the organization's transition from SAFe 4.5 to SAFe 5.0, underscoring the need for continuous adaptation and enhancement in sensing customer needs and trends.

6.5. Agile Practices

6.5.1. Cooperation Practices

Transitioning from SAFe 4.5 to 5.0 for large-scale financial organizations requires them to adapt agile practices to accommodate more significant organizational needs, customer-centric strategies, and a broader scope

for collaboration inclusive of suppliers. Extending engagements beyond IT into other business areas was emphasized, promoting inclusivity and effective communication throughout the organization. The findings around the cooperation practices sub-theme as an Agile Practice were as follows:

- **Collaboration Beyond Agile Teams:** Res 5 emphasized the need for enhancing engagement beyond Agile teams, indicating the existence of departmental silos that hinder effective collaboration. The organization introduced a Weekly KanBan ceremony where business users and IT discuss and collaborate on various initiatives.

"There's still a lot of different departments doing different things going in different direction" – Res 5

"If we had a platform where people could... join... to have these conversations, we could start tapping into that knowledge" – Res 8

"The rest of the organization, like retail, all the other service providers, they are not as synchronized" – Res 9

- **Organizational Practices for Engagement:** Res 7 discussed organizational practices such as recognition, feedback, and development opportunities, contributing to continuous engagement and collaboration. The organization used Sparkfolios to recognize

employees by thanking them and issuing them awards or cash. The organization used an online learning KnowB4 platform to train staff in line with continuous learning.

"We provide opportunities for learning and development" – Res 7

These findings, enriched by the respondents' perspectives, underscored the multifaceted nature of cooperation practices in Agile environments. While existing Agile ceremonies contributed to team cohesion, there was a clear need for more structured, inclusive, and technologically supported strategies to facilitate broader and more effective organizational collaboration and innovation to transition to SAFe 5.0.

6.5.2. Customer Enrichment Practices

The interviewees shared insights on how their organization ensured that the solutions they developed were desirable, feasible, and viable for customers. They also mentioned various tools and techniques to gather customer feedback, conduct market research, feasibility studies, and design thinking to understand customer needs and preferences. The organization had a comprehensive process to assess sustainability, quality, and financial viability before implementing new projects. They also acknowledged the need for ongoing improvements and customer engagement to refine and enhance their solutions. The findings around the customer enrichment sub-theme as an Agile Practice were as follows:

- **Customer-Centric Solution Development:** Res 2 and Res 10 emphasized that the organization focused on developing customer-centric solutions, ensuring that customer needs and experiences were at the forefront of development processes. They built customer-centric solutions by having focused design thinking sessions to understand customer needs and create solutions that add customer value, in line with SAFe 5.0. Using design thinking and customer journey mapping described by Res 8, helped identify customer pain points and develop tailored solutions. Using design thinking sessions also involved researching and getting customer feedback, as highlighted by Res 5, Res 7, and Res 9.

"We've implemented... customer-centric... what is the best experience for the customer?" – Res 2

"You look at the feasibility of it... if it can be... and of course, is it viable" – Res 10

"So at the design stage... we are using the design thinking... to be able to identify customer pains" – Res 8

"We do a lot of customer research, understanding the customer's needs" – Res 5

"We also conduct market research, feasibility studies" – Res 7

"Ensuring that we provide very good financially sound products and services to customers" – Res 9

- **Focus on Sustainable and Quality Solutions:** Res 10 and Res 14 noted that the organization prioritized the development of sustainable and quality solutions through rigorous processes and governance. Focusing on sustainable and quality solutions requires the organization to prioritize built-in quality in their software solutions delivery processes in alignment with SAFe 5.0. The case organization has various governance gates that review qualities outside of change control, which is the final gate before release to PROD.

"And then at the end of the day... you can then go ahead and implement it and then assess sustainability" (Res 10); "The business realization... if we reached the desired outcome, and sustainable" – Res 14

These findings demonstrated the organization's commitment to aligning its Agile practices with customer enrichment goals. By actively involving stakeholders, embracing design thinking, and focusing on customer-centric solutions, the organization sought to ensure that its transition from SAFe 4.5 to SAFe 5.0 aligned with its mission of enhancing organizational agility while prioritizing customer needs.

6.5.3. Employee Empowerment Practices

The interviewees expressed varying levels of alignment with agile principles within their organizations. Some emphasized the importance of continuous learning, training, and coaching to promote agility, while others highlighted challenges in fully embracing agile methodologies aligned with the SAFe 5.0 framework. Agility levels varied between departments, with some areas exhibiting more agility than others. Addressing change management and the human aspect of agility was a crucial challenge in adapting to agile practices. The findings around the employee empowerment practices sub-theme as an Agile Practice were as follows:

- **Agile Ceremonies and Knowledge Sharing:** In line with the Lean-Agile and leadership principles of SAFe 5.0, several respondents pointed to the role of agile ceremonies and knowledge-sharing sessions in empowering employees. Res 12 spoke to a community of practice sessions for scrum masters and an overall agile community of practice sessions, highlighting the role of structured interactions in fostering agility. Similarly, Res 13 underscored the value of daily defect meetings and biweekly knowledge-sharing sessions, facilitating learning and problem-solving within agile frameworks. The knowledge-sharing sessions foster a culture of continuous learning in line with SAFe 5.0, which is essential for the maturity of an organization.

"We do knowledge sharing, we say what works, what doesn't work." – Res 12

- **Change Management Challenges:** Addressing change management emerged as a critical aspect of employee empowerment in the agile transition. Res 9 highlighted the complexities arising from "different methods of training, accepting change, and working with teams," pointing to the human element as a pivotal factor in successfully adapting agile practices.

"Change management and actually enabling people to adopt to this change is definitely something we need to work on and conquer." – Res 9

- **Agile Coaching and Training:** Some respondents emphasized the need for external agile coaching within agile teams. Res 1 suggested that regular assessments by agile coaches could help identify areas needing improvement and act as a catalyst, accelerating the transformation process to SAFe 5.0. At the same time, Res 7 mentioned providing "no meeting periods" and necessary training to agile teams to aid in their transformation. Training for the agile team helps develop a deep understanding of the Lean-Agile principles and practices of SAFe 5.0.

"I believe agile coaches need to come in at least twice a year to assess our journey." – Res 1

In summary, the findings illuminated the multifaceted nature of employee empowerment practices in agile adaptation. The emphasis on continuous learning, agile ceremonies, knowledge sharing, and addressing change management challenges, coupled with departmental variability and the need for coaching, underlined the complexity of achieving organizational agility. These insights were crucial in guiding the organization's transition from SAFe 4.5 to SAFe 5.0.

6.5.4. Organizational Practices

The interviewees discussed various agile practices and methodologies adapted within their organizations to promote agility, continuous improvement, customer-centric development, rapid iterations, and cross-functional collaboration. While some expressed challenges in achieving agility across all levels, others emphasized the importance of training, collaboration, and decision-making involvement to drive agile transformation. They also highlighted the significance of embracing agile practices in IT and non-IT areas to foster a culture of agility throughout the organization. The findings around the organizational practices sub-theme as an Agile Practice were as follows:

- **Collaboration and Continuous Learning:** Res 1 emphasized returning to fundamental agile practices. They noted, "We are trying to go back to basics to incorporate the ideas of Scrum Masters to move our platform forward."

"We are trying back to basics to incorporate the ideas of Scrum Masters to move our platform forward." – Res 1

- **Involvement in Decision Making:** Res 6 called for greater participation of agile teams in strategic decision-making processes to enhance overall agility. They wanted teams to be more in the driver's seat, contributing to strategic initiatives; in this way, the organization can tap into a wealth of practical insights from the frontline workers in the agile team.

"I still feel like the teams could be more in the driver's seat." – Res 6

- **Impact of Agile on Organizational Structure:** Res 14 observed changes in the organizational structure, like creating platforms (eChannels, Process Automation, etc.) to support agile practices, particularly in the IT department, fostering a more collaborative and transparent work environment. The platforms aligned with the SAFe 5.0 Agile Product Delivery competency to ensure that value is delivered faster to the stakeholders.

"Restructuring of our IT department... encouraged people to work as teams more." – Res 14

- **Agility Beyond IT Departments:** Res 10 pointed out the necessity of extending agile practices (daily standup, retrospectives, refinement sessions, etc.) to non-IT areas, highlighting a gap in the current agility application within the organization.

"The business is not so much using the agile way of doing things." – Res 10

These findings collectively suggested that while there was a strong movement towards adapting to agile methodologies, mainly influenced by the SAFe framework, there were evident challenges in uniformly applying these practices across all organizational levels. The insights from the respondents indicated a journey towards agility that was still in progress, with a need for a more holistic integration of agile practices to realize the full benefits of the SAFe 5.0 framework.

6.6. Conclusion

This study focused on the transition from SAFe 4.5 to SAFe 5.0 and provides a detailed exploration of how organizations adapt to significant changes within the SAFe framework. While these findings are grounded in the specific context of this transition, they may offer valuable insights

into broader principles of Agile transformation that apply across different versions of SAFe, including future iterations.

The organization faced significant challenges during the transition to SAFe 5.0, particularly resistance to change and skill gaps among staff. For example, Respondent 3 noted that many teams were "*hesitant to adopt Agile principles due to comfort with traditional processes*." To address this, the organization implemented targeted change management workshops and coaching sessions, fostering greater buy-in and alignment with SAFe 5.0 practices.

Additionally, skill gaps in competencies like Lean Portfolio Management were mitigated through tailored training programs, ensuring staff across all levels were equipped to adopt new methodologies. These efforts exemplify how the organization overcame transition challenges, paving the way for a successful SAFe 5.0 implementation."

7. CHAPTER 7 – ANALYSIS AND DISCUSSION

7.1. Introduction

This chapter embarks on a comprehensive analysis and discussion, delineating the dynamics that governed the transition from SAFe 4.5 to SAFe 5.0 within the expansive setting of a large financial institution. This study examines the intricacies of agility drivers, enablers, capabilities, and practices through the lens of the research questions. The study dissected the factors influencing the transition from SAFe 4.5 to SAFe 5.0 in a large-scale financial services organization.

Central to this investigation was the dissection of empirical findings and their comparison with the broader landscape of existing literature, thereby enriching our understanding of the nuances inherent in the journey toward organizational agility. The exploration into agility drivers, the first segment in this analytical framework, prompted us to recognize the impelling forces that drove this financial institution's evolutionary leap from SAFe 4.5 to the more enhanced SAFe 5.0 framework.

The study identified critical factors like customer centricity, lean agile principles, continuous learning culture, and team and technical agility as drivers to transition from SAFe 4.5 to SAFe 5.0, resonating with established Agile principles and echoing insights from thought leaders such as (Ahmed et al., 2010; Scaled Agile, 2022). Participants highlighted the paramount importance of enhanced collaboration, underscoring the necessity of dismantling departmental silos, reflecting the Agile

Manifesto's emphasis on individuals and interactions over processes and tools (Milašinović & Fertalj, 2018).

The narrative revealed organizational mechanisms that catalyzed sustained engagement and teamwork in evaluating agile enablers. Recognition, feedback, and developmental opportunities emerged as pillars supporting this agility ecosystem, aligning with Agile methodologies prioritizing people (Abrahamsson et al., 2003).

The narrative shifted focus to agile capabilities, revealing a complex tapestry where organizations demonstrate proficiency in customer innovation through Agile practices. Stakeholder involvement in events, the development of customer-centric solutions, and the engagement of knowledge workers signified a robust commitment to agile capabilities, echoing established literature highlighting customer involvement in Agile processes (Duka, 2013). An observation introduced an element of disparity, questioning the synchronization in non-IT departments and suggesting an uneven manifestation of agile capabilities across different business segments.

The exploration culminated in agile practices, where the organization effectively integrated the SAFe 5.0 framework, leveraged technology, and enhanced collaboration through structured ceremonies. Positive sentiments towards SAFe 5.0 and technological integration align with literature that advocates using structured frameworks and technical

support in organizational transitions (Schwaber & Sutherland, 2017). The analysis in this chapter navigated the highs and lows of the organizational transformation journey to SAFe 5.0 adaptation, revealing a complex interplay of positive evidence and challenges. The paradox inherent in the findings underscored the tapestry of the agile transformation from SAFe 4.5 to SAFe 5.0, setting the stage for subsequent synthesis and formulating recommendations for the financial institution's ongoing SAFe agile transformation (Schwaber, 2004).

7.2. RQ1: What are the agility drivers for transitioning from SAFe 4.5 to SAFe 5.0 in a large-scale financial institution?

This section analyzed the findings, focusing on deciphering the agility drivers crucial for the significant shift from SAFe 4.5 to SAFe 5.0 within a large-scale financial institution. Insights drawn from interview data were interwoven with existing literature to elucidate the complex dynamics of this transformative journey, aiming for a comprehensive understanding of the organizational pivot towards increased agility.

The agility drivers for transitioning from SAFe 4.5 to SAFe 5.0 in a large-scale financial organization, are aligned with SAFe 5.0 principles and competencies. Demographic influences, including design thinking sessions, align with Customer Centricity, which puts the customer at the center of everything, whereas Digitization and technological advancement align with Technical agility competency. Agile Product

Delivery competency relates to the organizational strategy and demands, including embracing SAFe 5.0 principles for enhanced delivery when implementing a three-year strategic cycle. Lean Portfolio Management competency aligns with the potential over-responsiveness and market alignment driver. Overall, the market as an agility's drivers from transitioning from SAFe 4.5 to SAFe 5.0 for large-scale organizations are customer centricity, team, technical agility, lean agile leadership, agile product delivery, and lean portfolio management (Duka, 2013; Scaled Agile, 2022).

The linking between the agility drivers to the SAFe 5.0 principles or competency is highlighted in the **Table 2** below:

Agility Driver	SAFe 5.0 Principal or Competency
Budget and Size Constraints	Lean-Agile Principles
Competitive Market and Agility	Lean-Agile Leadership
Continuous Competitive Analysis and Advanced Solutions	Lean Portfolio Management
Cultural Shift Towards Learning and Adaptation	Organizational Agility
Customer Engagement and Feedback Mechanisms	Customer and Stakeholder Engagement
Customer Feedback and Application of Design Thinking	Customer Centricity and Design Thinking
Customer-Centric Product Development	Customer Centricity and Design Thinking
Digital Transformation	Lean-Agile Operations
Digitalization and Technological Advancement	Technical Agility
Embracing SAFe for Enhanced Delivery	Agile Product Delivery
Ensuring Service Parity with Competitors	Customer Centricity and Design Thinking
Influences of Demographics on Market Responsiveness	Customer Centricity
Internal Process Optimization	Lean Portfolio Management
Legacy Systems and Processes	Built-In Quality
Organizational Strategy and Market Demands	Agile Product Delivery
Potential Over-responsiveness and Market Alignment	Lean Portfolio Management
Requirements Gathering and First To Market	Continuous Learning Culture
Restructuring for Technological Adaptability	Lean-Agile Principles
Self-Sufficiency and Local Innovation	Organizational Agility
Technology Reusability and Development	Agile Product Delivery
User-Friendly and Intuitive Applications	Customer Centricity and Design Thinking

Table 2: Agility Drivers vs SAFe 5.0 Principals or Competency

7.3. RQ2: What are the agile enablers for transitioning from SAFe 4.5 to SAFe 5.0 in a large-scale financial institution?

This section examines the positive evidence, obstacles, and dynamic interaction between organizational practices and technological advancements to comprehend the agile enablers facilitating the transition from SAFe 4.5 to SAFe 5.0 within a large-scale financial institution.

In line with SAFe 5.0, a theme of continuous learning culture was identified in the data. Skills development for agile teams through various SAFe training initiatives is an enabler towards transitioning to SAFe 5.0. Another enabler for transitioning is Lean-Agile leadership, with the focus on driving adaptation to SAFe 5.0 in the organization, having stability in HR practices for agility as well as driving the agile mindset shift toward a growth mindset is a key enabler for transitioning to SAFe 5.0 in a large scale financial organization. Team and technical agility is another enabler identified in the transition with the re-engineering and standardization of processes as well as forming cross-functional teams with a diverse skill set to collaborate and deliver on initiatives (Abrahamsson et al., 2003; Scaled Agile, 2022).

The implementation of microservices and continual system enhancements and automation embedded within the large-scale

financial organization's technology stack enables the organization's Enterprise Solution Delivery capability, more specifically, the continuously evolving live systems principle of SAFe 5.0 (Scaled Agile, 2022).

The presence of silos suggested a potential gap between identifying enablers and effectively implementing them to achieve consistent collaboration (Abrahamsson et al., 2003). This challenge underscored the complex nature of organizational dynamics in a large-scale financial organization, and the mere presence of enablers does not guarantee their successful integration into the organization's fabric. Large-scale financial organizations have to put mechanisms in place to hinder any silo creation within the organization, as it can inhibit the transitioning process to SAFe 5.0.

Addressing this challenge necessitates a deeper examination of the underlying causes behind departmental silos. It calls for a critical assessment of existing structural and cultural barriers that impede the translation of practices into enablers. Literature on organizational change and Agile transformation provided insights into strategies for dismantling silos and fostering a culture of cross-functional collaboration (Ahmed et al., 2010).

The alignment of these findings with the Agile Manifesto's emphasis on responding to change encouraged organizations to view enablers as adaptable tools rather than rigid frameworks (Ahmed et al., 2010).

The linking between the enablers to the SAFe 5.0 principles or competency is highlighted in the **Table 3** below:

Agile Enabler	SAFe 5.0 Principal or Competency
Addressing Skill Gaps	Lean-Agile Leadership & Continuous Learning Culture
Adoption of Microservices and System Integration	Enterprise Solution Delivery (Lean Systems and Solution Engineering)
Agile Mindset Across the Organization	Lean-Agile Leadership
Agile Mindset, Customer-Centricity, and Broader Organizational Adaptation	Lean-Agile Leadership & Organizational Agility
Alignment between IT processes and Business Processes	Lean-Agile Leadership & Organizational Agility
Continuous Learning and Training	Continuous Learning Culture
Continuous System Enhancements and Automation	Enterprise Solution Delivery (Continually Evolve Live Systems)
Cross-Departmental Collaboration	Organizational Agility
Cross-Functional Agile Integration	Team and Technical Agility
Flatter Organizational Structures	Organizational Agility
Formation of Cross-Functional Teams and Integration of Diverse Skills Sets	Team and Technical Agility
Global Collaborative Infrastructure	Agile Product Delivery & Team and Technical Agility
Incorporation of Agile Ceremonies and Practices	Agile Product Delivery & Continuous Learning Culture
Mobility and Accessibility for Agile Work	Team and Technical Agility
Operational Efficiency in Agile Networks	Team and Technical Agility & Lean-Agile Leadership
Process Re-engineering and Standardization	Team and Technical Agility & Lean Portfolio Management
Role Adaptation to SAFe 5.0	Lean-Agile Leadership & Team and Technical Agility
Role of Leadership and Organizational Support	Lean Portfolio Management
Skill Development for Agile Teams	Lean-Agile Leadership & Team and Technical Agility
Stability in HR Practices for Agility	Lean-Agile Leadership
Standardization and Process Refinement	Enterprise Solution Delivery
Technology Availability vs. Skills Shortage	Continuous Learning Culture

Table 3: Agile Enabler vs SAFe 5.0 Principals or Competency

7.4. RQ3: What agile capabilities are needed by a large-scale financial institution to transition from SAFe 4.5 to SAFe 5.0?

Examining the agile capabilities of the organization during the transition from SAFe 4.5 to SAFe 5.0 was crucial to evaluating the capabilities a large-scale organization needs for the transition. This section provides a detailed analysis, drawing correlations with existing literature to explore

the relevance of these capabilities in transitioning from SAFe 4.5 to SAFe 5.0 (Schwaber, 2004).

Large-scale organizations need to have a continuous learning culture embedded within the organization as it enables the organization to have the response capability to respond to market trends and competitive pressures swiftly. The SAFe 5.0 Agile Product Delivery competency is an agile capability that embeds proactive new technologies that enable the organization to respond quickly to market changes. Integrating digital and traditional feedback mechanisms is also a crucial agile capability for large-scale organizations transitioning to SAFe 5.0. The involvement of team members in Agile services is an essential factor in ensuring their active participation in decision-making processes and utilizing insights from frontline workers to gain a direct understanding of customer experiences and needs, aligning with the customer-centricity competency of valuing people and interactions over processes and tools (Hass, 2007; Scaled Agile, 2022).

Positive evidence emerged from the findings, revealing that large-scale financial organizations' customer innovation initiatives through Agile practices align with the SAFe5.0 customer centricity competency highlighted by (Raharjo & Purwandari, 2020). The focus on continuous improvement, delivery of valuable solutions, and customer segmentation further supported the large-scale financial organization's commitment to enhancing agile capabilities (Scaled Agile, 2022).

In conclusion, assessing agile capabilities revealed a multifaceted situation within the organization. While commendable practices align with agile competencies, namely Agile Product Delivery, Lean-Agile Leadership, and continuous learning culture, achieving consistency necessitates strategic reflections for comprehensive agility. This section provides valuable insights for practitioners and organizational leaders seeking to navigate the complexities of agile transformations within large institutions using agile capabilities.

The linking between the enablers to the SAFe 5.0 principles or competency is highlighted in the **Table 4** below:

Agile Capability	SAFe 5.0 Principal or Competency
Addressing Innovation Deficit	Organizational Agility
Business Case Development and Market Trends Awareness	Lean Portfolio Management
Continuous Innovation and Learning	Continuous Learning Culture
Integration of Digital and Traditional Feedback Mechanisms	Agile Product Delivery
Overcoming Internal Resistance	Lean-Agile Leadership
Proactive and Reactive Customer Engagement	Customer Centricity
Proactive Technology Adoption	Agile Product Delivery
Research and Data-Driven Decision-Making	Continuous Learning Culture

Table 4: Agile Capability vs SAFe 5.0 Principals or Competency

7.5. RQ4: What agile practices must a large-scale financial institution adapt to transition from SAFe 4.5 to SAFe 5.0? adapt

This section explored the agile practices essential for transitioning from SAFe 4.5 to SAFe 5.0 within a large financial organization, examining the

positive evidence and challenges encountered. By delving into respondents' perspectives and aligning them with existing literature, we aimed to illuminate the path forward in adapting agile practices for successful organizational transformation.

The Built-in quality SAFe 5.0 principle is an agile practice that large-scale financial organizations must adapt to transition to SAFe 5.0. Built-in quality focuses on building sustainable and quality solutions that are built for scale and are continuously evolving. These practices aligned with established agile principles emphasizing regular reflection, critique, and continual improvement (Hass, 2007).

Collaboration is another practice that organizations need to adapt and leverage in the transition to SAFe 5.0. Large-scale organizations should enable a collaborative environment beyond the IT department or Agile Feature team. The collaborative practice adaption aligns with the SAFe 5.0 competency of Team and Technical Agility and Organizational Agility. This approach resonated with previous research by Fernandez and Fernandez (2008), suggesting integrating technology into agile teams to enhance communication and collaboration. This finding was in harmony with literature emphasizing the importance of adapting recognized structured frameworks, such as SAFe 5.0, for scaling agility in large organizations.

Large-scale organizations address the change management challenges during the transition of SAFe 5.0 by adapting the SAFe-Agile leadership competency. Change management challenges is evident in departmental disparities, indicating that not all parts of the organization uniformly embraced agile practices. This discrepancy could stem from variations in organizational culture, resistance to change, or differing levels of comprehension and commitment to agile principles across departments. Adapting the Lean-age leadership practice enables large-scale organizations' managers, executives, and other leaders to provide a foundation for employees to accept changes during transitioning with minimal resistance. This challenge echoed existing literature emphasizing the importance of fostering an agile culture throughout the organization (Ahmed et al., 2010).

Aligning these findings with existing literature underscored that the positive evidence resonated with established SAFe 5.0 competencies: Team and Technical Agility, Organizational Agility, Agile Product Delivery, lean agile leadership, and continuous learning culture. Conversely, the organization's challenges in achieving uniform agile practices across departments echoed the difficulties of scaling agility in large organizations discussed in the literature. (Ahmed et al., 2010) emphasized that true organizational agility requires a comprehensive strategy beyond IT departments.

Large-scale organizations must consider a unified approach to agile practices to overcome challenges and capitalize on positive practices. A unified approach involves implementing comprehensive training programs, launching targeted initiatives to promote a uniform understanding of agile principles across departments, including SAFe 5.0, and establishing mechanisms for sharing successful practices organization-wide. The examination of agile practices revealed a division of positive evidence and challenges. While there was a strong inclination towards agile ceremonies and technological integration, challenges in achieving consistency across departments necessitated strategic interventions. This section provided valuable insights for organizational leaders and practitioners aiming to orchestrate a successful transition to SAFe 5.0 within a large-scale financial organization.

The linking between the enablers to the SAFe 5.0 principles or competency is highlighted in **Table 5** below:

Agile Practice	SAFe 5.0 Principal or Competency
Agile Ceremonies and Knowledge Sharing	Lean-Agile Leadership & Continuous Learning Culture
Agile Coaching and Training	Lean-Agile Leadership & Continuous Learning Culture
Agility Beyond IT Departments	Organizational Agility
Change Management Challenges	Lean-Agile Leadership
Collaboration and Continuous Learning	Team and Technical Agility
Collaboration Beyond Agile Teams	Team and Technical Agility & Organizational Agility
Customer-Centric Solution Development	Customer Centricity & Agile Product Delivery
Focus on Sustainable and Quality Solutions	Built-in Quality
Impact of Agile on Organizational Structure	Agile Product Delivery
Involvement in Decision Making	Lean-Agile Leadership
Organizational Practices for Engagement	Continuous Learning Culture

Table 5: Agile Practice vs SAFe 5.0 Principals or Competency

7.6. RQ1, RQ2, RQ3 & RQ 4 Competing Priorities

In transitioning from SAFe 4.5 to SAFe 5.0 within a large-scale financial organization, examining the competing priorities across the four research questions (RQ1, RQ2, RQ3, and RQ4) was critical. These competing priorities, where positive evidence clashed with challenges, provided a different perspective on the complexities inherent in organizational agility.

7.6.1. Competing Priority 1: Technology as Both Driver and Challenge

The potential of technology as a driver for engagement and collaboration, particularly in a post-COVID setting, aligns with literature advocating the strategic use of technology to enhance communication within agile teams (Duka, 2013). Challenges in fully implementing agile practices outside of IT highlight a gap in large-scale financial organizations' agile methodology application. This competing priority illustrated how the benefits of technology as an agility driver conflicted with the challenges of its uniform adaptation across organizational segments. Large-scale organizations can mitigate this competing priority by adapting to the Agile Product Delivery competency, which emphasizes leveraging technology, automation, and modern engineering practices to enhance the delivery capability of Agile feature teams or ARTs (Scaled Agile, 2022)

7.6.2. Competing Priority 2: Cross-Department Collaboration vs. Silos

Recognition, feedback, and development opportunities emerged as enablers for sustained engagement, resonating with agile guidelines prioritizing people-centric approaches (Abrahamsson et al., 2003). In contrast, the highlighted presence of departmental silos disrupting effective collaboration in large-scale organizations, which enables customer centricity, is deemed challenging to achieve. Dismantling silos demonstrated the difficulty large-scale organizations face during the transitioning process to SAFe 5.0. Adapting the Lean Portfolio Management competency of SAFe 5.0 aid in breaking down the silos. Breaking down the silos can be achieved by accomplishing strategy and investment funding, making sure the portfolio is well funded to create and maintain solutions. The next step from LPM is to have lean governance in place and embedded in Agile Portfolio Operations, which coordinates and supports decentralized program execution (Scaled Agile, 2022)

7.6.3. Competing Priority 3: Customer-Centric Capabilities vs. Non-IT Disparities

Large-scale organizations find it challenging to adapt to a customer-centric culture. Although customer centricity is a key enabler, driver, practice, and capability in transitioning to SAFe 5.0, not having other non-IT departments fully adapting to the customer centricity and agile culture

inhibits the transition and adapting of SAFe 5.0. This competing priority suggests that while strong customer-centric capabilities existed in certain areas, achieving uniformity across non-IT segments remained challenging. A continuous learning culture combined with lean portfolio management can help mitigate this challenge by having deliberate efforts in place to learn SAFe 5.0 and customer-centricity principles. Embedding a customer-centric culture cannot be achieved without the support of executive leadership in large-scale financial organizations.

7.6.4. Competing Priority 4: Embracing Agile Practices vs. Departmental Disparities

Evidence of willingness to adapt to agile practices, such as technological integration and ceremonies, aligned with literature on the importance of agile practices for organizational agility (Leffingwell, 2010; Murugaiyan & Balaji, 2012). Departmental disparities and limited readiness beyond the IT department make it challenging for large-scale organizations to transition to SAFe 5.0 and embrace agile practices. Lean Portfolio Management, a Continuous Learning Culture, and Agile Product Delivery competencies aid large-scale financial organizations in helping employees embrace the changes by creating ARTs and involving business stakeholders. At the same time, make sure that the trust and support also come from the top down, namely Executives, Managers, etc. (Scaled Agile, 2022).

7.6.5. Synthesizing Competing Priorities: A Balancing Act

These competing priorities underscored the delicate balancing act large-scale organizations must navigate when transitioning to SAFe 5.0. While positive evidence highlighted the potential benefits of technology, enablers, customer-centric capabilities, and agile practices, challenges such as departmental silos and inconsistencies presented formidable barriers.

7.7. Conclusion

In summary, transitioning from SAFe 4.5 to SAFe 5.0 within the large financial institution unveiled a dynamic landscape where drivers, enablers, capabilities, and practices intersected with challenges. The technological drive, identified as a significant agility driver, was coupled with challenges in its uniform adaptation across business segments. Enablers like recognition and development opportunities coexisted with challenges related to departmental silos, necessitating a strategic approach for effective collaboration. The organization demonstrated capabilities in customer-centric innovation through Agile practices but faced challenges in achieving consistency in non-IT areas (Abrahamsson et al., 2003). There was a marked willingness to adapt to agile practices, emphasizing ceremonies and technological integration, yet departmental differences persisted. This fragile balance between positive evidence and challenges underlined the complexity of the SAFe 5.0 transition. Strategic alignment, fostering a collaborative culture, achieving uniform customer-centric capabilities, and embracing

comprehensive agile practices emerged as goals for organizational success, in line with the seven SAFe 5.0 core competencies for business agility (**Figure 11)**. Future research should focus on these specific areas to assist organizations in a smoother and more comprehensive transition to SAFe 5.0.

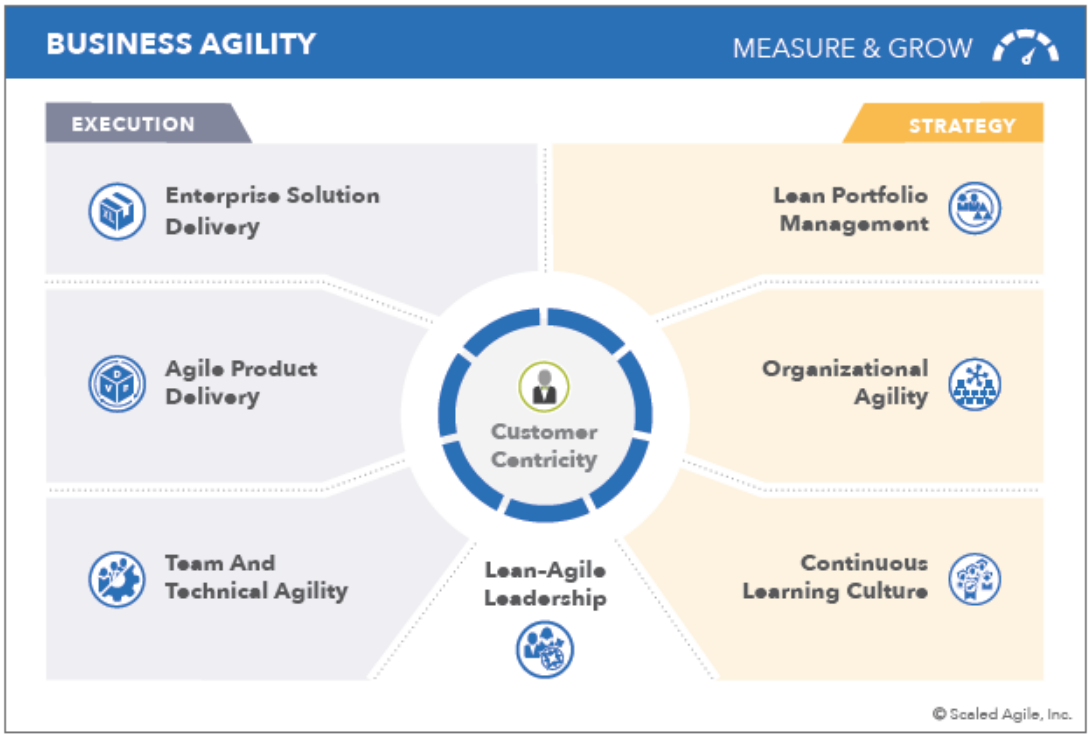

Figure 11: Seven Core Competencies of SAFe 5.0 (Scaled Agile, 2022)

8. CHAPTER 8 – CONCLUSION AND RECOMMENDATIONS

8.1. Overview

The final chapter effectively acts as a summary and directional guide, aligning well with the primary focus of the study: the factors influencing the transition from SAFe 4.5 to SAFe 5.0 in a large-scale financial organization. This alignment is consistent with the research objectives, particularly in exploring the multifaceted factors that demand consideration during this transformative journey.

8.2. Research Problem & Questions

Addressing the urgent need for a smooth transition from SAFe 4.5 to SAFe 5.0, this research has illuminated various factors critical to the success of such a transformation. The study's in-depth examination has answered the primary research question by identifying the key drivers, enablers, and capabilities required to foster organizational agility in a large-scale financial institution. This exploration has bridged the gap between theoretical understanding and practical application in agile transformation.

8.3. Summary of Findings

The investigation revealed several key themes: the critical role of enhanced collaboration in Agile Product Delivery, the significance of dismantling departmental silos with the support of Lean Portfolio Management, and the importance of technology as an agile enabler for transitioning to SAFe 5.0 for large-scale organizations. The study also

highlighted large-scale financial organizations' strengths in customer innovation by embedding a continuous learning culture and adapting design thinking principles to deliver customer value.

8.4. Limitations of Study

This single case study findings may not be broadly generalized to other large-scale financial organizations due to the different economic environments in which they operate and the uniqueness of their culture. The data collection and findings can potentially bias the researcher's perspectives, potentially impacting the objectivity of the findings. Time and resource constraints were also a limitation to the study as a case study is time-consuming and resource intensive, thus limiting the scope of the study. Lastly, respondents can be influenced by the desire to present the organization's transition in a positive light.

8.5. Contributions to Research/Academics

The chapter's emphasis on the contribution to academic research resonates by delving into the complexities involved in transitioning from SAFe 4.5 to SAFe 5.0 in large-scale financial organizations. Examining a large-scale financial organization within a specific context provides a detailed case study that enriches the book of knowledge on agile and the factors needed to transition to SAFe 5.0.

Furthermore, the study makes a methodological contribution by employing a qualitative research paradigm rooted in interpretivism and

constructivism to explore the transition from SAFe 4.5 to SAFe 5.0. The in-depth case study approach provided rich, context-specific insights into organizational agility, capturing participants' lived experiences that quantitative methods might overlook. By combining semi-structured interviews with supplementary organizational documents, the study ensured a holistic understanding of the transition. This approach highlights the value of qualitative methods in exploring complex, dynamic organizational changes, offering a replicable framework for future Agile transformation research.

8.6. Contributions to Practice/Practitioners

The findings of this study contribute significantly to practice by offering actionable insights that organizations can apply to facilitate smoother transitions from SAFe 4.5 to SAFe 5.0. These contributions include practical recommendations such as investing in tailored training programs to address skill gaps, strengthening leadership commitment to foster Lean-Agile leadership behaviors, and enhancing communication and collaboration to align teams with organizational objectives.

Additionally, the study underscores the importance of aligning IT and business strategies through value stream mapping and leveraging pilot projects to build confidence and reduce risks during the transition. Focusing on critical elements such as customer centricity, lean portfolio management, a continuous learning culture, and Agile product delivery with built-in quality, the study provides practitioners with a

comprehensive strategy to navigate the complexities of transitioning from SAFe 4.5 to SAFe 5.0.

8.7. Recommendations for Future Research

The suggestions for future research extend the scope of the current study and align with the overarching theme of exploring the complexities of transitioning to SAFe 5.0. The recommendation for future research is to enhance the Organizational Agility Conceptual Model and align it with SAFe 5.0 factors influencing organizational agility during the transitioning process of SAFe.

To fully understand the factors influencing transitions across different stages of SAFe, future research could explore transitions to other versions, such as SAFe 5.5 to SAFe 6.0. This comparative approach would help determine which factors are universal and version-specific, providing a more comprehensive understanding of SAFe transformations.

8.8. Conclusion

The study has meticulously examined the strategic complexities of transitioning from SAFe 4.5 to SAFe 5.0, delving into the dynamics of agility drivers, enablers, and capabilities. Beyond addressing technical aspects, it has revealed the critical role of organizational dynamics in the success of such transformations. The insights gained contribute to

academic discourse and offer practical applications, encompassing leadership, culture, and technology. This research paves the way for future studies and ongoing advancements in agile transformations within large-scale financial institutions.

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10. APPENDICES

10.1. Appendix A – Request for Permission

Memo

To:	Managing Director and Group Managing Director
From:	Chris Hoeseb
cc:	Group Chief Information Officer and Executive Enterprise Risk
Date:	22 March 2022
Re:	Permission To Interview Employees for master's Research Study

1. This memo serves as a request for permission to interview employees in the Bank and Group IT in aid of my master's in information systems dissertation at the University of Cape Town.

2. The main objective of this study is to explore the "*Implications of changes made in the SAFe 5.0 framework on a large-scale financial services organization and their quest towards organizational agility*".

3. Organizational agility is defined by Scaled Agile Inc. as "*How Lean-thinking people and Agile teams optimize their business processes, evolve strategy with clear and decisive new commitments, and quickly adapt the organization as needed to capitalize on new opportunities*".

4. The target audience for the study are contained in **Annexure A** and all of them will be required to sign a consent form to participate.

5. Candidates will not be requested to supply any identifiable information, ensuring anonymity, and none of the information provided will be attributed to the candidates or organizations by name in the dissertation or any other publication.

6. The name of the organization will be kept confidential and participation in this study is strictly voluntary with the candidates given the opportunity to withdraw from it at any time.

7. The findings from the study will be presented to the University of Cape Town for academic purposes only and a final copy of the dissertation can be made available to the bank and group after completion of my studies.

Comments			
Authorization			
Title	**Name**	**Date**	**Signature**
Researcher	Chris Hoeseb		
Chief Information Officer			
Executive: Enterprise Risk			
Managing Director			
Group Managing Director			

ANNEXURE A – Target Audience for Interviews

1. Portfolio level roles
   a) Executives
   b) Epic Owners
   c) Enterprise Architects

2. Essential Level Roles
   a) Business Owners
   b) Release Train Engineers
   c) Solution Architect
   d) Scrum Masters
   e) Agile Team Members (Developers, Testers, Feature Analyst, etc.)
   f) Product Owners

10.2. Appendix B – Interview Questions / Protocol

Dimension	Sub-Dimension	Question
Agility Drivers	Market	Do you think the organization is responsive to the market's shifting demands? And Why?
	Competition	What, if anything, did your organization do in practice to advance agility and remain competitive?
	Customer Preferences	How does your organization create positive customer experiences through its products and services?
	Technology	Do you think your organization delivers features and solutions faster than the competition? And Why?
	Social Factors	How do your organization's systems cater to routine regulatory oversight to various compliance requirements?
Agile Enablers	Structure and Organization	How does the organizational structure enable the organization to bring together

		professionals from different skill sets and form cross-functional teams and trains organized around customer value?
	Processes	How do your organizational processes that deliver and support business solutions enable agility?
	Technology	How does your organization's technology landscape enable you to integrate and deliver value to customers continuously?
	Human Resources	How do human resources practices in your organization enable agility?
	Network	How does your organization support local and distributed development and the intense interaction and cooperation required?
Agile Capabilities	Sensing capabilities	How does your organization sense the challenges customers face

		using existing processes and systems?
	Response capabilities	How does your organization respond to market changes and emerging opportunities with innovative, digitally-enabled business solutions?
Agile Practices	Organizational Practices	What practices did your organization adopt to become more Agile?
	Employee empowerment practices	What agile practices help employees at every level learn and grow so that the organization can transform and adapt to an ever-changing world?
	Customer enrichment practices	How does your organization ensure a solution/product for customers is desirable, feasible, viable, and sustainable?
	Cooperation practices	How does your organization foster continuous engagement between employees?

10.3. Appendix C – Consent to Participate

Department of Information Systems
Leslie Commerce Building
Engineering Mall, Upper Campus
OR
Private Bag X3 · Rondebosch · 7701
Tel: +27 (0) 21 650 2261 Fax: +27 (0) 21650 2280
Internet: http://www.commerce.uct.ac.za/informationsystems/

Consent to Participate in Research Study entitled "Implications of Changes made in the SAFe 5.0 Framework on a Large-Scale Financial Services Organization and their quest towards Organizational Agility"

In signing below, I hereby grant consent to participate and be interviewed for the purpose of this research study as described in the accompanying cover letter.

I acknowledge that:

- My participation is voluntary and can be withdrawn at any time.
- All information I provide will only be used for this study.
- Any information I provide may be used in an anonymous form in the final thesis report.

In addition,

I grant permission for the audio of any interview I participate in, related to this study to be recorded.

□ Yes □ No

I do not grant permission for the audio of any interview I participate in to be recorded.

□ Yes □ No

(Please tick whichever option applies.)

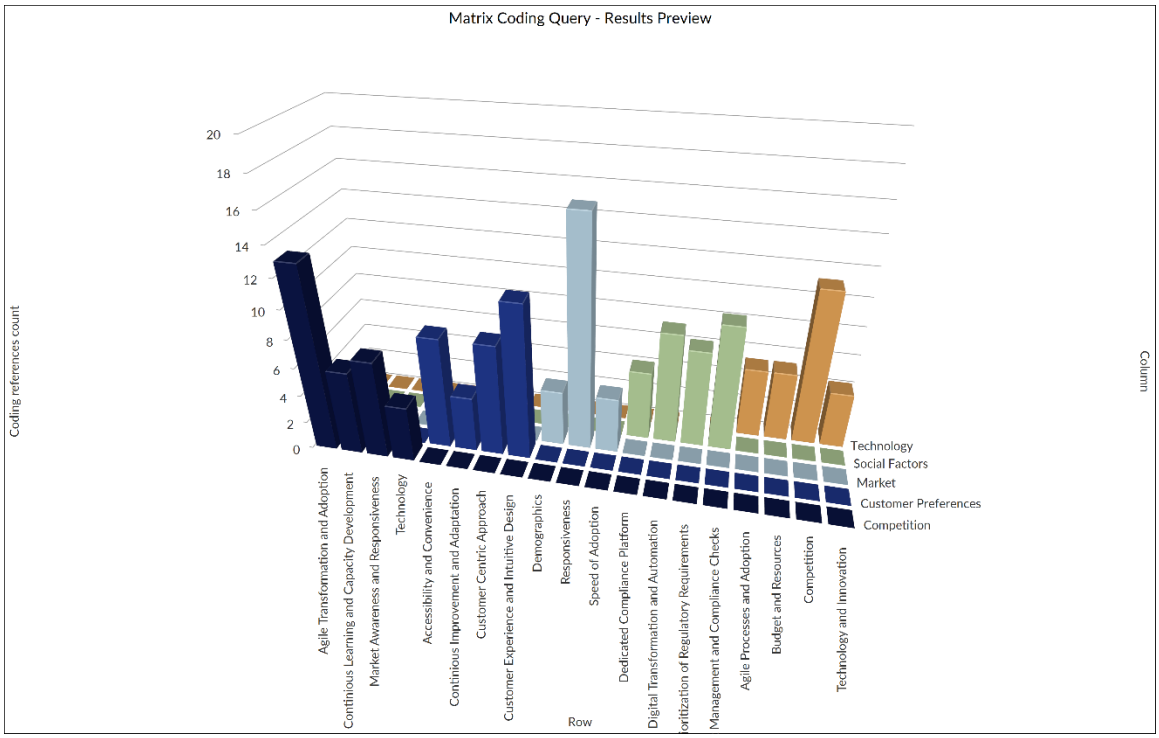
I do so understanding that any audio recording made will be anonymous and will only be used for this research study.

Signature: _____

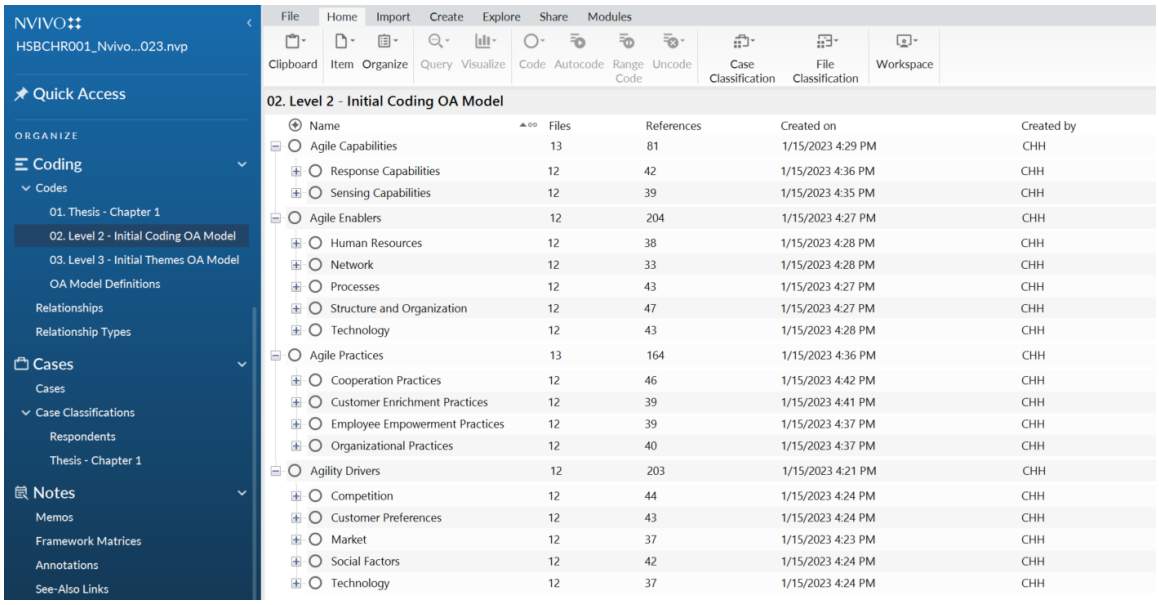
Name: _____

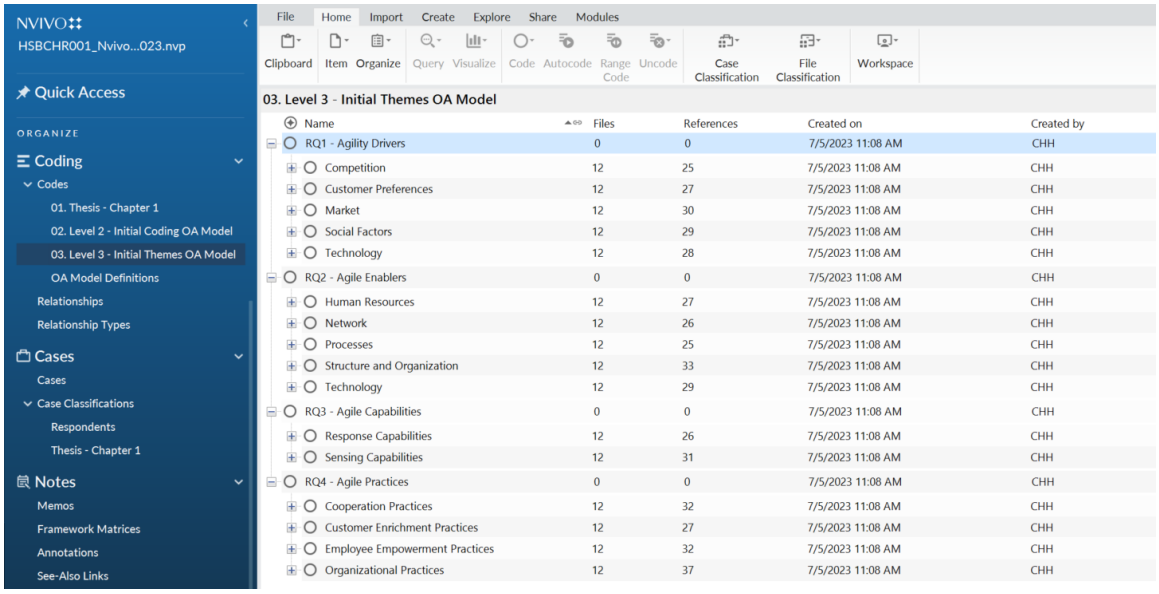
Date: _____

10.4. Appendix D – Matrix Coding Query – Agility Drivers



10.5. Appendix E – Level 2 & Level 3 Initial Coding





10.6. Appendix F – Agile Capabilities Theme – Code Comparison