ANARA BEKMUKHAMBETOVA:

CHANGE MANAGEMENT'S ROLE IN THE EVOLUTION OF FINANCIAL INSTITUTIONS IN KAZAKHSTAN AND HUNGARY

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DOCTORAL DISSERTATION

Supervisors: Deutsch Nikolett, PhD

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This dissertation represents the culmination of years of research and reflection on the role of change management in financial institutions, particularly in the context of Kazakhstan and Hungary. The rapid technological advances, regulatory challenges, and evolving customer expectations in the banking sector have provided a rich backdrop for this study. The exploration of change management models and their application in two distinct banking environments has been both a professional and personal journey, deeply influenced by my experiences in the financial sector.

I would like to express my deepest gratitude to my supervisor, Prof. Nikolett Deutsch, for her invaluable guidance, insightful feedback, and steadfast support throughout this research. Her expertise in both theoretical and practical aspects of change management has been fundamental to shaping the direction and depth of this study. I am particularly grateful for her encouragement to explore various models and to critically analyze the change processes within the financial institutions of Kazakhstan and Hungary.

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A sincere thank you goes to the participants of my interviews, whose contributions were vital for the empirical analysis. Their perspectives on change management in the banking sectors of Kazakhstan and Hungary enriched this research, providing practical insights into the challenges and strategies in both countries.

This study was also interrupted during the COVID-19 pandemic, a period that brought unique challenges but also unexpected opportunities for reflection. The disruptions forced me to rethink my research approach and allowed me to slow down and appreciate the process in new ways.

On a personal note, I am immensely grateful to my family. To my mother and uncle, whose enduring love, wisdom, and support have been my guiding light through this entire journey. This dissertation is also dedicated to the loving memory of my grandmother and grandfather, whose legacy continues to inspire me every day.

I also want to acknowledge Chris, Saniya, Adema and Diana, whose support and companionship were a constant source of strength throughout this process. Their belief in me kept me grounded during the most challenging times.

I cannot forget my cat Audrey, who shared many sleepless nights with me. Her silent presence, curled up beside me as I worked late into the night, reminded me that I was never truly alone in this process.

CHAPTER 1 - INTRODUCTION

Change management is critical to financial institutions as this sector has to quickly adapt to technological innovation, regulatory changes, and economic volatility while maintaining operational stability and customer confidence. Aligning organizational culture with change initiatives is key to fostering employee engagement, reducing resistance, and ensuring smoother transitions (Cameron and Green, 2015). Despite the widespread occurrence of organisational change, a significant number of change initiatives fail (Vrcelj, 2023). This research seeks to find strategies and practices in change management that most effectively facilitate successful organisational change and minimise the risk of resistance within financial institutions of Hungary and Kazakhstan.

1.1 Topic selection rationale and individual motivations

Nowadays, organizations face constant changes, making change management a critical element for success. The financial sector faces rapid digital transformation, regulatory pressures, and shifting consumer expectations (Burnes, 2004). As outlined by Kontić and Kontić (2014), the banking sector faces a critical need for effective change management to ensure successful integration and adaptation. The rapid acceleration of changes in the financial and banking systems underscores the importance of successful change management as a key factor for growth and stability (Luburić, 2013). There is a need for practical and specific change management strategies in the banking sector, drawing upon empirical evidence and models from other sectors (Farkas, 2015). Change management is a complex process, but a key issue is the lack of agreement on which factors most significantly affect change initiatives. The inevitability of change has made most companies adapt and start transformation processes. For instance, Armstrong (2009) has defined change management as process of carefully planning and implementing changes within an organization to ensure a smooth transition for both people and structures. Jalagat (2015) argued that any change initiatives and efforts should align with the corporate goals and objectives to ensure business success. In the literature, similar sentiments

are shared by scholars, who examined the impact of disruptive technologies on existing market leaders, emphasizing the need for adaptive change management strategies (Bower and Christensen, 1995). In addition, Teece (2012a) discusses the importance of the dynamic capabilities of organizations, especially when adapting to technological advances. This coincides with the observations made in this study, where the dynamic capabilities of banks to manage and implement change are critical in the context of the evolution of financial technology. The concept of open innovation provides a framework for understanding how banks can capitalize on external ideas and innovations (Chesbrough, 2003).

Effective change management output is adaptation to new systems, policies, and technologies, which leads to smoother transitions and minimized disruptions and resistance (Jatobá *et al.*, 2023). According to the research (Smith, 2025), around 70% change initiatives do not achieve their intended outcomes.

The research focuses on the banking sectors of Kazakhstan and Hungary, offering a comparative lens to uncover how change management drives adaptation and performance while tackling resistance, a critical concern for financial stability. This contribution is particularly significant given the scarcity of research on change management in Kazakhstan and Hungary banking contexts, where global trends like digitalization and regulation play out uniquely.

While change management is well-documented in worldwide banking contexts, its application in Kazakhstan and Hungary remains underexplored. Kazakhstan's banking sector, buoyed by retail lending and digital growth (IFM, 2024), contrasts with Hungary's slower, EU-regulated evolution - yet both face global pressures like technological disruption. By comparing these cases, this study can refine theories of organisational change, showing how context shapes adaptation. Practically, it offers banks strategies to optimise change processes, enhancing competitiveness and resilience. This is important as financial institutions in both nations navigate rising complexity, from Kazakhstan's geopolitical risks to Hungary's regulatory burdens, making the research timely and relevant.

Kazakhstan's banking sector has undergone significant changes due to economic reforms, new banking laws, digital transformation, and efforts to enhance the overall stability and competitiveness of the sector (ERBD, 2024). In Hungary, the banking

sector faces challenges related to adapting to digital transformation and enhancing customer-centric services (Fehér and Varga, 2017). The cultural shift towards a customer-centric focus requires banks to pivot from traditional models.

The banking sector's continuous transformation - where technological innovations, regulatory demands, and economic current waves have long captivated my intellectual curiosity. This is deeply rooted in my professional journey within Kazakhstan's financial institutions. During that time in the banking system, I contributed to implementing a new development strategy alongside the Big 4 consulting, I immersed myself in the complex process of modernizing a traditional banking institution. The hours spent refining the strategy, balancing stakeholder needs and ambitious goals, demonstrated the importance of change management. Also, as part of the Transformation team at Kazakhstan's national postal system, I engaged in a transformation project, a role that demanded creativity and persistence amid resistance during the change processes. These experiences motivated me to explore the dynamics of change management more deeply. What drives successful adaptation in financial institutions, particularly in Kazakhstan's resource-driven context versus Hungary's EU-integrated framework? This question, born out of my encounters with change, is at the heart of this thesis as I seek to bring together practical and academic knowledge of how change management shapes the evolution of banking in these two different but interrelated contexts.

The novelty of the thesis lies in the focused study of change management strategies in the banking sector in Kazakhstan and Hungary. In contrast to previous studies that broadly examine change in mature markets (Cameron and Green, 2015), I focus on these two understudied contexts: an emerging post-Soviet economy and an EU-integrated economy, and compare how strategies facilitate successful change and deter resistance. This comparative approach reveals how cultural, historical, and institutional factors (e.g. Kazakhstan's Soviet legacy, Hungary's accession to the EU) determines change outcomes, offering a fresh perspective missing from the existing literature.

The significance of this study is that it has the potential to fill important gaps in both theoretical understanding and practical application, thereby providing strong justification.

From a theoretical perspective, I build on existing frameworks by adapting them to the specific contexts of Kazakhstan and Hungary. For example, I examine how normative pressures shape centralized structures in Kazakhstan compared to decentralized structures in Hungary, improving models like Kotter (1996) to account for such contextual mediators. Similarly, I explore how cultural and institutional differences affect change outcomes, extending the theory to emerging and transition economies, which are often left out of Western-centered research (Burnes, 2004).

From a practical perspective, my research offers practical implications of changes for financial institutions in Kazakhstan and Hungary. In addition, the study creates an opportunity for further research on styles of change implementation, company management, and individual transformational processes. To create a common baseline, it is necessary to look at the classic definition of change management which is, according to Moran & Brightman (2000, p.66): *"the process of continually renewing an organization's direction, structure, and capabilities to serve the ever-changing needs of external and internal customers*". While the definition of change management is constantly evolving and various interpretations exist, a well-established definition is provided by Jones (2013, p.32), who describes organizational change as *"the process by which organizations move from their present state to some desired future state to increase their effectiveness"* (Anyieni and Gidion, 2016).

1.2 Research aims and goals

The aim of this research is to understand how change management practices work in the banking sectors of Kazakhstan and Hungary, using both theoretical insights and real-world data. The study focuses on internal factors such as organizational culture (Schein, 2010), leadership styles (Kotter, 1996), and employee engagement (Lewin, 1947) alongside external drivers like technological innovations (Battisti and Stoneman, 2010; Walk, 2024), and the impact of regulatory changes within the highly regulated financial sector (BIS, 2011). These external factors, combined with economic fluctuations and market conditions, often force banks to adapt their strategies in order to remain competitive and financially viable.

Leadership in financial institutions may struggle to implement necessary changes, often focusing on their own interests rather than the organization's long-term goals, which can create misunderstandings and inefficiencies between management and staff (Jalagat, 2015). The need for change management is underscored by the accelerating pace of market and global shifts, as businesses must realign their operations to achieve success (Bugubayeva, Sansyzbayevna and Teczke, 2017). Based on my own experience in the banking and insurance sectors, this study emphasizes how traditional top-down leadership structures are evolving into more self-directed teams, which are key to adapting to technological and regulatory shifts (Beer and Nohria, 2009).

The main contribution of this study is the development of a comprehensive concept that combines key internal and external factors influencing change management in the banking sector. This concept will improve existing change management models and propose new concepts aimed at solving the unique challenges faced by developing economies such as Kazakhstan and Hungary. Focusing on both sustainability and success in change management, this study aims to provide practical recommendations that will help financial institutions improve their performance in these dynamic markets.

The goal is to analyse change management practices in Hungary and Kazakhstan, with a particular focus on how regulation, leadership and employee engagement influence the success of organisational change. To achieve this goal, the study will focus on the following tasks:

- Compare change management practices in the banking sectors of the two countries, focusing on the roles of regulation, leadership, and organisational culture in shaping these processes.
- Examine the impact of regulatory stability in Hungary and regulatory instability in Kazakhstan on the ability of the banking sectors of these countries to manage change.
- Analyse the extent to which change management practices in these two countries correspond to change management models.
- Offer practical recommendations for bank managers, policymakers, and regulators on improving change management practices, especially in developing economies.

- Contributes to academic knowledge by examining driving forces of change management influence the application of global change management frameworks in Hungaty and Kazakhstan.

These goals reflect my belief that academic research should contribute to advancing knowledge and addressing real-world challenges. The research is underpinned by three foundational pillars, each contributing to the study's overarching goal of providing both theoretical insights and practical solutions:

- Theoretical Pillar:

This pillar will draw on established change management theories and integrate these models to identify gaps and propose new frameworks that better address the needs of banking systems in emerging economies. The goal is to advance theory by reflecting on the challenges specific to the banking sectors in Kazakhstan and Hungary.

- Practical Pillar:

The practical part of the research will focus on a real-world study in both Kazakhstan and Hungary. This will involve studying financial technology adoption, regulatory aspects and its impact on the success of change management processes, comparing how each country manages these changes.

- Methodological Pillar:

The study employs a qualitative approach, using expert interviews to gain a deep understanding of real-world change management practices in the banking sector. This approach will provide empirical evidence to support both theoretical development and practical recommendations.

Each of these pillars works together to build a comprehensive research model, where the theoretical pillar informs the conceptual framework, the practical pillar connects theory with real-world applications, and the methodological pillar guides data collection and analysis.

The research also aims to offer actionable recommendations for banking practitioners, policymakers, and regulators, ensuring that the findings directly address real-world challenges and help shape the future of change management strategies in the banking sector.

1.3 Research questions

Change management involves transitioning organizations, teams, and individuals to a desired future state, aligning with strategic visions and overcoming resistance (Sirkin, Keenan and Jackson, 2005). It is an organizational process aimed at enhancing the ability of employees to accept and assimilate changes in the current environment. It involves defining and installing new values, and attitudinal and behavioral norms in the organization that support updated work methods and overcome resistance to change on individual or organizational levels. Based on this, there are the research questions, designed to comprehensively address and shed light on the overarching inquiry:

RQ1: What are the most commonly used change management strategies in the banking sectors of Kazakhstan and Hungary, and how do these strategies align with established change management models?

RQ2: How do regulatory pressures in Hungary and Kazakhstan impact the design and implementation of change management?

RQ3: How do cultural, historical, and institutional differences between Kazakhstan and Hungary (e.g., demographic profiles and technological advancements) influence the implementation and outcomes of change management strategies in the banking sectors?

RQ4: What are the critical factors affecting the implementation of innovative technologies in banks, and how do these factors influence the success of change management processes?

A qualitative approach provides a framework for understanding the realities in which business exists. Above all, to find answers to the research questions and achieve a deeper understanding of the change process by comparing two countries. Through semi-structured interviews with financial sector employees and certified change management experts, I analyse how the change process takes place, with what challenges they faced and how successfully they implement change initiatives in targeted countries.

1.4 Structure of the thesis

This thesis is organized into seven chapters, each with a distinct aim and focus. The chapters are designed to progressively develop the research questions, theoretical frameworks, empirical findings, and practical recommendations. The structure

follows a logical flow from the introduction of the topic to the conclusions drawn from the data analysis, with each chapter contributing to a comprehensive understanding of change management in the banking sectors of Kazakhstan and Hungary. The structure of the thesis is presented in Figure 1.

Figure 1 *- Thesis Outline*

Source: Author's own edition, 2024.

Chapter 1: Introduction sets the foundation for the entire thesis. It provides an overview of the research topic, explaining the significance of studying change management within the banking sectors of Kazakhstan and Hungary. The chapter introduces the primary research questions and objectives, outlining the rationale

behind the selection of these two countries for comparison. Additionally, it provides a brief overview of the structure of the thesis, preparing the reader for the in-depth analysis and discussions in the following chapters.

Chapter 2: Key Challenges of Financial Institutions presents a comparative overview of the banking sectors in Hungary and Kazakhstan, situated within the context of global financial sector developments. By analysing key indicators such as digital banking adoption, compliance cost growth, cybersecurity challenges, and institutional structure, the chapter identifies common pressures faced by financial institutions today. The overview shows that change in the banking environment is already ongoing, and highlights why structured change management approaches are increasingly necessary to support adaptation and resilience.

Chapter 3: Fintech and Innovation Disruption in Financial Institutions examines how emerging technologies such as blockchain, artificial intelligence, robo-advisors, and digital payments are transforming banking models in Kazakhstan and Hungary. The chapter shows that fintech not only creates opportunities for efficiency and financial inclusion but also forces banks to adapt their organizational culture, leadership, and operations through structured change management. It highlights the importance of balancing rapid innovation with regulatory compliance, employee readiness, and customer trust.

Chapter 4: Theoretical Foundations of Change Management in Organizational Contexts delves into the theoretical frameworks and models of change management that underpin this study. The chapter examines established models such as Kotter's 8-Step Model, Lewin's Change Model, and ADKAR, critically assessing their application within the banking sectors of Kazakhstan and Hungary. It explains how these models can be adapted to address the unique challenges faced by financial institutions in these countries, particularly in relation to regulatory compliance, technological disruption, and organizational resistance to change. Also, it explores leadership and culture influence in change management. This chapter serves as the conceptual foundation for the empirical analysis that follows.

Chapter 5: Research Framework outlines the methodology used to conduct the research. It explains the qualitative approach employed in this study, including the use of semi-structured interviews with banking professionals and change

management experts from Kazakhstan and Hungary. The chapter justifies the choice of a comparative case study approach and details the process of data collection and analysis. It also provides an overview of the research framework, ensuring transparency in how the data was interpreted and connected to the theoretical concepts discussed in previous chapters.

Chapter 6: Data Analysis presents the findings from the interviews and provides a detailed analysis of the data. The chapter identifies key themes, patterns, and insights regarding the change management strategies employed by banks in Kazakhstan and Hungary. It compares the approaches taken in each country, examining how regulatory environments, technological advancements, and cultural factors shape change management practices. This chapter links the empirical data to the theoretical models presented earlier, drawing conclusions about the effectiveness of different change management strategies in each context.

Chapter 7: Discussion and Recommendations synthesises the findings from the data analysis and discusses their implications for both theory and practice. It compares the change management practices in Kazakhstan and Hungary, providing insights into the factors that influence the success of change initiatives in these two banking sectors. The chapter offers recommendations for financial institutions in both countries on how to enhance their change management processes, particularly in the context of digital transformation and regulatory compliance.

Chapter 8: The chapter concludes by summarising the key contributions of the study, reflecting on its limitations, and suggesting areas for future research on change management in financial institutions. It presents promising areas for future research that could build on the findings of this study and expand the current understanding of the relationship between financial technology, leadership, culture, and regulation aspects in the context of change management.

CHAPTER 2 - KEY CHALLENGES OF FINANCIAL INSTITUTIONS

This chapter investigates the evolving challenges confronting financial institutions through examination of environmental change pressures and organizational change management responses. By analyzing Kazakhstan's emerging market transformation alongside Hungary's mature European banking evolution, this research demonstrates the critical necessity for systematic change management in contemporary financial services. The study employs primary data from the National Bank of Kazakhstan (NBK) and Magyar Nemzeti Bank (MNB) official publications, revealing distinct yet complementary transformation patterns that establish the universal requirement for organizational adaptation in modern banking environments.

Financial institutions worldwide operate within increasingly complex environments where external pressures demand sophisticated organizational responses. The distinction between environmental changes that institutions cannot control and change management strategies they must develop represents a fundamental framework for understanding contemporary banking challenges. This analysis examines how different institutional contexts require tailored approaches to organizational transformation while maintaining universal principles of adaptive capability development.

Through a detailed examination of Kazakhstan's rapid digital transformation (NBK, 2024) and Hungary's systematic European integration (McKinsey and Company, 2024) (MNB, 2025a), this research illuminates the essential role of change management in institutional survival and success. The comparative approach reveals how emerging and mature markets face similar environmental pressures yet require different strategic responses based on their unique regulatory, cultural, and economic contexts.

2.1 Overview of financial institutions on a global scale

The global financial system has undergone substantial transformation through successive crisis periods, each serving as a catalyst for institutional evolution and regulatory advancement. Contemporary banking institutions navigate an

environment where external changes occur with unprecedented speed, requiring organizational capabilities that extend considerably beyond traditional operational frameworks. Environmental changes encompass market dynamics, regulatory modifications, technological disruptions, and economic crises that financial institutions cannot directly influence but must effectively manage. Change management represents the systematic organizational processes, strategic frameworks, and adaptive capabilities that institutions develop to respond to external pressures while preserving operational stability and competitive positioning.

Financial institutions often face significant challenges during times of crisis, particularly when they lack structured change management capabilities. The Great Depression of 1929 demonstrated this relationship clearly, with environmental changes including market collapse, deflation, and economic contraction creating conditions that led to over 9,000 American bank failures between 1930 and 1933 (Richardson, 2007). Surviving institutions exhibited superior change management through diversified revenue streams, conservative lending practices, and adaptive organizational structures. The 2008 global financial crisis represented another watershed moment, exposing vulnerabilities in risk management practices and revealing the interconnected nature of global financial systems. This crisis generated comprehensive regulatory reforms, including Basel III implementation, enhanced stress testing requirements, and macroprudential policy framework development. The experience demonstrated that individual institutional resilience depends on systematic change management approaches across entire banking sectors.

The COVID-19 pandemic provided the most recent example of environmental change requiring immediate organizational adaptation. Digital banking adoption accelerated from gradual implementation to immediate necessity, compelling institutions to deploy comprehensive change management strategies within months rather than years. Institutions with existing change management capabilities successfully pivoted operations, while those that didn`t have frameworks experienced significant operational disruption and market share erosion.

The fintech revolution represents perhaps the most significant ongoing environmental change affecting traditional banking models. Digital payment transaction volumes have expanded exponentially, creating competitive pressures that require banks to develop entirely new service delivery approaches and

partnership strategies (McKinsey and Company, 2024). This transformation extends beyond technological adoption to encompass fundamental business model innovation, customer relationship management, and operational process redesign.

The global banking sector is undergoing deep and irreversible transformations. Over the last two decades, evidence shows that environmental pressures, economic, technological, regulatory, and social, have intensified, leaving traditional banking approaches based on gradual adaptation increasingly obsolete. These shifts, accelerated by financial crises and digital disruption, have created compound volatility. As a result, modern banks face urgent demands for strategic flexibility and dynamic change management.

Statistical indicators reveal the magnitude of change across global banking environments. Productivity in the sector has become more volatile, declining sharply during the 2008 Global Financial Crisis (GFC) before recovering unevenly. Between 2004 and 2012, productivity fell significantly in countries with weak regulatory structures and rose where capital supervision and banking competition were stronger (Chen, 2013). Meanwhile, the number of commercial banks in developed countries declined rapidly following the GFC, driven by consolidation trends that were exacerbated by the crisis (Parsons and Nguyen, 2017). Financial contagion also became more pronounced, with banking shocks rapidly transmitting across national markets (Selmi and Hachicha, 2014).

Another structural shift has come from rising demand for environmental, social, and governance (ESG) integration. Banks that were more engaged in social and environmental responsibility experienced less risk and greater financial stability during the COVID-19 crisis (Li, Trinh and Elnahass, 2023). Innovation capacity has also become a defining factor. Banks in competitive financial hubs significantly enhanced their resilience and technological advancement following the GFC (Degl'Innocenti *et al.*, 2018). Finally, one of the most transformative developments has been the rise of digital banking. Digital banking adoption has increased rapidly across both advanced and emerging markets, creating efficiency gains but also exposing institutions to new operational and cybersecurity risks (Waliullah and George, 2025). Table 1 provides an overview of key global environmental change indicators in banking, highlighting shifts in productivity, innovation, consolidation, ESG integration, and digital banking adoption.

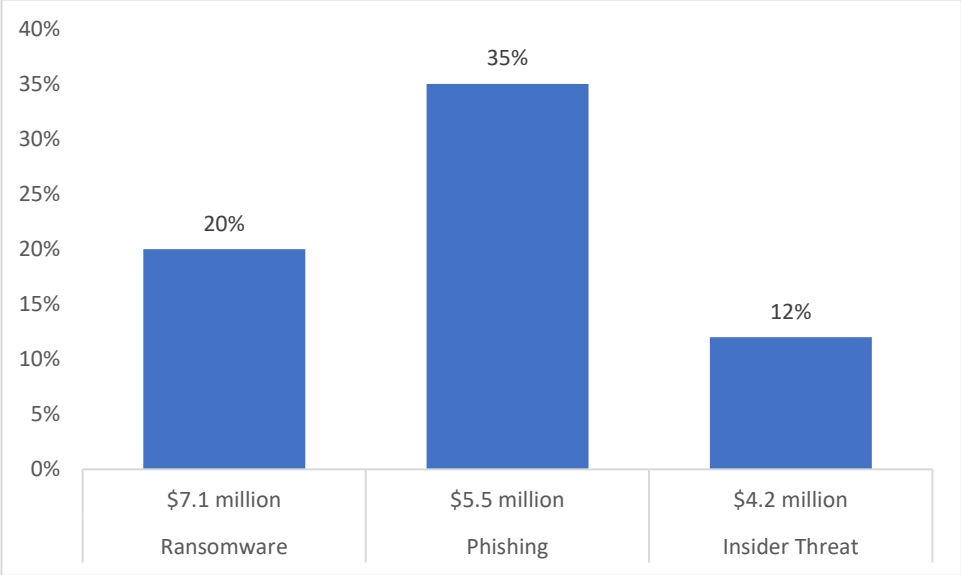
Table 1 - *Global Banking Environmental Change Indicators*

Indicator	2004 -2007 (Pre-GFC)	2008-2009 (GFC)	2010-2019 (Post-GFC)	2020-2021 (COVID)
Bank Productivity Growth	↑ Moderate	↓ Decline	↑ Gradual recovery	↓ Decline
Bank Numbers	Stable	↓ Sharp fall	↓ Ongoing decline	↓ Further decline
Financial Contagion	Low	↑↑ Very high	↓ Stabilizing	↑ Increasing again
ESG & Social Trust	Low	Limited	↑ Growth	↑↑ Strong effect
Innovation Capacity	Low	↓ Stalled	↑↑ Rapid increase	↑ Maintained
Digital Banking Adoption	Limited	↓ Decline	↑↑ High adoption	↑↑ Dominant model

Source: Author's own edition based on Chen (2013), Parsons and Nguyen (2017), Selmi & Hachicha (2014), Li, Trinh and Elnahass(2022), Degl'Innocenti et al. (2018), Waliullah and George (2025).

Beyond structural metrics, cybersecurity incidents have emerged as a core systemic threat. Ransomware attacks, phishing, data breaches, and distributed denial-of-service (DDoS) campaigns are now frequent in financial services. Cybersecurity researchers estimate that ransomware attacks cost banks an average of $7.1 million per incident, with phishing losses reaching $5.5 million (Olutimehin, 2025). Figure 2 summarises the most common types of cybersecurity threats targeting financial institutions, along with their average financial impact and frequency based on recent empirical studies.

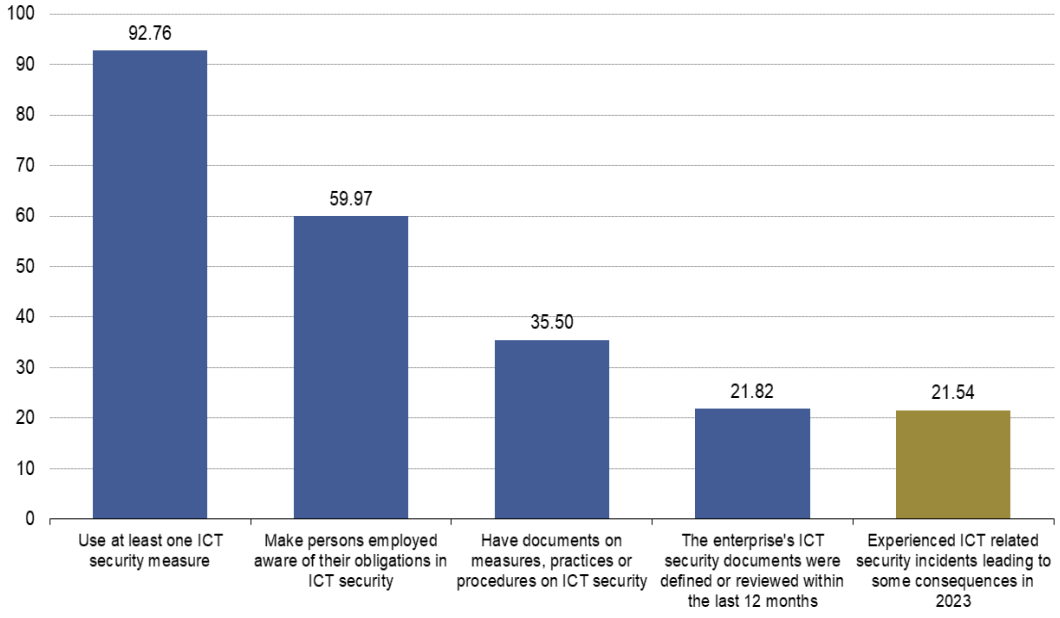
Figure 2 *- Common Cyber Threats and Estimated Impacts.*



Source: Author's own edition based on Olutimehin (2025)

Eurostat data (Figure 3) confirms the widespread nature of these threats, showing that in 2023, 21.5% of enterprises in the EU experienced ICT-related security incidents, with financial institutions among the most targeted (Eurostat, 2024a).

Figure 3 *- EU enterprises affected by ICT security incidents*



Source: Eurostat, 2024 (online data codes: isoc_cisce_ra and isoc_cisce_ic)

The European Union Agency for Cybersecurity reports that 46% of all data-related incidents in the EU in 2023 impacted credit institutions (ENISA, 2025), making banking the most attacked sector (JDSupra, 2024).

Parallel to cyber threats, regulatory compliance costs have expanded significantly, placing new burdens on bank operations. Following the GFC, new regulations such as Basel III, MiFID II, DORA, and GDPR were implemented across Europe, requiring banks to improve capital buffers, enhance disclosures, and implement risk-based supervision. The total annual cost of financial crime compliance in the EMEA region reached $85 billion in 2023, with EU banks bearing a major share (Mohanty et al., 2024). These growing pressures are particularly evident in the regulatory domain, where compliance costs have expanded into a persistent operational challenge. Financial institutions now face a complex matrix of obligations from anti-money laundering (AML) frameworks and cybersecurity audits to emerging environmental and sustainability reporting requirements. These costs are not only increasing but also becoming more interconnected, with regulators demanding integrated risk oversight across all business units. The scale and scope of this financial burden are illustrated in the following table, which presents estimated annual compliance costs for mid- to large-sized banking institutions operating in the EU. The table below outlines estimated annual regulatory compliance costs for EU-based financial institutions, with a focus on AML, cybersecurity, and ESG reporting obligations.

Table 2 *- Estimated Annual Compliance Costs in EU Banking*

Compliance Cost Type	Estimated Annual Cost per Bank (USD)
AML/KYC Compliance	$20-50 million
Cybersecurity Compliance	$15-40 million
ESG Reporting	$5-15 million

Source: Author's own edition based on Crisanto (2021).

This chapter shows that financial institutions today are under strong pressure from many directions: economic crises, digitalisation, cybersecurity threats, and increasing regulatory demands. These factors are not short-term problems but long-term changes in the environment in which banks operate. As a result, changes in financial institutions are essential. It is important to differentiate between change, which refers to the external shifts in markets, technologies, and regulations, and change management, which involves the internal strategies and processes institutions use to respond to those shifts effectively. While change is imposed by the environment, change management is a choice, a structured, deliberate approach to adaptation. In modern banking, traditional slow-reacting models are inadequate. Institutions must adopt continuous, proactive, and integrated change management frameworks that enable resilience, innovation, cultural and regulatory alignment.

2.2 Kazakhstan Banking Sector Overview

Kazakhstan's banking sector has evolved significantly since the country's independence in 1991, undergoing a transformation marked by liberalisation, crisis-driven consolidation, and, more recently, digital disruption. While many of the sector's metrics appear stable on the surface, a closer inspection, such as Kazakhstan's declining loan-to-GDP ratio of 38.2% (World Bank, 2023), high market concentration with HHI nearing 1980 (NBK, 2023a), and uneven digital banking adoption across institutions and regions (NBK, 2023d), reveals structural challenges that necessitate stronger, forward-looking change management strategies.

In the early 2000s, Kazakhstan's banking system was one of the most dynamic among former Soviet republics. However, this growth was followed by instability due to overexposure to foreign loans and weak risk controls, culminating in sharp contractions during the global financial crisis. In the past decade, Kazakhstan's authorities have prioritized consolidation, digital infrastructure investment, and alignment with international regulatory frameworks (NBK, 2024). This trend is reflected in key structural indicators over time, including the number of banks, employment levels, and credit depth, as shown in Table 3.

Table 3 *- Kazakhstan's Banking Sector Key Indicators*

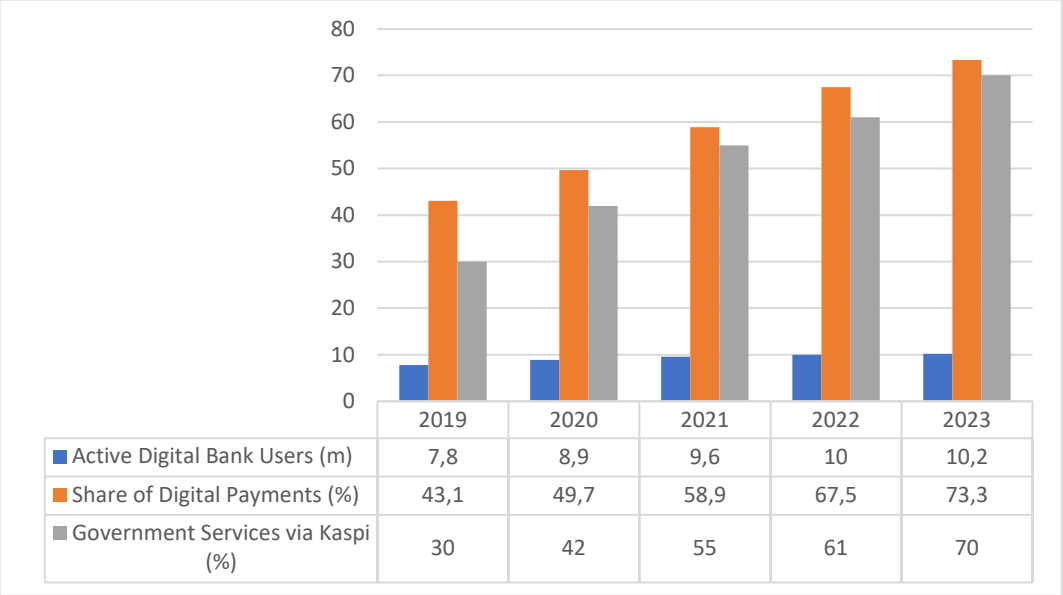
Indicator	2008	2014	2018	2020	2023
Number of Commercial Banks	35	38	28	23	21
Foreign-Owned Banks	14	16	15	12	12
Herfindahl Index (HHI est.)	1,520	1,620	1,740	1,840	1,980
Loans to GDP Ratio (%)	45.3	40.1	35.6	36.7	38.2
Banking Sector Employment (thousand persons)	43.2	42.8	39.5	36.1	34.9

Source: Author's own edition based on NBK Annual Reports (2024a), World Bank GFDD (2023)

The number of banks has steadily declined, reflecting tighter licensing, mergers, and capital adequacy pressures. Market concentration is increasing: in 2023, the top five banks: Halyk, Kaspi, Otbasy, ForteBank, and Jusan, controlled more than 74% of sector assets. The Herfindahl-Hirschman Index (HHI) nearing 2,000 indicates a moderately concentrated market, significantly above the EU average (~1,000), raising concerns about competition, systemic risk, and innovation diffusion. The loan-to-GDP ratio, a key metric of intermediation, has stagnated. At ~38% in 2023, Kazakhstan underperforms peers like Poland (~53%), Malaysia (~92%), or China (~160%) (World Bank, 2023). This gap suggests underutilization of banking in financing economic growth, potentially due to weak SME access, high collateral demands, or cautious post-crisis lending cultures.

Kazakhstan's banks are also shedding jobs amid digitalization. Employment has declined by over 20% in the past decade (NBK, 2023c). While global banks face similar pressures, countries like Germany or South Korea are retraining staff into fintech and compliance roles; Kazakhstan's strategy on workforce reskilling remains underdeveloped.

Figure 4 *- Digital Banking Penetration and Usage*



	2019	2020	2021	2022	2023
Active Digital Bank Users (m)	7,8	8,9	9,6	10	10,2
Share of Digital Payments (%)	43,1	49,7	58,9	67,5	73,3
Government Services via Kaspi (%)	30	42	55	61	70

Source: Author's own edition based on Kaspi (2024), NBK Statistics (2023a)

Kazakhstan has made strides in digital banking, largely through private-sector innovation, especially Kaspi Bank's super-app model. The scope and pace of digital adoption in the retail banking sector are illustrated in Figure 4, which highlights user growth and transaction volume over a five-year period. However, public infrastructure lags: national interoperability platforms, digital ID systems, and real-time payment networks are still limited compared to global leaders like Singapore or Sweden. The regulatory framework has expanded significantly. Since 2020, the NBK and Agency for Regulation and Development of the Financial Market (ARDFM) have introduced ESG disclosure guidelines, mandatory AML systems, and sector-wide stress testing protocols. Compliance costs are rising; NBK reports a 23% increase in regulatory IT spending from 2020 to 2023 (ARDFM, 2021; NBK, 2023a).

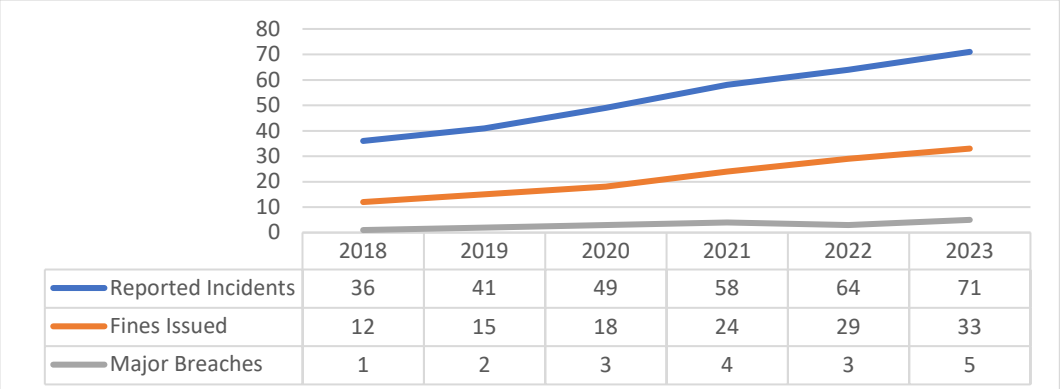
The driving forces of transformation in Kazakhstan's financial institutions originate from a combination of geopolitical, technological, economic, and societal dynamics. The sanctions imposed on Russian financial institutions following the invasion of Ukraine in 2022 had substantial spillover effects on Kazakhstan's banking ecosystem. The case of Sberbank Kazakhstan, which was divested from its Russian parent and restructured as Bereke Bank under state ownership, serves as a high-

profile example of how political constraints can induce rapid institutional change. This transition required the establishment of new correspondent banking networks, complete compliance reorientation, and operational rebranding within less than one fiscal year.

COVID-19 pandemic and its aftermath dramatically accelerated consumer transition toward digital banking solutions. According to the World Bank (2023), over 74% of adult citizens in Kazakhstan used digital banking channels in 2021, compared to less than 40% just five years earlier. This shift, while partially driven by lockdowns, has been sustained due to changes in consumer expectations and the growing reliability of mobile-first platforms like Kaspi.kz. These platforms are now deeply integrated into daily life, with many users relying on them for both commercial and government services.

From the regulatory perspective, the Digital Kazakhstan program has encouraged the harmonization of banking and government IT infrastructure, fostering the creation of digital IDs, smart data registries, and the use of artificial intelligence in financial monitoring. The growing need for cybersecurity resilience has led to an increase in both regulatory oversight and institutional spending, especially in light of rising financial phishing and ransomware threats targeting the sector, as documented by the National Bank's cybersecurity bulletins (NBK, 2023b). Figure 5 provides a summary of key cybersecurity metrics, demonstrating the escalation of digital threats and regulatory responses in the banking sector.

Figure 5 - *Cybersecurity Trends in Kazakhstan's Financial Sector*



	2018	2019	2020	2021	2022	2023
Reported Incidents	36	41	49	58	64	71
Fines Issued	12	15	18	24	29	33
Major Breaches	1	2	3	4	3	5

Source: Author's own edition based on NBK Cyber Division, National Security Committee Reports (2023b)

These changes are reinforced by consumer behavior trends. Surveys conducted by the Center for Strategic Initiatives (2022) indicate that younger banking clients, especially those under 35, consider mobile applications and integrated digital services not as conveniences but as expected standards. Such expectations put pressure on banks to innovate faster and with greater focus on reliability, user interface, and embedded security (NBK, 2023a).

Meanwhile, international financial governance trends, including mandatory ESG disclosures, strengthened AML and CFT frameworks, and convergence with Basel III principles, have raised the bar for operational compliance. These shifts have led to higher costs and the need to reallocate internal resources, often requiring cross-functional project management capabilities that were not traditionally emphasized in Kazakhstan's banking hierarchies. Recent research supports this shift, highlighting that digital transformation in banking is driving the integration of cross-functional teams to handle complex regulatory and operational challenges. For example, Tashkinov (2024) highlights that digital transformation projects require cross-functional collaboration to optimize resources and implement strategies effectively. Additionally, the implementation of integrated risk management systems and the adoption of modern Management Information Systems (MIS) demand greater cross-functional collaboration to meet the new regulatory and operational challenges faced by Kazakhstan's banking sector (Tumenbayeva and Zhaksybekova, 2016; Akhmedov, 2023). This reflects a move toward more agile and integrated project management practices, as banks are gradually adapting to the rising complexities brought by new regulations, such as Basel III and AML/CFT frameworks, as well as the increasing importance of cybersecurity (Miller, 2014; Oluoha and Odeshina, 2021).

The response by leading Kazakh banks reveals a growing appreciation for formalized change management strategies. Institutions like Halyk Bank and Kaspi.kz have implemented agile transformation teams, streamlined compliance and IT collaboration, and adopted iterative digital product development cycles. Change management has also taken the form of government-backed initiatives, such as regulatory sandboxes under the Astana Financial Services Authority (AFSA), and direct partnerships for digital public infrastructure development (NBK, 2023c).

Kazakhstan’s financial institutions thus face a multilayered imperative to change: geopolitical shifts require adaptive governance structures, technological evolution demands agile innovation, and consumer expectations necessitate high-speed digital service delivery. These demands are compounded by rising regulatory complexity and global competition, pushing the sector toward a more mature, integrated, and anticipatory form of change management.

Kazakhstan’s banking transformation has strong foundations, but faces rising complexity and global performance gaps. Future competitiveness will depend not only on innovation but on the speed and structure of institutional adaptation.

2.3 Hungary Banking Sector Overview

Hungary's banking sector has undergone a significant transformation since the early 1990s, shifting from a state-controlled system to a competitive, market-driven model. This change was driven by the establishment of a two-tier banking system in 1987, which separated the central bank from commercial banks and introduced market-based operations (Lengyel, 1994). EU membership brought stricter regulatory requirements, including the adoption of Basel III standards. The MNB has played a key role in implementing these regulations, ensuring the sector remains resilient to economic risks through measures like stress testing.

Digital banking has become a priority in recent years, with the government’s fostering of financial inclusion. Hungarian banks, particularly OTP Bank, have expanded their digital services to meet consumer demand (Szikra and Varga, 2022). However, challenges remain in integrating digital technologies with older systems, and cybersecurity risks are an ongoing concern, especially as digital services expand.

In 2024, Hungary enacted a cybersecurity law aligned with the EU’s NIS2 Directive, requiring banks to enhance their cybersecurity measures (McKenzie, 2024). This legislation aims to protect the financial system from growing online threats.

The Hungarian banking system has faced both external and internal political-economic pressures over the past decade. Following the global financial crisis, Hungary adopted a more domestically oriented policy while continuing to comply

with the recommendations of the European Central Bank. Policy measures such as the conversion of foreign currency-denominated loans and the introduction of additional bank levies initially raised concerns about financial nationalism, but these measures were gradually brought into line with EU expectations, ensuring compliance with EU financial standards (European Commission, 2024). Hungary continues to face significant pressure from EU institutions to improve the rule of law and ensure greater transparency in the banking sector, particularly with regard to anti-money laundering (AML) frameworks and environmental, social, and governance (ESG) disclosures. These regulatory demands have been further intensified by the EU's Digital Operational Resilience Act (DORA) and the establishment of new ESG taxonomies, which impose substantial implementation burdens on Hungarian financial institutions (LawNow, 2024). Increased regulation requires significant resources to ensure compliance and adaptation, forcing banks to improve their systems and processes to meet these changing expectations.

In addition to EU regulatory compliance, Hungarian banks have had to adapt to sanctions-related shifts, especially after Russia's invasion of Ukraine. Although Hungary has maintained diplomatic and energy ties with Russia, financial sanctions imposed by the EU have required Hungarian institutions to implement asset freezes and transaction monitoring for Russian entities. This dual pressure, balancing EU alignment with geopolitical strategy, has prompted banks to increase their compliance, KYC (know your customer), and risk assessment capabilities.

On the digital front, Hungary has advanced through initiatives such as the "Digital Success Program 2.0" and the Hungarian Digital Welfare Agency, which coordinate financial inclusion, digital literacy, and public-private cooperation in fintech. The MNB's 2024 Digitalisation Report emphasises that all major Hungarian banks have appointed dedicated digital strategy officers, and over 90% of customers now use at least one online banking service. Moreover, MNB's Digital Maturity Index shows improvement in six out of seven core areas including leadership, IT infrastructure, and workflow optimization (MNB, 2024, MNB 2025b).

Hungarian financial institutions have increasingly institutionalized change management through dedicated innovation frameworks, core banking upgrades, and cybersecurity strategies. OTP Bank has become a key driver of innovation in the region through its Innovation Lab, launched in 2017, which has automated over 50

internal processes using artificial intelligence and robotic process automation (Fintech Futures, 2023). OTP has expanded into adjacent ecosystems such as health, e-commerce, and real estate, shifting from a traditional financial institution to a digitally enabled platform model (Global Finance, 2024).

In 2023, OTP also modernized its core banking system by adopting a cloud-native, API-first architecture developed by Intellect Global Consumer Banking. This upgrade enabled real-time transactions, modular lending services, and automated workflows, contributing to agility, speed, and scalability (Fintech Futures, 2023; Global Finance, 2024). Change management within OTP is overseen by cross-functional digital strategy units that integrate compliance, IT development, and customer engagement functions.

K&H Bank has prioritized cybersecurity, launching a cyber education initiative for corporate clients in 2025 that includes phishing simulations and threat workshops (CEE Legal Matters, 2025b). OTP has also streamlined mobile access by discontinuing browser-based mobile banking in favor of app-only channels, reducing fraud exposure and reinforcing user control (Trade Magazin, 2025).

At the national level, Hungary's 2025 Cybersecurity Strategy reframes digital risk not only as a technical issue but as a pillar of national governance, calling for coordinated response mechanisms involving banks, regulators, and infrastructure providers (CEE Legal Matters, 2025a).Complementing this, the MNB's FinTech and Digitalisation Strategy (2024) outlines 24 strategic initiatives, including regulatory sandboxes, open banking standards, and financial literacy campaigns, to support sector-wide innovation (MNB, 2024).

Notably, Hungary has experimented with digital currency through its 2023 "Digital Student Safe" initiative, a partnership between the central bank, schools, and fintech firms. This pilot tested digital wallets and promoted financial literacy among students while laying groundwork for future Central Bank Digital Currency (CBDC) rollouts (Central Banking, 2023).

MNB has also institutionalized cybersecurity reporting through its Cyber Threat Landscape Report, developed in coordination with 39 financial institutions. The report identified phishing, ransomware, and supply chain risks as top sectoral threats

and established an incident response framework aligned with the EU's DORA regulation (MNB, 2023, p. 2).

Hungary's banking sector has also responded to the emergence of neobanks, including Revolut and Wise, which have rapidly gained popularity among digitally-savvy consumers. These fintech entrants offer mobile-first, low-cost banking alternatives that challenge traditional pricing models and user experiences. Their growing customer base, especially among younger urban populations, has accelerated digital adoption trends and prompted incumbent banks to prioritize seamless user interfaces, real-time notifications, and low-cost international transfers. In response, MNB has enhanced oversight of fintech license requirements and introduced regulatory sandboxes to ensure competitive neutrality and risk-based innovation scaling (MNB, 2024).

To further support banking innovation, the Hungarian government continues to expand digital public infrastructure, such as e-identification frameworks and interoperable payment gateways. These foundational services simplify onboarding processes and support digital inclusivity. Programs like "Digital Welfare" and "AI Hungary" foster collaboration between banks, academia, and technology developers, shaping long-term institutional transformation. These initiatives aim to increase financial access, reduce operational costs, and improve user-centric service delivery.

Public acceptance of digital banking continues to grow. According to Eurostat and MNB surveys, 87% of adult banking customers used internet banking in 2024, while mobile banking users surpassed 5 million (Eurostat, 2024a; MNB, 2024). The highest penetration rates are observed among the younger population, although even among older age groups, the level of technology adoption has increased. However, a digital divide still exists in rural areas, where limited infrastructure and low levels of digital literacy hinder full integration.

Table bellow shows structural indicators reflecting the long-term trends in Hungary's banking sector between 2008 and 2024, highlighting ongoing consolidation, increased concentration, and gradual digital labour shifts.

Table 4 shows steady consolidation, growing concentration, and technological labor substitution in Hungary's banking system.

Table 4 *- Hungarian Banking Sector Key Indicators*

Indicator	2008	2012	2016	2020	2024
Number of Commercial Banks	39	33	28	25	24
Foreign-Owned Banks	23	20	17	15	14
Herfindahl Index (HHI)	1320	1450	1610	1800	1930
Loans to GDP Ratio (%)	38.5	37.9	38.7	38.2	39.4
Banking Sector Employment (thousand)	41	38.4	36.2	35.1	33.5

Source: Author's own edition based on MNB (2025a), Eurostat (2024b), World Bank (2024)

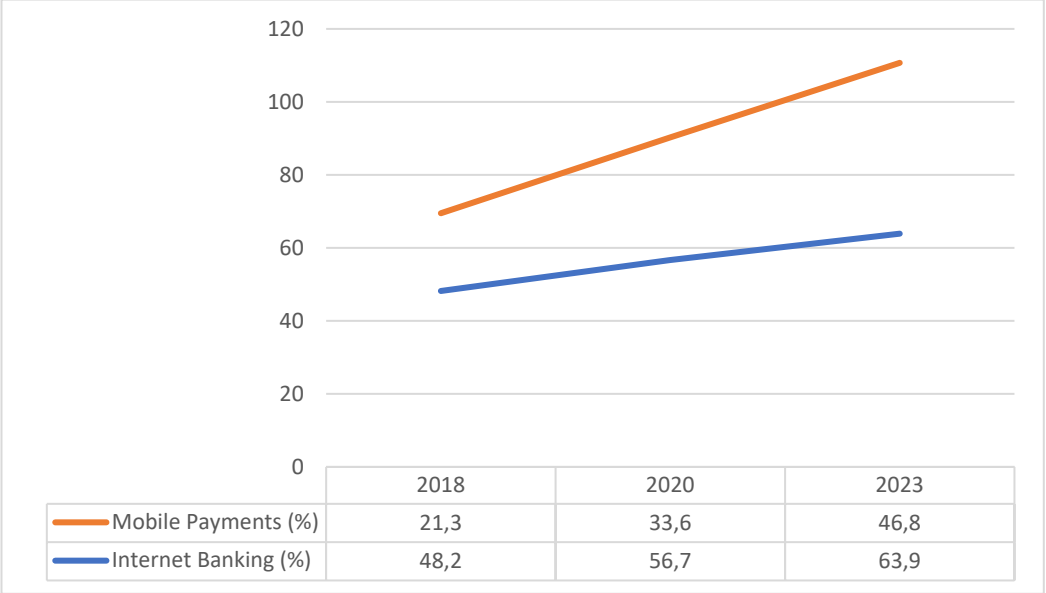
Between 2008 and 2024, the number of credit institutions decreased from 39 to 24. The Herfindahl-Hirschman Index (HHI) rose from 1,320 to 1,930, reflecting increased market concentration. The top five banks, OTP, K&H, UniCredit, Erste, and Raiffeisen, collectively control over 72% of total sector assets (MNB, 2025a).

The loan-to-GDP ratio has remained relatively stable over the past decade, fluctuating between 37% and 42%. In 2024, it stood at 39.4%, which is modest by EU standards but consistent with regional peers such as the Czech Republic (41.8%) and Slovakia (43.5%) (World Bank, 2024).

Employment in the Hungarian banking sector has declined gradually from 41,000 in 2010 to approximately 33,500 in 2024, driven by digital automation and back-office rationalization (Eurostat, 2024b).

The steady increase in both internet banking and mobile payment usage across Hungary from 2018 to 2023 reflects rapid digital transformation and changing customer behaviour (Figure 6).

Figure 6 *- Digital Banking Usage in Hungary*



Source: Author's own edition based on Eurostat (2024a)

Hungary's regulatory environment includes strict compliance with EU regulations, notably the Fourth and Fifth Anti-Money Laundering Directives, GDPR, and new ESG obligations (European Union, 2024a). Regulatory pressure has increased due to enhanced EBA reviews and DORA alignment (Baker McKenzie, 2024).

Cybersecurity has emerged as a critical pillar. Although Hungary has avoided major incidents, the MNB has mandated cyber-resilience reporting and penetration testing. Banks have scaled up investments in cybersecurity platforms and staff training (CEE Legal Matters, 2025a).

Despite strong financial performance, change remains a necessity rather than an option. Hungary's financial institutions should adapt to evolving EU regulatory standards, rising customer expectations, cross-border competition, and accelerating digital innovation (European Banking Authority, 2024; European Commission, 2024). Failure to modernize core systems, upskill workforce capabilities, and strengthen cyber resilience may lead to declining competitiveness, operational inefficiencies, and growing systemic risk (Aon, 2023).

All market trends, from EU regulatory evolution and cyber risk to neobank competition and changing consumer preferences, confirm that the Hungarian banking sector is experiencing a profound structural transformation. These challenges demand institutionalized change management practices that are strategic,

data-driven, and innovation-oriented. As Hungary continues its digital and regulatory convergence with the European banking model, sustained public-private cooperation and agile policy frameworks will be essential for maintaining resilience and securing long-term financial stability.

2.4 Comparative Analysis: Institutional Adaptation Strategies

This chapter presents a deeper comparative analysis of the banking sectors of Kazakhstan and Hungary within the global context of ongoing structural, regulatory, and technological changes. Both countries demonstrate clear evidence of transformation, but through different pathways shaped by historical, political, and institutional frameworks. The objective here is to highlight the key driving forces of change in each country, compare their alignment with global banking trends, and evaluate how change management strategies are used to deal with evolving conditions.

Worldwide, financial institutions are adapting to rising compliance costs, increased digital expectations, and intensifying cybersecurity threats. Global banking assets surpassed $180 trillion in 2023, showing not only sector growth but also higher consolidation (World Bank, 2023). The digital banking sector is expanding steadily. Over 64% of global adults now use digital channels for financial services, with even higher rates in developed economies (Munira, 2025). This has made change management an essential process for maintaining competitiveness and resilience.

In Hungary, the driving forces behind change are largely institutional and policy-driven. As an EU member, the country is influenced by regulations such as the Capital Requirements Directive, DORA, and GDPR. Hungary also supports innovation through structured programs like the Digital Success Program and FinTech Strategy 2022-2030. Domestic banks such as OTP and K&H have introduced formal innovation labs and cross-sector partnerships to implement real-time payments, API-based services, and cybersecurity upgrades (Fehér & Varga, 2017; FinTech Futures, 2023).

In Kazakhstan, the transformation is more centralized and accelerated by state programs. The Smart Data Ukimet and the AI Financial Sector Strategy are examples of national initiatives led by the NBK. Digital leadership is concentrated in a few

banks, especially Kaspi Bank, which has scaled a multi-functional digital ecosystem for 10 million users. Sanctions against Russia, especially since 2022, have also pushed Kazakhstan to diversify banking channels, digital infrastructure, and compliance practices (Arynova and Nedugova, 2023; European Union, 2024b).

A comparative analysis of structural and digital indicators in the banking sectors of Hungary and Kazakhstan is presented in Table 5.

Table 5 *- Comparison table of the Structural Indicators*

Indicator	Hungary	Kazakhstan
Number of Banks	24	21
Foreign-Owned Banks	14	12
Herfindahl Index (HHI est.)	1930	1980
Loans to GDP Ratio (%)	39.4	28.5
Banking Employment (thousands)	33.5	27.8
Digital Banking Users (%)	87	61
Mobile Payment Use (%)	46.8	54

Sources: MNB (2025b), NBK (2023a), Eurostat (2024a), World Bank (2024)

The number of operating banks: 24 in Hungary and 21 in Kazakhstan, though Hungary's higher proportion of foreign-owned banks reflects its deeper integration into European capital markets. Market concentration, as measured by the Herfindahl-Hirschman Index, is moderately high in both countries (~1930 in Hungary and 1980 in Kazakhstan), indicating that a few large institutions dominate sector assets. This level of concentration typically supports digital infrastructure investments but may limit competitive innovation. The Loans to GDP ratio reveals a notable divergence: Hungary reports 39.4%, while Kazakhstan lags behind at 28.5%. This suggests that Hungarian banks play a more active role in domestic credit intermediation, supported by lower inflation and interest volatility due to EU monetary alignment. Employment figures are proportionally close (33.5k in Hungary, 27.8k in Kazakhstan), which aligns with the relative size of their financial sectors. Digital penetration metrics

display sharper contrasts. While 87% of Hungarian banking clients use digital channels, only 61% do so in Kazakhstan, where digital access is concentrated in major players like Kaspi. Interestingly, Kazakhstan surpasses Hungary in mobile payment usage due to Kaspi's super-app model (54% vs. 46.8%). These differences underscore that while Hungary's digital transformation is more evenly distributed across institutions, Kazakhstan's success is driven by one dominant platform.

Regulatory compliance costs have increased in both countries. In Hungary, this is driven by EU legal harmonization and cyber risk frameworks. The introduction of DORA (MNB, 2025b) adds requirements for operational resilience, forcing banks to upgrade internal controls and IT risk management. In Kazakhstan, compliance burdens emerge more from AML reforms and supervisory tools introduced by the Agency for Regulation and Development of the Financial Market.

Table 6 *- Global and Local Regulatory Pressures*

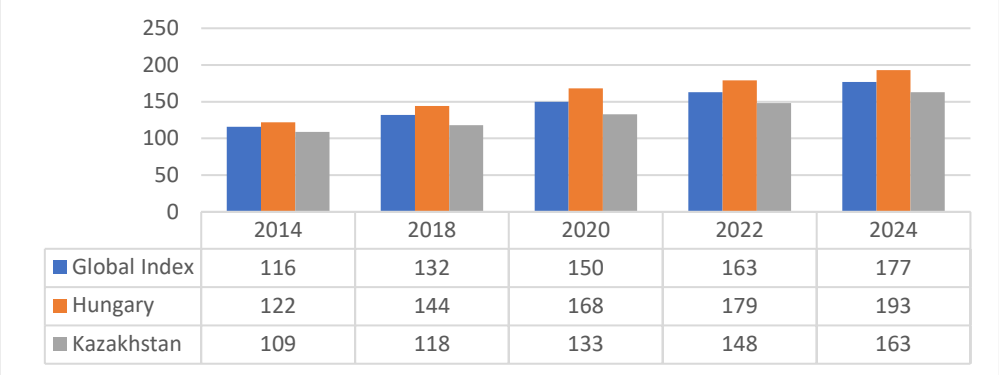
Compliance Cost Pressure	**Global Trend**	**Hungary**	**Kazakhstan**
AML Regulations	High - FATF + EU AMLD VI	AMLD V + FATF alignment	Strengthened post-2022 via NBK + ARDFM
Cybersecurity Rules	Increasing under DORA/GDPR	DORA regulation active	NBK cybersecurity roadmap adopted
FinTech/Open Banking Regulation	Global sandbox trend	MNB Fintech Strategy, Open API pilot	National pilot sandbox (ARDFM)

Source: Author's own edition , 2025

Table 6 shows how both Hungary and Kazakhstan face rising regulatory pressure, especially around cybersecurity, AML enforcement, and the legal adaptation of open banking. Hungary's obligations stem mainly from EU regulation, while Kazakhstan relies on national initiatives informed by global standards. Hungary has launched a

National Cyber Strategy (CEE Legal Matters, 2025a) and conducted stress tests with 39 institutions in line with DORA regulations (Somogyi and Nagy, 2022). Kazakhstan initiated its own resilience tests in 2022, highlighting phishing and third-party risks as key vulnerabilities.

***Figure 7** - Compliance Cost Growth Index*



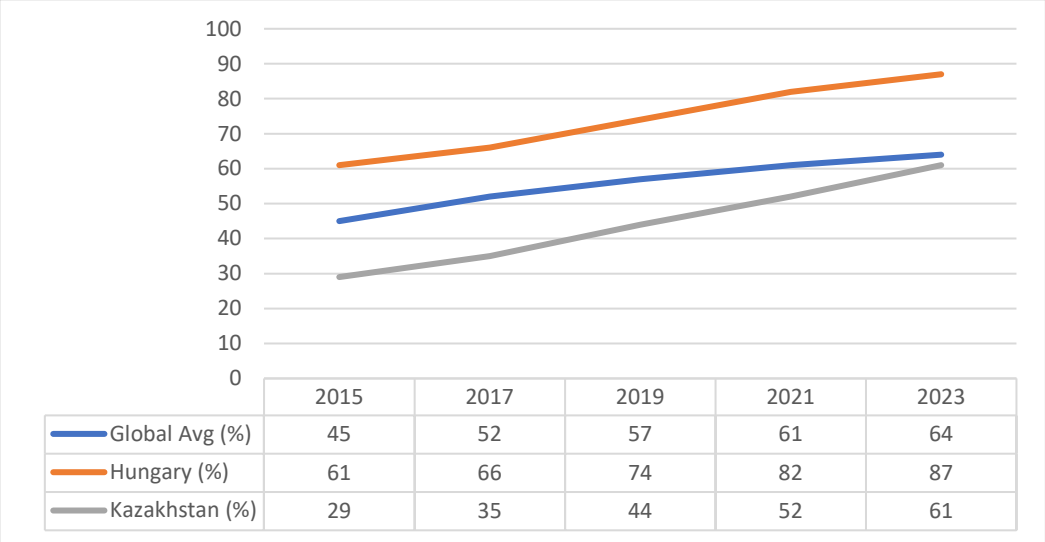
	2014	2018	2020	2022	2024
Global Index	116	132	150	163	177
Hungary	122	144	168	179	193
Kazakhstan	109	118	133	148	163

Source: Author's own edition based on OECD, MNB (2025), NBK(2024a)

Figure 7 tracks compliance cost growth between 2014 and 2024, benchmarked against a global index (base year 2010 = 100). Hungary's compliance costs have risen more steeply than both global and Kazakhstani trends, reaching 193 index points by 2024. This reflects the cumulative burden of adopting EU directives (such as AMLD, PSD2, and DORA) and the integration of strict cyber resilience requirements. Kazakhstan's compliance costs have also risen significantly (to 163 in 2024), primarily driven by post-2022 AML upgrades, geopolitical exposure, and the expansion of supervisory infrastructure. Globally, the compliance index rose to 177, indicating that both countries face above-average regulatory burdens relative to their institutional capacity. These rising costs challenge traditional operational models and reinforce the importance of structured management strategies to ensure compliance without compromising innovation or customer experience. The evolution of digital banking penetration between 2015 and 2023 globally, in Hungary, and in Kazakhstan is presented in Figure 8. The data reflects a strong upward trend across all contexts, but with significant variation in pace. Hungary, starting from a relatively high baseline of 61% in 2015, reached 87% by 2023, driven largely by EU digital infrastructure support, high smartphone adoption, and institutional digital strategies. Kazakhstan, although starting much lower at 29% in 2015, nearly doubled its

penetration by 2023 (61%), due to concentrated platform-driven innovation, especially by Kaspi Bank, and national digitalization policies such as Digital Kazakhstan (NBK, 2023d).

Figure 8 *- Global Growth in Digital Banking Penetration*



	2015	2017	2019	2021	2023
Global Avg (%)	45	52	57	61	64
Hungary (%)	61	66	74	82	87
Kazakhstan (%)	29	35	44	52	61

Source: Author's own edition based on World Bank (2023), Eurostat (2024a), NBK (2023a, 2023d)

This convergence indicates that Kazakhstan is catching up rapidly, though its growth is more uneven across institutions and regions. The global average (64% in 2023) situates both countries close to international standards, suggesting that digital transformation has become a global imperative requiring active change management across all banking environments.

Driving forces of change in both countries include international regulation, technological disruption, competition from neobanks (e.g., Revolut, Wise), and customer preferences. In Hungary, Revolut and Wise gained strong market presence, especially among young users (Nagy, Molnár and Papp, 2023). The MNB responded by initiating national digital literacy campaigns and pilot projects in digital currency for students (Central Banking, 2023). In Kazakhstan, foreign fintech competition is limited, but local platforms dominate digital usage. Government-backed digitalization helps improve inclusion but reveals infrastructure inequalities.

Hungary and Kazakhstan are on distinct but converging paths of banking transformation. While Hungary's process is driven by supranational regulation and

institutional innovation, Kazakhstan's change is steered by national priorities, geopolitical adaptation, and key institutional leaders. Despite these differences, both countries are aligned with global banking trends: rising compliance costs, cybersecurity threats, digital competition, and customer-driven transformation. These shared pressures confirm that change is not only happening but also needs to be strategically managed.

This comparative overview has established a foundational understanding of the structural and institutional environments shaping change in Hungary and Kazakhstan's banking sectors. While both countries operate in different regulatory and political contexts, they share exposure to global forces including digital disruption, cybersecurity risks, and escalating compliance requirements. Available data indicate that change management requirements will continue to intensify as global environmental pressures accelerate. Financial institutions must develop increasingly sophisticated capabilities, integrating technological innovation, risk management, operational efficiency, and strategic adaptation through change management as a tool. The chapter has demonstrated the relevance of the research questions. The next chapter introduces the theoretical frameworks that guide this inquiry, focusing on models of organizational change, regulatory institutionalism, and innovation management. These theories will help interpret the variation observed in how financial institutions evolve and manage transformation in complex and transitional environments.

CHAPTER 3 - FINTECH AND INNOVATION DISRUPTION IN FINANCIAL INSTITUTIONS

Fintech is a transformative force in the banking sector, fundamentally altering how financial services are delivered, consumed, and managed. Innovations such as blockchain, artificial intelligence (AI), digital payments, and mobile banking are challenging the very foundation of traditional banking models (Narayan, 2023). As financial institutions adopt Fintech, they are required to transform organisational culture, leadership styles, and operational processes. Managing this transition successfully is important to maintaining business continuity while leveraging the benefits of new technologies (Chandel, 2025). Change management provides banks with the necessary framework to minimize disruption, address employee resistance, and ensure regulatory compliance during the integration of Fintech solutions.

3.1 Overview of Fintech

Fintech refers to the application of technology to improve and automate the delivery of financial services. It covers a wide range of innovations aimed at enhancing financial operations, improving accessibility, and creating new business models. The emergence of Fintech has led to radical changes in traditional banking and financial services, enabling businesses and consumers to interact with money in a more efficient, secure, and convenient way. Table 8 presents key components of fintech.

***Table 7**- Key components of fintech*

Component	Description	Source
Digital banking	Providing financial services through online platforms without the need to visit branches: savings accounts, payment services, loans, investment. Examples of neobanks, such as Revolut and N26, highlight how financial services are being delivered entirely digitally, making banking more accessible to a global audience	Schindler, 2017

Payment Systems	PayPal, Stripe, and Square have simplified online payments for businesses and consumers, while blockchain-based systems like Ripple offer cross-border payment solutions with significantly reduced transaction times and costs	Magomadov, Ibragimov and Zaripova, 2023
Robo-Advisors	Automated investment platforms use algorithms to provide personalized financial advice based on an individual's financial situation and goals. Betterment and Wealthfront have made investing more accessible by lowering costs and eliminating the need for traditional human financial advisors	Wu and Dong, 2025
Blockchain	It provides a decentralized, transparent, and secure method for recording transactions, thus enhancing trust and reducing fraud. Blockchain's potential extends far beyond cryptocurrencies, with applications in supply chain management, smart contracts, and financial security	Mishra et al., 2025
Artificial Intelligence (AI)	Automating decision-making processes, improving fraud detection, and enhancing customer experiences. From algorithmic trading and credit scoring to chatbots and personalized financial advice, AI enables financial institutions to offer more tailored and efficient services	Schindler, 2017

Source: Author's own edition, 2025

The financial services sector has undergone a significant transformation due to fintech innovations. Historically, banking and finance were dominated by traditional institutions, which relied on manual processes and in-person interactions to serve customers. However, fintech has introduced new business models, driven by technology, which have allowed for faster, cheaper, and more inclusive financial services. Fintech innovations have made financial services more accessible to underserved populations. For example, mobile payment solutions like M-Pesa have revolutionized financial inclusion in developing countries, enabling individuals without bank accounts to send and receive money through their mobile phones (Magomadov, Ibragimov and Zaripova, 2023). The rise of digital banks, which operate solely through digital platforms, has democratized access to banking,

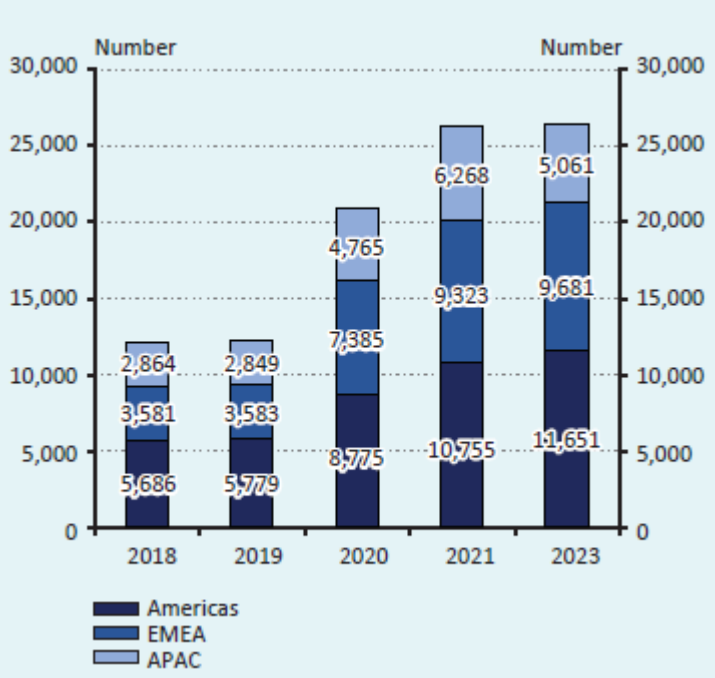
reducing the need for physical infrastructure. AI and big data have become pivotal in reshaping financial services by allowing institutions to offer more personalized experiences. AI algorithms are used for predictive analytics, enabling banks to offer customized financial products based on individual behavior and preferences (Zhao and Zhang, 2021). Moreover, the integration of blockchain technology is set to disrupt the financial industry by offering secure, transparent, and decentralized financial systems (Bowden *et al.*, 2021). The regulatory pressure has also had to adapt to these rapid innovations. While fintech offers significant opportunities for growth, it also introduces regulatory challenges. Governments and regulators are now tasked with ensuring consumer protection, financial stability, and compliance while allowing fintech to thrive (Singh and Johri, 2024).

The rise of fintech has led to organisational and operational changes in the financial services industry. Change management refers to the strategies and techniques that organizations use to manage transformations in their structure, operations, and culture. As fintech continues to transform financial services, institutions must adapt to new technologies, processes, and market conditions to remain competitive.

The integration of fintech requires financial institutions to implement comprehensive change management strategies. For example, the shift towards digital banking requires a transformation in organizational culture, management practices, and customer service models. Financial institutions must invest in training, restructure their operations, and ensure that employees are equipped to work with new technologies (Schindler, 2017). Fintech innovations such as robo-advisors and automated payment systems are changing the way financial institutions interact with their customers. These innovations lead to a shift in customer expectations, as consumers demand faster, more efficient, and personalised services. Fintech present challenges related to regulatory compliance and data security, which must be managed through effective change management strategies. Financial institutions need to navigate evolving regulations while ensuring that their systems and processes are secure and compliant with industry standards (Zhao & Zhang, 2021).

According to the Hungarian National Bank (MNB, 2024), the rapid increase in the number of global fintech companies seen in recent years has slowed down, though there was continued growth in Europe and the Americas in 2023 (Figure 9).

Figure 9 *- Development of the number of Fintech companies*

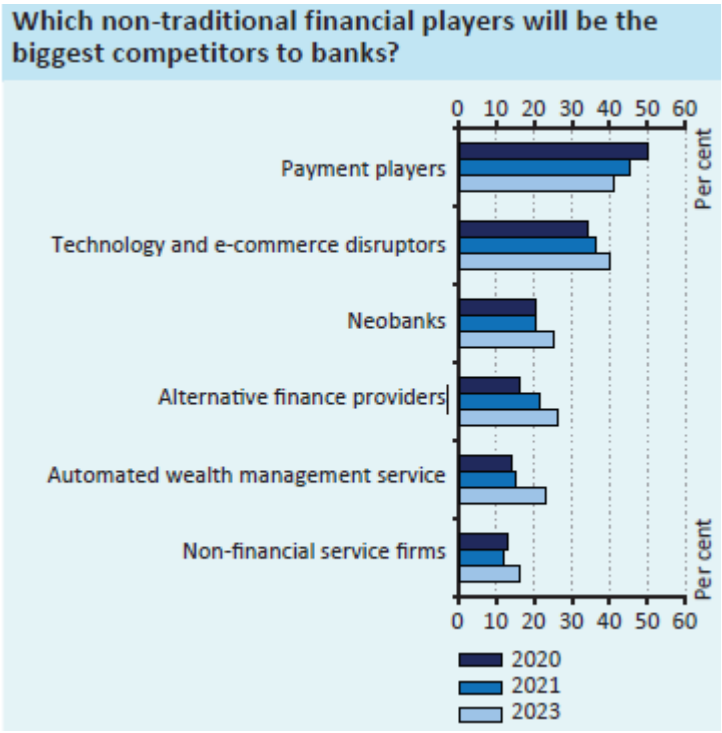


Source: MNB, 2024

While overall fintech investments decreased globally during the year, there remained strong interest in small-cap investments and technological solutions. Digital payment and lending services continue to be the most promising areas in fintech. However, the high inflation environment of recent years has impacted the spread of certain fintech business models. The rising cost of living led to the expansion of alternative financing platforms, including Buy-Now-Pay-Later (BNPL) solutions. On the savings side, some digital investment and capital market solutions became increasingly popular. Nevertheless, cybersecurity issues persist, with growing challenges related to fraud techniques, the frequency of incidents, and the volume of data and funds involved, partly driven by technological advancements and the use of artificial intelligence. Generation Z's openness to digital finance solutions is notable, and financial market players should pay more attention to this group. Central banks worldwide are becoming more involved in research on various forms of central bank digital currencies. In Europe, preparations for the digital euro are progressing rapidly, potentially reshaping the EU's digital payment services market as a result of this technology-driven financial innovation (MNB, 2024).

In 2023, the global number of fintech companies remained largely stable after years of growth. While data for the global fintech sector are not as detailed as those for the domestic sector, the main trends are still apparent. Geographically, North and South America continue to have the highest number of fintech companies, followed by Europe and the Asia-Pacific region. In 2023, over 26,000 firms were registered, just below the peak seen in 2021. That same year, there were 322 fintech unicorns (companies valued at over USD 1 billion), most of which are located in North America (MNB, 2024).

Figure 10 *- Non-traditional competitors to banks*



Source: MNB, 2024

Digital payments and lending services maintain their dominant position in the fintech market. There remains considerable room for growth in payment services, especially with the potential implementation of inclusive, instant, and affordable transactions, whether through market-based approaches or Central Bank Digital Currency (CBDC) projects, offering significant opportunities for the fintech sector. In lending, investors are optimistic about BNPL financing, AI, and ecosystem development. Neobanks have emerged as successful challengers, penetrating traditional sub-

markets with an expanding range of products, while keeping operating and client acquisition costs low, offering an exceptional user experience. Distributed Ledger Technology (DLT) promises substantial growth potential for financial infrastructures. Despite varying levels of preparedness, banks acknowledge the emerging trends and new challenges in the financial sector. Notably, payment service providers, once considered the primary competitors for banks, are now facing increasing competition from technology giants, BigTech companies, and e-commerce platforms, a shift expected to intensify over the next five years (Figure 10). At the same time, banks are facing a growing threat from alternative financial providers and neobanks, whose competitive positions continue to strengthen, further disrupting traditional banking models. Implementing structured change management processes allows banks to align their strategies with emerging technologies, manage stakeholder expectations, and mitigate risks associated with technological integration (Tengstrand et al., 2021).

3.2 Applying Change Management Strategies to Navigate Fintech

As fintech innovations disrupt traditional banking models, change management plays a key role in guiding the sector through this transition. This subchapter explores how Hungarian and Kazakh financial institutions apply change management strategies to effectively navigate fintech innovations.

The Role of Change Management in Fintech Disruption

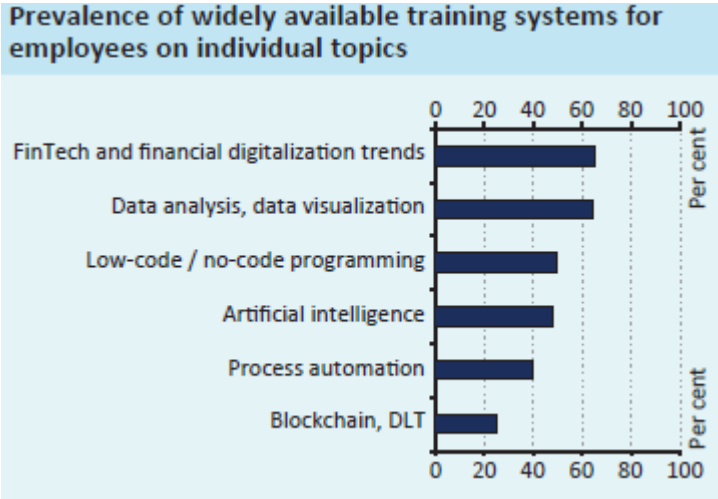
In Hungary, change management plays a crucial role in the successful adoption of fintech innovations, especially as banks work to integrate digital solutions such as mobile banking, AI, and blockchain into their existing systems. Change management refers to the process by which organizations guide their employees, customers, and internal operations through significant transitions. The goal is to minimize disruption while maximizing the benefits of new technologies.

Hungary's banking sector has been particularly cautious about digital transformation due to its highly regulated environment, which requires adherence to strict EU data protection and consumer security standards. According to Noda (2025), mobile banking adoption in Hungary has reached 50% of the population as of 2024, with a significant increase in digital payment usage, driven by the instant payment system

introduced by the Hungarian National Bank (MNB). This steady increase in digital payment transactions, up by 30% over the last two years, reflects the growing acceptance of digital solutions (MNB, 2024).

In Hungary, the role of change management in fintech adoption is ensuring that employees are trained and customers are educated to use these technologies confidently (Figure 11).

Figure 11 *- Training availability*



Source: MNB, 2024

In Kazakhstan, change management refers to the process by which banks guide their employees, customers, and operations through the integration of digital banking solutions. The role of change management is central in ensuring that these transitions occur smoothly, with minimal disruption to business continuity. The NBK has been instrumental in creating a regulatory environment that supports fintech innovations. The Digital Kazakhstan initiative, launched by the government, provides a supportive framework for fintech development, making it easier for banks to adopt new technologies like mobile wallets, digital payments, and super-apps. As of 2024, mobile banking adoption in Kazakhstan is approximately 70%, one of the highest in the Central Asian region, driven by the widespread use of platforms like Kaspi.kz (Kaspi, 2024).

Change management strategies in Kazakhstan focus on the rapid adoption of new technologies, agility, and cross-functional collaboration. These strategies emphasize quick experimentation, allowing financial institutions to test and scale new digital services with minimal risk. Kaspi.kz, a leader in Kazakhstan's fintech space, offers a super-app that integrates various financial services such as digital wallets, e-commerce, and buy-now-pay-later options, all of which are accessible via one platform (Kaspi, 2024). The agile approach at Kaspi.kz is a clear example of how change management in fintech enables rapid innovation while ensuring that banks keep up with the speed of technological change.

Incremental Innovation and the Gradual Adoption of Fintech

Hungarian banks are implementing incremental innovations, focusing on improving existing systems rather than introducing radical change. OTP Bank, Hungary's largest bank, has established OTP LAB, an innovation hub designed to develop AI, mobile payments, and low-code/no-code solutions (Group, 2025). The bank's approach emphasizes gradual adoption, allowing for careful testing and deployment of fintech solutions while ensuring that customers and employees are adequately prepared for the digital transition.

As of 2024, OTP Bank reported that mobile banking adoption among its customer base had reached 55%, reflecting a steady increase from the previous year. Despite the positive trend, OTP Bank's change management strategy focuses on employee readiness, ensuring that staff are equipped with the necessary skills to use AI-driven customer service tools and manage digital interactions securely. OTP Bank's decision to implement AI for personalized customer service reflects a broader trend in the industry, with AI adoption in Hungarian banks growing by 15% annually (MNB, 2024).

The gradual approach to fintech adoption in Hungary allows for effective management of risks associated with data privacy, security, and regulatory compliance. For instance, OTP Bank has invested heavily in cybersecurity measures, including AI-based fraud detection systems to monitor digital transactions and ensure that customer data is protected from potential cyberattacks. According to OTP Bank's annual report, the bank has reduced fraud incidents by 20% in 2023 due to enhanced security protocols (OTP Group, 2025).

Kazakhstan has been more active than many other countries in embracing revolutionary innovations in the field of financial technology. Kazakhstan's banking sector is not only implementing new technologies but also leading the way in revolutionary changes through the development of super apps and other integrated platforms. Kaspi.kz is at the forefront of this movement, providing a wide range of financial services on a single platform, including payments, lending, insurance, and investments (Kaspi, 2025). The bank's rapid adoption of fintech solutions is in line with a broader trend in Kazakhstan's financial sector, where revolutionary innovations take priority over gradual changes.

Halyk Bank has integrated cloud technologies and implemented artificial intelligence-based systems to improve customer service and automate back-office functions (ehuaweicom, 2025). This flexible approach allows Kazakh banks to implement changes quickly and efficiently, minimising the risk of disruption while stimulating innovation. The role of change management is evident in these banks' ability to continuously test and implement new digital solutions while maintaining customer trust.

Regulatory Framework and Its Impact on Change Management

The regulatory environment in Hungary significantly shapes the implementation of change management strategies in the fintech sector. The Hungarian National Bank has introduced several initiatives to support digital transformation, including regulatory sandboxes for testing fintech innovations. These initiatives allow banks to experiment with new technologies such as blockchain and digital currencies while ensuring compliance with EU regulations on data protection and consumer rights (MNB, 2024).

In Hungary, open banking adoption has been slower compared to other European countries. While the EU’s PSD2 directive mandates open banking to increase transparency and improve financial services, Hungary's adoption rates remain below EU averages. According to a report from the MNB, only 15% of Hungarian banks have fully implemented open banking features, compared to 35% in other EU countries (Noda, 2025). This discrepancy highlights the challenges Hungarian banks face in encouraging consumer adoption and building trust in third-party providers who will access consumer financial data.

The Kazakh National Bank plays an important role in supporting this shift, creating regulatory sandboxes for fintech testing, and actively promoting the adoption of Central Bank Digital Currencies (CBDC) and digital payment solutions (NBK, 2025). This regulatory environment is designed to foster innovation while ensuring financial stability, offering Kazakh banks a flexible platform for adopting and scaling fintech services quickly.

In contrast to Hungary, Kazakhstan's regulatory flexibility allows banks to adopt disruptive innovations more quickly. The Kazakh National Bank also plays a vital role in monitoring and supporting banks as they introduce new fintech solutions, ensuring that regulatory compliance and consumer protection are maintained throughout the process. This balanced approach to innovation and regulation has allowed Kazakhstan's banking sector to grow and adapt rapidly to fintech disruptions.

Consumer Engagement and Education in Change Management

One of the primary challenges of change management in Hungary is addressing consumer resistance to digital banking services. Despite increasing adoption, many Hungarian consumers, particularly those in older age groups, are still hesitant to embrace digital banking solutions due to concerns about data privacy, security, and technological literacy. According to a survey conducted by the MNB in 2024, approximately 35% of Hungarian consumers remain reluctant to use mobile banking apps due to concerns about identity theft and fraud.

To address these concerns, Hungarian banks have implemented consumer education programs designed to build trust in digital banking. OTP Bank and Raiffeisen Bank have both launched digital literacy initiatives, offering online tutorials, workshops, and customer support lines to guide users through the adoption process. These efforts have been successful in increasing customer engagement, with OTP Bank reporting a 20% increase in the number of digital transactions over the past year (OTP Group, 2025).

In Kazakhstan, consumer engagement and education are key aspects of the change management process. As the adoption of financial technology accelerates, particularly among Kazakhstan's younger population, banks must ensure that their customers understand how to use digital services safely and effectively. According

to Kaspi.kz, about 70% of the population currently uses mobile banking services, which shows how digitally engaged the country is (Kaspi, 2025). But there's still a need to address digital literacy among older customers, who might not be as comfortable with new tech.

Kazakh banks are addressing these issues through comprehensive customer education programs. For example, Halyk Bank has implemented digital literacy programs that provide customers with information on how to use mobile apps, make secure payments, and manage their finances digitally. These programs are an integral part of change management, as they ensure that customers not only accept new fintech solutions but also feel comfortable and confident using them.

Cybersecurity and Data Protection

As Hungary's banking sector undergoes digital transformation, cybersecurity remains a significant concern. Data breaches, fraudulent activities, and identity theft are pressing issues as more consumers embrace mobile banking and digital payment solutions. According to the Hungarian National Bank, incidents of cybercrime targeting banks in Hungary have increased by 18% in the last year (MNB, 2024b). As a result, cybersecurity has become a central element of change management strategies.

Hungarian banks, led by OTP Bank, are investing heavily in cybersecurity infrastructure to protect customer data and prevent fraud. OTP Bank has implemented AI-based fraud detection systems that monitor transactions in real-time, identifying suspicious activity and reducing fraud incidents by 20% in 2023 (OTP Group, 2025). Additionally, Hungarian banks are ensuring compliance with EU GDPR regulations to safeguard customer privacy and data protection.

With the increased use of digital platforms and mobile banking services, cybersecurity has become a top priority in Kazakhstan's fintech landscape. As digital banking and fintech solutions continue to evolve, ensuring data protection and cybersecurity is a key part of change management strategies. Kaspi.kz, for example, has integrated AI-based fraud detection systems and end-to-end encryption into its digital wallet and payment systems, significantly reducing the risk of fraudulent activities (Kaspi, 2025).

Table 8 provides a detailed overview of the different approaches to fintech adoption and the application of change management in the banking sectors of both countries, highlighting key differences in their regulatory environments, adoption rates, and consumer engagement strategies.

Table 8 *- Comparison of Fintech Application and Change Management Approach*

Aspect	Kazakhstan	Hungary
Adoption of Fintech	Rapid adoption of fintech, with a strong focus on mobile banking, super-apps, digital payments, and AI.	Incremental adoption of fintech, with a focus on mobile banking, AI-driven services, and digital payments.
Mobile Banking Adoption Rate	70% of the population uses mobile banking services (Kaspi.kz, 2025).	50% of the population uses mobile banking services (MNB, 2024).
Key Fintech Solutions	Super-apps (Kaspi.kz), digital wallets, buy-now-pay-later, AI-powered customer service, blockchain.	AI-driven customer service, mobile payments, digital banking, low-code/no-code platforms.
Regulatory Environment	Supportive regulatory environment, with regulatory sandboxes provided by the Kazakh National Bank (NBK).	Highly regulated by EU laws, with the Hungarian National Bank (MNB) enforcing data protection and security.
Government Support for Fintech	Digital Kazakhstan initiative promotes digital transformation	The MNB facilitates fintech growth via sandbox regulations and support for PSD2-

	and fintech adoption in the banking sector.	compliant open banking.
Change Management Approach	Disruptive and agile approach, focused on rapid adoption and cross-functional collaboration.	Incremental innovation and customer-centric change management, focusing on gradual adoption of new technologies.
Employee Training and Readiness	Strong emphasis on training employees to adapt to fintech and digital tools, with continuous upskilling programs.	Employee readiness is a key part of change management, with an emphasis on training for new digital tools.
Consumer Engagement and Education	Financial literacy programs and customer education to ensure widespread adoption, especially among older consumers.	Customer education campaigns, focusing on trust-building and helping older customers transition to digital banking.
Cybersecurity and Data Protection	AI-powered fraud detection and robust cybersecurity measures implemented across digital platforms (Kaspi.kz, 2025).	Cybersecurity investments, especially in mobile banking apps and AI-driven fraud detection.
Fintech Market Share	High market share with platforms like Kaspi.kz and Halyk Bank driving rapid digital payments adoption.	Steady growth in fintech, with OTP Bank, Raiffeisen, and K&H Bank leading

		digital payments and mobile banking.
Key Challenges	Data security concerns, consumer trust, and cybersecurity. Continuous need for regulatory compliance.	Open banking adoption is slow, with challenges in consumer trust, data privacy, and slow fintech adoption.

Source: Author's own edition, 2025

Hungary's banking sector is undergoing transformation due to fintech innovations, with change management ensuring the integration of new digital technologies while maintaining consumer trust, data security, and regulatory compliance. Hungary has adopted a cautious and incremental approach, but is steadily moving towards a digital-first banking model. The success of this transition depends on engaging consumers, ensuring data protection, and complying with both local and EU regulations. In contrast, Kazakhstan's fintech sector is characterized by rapid adoption and disruptive innovation. Banks are embracing mobile banking, digital payments, and super-apps, with change management playing a crucial role in ensuring these transformations are effective and sustainable. Supported by a flexible regulatory environment and a tech-savvy population, Kazakhstan is leading fintech innovation in the region. However, addressing challenges like cybersecurity, consumer trust, and digital literacy will be essential for the long-term success of fintech in Kazakhstan's banking sector.

CHAPTER 4 - THEORETICAL FOUNDATIONS OF CHANGE MANAGEMENT IN ORGANIZATIONAL CONTEXTS

Change management has become important for organizations navigating the complexities of modern business environments, particularly in financial institutions where rapid technological advancements, regulatory shifts, and evolving customer expectations drive continuous transformation. Defined as "the process of continually renewing an organization's direction, structure, and capabilities to serve the ever-changing needs of external and internal customers" (Moran and Brightman, 2000), change management covers strategic, technological, organisational, and cultural adaptations. This chapter provides a synthesis of change management's theoretical foundations, with a focus on change forces, drivers of change, sources of organizational change, resistance, change models and their specific applications in financial institutions.

The banking sector must adopt change management strategies due to unique drivers that require both revolutionary and evolutionary changes to balance innovation with stability. The rise of fintech, artificial intelligence, and blockchain technologies is evidenced by the transformative impact of mobile banking apps and roboadvisors (Pramudito, Gata, and Hadikristanto, 2025). Stringent regulatory frameworks, such as Basel III and anti-money laundering requirements, force banks to overhaul compliance systems to meet global standards (Merrino and Harris, 2025). Evolving customer expectations for personalised, digital-first services drive innovation, exemplified by the rise of neobanks (Stanleigh, 2008). Intensified competition from fintech startups and global banks prompts strategic responses like mergers, acquisitions, and digital transformations (Cummings and Worley, 2024). Additionally, economic pressures, including low interest rates and market volatility, push banks toward cost optimization and revenue diversification, underscoring the need for adaptive change management to ensure competitiveness and resilience.

4.1. The Rationale for Focusing on Change Management

In recent years, the traditional view of organizational change as something occasional has become irrelevant. Instead of reacting to isolated disruptions, organizations today are constantly under pressure to adapt. This is especially true in financial and regulated sectors, where firms are now operating in complex, rapidly shifting environments. In such settings, change is not a project anymore. It is a permanent state. Responding effectively to this reality requires more than strategies or technologies; it demands the ability to manage change itself.

One specific area reshaping change management is intelligent finance. As described in the study of Ping An Group in China, the integration of digital platforms and AI in finance requires institutions to constantly update internal processes, employee roles, and customer-facing systems. Managing change in such cases is no longer an administrative task, but part of the firm's core capability, intertwined with performance, culture, and competitiveness (Sensen, Kai and Xin, 2024)

The human aspect remains the biggest risk in these transitions. Most change efforts fail because they underestimate the emotional, cultural, and communicative aspects of transformation. As McKinsey reports, over 70% of change initiatives still do not achieve their targets, often due to weak leadership alignment or staff resistance (Ewenstein, Smith and Sologar, 2015). Supporting this, Mitra and Soni (2024) argue that without a deep focus on internal culture, communication routines, and leadership behaviour, change programs are unlikely to be sustained, even when they are well designed on paper (Arefieva, Bozhanova and Abernikhina, 2024).

Change management cannot be reduced to technical tools or project frameworks. It must be understood as a multidimensional process shaped by leadership, culture, and management systems. These three elements form an interdependent triangle that determines how change is perceived, accepted, and sustained in organizations.

Leadership defines the direction of change and influences how it is interpreted. Leaders act as sense-makers who shape meaning, establish priorities, and build trust. Recent studies show that leadership behaviours such as vulnerability, empathy, and emotional intelligence significantly increase engagement and reduce resistance

during change initiatives. Leadership is a cultural force that shapes how people relate to the transformation process (Khan et al., 2024).

Organizational culture frames employee attitudes toward change. It creates the norms that define what is seen as acceptable or threatening. Cultural misalignment is one of the most common reasons for failed change efforts. In cross-national contexts, such as India and New Zealand, studies have found that values like collectivism and long-term orientation reduce resistance and improve adaptability when change is framed as a shared goal (Sharma, 2024). Culture is an active participant in change.

Management provides the operational structure for executing change. However, traditional command-and-control models are insufficient. Change requires adaptive coordination, with systems that align strategy, people, and behaviour. Models like McKinsey's 7S or ADKAR can support this alignment, but only when applied with sensitivity to cultural norms and leadership style. Empirical evidence shows that transformational leadership and constructive culture explain 64% of successful change outcomes (Bowers, Hall and Srinivasan, 2017).

Many popular change management models, such as Kotter's 8-Step or ADKAR, were designed in Western business environments. These models often assume empowered employees, open communication, and flat decision-making structures. When applied in countries like Kazakhstan or Hungary, these models may overlook critical cultural and institutional realities. In these contexts, employees may comply with change out of obligation, not conviction, leading to low engagement or silent resistance. Trust in leadership may also be weaker, and feedback loops slower, which undermines the success factors assumed by Western models. While certain HR practices for change can be adapted, deep cultural factors must be accounted for when applying organizational change frameworks in non-Western settings (Al-nakeeb and Ghadi, 2024). Similarly, findings from post-Soviet cities show that attempts to implement "Euro-Western" change frameworks often generate resistance or fail to activate local engagement due to conflicting historical and institutional norms (Angelucci, Shatvoryan and Di Cinzio, 2024).

Change management should no longer be viewed as a tactical toolkit used only during discrete transformation projects. In today's volatile and fast-moving environment, it must be understood as a core strategic capability, a foundational system through which institutions embed leadership vision, align internal structures, and respond to external disruption.

Strategic change capability enables organizations to maintain competitive advantage and organizational stability while managing ambiguity, speed, and complexity. Institutions with strong change capabilities perform better during market disruptions, because they can align leadership, culture, and operational systems in real time (Alrajhi, 2025; Almuqwishi & Rosli, 2024). In this way, change management becomes less about responding to events and more about navigating constant movement.

This capability links strategy to execution. It turns vision into behavior, realigning mindsets, systems, and incentives around new directions. Organisations that treat change management as a strategic function, rather than a project office, develop the resilience to adapt not once, but continuously (Koptieva & Nashchekina, 2023). In volatile systems like financial institutions, where regulation, competition, and technology evolve rapidly, this is not optional. It is a prerequisite for survival.

This framing justifies why change management is central to this thesis. It is not studied here as a process or model in isolation, but as a lens to understand institutional capacity for adaptation. It is how leadership translates intent into implementation. It is how organizational systems engage with uncertainty. It is how people, processes, and power realign in the face of disruption.

Taken together, these perspectives position change management not as a toolbox, but as a dynamic capability rooted in leadership, culture, and internal alignment. This conceptual approach justifies the thesis's central focus: understanding change management not only through theoretical models, but also through its practical enactment in institutions facing structural and cultural constraints. The following subchapters introduces the models that seek to structure such processes, while Chapters 6 and 7 analyse their applicability in two coutries, Hungary and Kazakhstan.

4.2 Introduction to change management in financial institutions

Effective change management is a critical component in ensuring the success and sustainability of financial institutions, especially in environments marked by intense regulatory oversight, technological disruption, and shifting customer demands. Financial institutions face unique challenges that require structured, systemic, and adaptive approaches to change, as they operate in highly regulated and dynamic environments. In contrast to more agile industries, banks and financial institutions must contend with a complex blend of regulatory requirements, technological innovations, and cultural inertia, all of which contribute to a need for managing changes carefully. These factors make the need for efficient change management strategies more pressing in financial institutions, as it helps them navigate regulatory and technological transformations while maintaining compliance, operational stability, and customer trust (Arefieva, Bozhanova and Abernikhina, 2024)

“Change” refers to the alteration of organizational structures, processes, strategies, technologies, or culture, a broad definition that encompasses the necessary transformations required by organizations to maintain competitiveness and adapt to environmental pressures. Organizational change can be triggered by factors such as market shifts, technological innovation, or regulatory adjustments (Chalwe and Nyimbili, 2024). In financial institutions, this could mean adapting to new regulations like Basel III, introducing innovative fintech solutions, or reconfiguring organizational structures to better meet customer needs and expectations.

“Change management” is a structured approach that facilitates the transition from an organization's current state to its desired future state. It involves tasks, measures, and activities designed to implement significant changes in mission, vision, strategies, structures, systems, and processes, aiming to achieve sustainable competitive advantages and improve organizational effectiveness (Helmold, 2021). In financial institutions, change management ensures that the integration of new technologies or regulatory compliance measures is done systematically, minimizing disruptions and fostering a smooth transition toward the desired outcomes.

In change management theory, organizational culture is widely regarded as a critical factor influencing the success or failure of organizational change. One key framework used to understand how culture shapes organizational behavior is

Hofstede's model of national culture (Hofstede, 2001). Hofstede identifies several cultural dimensions, including uncertainty avoidance and power distance, which are particularly relevant to understanding how financial institutions in different countries approach change management.

In cultures with high uncertainty avoidance, such as Hungary and Kazakhstan, organizations typically prioritize stability and predictability, preferring incremental change over rapid, disruptive innovations (Hofstede, 2001). This preference is particularly pronounced in financial institutions, where risk aversion is a significant cultural trait. Financial institutions in such environments tend to adopt carefully controlled change processes, reflecting their societies' discomfort with uncertainty and ambiguity. Power distance, another cultural dimension, describes the extent to which hierarchical structures are accepted in organizations. In countries with high power distance, decisions are typically made by top management, with little involvement from lower levels of the organization (Hofstede, 2001). This often results in a centralized approach to change management, where leadership dictates the direction of change rather than encouraging a participatory process.

The application of Hofstede's model to Hungary's banking sector helps explain why these institutions tend to be risk-averse and prefer incremental change. For example, the banking sector in Hungary has often been characterized by a centralized decision-making process and a strong preference for stability (European Union, 2024a). Similarly, in Kazakhstan, the financial institutions' cautious approach to fintech adoption can be traced to the high uncertainty avoidance and power distance dimensions of their national culture (NBK, 2023c). These cultural traits mean that Kazakhstan's banks have generally favored incremental integration of digital technologies rather than embracing more disruptive innovations.

While Hofstede's model provides valuable insights, it is also important to consider other cultural frameworks that highlight additional dimensions influencing change management. For instance, Trompenaars` (1993) model of culture emphasizes how universalism vs. particularism influences organizational decision-making, which can further explain the variations in banking cultures in different countries. Furthermore, Schwartz's cultural value orientations (Schwartz, 1999) introduce the concept of embeddedness and autonomy, which can help deepen our understanding of how

national cultures prioritize social cohesion versus individual achievement in organizational contexts.

Despite the theoretical importance of Hofstede's framework, empirical studies demonstrate that while national culture plays a significant role in shaping organizational culture, institutions may adapt their practices in response to external pressures, such as globalization and technological innovation. For example, despite Hungary's traditionally conservative banking culture, OTP Bank has successfully integrated AI-driven banking services into its operations, demonstrating that incremental change is possible within a risk-averse cultural environment (McKenzie, 2024). Similarly, Kaspi Bank in Kazakhstan has managed to balance its cautious cultural approach with innovative digital strategies, successfully launching its SuperApp ecosystem through structured change management processes (NBK, 2023d). These cases show that while national culture sets certain boundaries, financial institutions can still adapt to the evolving digital landscape through strategic, data-driven change management.

4.1.1 Evolution and conceptualisation of change management

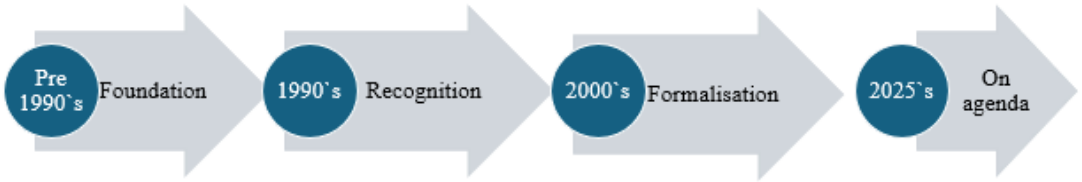
The field of change management has evolved considerably since its formal emergence, with particular relevance for highly regulated sectors such as banking. The systematic study of organizational change began to take shape in the 1990s, building on earlier organizational change theories, notably by Lewin (1951) forcefield analysis, which conceptualise models change as a dynamic equilibrium between driving forces (e.g., competitive pressures) and restraining forces (e.g., cultural inertia). Lewin's framework remains foundational, with recent studies reaffirming its utility in understanding resistance dynamics (Burnes, 2004). In financial institutions, this framework helps explain why banks often struggle between external changes (technological innovation pressures) and their internal change management responses (regulatory compliance processes).

Change management includes organisational tools and strategies that help institutions respond to external changes through iterative processes that align organisational strategies with external requirements (Anyieni and Gidion, 2016).

Contemporary research highlights the importance of leadership and temporal perspectives (Vullinghs and Dóci, 2020). Stouten, Rousseau and De Creme (2018) argue that effective change management requires aligning vision with employee engagement through participative leadership, while Hernes (2021) introduces an event-based temporal model, distinguishing episodic (past/future-oriented) and continuous (present-focused) change processes. Recent research by Cummings and Worley (2024) integrates systems thinking, viewing organizations as dynamic ecosystems where change interweaves psychological, cultural, and operational elements. In banking, this holistic approach is critical, as institutions must balance technological innovation with regulatory compliance and customer-centricity (Magnus, Temitope Oluwafunmike Sanyaolu, and Adams Gbolahan Adeleke, 2024).

This chapter aims to explore the evolution of change management as depicted in the image, shedding light on the key phases in its development, from early foundations to its current role as a disciplined area of expertise (Figure 12).

Figure 12 *- The evolution of change management*



Source: Author's own edition based on Prosci, 2020

The historical development of change management can be understood through four distinct phases, each reflecting how organizations learned to respond to different types of external changes:

Foundations (Pre-1990s): Before the 1990s, change management was largely informal and treated as a reactive response to external changes like economic crises or significant market shifts (Kotter, 1996). Organizations started to recognize the importance of developing systematic responses to change, but this was typically accomplished through ad hoc strategies with little formal structure. Early theorists

and practitioners worked in isolation, with limited frameworks and methodologies for managing organizational responses to change.

The foundational years were influenced by broader management theories, including those of Lewin (1947), who introduced the concept of "unfreezing," "changing," and "refreezing" as a change management process for helping organizations respond to external pressures. In banking contexts, this early period saw external changes driven by deregulation and market liberalization, with banks developing basic change management responses to these new competitive pressures. Although these foundational ideas were important, they lacked the formal, systemic approach that would later define change management as a distinct discipline for managing organizational responses to environmental changes.

Recognition (1990s): The 1990s represented a shift in how organizations understood the need for formal change management as a response to accelerating external changes, with it moving from the periphery to a more central position within business operations. During this period, external changes like globalization and technological advancement created growing recognition of the need for structured change management approaches. Greater emphasis was placed on change management elements like strategic planning, communication, and leadership during transitions (Hiatt, 2006). Several change management models and frameworks emerged, including Kotter's 8-Step Change Management Model, which became a key influence on how organizations structured their responses to change (Kotter, 1996).

Organizations started integrating formal change management processes into their strategic planning, aligning their responses to external changes with business goals. Financial institutions during this period faced external changes from technological advances like internet banking and ATMs, requiring structured change management approaches to adapt both technology and culture. This was an era when change management became a formalised area of focus for human resources and organisational development teams, though it was still viewed primarily as a response to large-scale external changes rather than a proactive, integrated management practice.

Formalization (2000s): By the 2000s, change management had developed into a formalized business discipline for systematically responding to external changes.

This era was marked by the development of standardized change management frameworks, certifications, and methodologies, with prominent organizations like the Project Management Institute (PMI) and Prosci offering structured guidance for practitioners (Prosci, 2020). The rise of corporate consulting firms and dedicated change management professionals indicated recognition of change management as an essential organizational capability for responding to continuous external changes.

The 2000s saw the implementation of systematic change management strategies designed to help organizations respond to external changes in a structured, predictable way. Change management frameworks such as ADKAR (Awareness, Desire, Knowledge, Ability, and Reinforcement) provided a step-by-step approach to helping individuals and organisations adapt to external changes (Hiatt, 2006). In banking, this period saw external changes from major regulatory shifts like Basel II, requiring banks to develop sophisticated change management capabilities for enterprise-wide transformations. The formalization also initiated extensive research into change management effectiveness, with studies on the return on investment of organizational responses to change gaining prominence.

Strategic Integration (2010s - Present): Currently, change management has become a core organizational capability integrated into how institutions respond to continuous external changes. The acceleration of external changes, including technological change, global interconnectedness, and growing market complexity, demands sophisticated change management approaches that are more agile and proactive (Burnes, 2017). Today, organisations recognise that change management capabilities must be built internally to respond effectively to constant external changes rather than relying solely on external consultants.

For financial institutions, this era is characterised by continuous external changes from digital disruption, requiring banks to develop change management capabilities for handling multiple concurrent transformations, including cloud migration, AI implementation, and open banking initiatives. The COVID19 pandemic demonstrated that strong change management capability is essential for responding to sudden external changes and ensuring institutional survival. There is growing emphasis on how change management must address the psychological and cultural aspects of organizational responses to external change, as well as the role of leadership in sustaining change management initiatives over time. Change

management has become integral to organizational processes, providing the tools and strategies for responding to external changes that affect everything from corporate governance to innovation strategies.

The evolution of change management reflects how organizations have learned to respond systematically to external changes. From its foundations as a reactive, informal process to its current status as a formalized discipline, change management has grown in scope and complexity as a set of organizational tools and strategies for managing responses to environmental changes. Understanding this evolution is crucial for both scholars and practitioners, as it provides insights into how organizations can better develop change management capabilities to respond to inevitable external changes in today's dynamic business environment. For financial institutions operating in rapidly evolving markets like Kazakhstan and Hungary, this evolution provides essential context for understanding how to develop change management capabilities that can effectively respond to local and global changes.

4.1.2 Forces driving organizational change

Organizations face numerous external changes that create pressures requiring systematic change management responses. Organizational change is initiated by a complex interplay of external and internal forces, each requiring different change management strategies. The distinction between external changes (forces beyond organizational control) and internal dynamics (factors within organizational influence) is key for developing appropriate change management approaches. In the banking sector, both internal and external forces significantly influence the strategies and operations of financial institutions. External factors, such as technological progress, regulatory frameworks, and shifts in market conditions, often drive banks to adjust their practices and systems. For instance, the increasing use of digital banking technologies and the need to comply with regulations like Basel III and GDPR force banks to rethink their operations (Gader *et al.*, 2021). Additionally, competitive pressures from fintech companies and the growing global interconnectedness of financial markets contribute to the need for adaptation (Meeh-Bunse and Hermeling, 2017). Internal factors, including organizational culture, leadership, and employee satisfaction, also play a significant role in how banks

respond to these external pressures. For example, the development of sustainable banking practices, motivated by internal values or employee-driven innovation, can lead to improvements in service and overall performance (Kumar and Mahapatra, 2013). Table 9 presents these forces, drawing on recent literature to highlight their impact on financial institutions.

Table 9 *- External and internal driving forces*

Type	Description	Examples in Banking	Source (APA In-Text Citation)
External	Factors originating outside the bank that influence its operations and strategies.	Adoption of AI and blockchain for efficiency. Compliance with Basel III or GDPR. Sanctions.	Gader et al., (2021)
		Shifts in customer preferences toward digital banking. Market demand for sustainable finance.	Goncharenko (2018)
		Compliance with anti-money laundering (AML) regulations. Competitive pressure from fintech startups.	Meeh-Bunse & Hermeling (2017)
		Regulatory compliance pressures (e.g., GDPR). Financial services regulation.	Kam, Katerattanakul and Merick, (2013)
		Government mandates for green banking. Stakeholder pressure for eco-friendly lending.	Aumbur et al., (2024)
		Financial recovery measures post-crisis. Regulatory changes in risk management.	Wisniwski (2005)
		Legal and regulatory structures. Protection of minority shareholders.	Sohail et al. (2017)
		Economic conditions influencing banking competition. Regulatory pressures.	Janjua & Mühlbacher (2015)
		Mobile banking technologies. Digital payments adoption.	Davčev et al. (2014)
		Development of self-service banking (e.g., ATMs, online banking). Technology adoption for efficiency.	Batiz-Lazo (2018)

Internal	Internal dynamics influencing organizational functioning and readiness for change.	Employee satisfaction programs. Leadership changes. Governance mechanisms.	Kumar & Mahapatra (2013)
		Digital transformation (cloud adoption, AI). Customer-centric innovations.	Sendjaja et al. (2012)
		Service innovation. Risk management adjustments.	Hong (2012)
		Governance frameworks, internal audits. Risk management protocols.	Wang (2013)
		Risk management, internal audits. Financial performance measures.	Podolskaya, Zhuravlev and Sidelnikov (2019)
		Integration of Web 2.0 technologies in communication and service.	Sakal, Matković and Tumbaset (2011)

Source: Author's own edition based on literature review, 2025

External forces, such as technological innovation, regulatory pressures, and globalization, are particularly pronounced in banking. The rise of fintech and digital platforms has disrupted traditional banking models, compelling institutions to adopt technologies like AI for fraud detection or blockchain for secure transactions (Bhattacharjee et al., 2024). Regulatory frameworks, such as Basel III or the EU's General Data Protection Regulation (GDPR), mandate structural and operational changes to ensure compliance (European Commission, 2024). Additionally, shifting customer expectations driven by mobile banking and personalised services require banks to prioritise digital transformation (Stanleigh, 2008). Globalization intensifies competition, as international fintech firms challenge established banks, necessitating rapid strategic realignments.

Internal forces include leadership dynamics, organizational culture, and performance metrics (Besley and Persson, 2024). In banking, new leadership often spearheads digital transformation initiatives, as seen in major banks adopting cloud-based systems (Cummings and Worley, 2024). Performance issues, such as declining net interest margins, drive cost-cutting measures or process reengineering. Cultural shifts toward agility and customer-centricity are critical, as banks transition from hierarchical to collaborative structures (Cox, Smith and Johnson, 2010). Employee

engagement, particularly demands for hybrid work models post2020, further influences internal change strategies (Walk, 2024).

The critical insight for financial institutions is recognizing which forces represent external changes requiring adaptive responses versus internal dynamics that can be shaped through proactive change management. External changes like regulatory requirements or technological disruption cannot be controlled, only responded to through effective change management. Internal forces can be actively managed and directed through strategic change management initiatives. This distinction is fundamental for developing appropriate change management strategies in banking contexts.

4.1.3 Sources of organizational change

Organizational change originates from various sources, each with distinct implications for management. Table 10 outlines key sources, with a focus on their relevance to banking. Sources of change management refer to the key drivers or initiators that influence the process of change within an organization.

Table 10 *- Organizational Change Sources*

Source	Description	Banking Examples	Sources
Top management	Strategic initiatives driven by executives to align with market or regulatory demands.	CEOs are launching digital transformation programs or mergers.	PetrauskaitėJocienė and Korsakienė, (2024), Zarandi, Amirkabiri and Azimi (2017)
Line managers	Operational changes initiated by middle management to improve efficiency.	Branch managers implementing new customer service protocols.	Mutale (2025), Oladimeji and Olanitori (2022)
Employee feedback	Suggestions from ordinary employees on how to improve processes or change corporate culture.	Staff proposing mobile app enhancements based on customer feedback.	Meesala (2019), Trivedi (2018)

External consultants	Expert-driven recommendations for structural or technological upgrades.	Consultants advising on blockchain integration.	Alzawawi (2016), Marabelli and Rajola (2007)

Source: Author's own edition based on literature review, 2025

Organizational change is an ongoing process in the banking sector, influenced by various internal and external factors. These changes are often driven by key players within the organization, including top management, line managers, employees, and external consultants. Top management plays a critical role in setting the strategic direction for organizational transformation, particularly in response to market or regulatory demands. For example, CEOs often initiate digital transformation programs or mergers to ensure alignment with industry trends and enhance operational efficiency (Zarandi, Amirkabiri and Azimi, 2017; PetrauskaitėJocienė and Korsakienė, 2024). Line managers, on the other hand, are responsible for implementing operational changes within their departments. These changes typically aim to streamline processes and improve customer service, such as branch managers introducing new protocols for customer interactions (Oladimeji & Olanitori, 2022; Mutale, 2025). In addition, employee feedback is a valuable source of change within banking organizations, as staff members often provide insights into areas for improvement, such as the enhancement of mobile apps based on customer feedback (Meesala, 2019; Trivedi, 2018). Finally, external consultants bring specialized knowledge to advise banks on technological upgrades and structural changes. For instance, consultants are often engaged to assist with the integration of emerging technologies like blockchain (Marabelli and Rajola, 2007; Alzawawi, 2016). The various sources of organizational change in the banking sector, such as top management, line managers, employee feedback, and external consultants, work together to drive the necessary adjustments to both internal and external challenges.

4.1.4 Types of organizational change

Change management literature categorizes change into revolutionary and evolutionary types, each with distinct characteristics and applications, particularly in banking (Bogdan and Anna, 2021). Table 11 presents a comparison between

revolutionary and evolutionary changes in the banking sector, exploring various factors such as description, nature, scope, implementation, banking examples, risk level, and limitations

Table 11 *- Revolutionary and evolutionary change*

Factors	Revolutionary change	Evolutionary change
Description	Rapid, radical transformations reshaping structure, culture, or strtegy.	Gradual, incremental refinements of processes or structures.
Nature	Disruptive, often crisis-driven (e.g., regulatory mandates).	Predictable, planned, and focused on continuous improvement.
Scope	Broad, affecting the entire organisation (e.g., bankwide digitalisation).	Narrow, targeting specific areas (e.g., branch process optimization).
Implementation	Quick, with top-down directives (e.g., adopting AI platforms).	Slow, iterative, with participatory processes.
Banking Examples	Mergers, AI-driven operational overhauls, and blockchain adoption.	Incremental app updates, staff training programs.
Risk Level	High, due to resistance and complexity.	Low, due to gradual adaptation.

Source: Author's own edition based on Nicoletti (2015), Bhalla (2019),Nichkasova & Shmarlouskaya (2020), Argitis (2017); Prezelj et al. (2015).

Revolutionary change is characterized by rapid and often crisis-driven transformations, which have a broad scope and are typically implemented quickly through top-down directives. This type of change can be seen in major events like mergers or the adoption of advanced technologies, such as blockchain and AI platforms (Nicoletti, 2015; Bhalla, 2019). On the other hand, evolutionary change

occurs more gradually, involving continuous improvements to processes or structures. These changes are often narrower in scope and focus on specific areas, such as branch optimization or incremental updates to apps, and are implemented through a slower, participatory process (Nichkasova and Shmarlouskaya, 2020). The table also highlights how revolutionary change typically carries higher risks due to its disruptive nature, while evolutionary change is more manageable but may result in a risk of lagging behind the competition (Prezelj *et al.*, 2015; Argitis, 2017). Both types of change play an important role in the evolution of the banking sector, with revolutionary change often being driven by external pressures, and evolutionary change fostering gradual, long-term growth. The dynamics between revolutionary and evolutionary change illustrate the need for banks to adapt to both sudden disruptions and continuous incremental improvements to stay competitive in a rapidly changing environment.

4.1.5 Resistance to change

Resistance to change is a pervasive issue within organizational behavior, particularly in the banking industry, where employees and systems face considerable challenges in adapting to new strategies, technologies, or organizational cultures. Several factors, presented in Table 12, contribute to this resistance, which can be categorised into two main levels: individual and organisational (Mikel-Hong *et al.*, 2023).

Table 12 - *Factors Contributing to Resistance to Change*

Level	Factor	Description	Banking Example	Source
Individual	Fear of the unknown	Anxiety about uncertain outcomes (e.g., job roles post-digitalization).	Staff uncertainty about AI replacing tasks.	Appelbaum, 2012; Armenakis & Bedeian, 1999
	Job security concerns	Fear of job loss or reduced importance.	Tellers resisting branch automation.	Cummings & Worley, 2024; Kotter, 2012
	Lack of trust	Distrust in leadership's intentions or competence.	Scepticism about new compliance systems.	Pardo del Val & Martínez Fuentes, 2003; Kotter, 2012

Organizational	Cultural barriers	Norms conflicting with change (e.g., risk-averse culture).	Resistance to agile methodologies.	Armenakis & Bedeian, 1999; Kotter, 2012
	Structural inertia	Established routines resisting change.	Legacy systems hindering digital adoption.	Cummings & Worley, 2024; Kotter, 2012
	Past failures	Negative experiences from prior changes.	Failed CRM implementations.	Pardo del Val & Martínez Fuentes, 2003; Cummings & Worley, 2024

Source: Author's own edition based on literature review.

On the individual level, one significant driver of resistance is the fear of uncertainty, particularly related to job roles and responsibilities in the wake of digital transformation. Employees often experience anxiety about how changes, such as the adoption of automation, may affect their job security, leading to a reluctance to embrace new technologies (Appelbaum *et al.*, 2012). Additionally, lack of trust in leadership plays a critical role in resistance, especially when employees question the competence or intentions of those implementing the change. Without trust in leadership, employees may be unwilling to fully engage with or support the transformation (Cummings, Bridgman and Brown, 2015).

At the organizational level, resistance can stem from cultural barriers that arise when established organizational values and norms conflict with the change being introduced. In many banks, a risk-averse culture and attachment to traditional practices may hinder the acceptance of new methodologies, particularly those that emphasize innovation or flexibility (Armenakis and Bedeian, 1999). Furthermore, structural inertia plays a significant role in resisting change, as many banking institutions rely heavily on long-standing procedures and legacy systems. This reliance on outdated systems creates substantial obstacles when attempting to implement new technological solutions, especially in the context of digitization (Pardo Del Val and Martínez Fuentes, 2003). Lastly, past failures can significantly contribute to resistance, as employees may be skeptical about new initiatives due to negative experiences with previous change efforts. This includes failed attempts at implementing new systems, such as Customer Relationship Management (CRM), which may lead to a fear of further disruptions or setbacks.

4.2 Key change management models and their application

Financial institutions face distinct challenges, driven by technological disruption, regulatory changes, and shifting customer expectations. These external pressures necessitate that banks respond to change in a structured and strategic manner that aligns with both organizational goals and regulatory frameworks. This chapter presents key change management models, exploring their theoretical foundations and practical relevance within the financial sector. Kotter's 8-Step Model, ADKAR, Lewin's Change Model, and Bridges' Transition Model have been widely adopted across various industries, offering frameworks to guide the processes of organizational change. However, their applicability to the banking sectors requires a nuanced understanding, as each market presents unique contextual challenges. The aim of this chapter is to critically examine these change management models, as theoretical constructs and practical frameworks that have been employed to address the specific needs of financial institutions. Analysing their application gives an opportunity to assess their strengths, limitations, and the extent to which they facilitate successful organisational change, particularly in response to the disruptive forces that define the modern banking system.

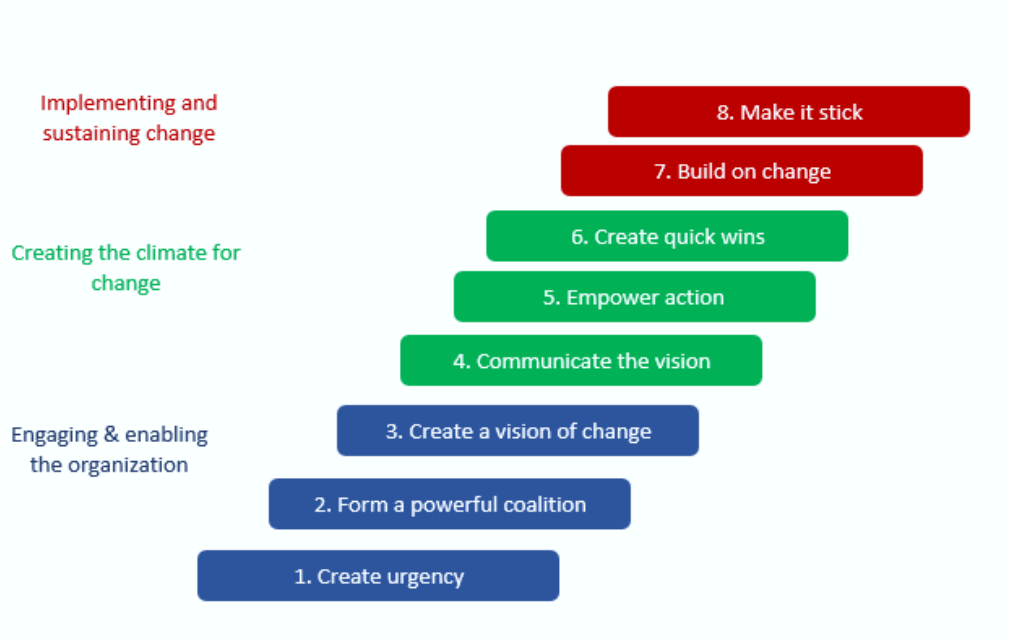
4.2.1 Kotter's 8-Step model - leadership driven transformation

Kotter's (1996) 8-Step Model operationalizes transformational leadership theory by prescribing a structured, sequential process to mobilize organizational change. The model begins with creating a sense of urgency and culminates in anchoring new approaches within the organizational culture (Kotter, 2012). Its strength lies in its focus on vision, coalition-building, and communication to overcome resistance and align stakeholders (Kotter, 1996). Kotter's model (Figure 13) emphasizes the importance of strong leadership throughout the change process, ensuring that a unified vision is communicated clearly and that all employees are engaged in the transformation process.

The model is widely acknowledged for its linear approach, which progresses through specific stages of change. However, the real-world application of Kotter's model reveals that implementing organisational change often requires engaging multiple

levels of the organisation simultaneously and addressing local relevance at each stage of the process. This underscores the necessity for adaptation and flexibility, particularly in complex organizations (Pollack and Pollack, 2015).When applied to the banking sector, Kotter's 8-Step Model proves effective in managing the shift towards digital banking. The transition involves engaging stakeholders, addressing gaps in the change process, and fostering alignment between business and technology functions.

Figure 13 *- Kotter`s 8-Step Model, adapted*



Source: Kotter, (1996).

Technological advancements are reshaping traditional banking business models, driven by customer demands for more digital and agile financial services (Marozzi, 2020). The model's focus on vision and coalition-building provides a strong framework for guiding these transformations, particularly in financial institutions facing fintech disruption and evolving regulatory pressures.

For example, JPMorgan Chase used Kotter's framework in its extensive digital transformation starting in 2015. Leadership at JPMorgan created a sense of urgency by articulating the threats posed by fintech competitors and the necessity of complying with increasingly stringent regulations (Dai, 2024). A guiding coalition

was formed across various business and technology units to align the company's vision of digital innovation. The company communicated this vision effectively and supported it by implementing agile fintech pilots and recognizing short-term wins to engage employees and foster organizational commitment (Appelbaum *et al.*, 2012). This approach successfully enabled JPMorgan to embed new digital capabilities while maintaining alignment with organizational goals.

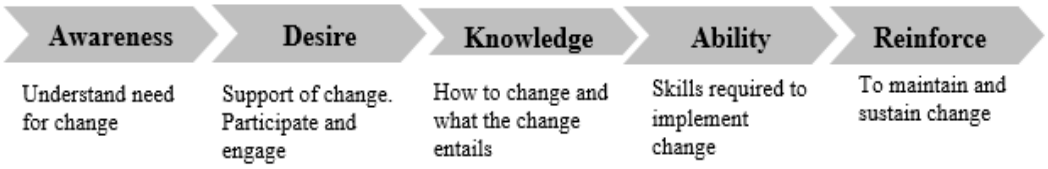
However, despite its clear structure, Kotter's model has been critiqued for its linear nature, which may constrain the flexibility needed in dynamic environments, particularly in industries facing rapid, iterative changes such as fintech (Jo, Kim and Koh, 2020). The model's prescriptive clarity, while valuable, may limit its adaptability to emergent and ongoing transformations, where constant iteration and recalibration are essential.

As financial institutions continue to adapt to the digital economy, Kotter's model provides a useful framework for leadership-driven change. Important to recognize the limitations of the model, especially in fast-paced environments like fintech, where flexibility and responsiveness to change are paramount (Gehrig, 2015), 2015). The model is applicable in managing large-scale digital transformations, and beneficial to consider alternative models for specific types of change. For example, ADKAR, with its focus on individual readiness, is better suited for managing personal transitions and employee behavior changes during digital skill development (Hiatt, 2006). Similarly, Lewin's Change Model could be more useful in managing incremental change or cultural shifts within an organization, where the need for unfreezing existing behaviors is crucial before introducing new ways of working. Combining Kotter's leadership-driven transformation approach with models like Lewin's or ADKAR allows for a more holistic approach that covers both organizational structure and individual readiness, ensuring a comprehensive transformation strategy that addresses both top-down and bottom-up change.

4.2.2 ADKAR Model of individual readiness and behavioral change

Hiatt's (2006) ADKAR Model, grounded in behaviorist and cognitive theories, focuses on sequential individual change: Awareness, Desire, Knowledge, Ability, and Reinforcement (Figure 14).

Figure 14 - ADKAR Model



Source: Haitt and Creasey (2012).

It targets psychological readiness, critical in skillintensive digital adoption contexts (Bandura, 1986). The Model focuses on people's change adaptation, as opposed to the change itself (Hiatt and Creasey, 2012), making it highly relevant in industries like banking, where digital transformation demands significant shifts in employee behavior, skills, and mindsets.

The model's strength lies in its sequential approach. It starts with creating awareness of the need for change, builds desire to participate, and progresses through knowledge acquisition, skill development, and ultimately, reinforcement to ensure sustainability. The reinforcement stage ensures that new behaviors stick through feedback, rewards, and recognition (Vázquez, 2022).

However, ADKAR's focus on individual readiness may not address organizational culture or structural factors, which are also crucial for successful transformation. In the Kazakhstani and Hungarian banking sectors, organizational alignment and culture play key roles in supporting digital adoption. Therefore, complementary models like Kotter's 8-Step Model are often needed to address broader organizational challenges (Todnem By, 2005). Prosci, (2020) highlights how the model has been implemented in Bank of America during its multiplatform digital upgrades. Here, ADKAR-based strategies were employed to manage the digital transition. These included building awareness and desire through transparent communication, enhancing knowledge and ability via targeted training programs, and using reinforcement through performance incentives and support forums. This comprehensive approach helped reduce resistance and increase adoption rates of new system

In Kazakhstan, Kaspi Bank has successfully applied ADKAR to drive employee readiness for digital banking adoption. The bank used awareness campaigns and training programs to equip employees with the necessary knowledge and skills. Reinforcement was achieved through performance incentives, ensuring long-term change (NBK, 2023b). The "Digital Kazakhstan" program further accelerated these efforts by embedding digital literacy at all levels of the banking workforce.

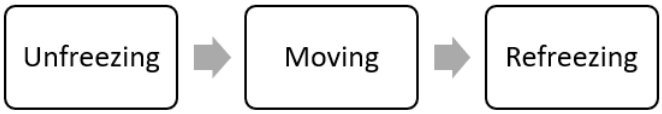
Similarly, in Hungary, OTP Bank applied the ADKAR model during its digital transformation. The bank focused on building awareness about the importance of digital services, created desire through clear communication, and provided employees with comprehensive training. Reinforcement was achieved through employee recognition and ongoing feedback (Szikra and Varga, 2022) This approach enabled OTP Bank to successfully transition to a more digital-first banking model.

While ADKAR excels in promoting individual behavioral change, it may not fully address organizational culture and systemic change. In the Kazakhstani and Hungarian banking sectors, where digital transformation requires alignment across organisational structures and cultural values, models like Kotter's 8-Step may be necessary for broader, organisation-wide change (Gehrig, 2015). ADKAR application in the banking sector can be more effective when integrated with other models that tackle organizational culture, leadership alignment, and systemic challenges.

4.2.3 Lewin's Change model: cyclical process and field theory

Lewin's (1947) model conceptualises change as disrupting the current equilibrium (Unfreeze), transitioning through a change phase, and stabilising a new equilibrium (Refreeze). Its foundation in field theory highlights the dynamic balance of driving and restraining forces shaping change (Burnes, 2020). Lewin offered a perspective for examining the complex process of change implementation by suggesting that organizational change goes through three stages:

Figure 15 *- Lewin`s Change Model, adapted*



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Source: Lewin (1951)

The model has been subjected to extensive scholarly analysis and requires more in-depth study, especially concerning its implications for leadership and employee engagement (Schein, 2010). In addition, questions have been raised about the originality of the authorship of Lewin's model and its overall influence on change management theory (Cummings, Bridgman and Brown, 2015). The model remains relevant in guiding larger organizational shifts, especially when dealing with resistance to change and the need to adjust existing organizational mindsets before introducing new practices (Burnes, 2004).

An example of Lewin's model in practice can be seen in Deutsche Bank, which applied the model to drive its digital banking initiatives. The bank began by unfreezing its traditional banking models through leadership-driven workshops and employee engagement, before implementing the Change phase with new digital platforms. Refreezing occurred through training programs and continuous feedback, which helped solidify the new systems and behaviors among staff (Deutsche Bank, 2023). Similarly, in India, HDFC Bank used Lewin's model to implement a digital banking transformation. The process involved unfreezing employees' established practices, introducing digital tools and services during the change phase, and ensuring refreeze through incentives and new performance metrics linked to digital engagement. This enabled the bank to align its operations with the growing demands for online banking and financial technology (HDFC Bank, 2022).

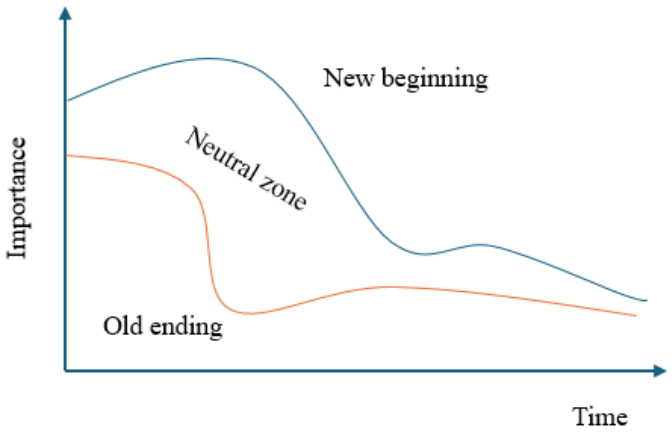
In both examples, Lewin's model facilitated a shift in operational practices and contributed to fostering a culture of continuous innovation. However, as with many traditional change models, its structure may need adaptation to fit environments where digital disruptions are ongoing, and change is a continuous process rather than a one-time shift.

4.2.4 Bridges Transition Model: psychological process and identity work

The Bridges' Transition Model, articulated by William Bridges in early 1979, offers a profound insight into the human side of change within organizational contexts (Bridges, 2009). Unlike traditional models that primarily focus on the structural aspects of change, Bridges' framework delves into the psychological transitions of individuals undergo during organizational change. Bridges' (2009) model distinguishes change (external) from transition (internal psychological process). It identifies three phases: Ending, Neutral zone, and New beginning, emphasizing affective and identity challenges inherent in change (Smollan and Sayers, 2020). This segmentation provides a nuanced understanding of how individuals emotionally navigate through the discontinuities brought about by organizational change (Figure 16).

Bridges' Transition Model has been pivotal in highlighting that organizational change is not merely about the tangible shifts in structures, systems, or processes but fundamentally about the people who experience and enact these changes. The model underscores the importance of managing transitions as a critical component of effective change management strategies. It asserts that successful change initiatives require acknowledging the endings that people experience, guiding them through the uncertainty of the Neutral Zone, and supporting them towards embracing new beginnings (Bridges, 2004).

Figure 16 *- Bridges' Transition Model*



Source: Author`s own construction, 2025.

The model has been used in the banking sector, HSBC applied the model during their back-office automation. The bank helped employees manage grief during the Ending phase by acknowledging the emotional challenges associated with the loss of old processes, supported them through the Neutral Zone with clear communication and retraining, and helped employees embrace new roles and systems during the New Beginning phase through identity reconstruction facilitated by leadership and training programs (The Banker, 2025). This approach effectively mitigated resistance in a risk-averse setting, ensuring that employees felt supported through each stage of the transformation.

Bridges' Transition Model is valuable in managing the psychological side of change, it may not be sufficient for addressing the structural or systemic aspects of transformation within financial institutions. For example, managing organizational culture shifts and technology adoption requires additional models that focus on strategic implementation and leadership-driven change, such as Kotter's 8-Step Model or ADKAR. In this context, Bridges' model can be effectively complemented by other frameworks, providing a more comprehensive approach to both the emotional and structural aspects of change management (Kotter, 1996; Hiatt, 2006).

4.2.5 McKinsey 7S Framework: systemic organisational alignment

The McKinsey 7S Framework, developed by Robert Waterman, Tom Peters, and Julien Philips in the 1980s, is a model designed to help organizations analyze and align key elements to improve performance during times of change. The model emphasizes seven interconnected factors, categorized into hard elements (strategy, structure, and systems) and soft elements (shared values, skills, style, and staff), all of which contribute to organizational success (Jain and Kansal, 2025). The core of the model lies in its emphasis on the alignment of these seven elements, with a particular focus on shared values, which are the foundation of an organization's culture and the primary driver of employee behavior. The strategy outlines how the organization plans to achieve its goals, while the structure defines its hierarchical and reporting relationships. Systems refer to the procedures and policies that guide daily activities within the organization (Channon and Caldart, 2015).

The softer aspects of the model address the human elements of change: skills, which focus on the capabilities of the workforce; style, which refers to the leadership approach within the organization; and staff, which highlights the people within the organization who drive the change (Channon and Caldart, 2015). Together, these elements shape the way an organization adapts to its environment, manages change, and executes its strategic objectives.

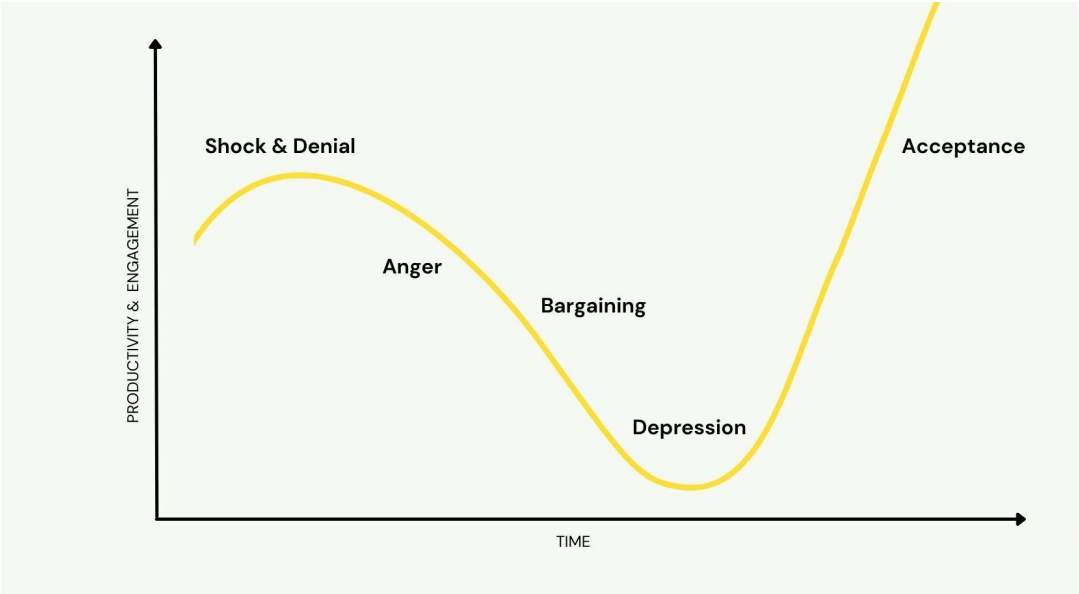
The McKinsey 7S Framework is particularly useful in the context of organizational change. Despite its effectiveness, the 7S Framework does not directly address the psychological aspects of change, such as those outlined in models like Bridges' Transition Model or ADKAR. Therefore, it is important to complement the 7S Framework with other models that focus on individual transitions or emotional readiness during organizational changes. In the financial sector, many institutions rely on Kotter's 8-Step Model as it provides clear steps for creating urgency, and reinforcing change, which helps ensure that the 7S elements, especially strategy and structure, are aligned with new technological initiatives.

2.3.6 Kübler-Ross Change Curve: emotional dynamics in change

Kübler-Ross's (1969) model originally described grief stages but has been adapted to map emotional responses to organizational change, including denial, anger, bargaining, depression, and acceptance (Dent and Goldberg, 1999).

The Kubler-Ross model of change management, which outlines the stages of grief, is a key concept in organisational change. It offers a profound framework for understanding the emotional stages of grief and loss (Figure 17). Its application extends beyond its initial medical context, providing valuable insights into the emotional transitions individuals experience during organizational change. The model delineates five distinct stages: denial, anger, bargaining, depression, and acceptance, serving as a roadmap for navigating the complex emotional landscape of change (Kübler-Ross, 1969).

Figure 17 *- The Kubler-Ross Change Curve*



Source: Kübler-Ross (1969)

In the banking sector, the Kübler-Ross Change Curve can be applied when organizations undergo digital transformations or regulatory changes. For example, during a transition to digital banking, employees may initially experience denial regarding the necessity of adopting new technologies, followed by anger as concerns arise about job displacement or skill gaps. Bargaining could take place as employees attempt to negotiate their roles in the new structure. The depression stage may emerge as employees feel insecure about their future, but with proper support, they eventually reach acceptance and embrace the new technologies and processes (Cameron and Green, 2015).

The model provides valuable insight into the emotional journey of change, it primarily focuses on individual experiences and does not address the organizational systems or the structural aspects of transformation. Therefore, it is often best used in conjunction with other models, such as Kotter's 8-Step Model or Bridges' Transition Model, which address both individual and organizational dimensions of change (Kotter, 1996; Bridges, 2009).

4.2.7 Integrated analysis

In managing organizational change, particularly in the banking sector, it is essential to address both systemic and psychological dimensions of transformation. As the banking industry faces significant challenges such as digital transformation, technological disruption, and regulatory shifts, an integrated approach to change management becomes crucial. No single change management model can comprehensively address the various facets of transformation. Each model, Kotter's 8-Step Model, ADKAR, Lewin's Change Model, Bridges' Transition Model, Kübler-Ross Change Curve, or the McKinsey 7S Framework, has its strengths and focuses on different aspects of the change process. However, their combined application allows for a more holistic approach, ensuring that the emotional, individual, and systemic elements of change are all addressed.

For instance, Kotter's 8-Step Model provides a clear, step-by-step structure for organizational transformation, focusing on leadership and creating urgency (Kotter, 1996). However, it lacks sufficient focus on the emotional journey employees undergo during transitions. This gap can be filled by Bridges' Transition Model (Bridges, 2009) and the Kübler-Ross Change Curve (Kübler-Ross, 1969), both of which focus on the emotional aspects of change, providing a framework to understand how employees move through denial, anger, and acceptance stages.

Similarly, ADKAR (Hiatt, 2006) targets the individual readiness required for change. While ADKAR is excellent at ensuring employees understand why change is necessary and are equipped with the skills needed, it does not address the organizational alignment necessary for sustaining transformation. This is where the McKinsey 7S Framework (Peters and Waterman, 1982) comes into play, ensuring that the strategy, structure, and systems of the organization are in alignment with the changes being implemented. Together, these models create a complementary approach that manages both individual and systemic aspects of change.

Lewin's Change Model offers a foundation for understanding how organizations can undergo change, focusing on unfreezing, changing, and refreezing processes (Lewin, 1951). While useful in more stable environments, it does not consider the continuous nature of change required in today's dynamic banking environment. By integrating Kotter's 8-Step Model for leadership-driven transformation and ADKAR for

individual change, banks can ensure that the systemic and individual components of transformation are aligned.

An integrated approach allows for a synergy between these models, each complementing the other to ensure a smooth and sustainable transition. In this way, Kotter's model provides a structural roadmap, while ADKAR, Bridges, and Kübler-Ross address the human side of change, ensuring that employees are emotionally and behaviorally ready for the transformation. Additionally, McKinsey's 7S Framework ensures that the organizational systems are aligned to support the changes being implemented.

Table 13 summarizes how each of these change management models can be applied within the banking sector. It outlines the focus of each model, the key aspects of change they address, and how they can specifically support banks in managing both systemic and psychological changes during transformations.

***Table 13**- Comparison of Change Management Models*

Model	Focus	Key Aspect of Change Addressed	Banking Specific Application
Kotter's 8-Step Model	Organizational Change	Step-by-step guidance for organizational transformation	It can be used by banks to guide large-scale digital transformation by creating urgency, establishing leadership coalitions, and embedding new technologies.
ADKAR Model	Individual Change	Individual readiness and behavior change	Useful for banks to ensure employee readiness for changes, focusing on building awareness, developing desire to change, and providing training on new systems.
Lewin's Change Model	Organizational Change	Organizational processes and systemic change	Helps banks manage major restructuring efforts by unfreezing existing processes, changing to new methods, and refreezing the changes into daily operations.
Bridges' Transition Model	Emotional Transition	Emotional and psychological transitions	Assists banks in managing emotional transitions during periods of change, such as mergers, technology adoption, or organizational restructuring, guiding employees from uncertainty to stability.
Kübler-Ross Change Curve	Emotional Response	Emotional responses to change	Useful for banks to understand and manage employee reactions to change, particularly during major technological shifts, such as automation or the introduction of new digital platforms.
McKinsey 7S Framework	Organizational Alignment	Organizational alignment of key elements	Helps banks align their strategy, structure, systems, and staff during significant organizational changes, ensuring all elements support the new vision and goals.

Source: Author's own edition based on literature review, 2025.

In conclusion, the integrated use of Kotter's 8-Step Model, ADKAR, Lewin's Change Model, Bridges' Transition Model, Kübler-Ross Change Curve, and the McKinsey 7S Framework ensures that both the structural and emotional dimensions of organizational change are effectively managed. This comprehensive approach will allow banks to navigate digital transformations and other industry shifts while keeping employees engaged and aligned with the organization's new goals and processes.

4.3 Leadership, culture, and change management

Change management is important factor for organizational success, particularly in the banking sector, which is experiencing rapid technological innovations, regulatory shifts, and evolving customer expectations. In both Kazakhstan and Hungary, financial institutions face challenges that require not only operational adjustments but also strategic leadership and cultural alignment. This subchaper focuses on change management to understand how leadership styles and national cultural values influence the success of organizational transformations.

4.3.1 Leadership and change management

Leadership plays an essential role in guiding organizations through change, ensuring that change initiatives are successfully implemented, communicated, and sustained. The effectiveness of leadership in the context of change management is vital, as it influences how changes are perceived, understood, and acted upon by employees. Leadership not only sets the vision for change but also provides the necessary support, resources, and motivation to ensure that employees remain aligned with the organization's goals during the transformation process. The conceptual link between leadership and change management is rooted in the leader's ability to create a shared vision, reduce resistance to change, and motivate employees to adapt to new ways of working (Kotter, 1996).

Theories of leadership have long been explored to understand their implications for managing organizational change. Among these, transformational leadership has been

shown to have a significant influence on employees' attitudes toward change and their willingness to embrace new ideas. Transformational leadership, as defined by (Bass and Avolio, 1994), focuses on inspiring and motivating followers by appealing to their values and higher ideals. Leaders who adopt this style are proactive in driving change, fostering a sense of ownership among employees, and cultivating an environment that encourages innovation. This leadership style is particularly effective in times of significant transformation, as it can align employees' individual goals with the broader objectives of the organization. In the banking sector, where technological advancements and regulatory shifts are frequent, transformational leadership can play a pivotal role in helping financial institutions navigate these changes (Smajlovic and Bandur, 2025).

Transactional leadership, in contrast, emphasizes a more structured approach to achieving goals, focusing on performance and compliance through a system of rewards and punishments (Burns, 1978). While this leadership style may seem less dynamic than transformational leadership, it is highly effective in environments that require stability, order, and clear processes. In banking, where operational efficiency, adherence to regulations, and risk management are critical, transactional leadership can ensure that necessary changes are implemented effectively, with clear directives and measurable outcomes. However, when change involves significant shifts in culture or technology, transformational leadership is often required to motivate employees to go beyond routine tasks and embrace the new direction (Ogundeji *et al.*, 2023).

Leader-Member Exchange (LMX) Theory offers another lens through which to examine the role of leadership in change management. According to LMX theory, the quality of the relationship between leaders and their followers significantly affects the success of change initiatives (Graen and Uhl-Bien, 1995). High-quality leader-member exchanges, characterized by mutual trust, respect, and open communication, are linked to greater employee commitment and improved outcomes during organizational change. In the banking sector, where employees may be skeptical of change due to its impact on job security or daily routines, a leader who has built strong, supportive relationships with their team can ease the transition by fostering a positive environment for change. This approach can be particularly

relevant in countries like Kazakhstan, where hierarchical leadership styles are more common, and in Hungary, where there may be more emphasis on collaboration and employee involvement in decision-making (Hofstede, 2001).

4.3.2 Leadership application in the financial institutions

Leadership in the banking sector is central to managing the dynamic and complex changes faced by financial institutions. Both Kazakhstan and Hungary, though geographically close, have distinct cultural and organizational contexts that influence leadership styles and the effectiveness of change management. In Kazakhstan, where power distance is high (Hofstede, 2001), leadership tends to be more top-down, with decisions made by senior management and communicated to lower-level employees. In such an environment, transformational leadership must be carefully adapted, as employees may not be accustomed to participative approaches. Leaders in Kazakhstan's banking sector often need to communicate a clear vision for change, inspire trust, and manage resistance through structured directives that align with the hierarchical culture.

In contrast, Hungary's banking sector, which tends to have a lower power distance (Hofstede, 2001), may embrace more participative leadership styles. Hungarian banks may benefit from a more collaborative approach to change, where leaders engage employees at all levels in the decision-making process. This participative approach fosters greater employee involvement and buy-in, particularly when implementing changes related to digital transformation and customer-focused innovations (Ogundeji et al., 2023). Furthermore, transformational leadership in Hungarian banks can leverage the relatively flat organizational structures to encourage creativity and innovation among employees, which is crucial in responding to the rapid changes in financial technologies and customer expectations.

In both countries, the role of leadership includes managing the cultural shift that accompanies such transformations. As digital banking and regulatory changes continue to reshape the financial sector, leaders in Kazakhstan and Hungary have to balance the demands for stability and innovation, while fostering a culture that embraces change. The relationship between leadership, employee commitment, and

organizational change in these two countries highlights the importance of adapting leadership styles to the specific cultural context to ensure that change initiatives are successful.

4.3.3 Culture and change management

National culture plays a critical role in shaping how organizations approach and manage change. Understanding cultural dimensions is essential for adapting leadership strategies and ensuring that change initiatives are implemented successfully within a given cultural context. Hofstede's model of cultural dimensions is widely used to examine how national culture influences organizational behavior and change management processes. However, it is essential to recognize that Hofstede's framework, while valuable, is not the only lens through which we can view the cultural implications of change. Other frameworks, such as Schwartz's Value Theory or Trompenaars' Seven Dimensions of Culture, may offer additional insights and complement Hofstede's work, especially in the context of cross-national comparisons (Trompenaars, 1993; Schwartz, 1999).

Among Hofstede's cultural dimensions, power distance is a fundamental factor that shapes organizational hierarchies and decision-making processes. In countries with high power distance, such as Kazakhstan, decision-making is often centralized, and employees expect that changes will be directed from the top. This hierarchical structure can have a significant impact on the success of change initiatives. Leaders in high power distance cultures are typically expected to take charge and make decisions with little input from lower-level employees, which can streamline the change process but may also generate resistance if the change is seen as top-down or imposed without sufficient communication (Hofstede, 2001). In contrast, Hungary, with its lower power distance, is characterized by a more egalitarian approach to leadership and decision-making. Employees are more likely to expect involvement in change processes and may resist top-down change if they feel their voices are not heard. The impact of lower power distance in Hungary suggests that more participative and consultative approaches to change management, where

feedback is encouraged and incorporated into the change process, are likely to be more successful (Smajlovic and Bandur, 2025).

The dimension of individualism vs. collectivism also influences how employees respond to change. Kazakhstan, with a more collectivist orientation, places value on group harmony and loyalty. In this context, change management strategies that emphasize group cohesion, collective goals, and shared responsibility are likely to resonate more with employees. In contrast, Hungary's individualistic culture places higher value on personal achievement and autonomy. Change initiatives in Hungary may be more successful when framed in terms of personal benefits, such as career advancement or skill development, which appeal to employees' individual interests and goals (Ogundeji et al., 2023).

Another critical cultural dimension is uncertainty avoidance, which refers to the degree to which a culture is comfortable with ambiguity and change. Kazakhstan, with its higher uncertainty avoidance, tends to prefer structured and predictable environments. This cultural trait may cause employees to resist change, especially when the future is perceived as uncertain or risky. In Kazakhstan's banking sector, where regulatory changes and economic shifts are common, leaders must provide clear plans and assurances to reduce uncertainty and help employees feel secure about the change (Hofstede, 2001). Hungary, with a lower uncertainty avoidance, tends to be more open to ambiguity and innovation, making it more adaptable to technological changes and market disruptions (Smajlovic & Malić Bandur, 2025).

The role of culture in change management is evident in both Kazakhstan and Hungary, and leaders in each country must adapt their strategies to align with the cultural values and expectations of their employees. For instance, while Kazakhstan's banks may benefit from more hierarchical, top-down change management approaches, Hungarian banks may be more successful with participative, collaborative strategies that engage employees in decision-making. Leaders must also consider how cultural dimensions like collectivism or individualism influence employee responses to change, tailoring their approaches to foster a sense of ownership and commitment to the change process.

Hofstede's cultural dimensions provide a systematic framework to investigate the relationship between national culture and change management. By examining key dimensions such as power distance, individualism versus collectivism, uncertainty avoidance, masculinity versus femininity, long-term versus short-term orientation, and indulgence versus restraint, researchers can analyze how cultural values shape leadership approaches, employee responses, and organizational change strategies (Table 14). For instance, in Kazakhstan, high power distance and high uncertainty avoidance indicate that employees are more likely to accept top-down change directives and prefer structured, predictable processes, while collectivist values suggest that team-focused strategies and shared responsibilities enhance engagement during change initiatives. Conversely, in Hungary, lower power distance and lower uncertainty avoidance support participative leadership and flexible approaches, while individualistic tendencies mean that change initiatives emphasizing personal benefits, such as career development or skill acquisition, are more effective. Additional dimensions, such as masculinity versus femininity and long-term orientation, further explain how leaders can frame change initiatives to align with national priorities, whether by emphasizing performance outcomes, collaboration, immediate results, or long-term benefits. By combining these cultural insights with empirical observations, researchers can systematically describe how national culture influences both leadership behavior and the effectiveness of change management strategies in different contexts, creating a solid framework for comparing organizational change across countries (Hofstede, 2001; Blyznyuk and Blyznyuk, 2024).

Table 14 *- Change and National Culture Using Hofstede's Model*

Cultural Dimension	Description	Impact on Change Management	Hungary	Kazakhstan
Power Distance	Degree to which hierarchical differences are accepted	Determines whether top-down or participatory leadership is effective	Low: participatory approaches work better	High: centralized decision-making; top-down preferred
Individualism vs. Collectivism	Focus on individual achievement vs. group harmony	Influences motivation, engagement, and acceptance of change	Individualist: personal incentives improve acceptance	Collectivist: team-focused strategies enhance buy-in
Uncertainty Avoidance	Tolerance for ambiguity, risk, and innovation	Affects resistance and adoption of new practices	Low: flexible adaptation acceptable	High: structured change preferred
Masculinity vs. Femininity	Emphasis on achievement vs. cooperation	Shapes framing of change initiatives and leadership focus	Moderate femininity: collaboration-focused	Moderate-high masculinity: results-focused
Long-Term vs. Short-Term Orientation	Focus on future planning vs. immediate results	Influences acceptance of changes with delayed or immediate benefits	Short-term orientation: quick wins needed	Long-term orientation: delayed benefits accepted
Indulgence vs. Restraint	Extent to which gratification and autonomy are allowed	Affects acceptance of flexibility during change	Indulgent: autonomy and flexibility accepted	Restrained: structured processes preferred

Source: Author's own edition based on Hofstede's Model (2021).

4.3.4 Cultural dimensions and leadership styles in driving organizational change

The relationship between leadership, culture, and change is critical in understanding how organizations adapt to new challenges and opportunities. Leadership plays an instrumental role in driving change within organizations, but the effectiveness of leadership approaches is often contingent on the cultural context. This section explores the interplay between leadership styles, national culture, and organizational change, focusing on how cultural dimensions shape leadership behaviors and influence the success of change initiatives.

While transformational leadership has been highlighted as a catalyst for inspiring and motivating employees during organizational change (Bass and Avolio, 1994), its effectiveness is shaped by the cultural context in which it is applied. In high power distance cultures, such as Kazakhstan, leaders are expected to maintain control over decision-making processes, with employees generally accepting their roles in a more passive manner (Bhugra, Till and Ruiz, 2013). This expectation means that top-down change management strategies may be more successful in Kazakhstan, as employees are accustomed to receiving clear instructions from their superiors. However, leaders in such cultures must also be mindful of the need to manage resistance, particularly when changes challenge established hierarchies or disrupt traditional ways of working.

Conversely, in low power distance cultures like Hungary, leaders must adapt their approaches to ensure that employees feel engaged and involved in the change process. Participative leadership styles, where employees have a voice in decision-making, are likely to be more effective in Hungary's more egalitarian work environment. Employees in Hungary expect transparency, open communication, and a collaborative approach to change management. Leaders who adopt a transformational style, with an emphasis on shared goals and employee empowerment, are more likely to foster commitment to change and reduce resistance. However, in Hungary's individualistic culture, leaders must also tailor change initiatives to emphasize personal benefits, such as career development opportunities, to motivate employees to embrace change (Smajlovic and Bandur, 2025).

Further, uncertainty avoidance plays a significant role in shaping leadership strategies during times of change (Kebe, Liu and Kahl, 2025). In Kazakhstan, with its higher uncertainty avoidance, leaders may find that employees are resistant to change, especially if they perceive the change as unpredictable or risky. Leaders must provide clear, structured plans and ensure that employees understand the steps involved in the change process. In Hungary, where uncertainty avoidance is lower, employees may be more willing to engage with new ideas and technologies, but leaders must still address concerns about the implications of the change to ensure employees feel secure and confident in their roles.

By integrating these cultural dimensions with leadership styles, it becomes clear that successful change management requires leaders to be culturally attuned. In Kazakhstan, a directive leadership approach, coupled with a focus on control and certainty, may be necessary to drive change, whereas in Hungary, a more participatory approach, focused on collaboration and empowerment, is likely to lead to more successful outcomes. Thus, leadership and culture are intricately linked, and understanding this intersection is critical for managing organizational change effectively in diverse cultural contexts.

3.4. Chrisis management

Crisis management is important in understanding organizational change in financial institutions. Any analysis of change management in financial institutions should include a conceptual understanding of crisis management as a driver of transformation and a determinant of success or failure.

Crisis management in the financial sector includes pre-crisis risk monitoring, resilience planning, and structured adaptation (Tohtamysh and Bukanova, 2019). In banks, this often means reinforcing internal systems, establishing early warning indicators, ensuring liquidity, and managing stakeholder communication. Financial institutions that develop structured crisis protocols are better positioned to manage sudden shocks without disrupting critical services. Such capabilities are closely tied to change readiness, adaptive leadership, and coordinated decision-making

processes, key themes in contemporary change management literature (Burnes, 2004).

The COVID-19 pandemic highlighted the operational significance of crisis preparedness. Banks worldwide had to rapidly adjust their digital infrastructure, remote work capacities, and customer service models (Dovhan, 2020). In Hungary, crisis management during the pandemic included stress testing by the MNB and rapid implementation of fintech tools to reduce in-person interactions. In Kazakhstan, the transition to digital platforms like Kaspi.kz accelerated due to consumer behavior during lockdowns, but it was also reinforced by crisis-induced urgency. These cases illustrate that crisis often accelerates innovation, redefines priorities, and modifies the organizational culture toward more agile structures. As noted by (Zawiła-Niedźwiecki and Rakoczy, 2018) financial institutions are increasingly recognized as critical infrastructure providers in public crisis management systems, with responsibilities that go beyond internal operations.

Crisis management overlaps with change management in several important ways. First, the urgency induced by crisis conditions often corresponds to the "unfreezing" stage of Lewin's change model, where existing structures become unstable and are therefore more open to change (Lewin, 1951). Kotter's first step, creating a sense of urgency, also frequently emerges from crisis events, which motivate leadership to act decisively and mobilize resources (Kotter, 1996). These frameworks view crisis as a necessary condition that often precedes organisational change.

Second, crisis contexts test the institution's dynamic capabilities, which refer to its ability to adapt, integrate, and reconfigure internal competencies in response to external challenges (Teece, 2012b). When institutions respond to crises effectively, by reallocating resources, modifying services, or realigning organizational structures, they engage in change processes that are both reactive and transformative. Thus, crisis can be seen as an accelerant for otherwise slow-moving change processes, forcing organizations to abandon incrementalism in favor of decisive shifts.

Transparent, proactive communication strategies during crises increase trust among employees and clients, which is crucial during implementation of new systems or

procedures (Whyte, 2025). The way a bank communicates change during a crisis influences employee engagement and customer retention, two variables that directly affect change outcomes.

(Sinyagovsky, 2021) emphasize that effective crisis management includes both preventive and reactive components. Preventive elements, such as risk monitoring, scenario planning, and compliance audits, contribute to long-term organizational resilience. Reactive responses, like emergency restructuring or leadership replacement, serve to stabilize the institution during periods of disruption (Sinyagovsky, 2021). Both types of response require coordinated change initiatives and therefore align conceptually and practically with change management theory.

The inclusion of crisis management in the theoretical framework of this study is necessary to capture the real-world conditions under which financial institutions in Hungary and Kazakhstan implement change. Integrating crisis management into the theoretical framework of change management allows for a more accurate and context-sensitive understanding of how banks respond to uncertainty, build resilience, and transform their operational models.

4.4 Summary of the theoretical framework

In chapter 4, I explored the theoretical foundations of change management in financial institutions, with a focus on financial institutions. The financial sector must adapt to technological advancements, evolving regulations, and changing customer expectations. This makes change management an key factor for their long-term success. To understand how institutions manage these transformations, I analysed popular change management models, including Lewin's 3-Step Model, Kotter’s 8-Step Model, the ADKAR Model, Bridges' Transition Model, and the McKinsey 7S Framework. Each of these models provides valuable insights into how organizations can effectively manage change.

Lewin’s 3-Step Model offers a basic framework for understanding organizational change. It outlines three stages: unfreezing, changing, and refreezing, which emphasize the need to prepare the organization for change, implement the necessary changes, and stabilize the new practices. On the other hand, Kotter’s 8-Step Model

offers a more detailed, structured process, focusing on creating urgency, building a coalition, and embedding new practices into the organization's culture. The ADKAR Model, which focuses on individual change, stresses the importance of awareness, desire, knowledge, ability, and reinforcement, ensuring that employees are ready and motivated to embrace change. Bridges' Transition Model adds a psychological element, acknowledging the emotional journey that employees go through during change. This model focuses on the stages of endings, the neutral zone, and new beginnings. Finally, the McKinsey 7S Framework looks at the alignment between seven critical elements: strategy, structure, systems, shared values, skills, style, and staff, that need to be in harmony during organizational changes.

Another critical aspect of successful change management is workforce adaptation. With the rapid introduction of new technologies, banks in both countries must ensure their employees have the necessary skills to operate in a digital environment. This involves implementing reskilling programs and training to help employees transition into new roles and embrace new technologies. Change management models provide structured approaches for implementing change. Their strength lies in offering clear steps and guidance for leaders to follow, which can reduce uncertainty and increase the likelihood of successful change. However, these models are largely normative and linear, assuming a uniform organizational context and employee response. In real-world banking environments, particularly in countries with differing cultural contexts, the models may fail to capture complex human behaviors, power dynamics, and cultural influences on change adoption (Smajlovic & Malić Bandur, 2025). For example, the Kotter model emphasizes urgency and coalition-building, yet in hierarchical cultures, employees may comply without engagement, which limits the long-term sustainability of change.

The chapters on driving forces and sources of organizational change illustrate that technological, regulatory, and strategic factors often initiate transformation. While these drivers are well-documented, the literature tends to focus on external triggers and underemphasizes internal organizational factors such as culture and leadership influence on change readiness (Ogundeji et al., 2023). Similarly, discussions of resistance to change emphasize employee attitudes and psychological reactions but often neglect how these reactions are moderated by national culture, leadership style, and organizational communication.

Leadership theories, including transformational, transactional, and LMX frameworks, were presented for understanding how change is executed at the individual and team level. Transformational leadership inspires engagement and innovation (Bass & Avolio, 1994), whereas transactional leadership ensures compliance and process adherence (Burns, 1978). LMX focuses on dyadic relationships to explain variance in commitment and performance (Graen & Uhl-Bien, 1995). While each theory offers valuable perspectives, their applicability is highly context-dependent. Transformational leadership may not yield the same outcomes in high power distance environments, such as Kazakhstan, where employees expect top-down directives rather than participative approaches. LMX assumes high relational quality is possible, but national culture and organizational norms may limit leader-member interactions.

The chapters addressing culture, particularly through Hofstede's dimensions (Hofstede, 2001), complement leadership theories by explaining how national cultural traits moderate change processes. Power distance, uncertainty avoidance, individualism versus collectivism, masculinity versus femininity, long-term orientation, and indulgence versus restraint offer insights into how employees perceive leadership behaviors and react to change initiatives. However, Hofstede's framework assumes national homogeneity and may overlook organizational subcultures or intra-national differences, which are especially relevant in multinational or regionally diverse banking institutions (Schwartz, 1999; Trompenaars & Hampden-Turner, 2012). Hofstede explains tendencies, but it does not provide guidance on how leaders should adapt change management practices to specific contexts, leaving a gap between cultural understanding and actionable strategies.

Integration of leadership and culture in the context of banking is a strength of the theoretical chapters, as it acknowledges that effective change is not only a function of process models but also of how leaders interact with culturally influenced employees. The literature reviewed remains largely descriptive in nature, and only a few empirical studies examine the interaction of leadership styles, cultural aspects, and formal models of change in real banking environments, especially in developing economies such as Kazakhstan or transition economies such as Hungary. Finally, the

theoretical frameworks provide a foundation for linking to the empirical study, but this link should be operationalized. The literature indicates which leadership behaviors and cultural dimensions are likely to influence change adoption, but it does not provide quantitative or qualitative measures tailored to the banking sector. The empirical study operationalises these constructs through interviews with banking employees and leaders, allowing the investigation of how theoretical assumptions manifest in practice. This approach addresses the critical gaps identified in the literature and strengthens the relevance and rigor of the study.
This chapter integrates leadership theories, cultural dimensions, and change management strategies to analyze leadership practices and the role of culture in managing organizational change in the banking sectors of Kazakhstan and Hungary. By linking theories such as transformational and transactional leadership with Hofstede's cultural dimensions, the study examines how cultural contexts influence leadership behaviors and employee responses to change. The empirical findings, based on interviews, are analysed through these theoretical frameworks to understand how leadership styles manifest in practice, how change is communicated, and how resistance is managed, especially during crises.

Managing change in financial institutions requires a comprehensive approach that considers both organizational structures and individual readiness. By combining different change management models and applying them within the context of each institution, banks can better navigate the challenges of transformation. As the financial industry continues to evolve, adopting a flexible, context-sensitive approach to change management as a tool will help ensure that institutions are well-positioned for growth.

In conclusion, the theoretical frameworks discussed provide a strong foundation for understanding change management in banking, but they have notable limitations. Change models are often linear and do not account for cultural and organizational complexity. Leadership theories may not be universally applicable, as national culture moderates the effectiveness of transformational or transactional approaches. Cultural frameworks, while insightful, assume homogeneity and lack operational guidance for managing resistance. These gaps justify the empirical investigation in Kazakhstan and Hungary, which aims to explore how leadership behaviors, cultural

dimensions, and change management models interact in practice. This integrated approach ensures that the study provides practical insights for managing change in culturally diverse financial institutions.

CHAPTER 5 - RESEARCH FRAMEWORK

This chapter explains the research strategy, describing the methods and approach used to carry out the study. It covers how data was collected and analyzed to answer the research questions and meet the study's goals.

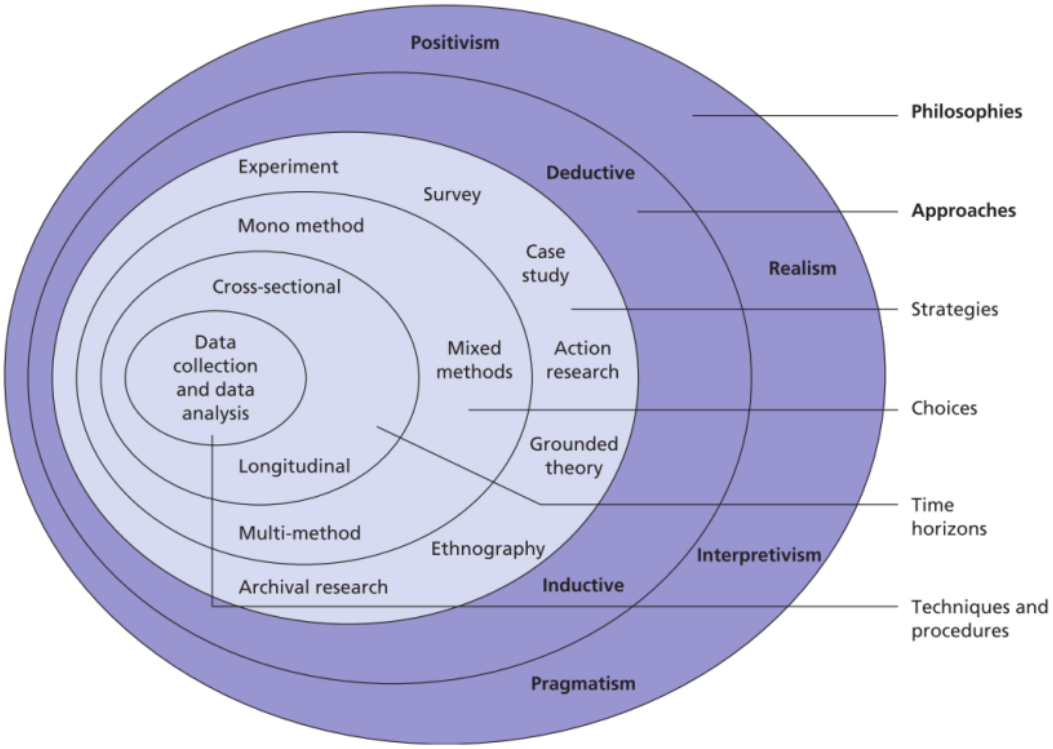
5.1 Research strategy

In developing the methodological part of the thesis, the integration of semi structured interviews and case studies is based on a pluralistic approach to qualitative research. This approach is important for understanding the complex nature of human experience and organizational situations. As (Mason, 2006) recommends, using a combination of qualitative methods deepens the understanding of phenomena that may remain unclear when viewed from a single perspective. This combination helps create holistic understanding and detailed description of complex phenomena (Symon and Cassell, 2012). Several qualitative research methods (Figure 18) can be combined to provide a comprehensive understanding of a research topic (Saunders, Lewis and Thornhill, 2019). This research is based on a qualitative approach and is guided by an interpretivist epistemology with a realist ontology. The interpretivist view supports the idea that knowledge is constructed through social interactions and subjective understanding. In this study, I aim to explore how professionals in the financial sector make sense of organisational change, leadership behaviour, and resistance in their specific institutional context. At the same time, I follow a realist ontology, which means that I believe these organisations and systems exist independently of the participants, but we can only access them through people’s experiences and interpretations. This combination allows me to investigate the meanings participants give to change, while also recognising that these experiences are influenced by real structural conditions such as national regulation, institutional culture, and leadership strategies. This philosophical position supports the use of semi-structured interviews and thematic analysis to explore different perspectives across two national cases.

The Research Onion model (Saunders, Lewis and Thornhill, 2019) also helps the methodology by guiding the process step by step, from philosophical foundations

through to data collection methods. This model makes possible the integration of theoretical perspectives, methodological approaches, and practical steps in a structured way, ensuring that the research design is consistent, systematic, and aligned with the research objectives.

Figure 18 *- Research onion.*

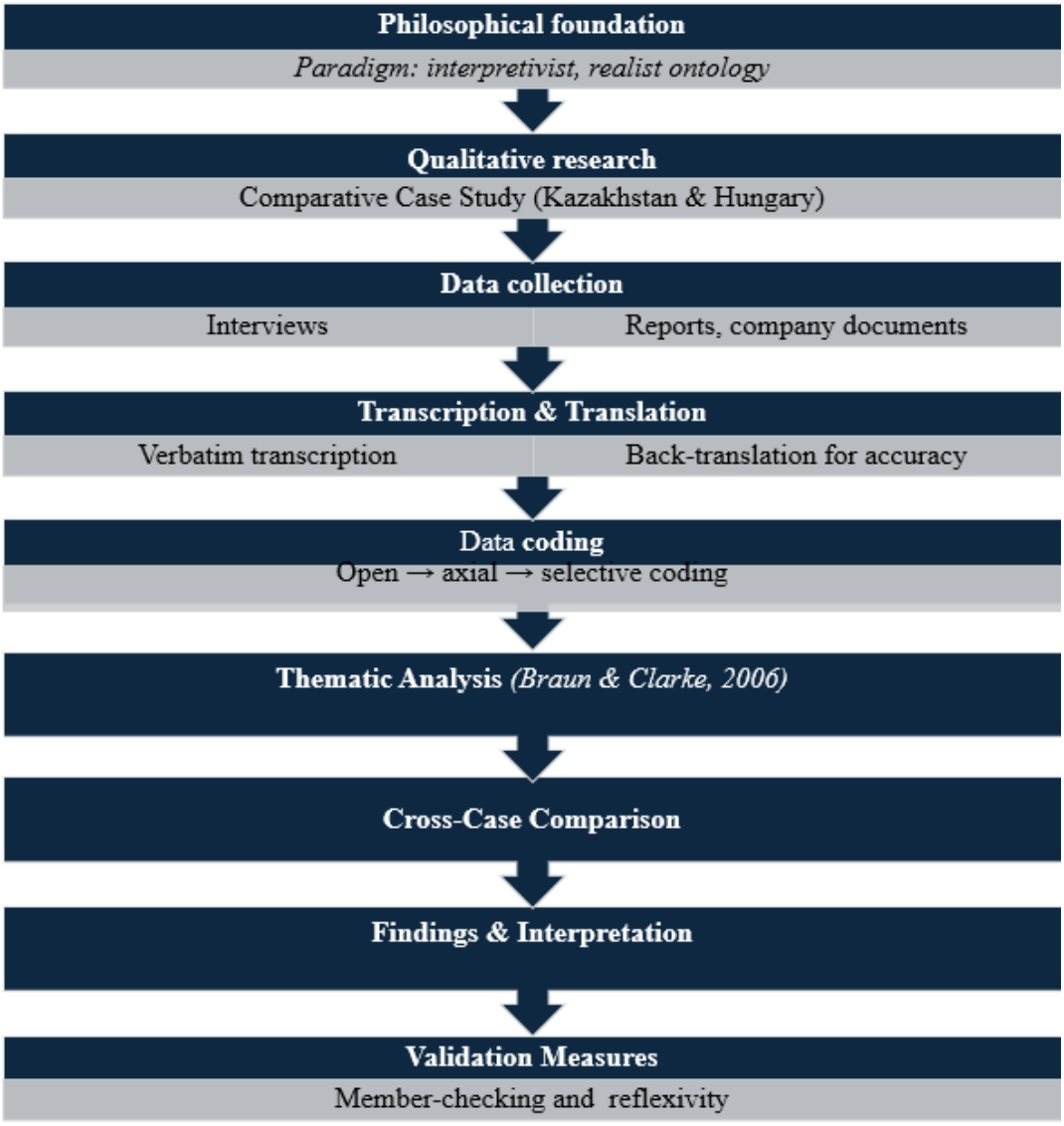


Source: Saunders, Lewis and Thornhill, 2019.

Exploring a research topic from multiple perspectives increases the depth and breadth of empirical insights. Theoretical frameworks such as symbolic interactionism offer a consistent integration of semi-structured interviews and case studies (Benzies and Allen, 2001). This view supports the idea that people act based on the meanings they give to their experiences, a concept that is central to both semi-structured interviews and case studies. Also, these methods will support qualitative research's *focus* on understanding development as a dynamic and transactional process, which together allow the "when" and "how" questions to be explored in future (Yoshikawa *et al.*, 2008).

My research strategy, presented in Figure 19, is based on the qualitative research methodology that forms the foundation of my doctoral research. As part of the action research, I conducted individual interviews in a semi-structured format to collect data and collected company documents. To analyze the collected data, I used qualitative content analysis to gain initial inductive insights. In addition, the grounded theory coding technique was used.

Figure 19 *- Research strategy*



Source: Author's own edition, 2025.

Regarding my research topic, previous studies also support my chosen methodological approaches, which are documented in peer-reviewed international journals (Table 15). The table demonstrates that qualitative methods, particularly interviews and case studies, have been widely used in recent banking research to examine digital transformation, organizational change, and leadership dynamics across different geographical areas.

Table 15 *- Review of methodological approaches in relevant studies*

Authors	Date	Method of Research	Research Topic	Journal	Scimago Rank (Q)
Humbani, M., Wiese, M.	2019	Mixed Methods (Survey, Interviews)	Mobile banking adoption in South Africa, focusing on organizational change	International Journal of Bank Marketing	Q1
Paulet, E., & Mavoori, H.	2019	Qualitative (Case Study)	Conventional banks and fintechs: Impact of digitization in the banking model	Journal of Business Strategy	Q2
Forcadell, F. J., Aracil, E., Ubeda, F.	2020	Qualitative (Case Study)	Using corporate sustainability reputation to address digitalization challenges in banks	Business Strategy and the Environment	Q1
Hensmans, M.	2020	Qualitative (Historical Analysis)	Digital transformation fantasies and organizational change in a large alternative bank (1963-2019)	Organization	Q1
Von Solms, J.	2020	Qualitative (Case Study)	Integrating Regulatory Technology (RegTech) into bank treasury digital transformation	Journal of Banking Regulation	Q2
Diener, F.	2021	Qualitative (Semi-structured Interviews)	Managerial obstacles in digital transformation of banking	Sustainability	Q1
Diener, F., Špaček, M.	2021	Qualitative (Contextual Interviews)	Barriers to digital transformation in German banks from	Sustainability	Q1

			a managerial perspective		
Kaur, S. J., Ali, L., Hassan, M. K., AlEmran, M.	2021	Qualitative (Semi-structured Interviews)	Adoption of digital banking channels in India, focusing on inbranch efforts	Journal of Financial Services Marketing	Q2
Kitsios, F., Giatsidis, I., Kamarioto, M.	2021	Quantitative (Multivariate Regression)	Acceptance of eservices in Greek banking sector	Journal of Open Innovation: Technology, Market, and Complexity	Q1
Alshwayat, D.	2023	Empirical Study	Barriers to innovation and change in fintech	Journal of Innovation & Knowledge	Q2
Guo, H., & Polak, P.	2023	Qualitative (Case Study)	Implications of intelligent finance on change management	Humanities and Social Sciences Communications	Q1
Porfírio, J. A., Felício, J. A., Carrilho, T.	2023	Mixed Methods (Interviews, QCA)	Factors affecting digital transformation in Portuguese banks	Journal of Business Research	Q1
Rodrigues, L. F.	2023	Empirical Study	Impact of technology management on digital transformation	Technological Forecasting and Social Change	Q1
Papathomas, A., & Konteos, G.	2024	Qualitative (Literature Review)	Stages of digital transformation in financial institutions	Journal of Financial Transformation	Q2

Source: Author's own edition, 2025.

The main factors that influence my research strategy are outlined below:

First, based on my experience with transformations in the financial sector, my approach supports functionalist objectives using primarily interpretive tools. Having worked directly on transformation projects in both Kazakhstani banks and the national postal system, I bring insider knowledge of how change initiatives unfold in post-Soviet financial institutions, including the cultural resistance patterns, bureaucratic challenges, and adaptation strategies that theoretical models often overlook. This practical experience enables me to ask more penetrating questions during interviews, recognize subtle organizational dynamics that external researchers might miss, and interpret findings through both theoretical and experiential lenses, thereby producing insights that are both academically rigorous

and practically relevant for banking practitioners facing similar transformation challenges.

Second, my goal is to understand current phenomena occurring in financial institutions, by addressing questions of "How", "Which" and "What kind..", making the selection of a qualitative methodology suitable (Yin, 2018). Specifically, this research examines how innovative leadership qualities influence innovation in the banking sector of Kazakhstan and Hungary. This study aims to investigate how bank executives and change managers respond to technological changes and regulatory changes, identifying key leadership traits that contribute to successful management practices and help banks maintain stability and competitiveness in a rapidly changing environment.

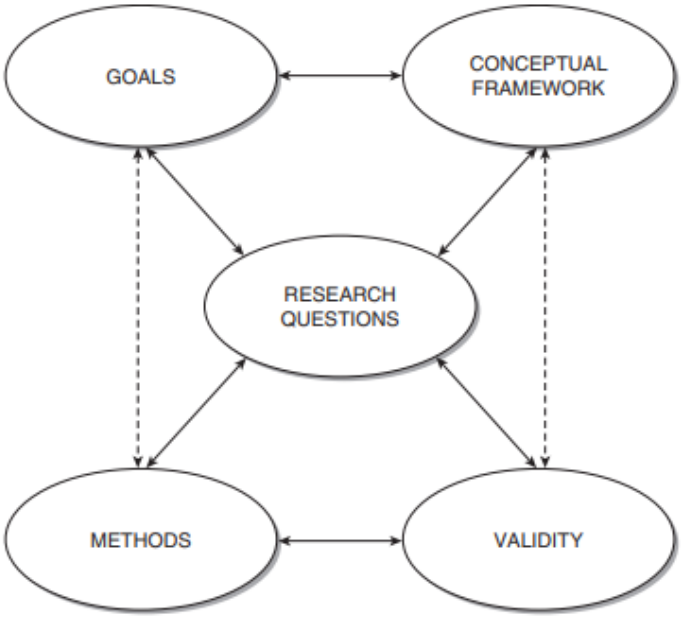
Third, one of the pillars of my research from the theoretical part involved identifying the gap within existing models of change. In this context, a qualitative research approach is beneficial and is likely to yield powerful insights (Teece, 2012a). This gap specifically relates to how change management models developed for Western contexts apply to the unique banking environments of Kazakhstan and Hungary, where different cultural, regulatory, and historical factors shape organizational transformation processes.

5.2 Research model

The research model for this study is built on (Maxwell, 2013) Interactive Model of Research Design, which is recognized for its flexibility and adaptability in qualitative research. This model emphasizes the dynamic and iterative interaction between research questions, conceptual frameworks, methods, and validity considerations. In my research, the interactive model is particularly suitable for examining the evolving nature of entrepreneurial leadership and its role in driving innovation within the banking sector of Kazakhstan and Hungary. As technological advancements such as artificial intelligence and blockchain disrupt traditional banking practices, Maxwell's approach ensures that the research can adapt as new insights emerge throughout the data collection and analysis process (Figure 20). The research was planned with a clear structure and theoretical models from the beginning I found Maxwell's Interactive Model (2013) useful for keeping coherence

between my research purpose, framework, and data. The model helped me reflect critically during the analysis process. For example, when I started coding the interview data in NVivo, certain topics such as stakeholder engagement, employee resistance, and leadership behaviour appeared more strongly than I first expected.

Figure 20 *- Interactive Model of Research Design*



Source: Maxwell (2013, p. 217).

This led me to pay more attention to leadership style and communication in interpretation. I noticed how the role of leadership in motivating employees and managing resistance was often connected to how digital change was introduced.

Also, differences between the two countries in innovative readiness and regulatory influence made me explore more literature on national digital strategies and institutional support. Even though my research questions and design did not change, Maxwell's model helped me to reflect on how the theoretical concepts and data stayed aligned throughout the project.

In line with Maxwell's model, the conceptual framework for this study integrates theories of organizational change and leadership, such as Lewin's Change Management Model, Kotter's 8 Step Model, and ADKAR. These frameworks guide the exploration of how banks in the two countries address change, particularly in

relation to the adoption of new technologies and regulatory compliance. The theoretical blend provided by these models offers a comprehensive perspective, enabling the study to explore leadership roles, employee engagement, and organizational strategies that are pivotal to managing change in the context of technological disruption.

The research strategy follows a qualitative approach, with semi-structured interviews as the primary data collection method. These interviews will provide insights into how leaders in Kazakhstan and Hungary view and respond to the challenges posed by technological innovation. In total, 20 semi-structured interviews will be conducted with executives and change management professionals from both countries. This method is particularly useful for capturing rich, detailed data, as it allows participants to discuss their experiences and perspectives in their own words, providing in-depth information on leadership styles, innovation strategies, and the management of resistance during organisational transformation (Kallio *et al.*, 2016).

Thematic analysis, guided by NVivo software, will be used to analyze the interview data. NVivo will assist in organizing the data systematically and will facilitate the identification of themes related to entrepreneurial leadership and innovation. Using open, axial, and selective coding, the data will be reduced into manageable concepts, related to one another, and grouped into central themes that respond to the research questions. NVivo's tools for visualization and pattern recognition will help identify recurring trends in leadership behaviors, technological adoption, and change management strategies across the two countries, ensuring that the analysis is both comprehensive and transparent.

In addition, triangulation will be employed to enhance the validity of the research findings. By comparing data from multiple interviews and case studies of banks that have undergone significant transformation, the research will avoid bias from a single data source and provide a more balanced and accurate interpretation of the change management processes in Kazakhstan and Hungary. This approach is in line with Maxwell's (2013) emphasis on the interactivity between different research components and the iterative refinement of research questions, methods, and interpretations based on the emerging data.

Maxwell's model offers advantages for the present research due to its flexible design. As the data analysis progresses and new themes emerge, the research questions and methodological approaches can be refined accordingly, ensuring the study remains aligned with evolving findings. This methodological flexibility facilitates a more comprehensive examination of change management and leadership dynamics within banking institutions experiencing technological transformation. Furthermore, this approach enables the continuous development of both theoretical understanding and practical applications of change management, thereby contributing to a more thorough investigation of the phenomenon under study.

5.3 Validity and reliability

In this section, I will outline the steps taken to improve the validity and reliability of my research. There are four types of validity that are commonly discussed in the literature: construct validity, internal validity, external validity, and reliability (Massis and Kotlar, 2014). Each of these factors plays a crucial role in ensuring that my findings are trustworthy and credible.

Construct validity refers to the extent to which the concepts in the study are accurately measured (Yin, 2014). One challenge researchers often face is the use of subjective judgment when interpreting data. It is important to remember that there is no single "truth," and it is essential to consider multiple perspectives in data analysis. To improve construct validity in my study, I gathered data from a variety of sources, including 20 semi-structured interviews with executives from the banking sectors of Kazakhstan and Hungary. By ensuring a diverse range of perspectives, I increased the reliability of the data. The interview questions were aligned with the research objectives and theoretical frameworks such as Lewin’s Change Management Model and Kotter’s EightStep Change Model, which are widely recognized in the field of change management (Kotter, 1996). By triangulating the data, I was able to crosscheck findings from interviews with other sources, such as case studies and existing literature, which further strengthened the construct validity of the study.

Internal validity is about ensuring that the study truly measures what it intends to measure (Creswell and Creswell, 2018). However, in my case, internal validity is not as relevant, as my study is exploratory rather than explanatory. Since I am not aiming

to establish causal relationships, but rather to explore the factors that shape leadership and innovation in the context of technological disruption, internal validity is less applicable. However, the iterative process of thematic analysis, supported by NVivo software, allows for continuous refinement of research questions and interpretations, ensuring that the findings accurately reflect the experiences of participants (Braun and Clarke, 2006).

External validity refers to the generalizability of the study's findings beyond the specific context in which the research was conducted (Yin, 2014). To enhance external validity in my study, I selected a diverse and representative sample of banking institutions from Kazakhstan and Hungary. This allowed me to explore different contexts and how leadership and innovation are influenced by technological change in two distinct cultural and regulatory environments. By conducting multiple case studies, I was able to build a more comprehensive understanding of how change management is implemented across different settings, and this analytical generalization strengthens the external validity of my findings.

Reliability refers to the consistency of the results when the study is repeated using the same procedures (Yin, 2014). In order to ensure the reliability of my research, I implemented several strategies. First, I developed a detailed case study protocol, which outlined the procedures for data collection and analysis. This protocol ensures that the study can be replicated by other researchers. I also used NVivo software to organize the interview data, making it easier to track codes and themes across multiple interviews. The use of NVivo allowed for systematic coding, which helped maintain consistency in data analysis. Furthermore, I created a case study database to store all raw data, including interview transcripts and notes, which allows for transparency and verification by other researchers.

NVivo 15 software was particularly helpful in facilitating the thematic analysis of the interview data. The software provided tools for open coding, axial coding, and selective coding, which allowed me to identify key themes and patterns in the data. It also provided features for visualizing relationships between codes, helping to ensure that my analysis was thorough and systematic. The software's ability to organize large volumes of qualitative data and track the frequency and association of themes further enhanced the rigor of the research process.

By using NVivo and adopting a systematic approach to data analysis, I was able to improve both the reliability and validity of my findings. The combination of triangulation, participant validation, and reflexivity ensures that my results are credible, consistent, and grounded in the data.

In summary, the steps taken to improve the validity and reliability of my research include ensuring construct validity by triangulating data sources, adopting an exploratory approach to internal validity, enhancing external validity through a representative sample, and improving reliability through the use of a case study protocol and NVivo software. These strategies ensure that my study contributes valid, accurate, and reliable insights into the field of change management in financial institutions.

5.4 Data collection: preparation and execution of the interviews

This section describes how the data were collected and analysed to support the qualitative exploration of change management practices in the financial sectors of Kazakhstan and Hungary. In line with the comparative case study methodology, the research was designed to gather in-depth, context-sensitive insights from professionals who have been directly involved in change initiatives within their organisations. The approach aimed to maintain consistency with the interpretivist paradigm and inductive reasoning while ensuring credibility, depth, and transparency throughout the process.

A purposive sampling strategy was used to identify participants with relevant expertise. These included banking professionals from both countries, such as project leaders, internal auditors, risk managers, change officers, and consultants. All participants had a minimum of three years of experience in a role that was connected to organisational transformation. Snowball sampling was also applied to reach senior executives who were not accessible through public channels. In total, twenty expert interviews were conducted 10 from Kazakhstan and 10 from Hungary. Two additional pilot interviews were completed to test the clarity and structure of the interview guide, although these were not included in the main analysis. The pilot stage helped adjust the wording of questions and confirmed the timing and flow of the semi-structured format, which was designed to allow participants freedom to

express their views while keeping the interview focused (Rubin and Rubin, 2012; Majid *et al.*, 2017).

The interviews explored a wide range of issues related to change implementation, including regulatory pressure, internal resistance, leadership dynamics, technological adaptation, and employee engagement. The questions were informed by the literature review and aligned with the theoretical models discussed in earlier chapters. Interviews were conducted in the preferred language of each participant, Kazakh, Russian, or English, depending on their fluency and comfort. Translations were carried out by the researcher and checked for meaning accuracy using backtranslation techniques (Temple and Young, 2004). This ensured that culturally specific terms or references were not lost or distorted during translation. Conducting interviews in multiple languages was essential to allow participants to speak more openly and provide richer responses.

The interviews took place between 2024-2025, depending on availability and context. They were conducted both face-to-face and online using secure platforms such as Zoom or Google Meet. The length of each interview was approximately 45 to 60 minutes. All sessions were audio recorded with the informed consent of participants, and notes were taken simultaneously to capture key impressions and contextual information. Participation in the study was entirely voluntary. Each respondent was provided with information detailing the purpose of the study, what participation involved, and their rights as participants. In accordance with established ethical research principles, the approval consent was obtained prior to participation.

Participants were assured of their right to withdraw from the study at any point without any consequences. To ensure confidentiality, no identifying information was disclosed, and all data were anonymized during analysis. The collected data were securely stored and used solely for this research

All interviews were transcribed verbatim and translated into English where needed by using AI tools. NVivo 15 was used to support the data management and analysis process. A thematic analysis approach was applied based on Braun and Clarke's (2006) six-phase model. The first step involved familiarising oneself with the transcripts through repeated reading and note-taking. Next, open coding was

conducted by labelling data segments that reflected meaningful patterns related to the research questions. Codes were then organised into broader thematic categories during the axial coding phase. A three-level coding structure was used, following the grounded theory-informed thematic analysis approach by Braun and Clarke (2006):

- Open coding involved identifying meaningful segments and assigning preliminary labels (e.g., “resistance to top-down change”).
- Axial coding grouped related codes into higher-order categories (e.g., “Resistance Management” or “Technology Constraints”).
- Selective coding focused on developing central themes that aligned with the research questions and theoretical framework (e.g., “Leadership as Enabler or Barrier to Change”).

Coding was performed in iterative cycles, with memo writing used to track emerging patterns and analytical reflections. NVivo's query and visualization tools supported deeper exploration of interrelations among themes such as regulatory demands, organizational inertia, and innovation.

To improve the trustworthiness of the analysis, selected participants were invited to review excerpts and comment on the accuracy of thematic representations. This member-checking process helped confirm that their perspectives were reflected correctly and reduced the risk of researcher bias (Lincoln and Guba, 1985). Memo writing was also applied during the coding process to document analytical decisions and track evolving interpretations. The use of NVivo enabled efficient coding, cross-case comparisons, and thematic queries across both national datasets, which was helpful for identifying similarities and differences between Hungary and Kazakhstan.

Reflexivity was maintained during all stages of the data collection and analysis. As a researcher with professional experience in Kazakhstan’s financial sector, I was aware of how this background could influence my interpretation of the data. To manage this, I kept a reflexive journal to monitor personal assumptions and ensure that my role as an insider or outsider did not affect the objectivity of the findings (Berger, 2015). While shared language and cultural context helped build rapport with Kazakhstani participants, this also required a high level of critical awareness to avoid overidentification or bias.

Thematic saturation was used as a stopping criterion for data collection. By the final interviews in each country, no substantially new information was emerging, and codes were repeating across multiple participants. This indicated that a sufficient level of depth had been reached to support the study's analytical objectives (Guest, Bunce and Johnson, 2006). Despite minor challenges such as scheduling difficulties, occasional technical issues during online sessions, and variation in language expression, the overall quality and richness of the data were considered robust.

This combination of carefully structured interviews, culturally sensitive translation, systematic coding, and reflective analysis ensured that the data collection process contributed significantly to the theoretical and empirical contributions of the study. By the final interviews in each country, recurring codes and patterns such as regulatory pressure, fragmented change efforts, and cultural resistance had stabilized, suggesting adequate coverage of the phenomenon.

5.5 Summary of the research framework

This chapter explains the research strategy and methodology used in my study, which focuses on understanding change management in the financial sectors of Kazakhstan and Hungary.

The research uses a qualitative approach, combining semi-structured interviews and case studies to get detailed insights from professionals in the financial industry. The research follows an interpretivist philosophy, meaning it focuses on how people understand and make sense of their experiences, while also acknowledging the real-world structures, like regulations and institutional culture, that influence these experiences. I also use a realist ontology, meaning I believe that organizations exist independently but can only be understood through people's experiences.

I use the Research Onion model (Saunders, Lewis and Thornhill, 2019) to guide the research process from its philosophical foundations to the actual data collection. The chapter also discusses the importance of symbolic interactionism, which helps link the semi-structured interviews and case studies, focusing on how people act based on the meanings they give to their experiences.

The Interactive Model of Research Design (Maxwell, 2013) is another key part of the research. It's a flexible model that helps ensure the research adapts as new insights come up during the process. This model is especially useful in my study, which explores how leadership influences innovation in Kazakhstan and Hungary's banking sectors in response to technological changes. I use well-known change management models like Lewin's and Kotter's to help explore these issues.

For data collection, I conducted 20 semi-structured from both Kazakhstan and Hungary. These interviews were the main method of collecting data, allowing participants to share their views on leadership, innovation, and managing organizational change. To analyze the data, I used thematic analysis with the help of NVivo software, identifying key themes from the interviews.

I also took steps to ensure the validity and reliability of the research. Selected participants were invited to review excerpts of the analysis to confirm that their perspectives were accurately represented. This helped minimize researcher bias and improved the credibility of the findings.

Finally, the chapter covers how I collected data from participants. I used purposive sampling to select people with relevant experience and also conducted pilot interviews to test the interview questions. The interviews were conducted in multiple languages (Kazakh, Russian, and English), and interviews were recorded and transcribed verbatim. The data was then analyzed using thematic analysis through open coding, axial coding, and selective coding.

In summary, this chapter details the research methodology, emphasizing the combination of qualitative methods to explore change management in the financial institutions of Kazakhstan and Hungary. The flexible approach allows the study to evolve as new insights arise, helping provide a deep understanding of the leadership dynamics in these organizations during times of change.

CHAPTER 6 - DATA ANALYSIS

The purpose of this chapter is to present the main findings of the empirical research based on the interviews conducted with professionals from financial institutions in Hungary and Kazakhstan. The goal is to show how change management is experienced and implemented in both countries and to reflect on how the findings relate to the research questions and theoretical framework introduced in earlier chapters.

The analysis in this chapter is grounded in the thematic analysis approach developed by Braun and Clarke (2006), which was selected because it allows for a flexible but systematic process of identifying patterns across qualitative data. The analysis followed several steps, starting from open coding, then axial coding, and finally grouping the codes into broader themes. This process helped to organise the interview data in a way that makes it possible to understand how organisational change is managed in different regulatory, cultural, and technological contexts. NVivo 15 software was used to support the coding and to ensure a more transparent and traceable analytic process. The features of this software actually increase the rigor of theme development and allow researchers to track frequency, associations, and patterns in the data, as well as provide a wealth of detail about change management procedures in financial institutions.

This chapter is structured according to the main research questions and the thematic areas that emerged during the coding process. Each major theme is presented with supporting quotes from the participants, which were selected to illustrate important insights and to reflect the real voices of those involved in managing change. The findings are presented in four main parts, each responding to one of the research questions. These include the strategies and models used in change management, the influence of regulation, the role of national culture and history, and the factors that enable or hinder technological innovation.

By organising the findings in this way, the chapter connects the empirical material to the theoretical models discussed earlier, such as Kotter's 8-Step Model (Kotter, 1996), Lewin's Change Theory (Burnes, 2004), and the ADKAR model (Hiatt, 2006). These frameworks helped to guide the interpretation of the data and will be

further discussed in the next chapter. The cross-country comparison between Hungary and Kazakhstan is also included to highlight how local conditions shape the practice of change management.

6.1 Analytical Approach

The interview data were analysed using thematic analysis following the six-phase process proposed by Braun and Clarke (2006). This method was chosen for its ability to identify both manifest and latent patterns across qualitative data and its alignment with the study's interpretivist orientation. The aim was not only to describe change related practices in Hungarian and Kazakhstani financial institutions, but also to explain how these practices connect to established change management theories and are shaped by institutional, regulatory, and cultural conditions.

The coding process was conducted in three stages: open coding, axial coding, and thematic structuring. During open coding, meaningful statements from the interview transcripts were coded line by line in NVivo 15. These codes were derived inductively from participants' language, allowing for grounded, context sensitive categories to emerge. In parallel, attention was paid to concepts linked to the theoretical framework discussed in earlier chapters, including Kotter's eight-step model (1996), Lewin's planned change approach (Burnes, 2004), and the ADKAR model (Hiatt, 2006). This dual approach enabled a connection between empirical patterns and established models without forcing deductive assumptions onto the data.

Axial coding was then used to cluster codes into subthemes based on their conceptual relationships. For example, codes such as "project-based change," "senior management commitment," and "employee involvement" were grouped under the broader subthemes of "change strategy" and "managing change." The aim at this stage was to move beyond surface-level similarities and identify structural links that could explain variations in change experiences across the two countries.

The final coding structure consisted of twelve main themes, developed through iterative review of the data. Only themes that were consistently discussed across interviews and were analytically relevant to the research questions were retained. The goal of the thematic analysis was to interpret its significance. For example, in

the case of the “Change Management” theme, particular attention was paid to how change strategies were communicated, which models were consciously applied, and whether adaptation differed between Hungarian and Kazakhstani banks. Rather than treating all models as interchangeable, the analysis sought to identify where specific frameworks such as Kotter or ADKAR were implicitly followed or explicitly rejected in favour of local practice.

Throughout the process, analytic decisions were documented through memo-writing and reflexive journaling, increasing transparency and analytical consistency (McGrath, 2021). NVivo’s visualisation features were used to explore the co-occurrence of codes across countries and identify patterns in the application of models and strategies (Everett and Aloudat, 2017). Equal attention was paid to both Hungarian and Kazakhstani cases to ensure analytical balance and cross-case comparability.

6.2 Thematic Findings

This subchapter presents the key findings derived from the thematic analysis of interviews conducted with professionals from financial institutions in Hungary and Kazakhstan. The objective is to interpret how change is experienced, implemented, and understood in practice, with attention to contextual differences between the two banking systems. Twelve main themes emerged from the analysis, each supported by subthemes and specific codes. These themes capture the complexity of organisational change, including leadership, stakeholder engagement, regulatory compliance, technological adoption, and employee and customer dynamics. Attention is also given to how these factors are embedded in broader national strategies and shaped by institutional and cultural environments. The table below provides an overview of the identified themes, their corresponding subthemes, key codes, and the frequency with which they were referenced in the interviews.

Table 16 *- Summary of themes, subthemes and frequency*

Theme	Subtheme	Frequency
Change Management	Role and Experience	15
	Stakeholder Engagement	12
	Risk Management	10
Regulatory Context	Regulatory Influence	9
	Internal Audits	7
Technology and Innovation	Technology Adoption	13
	Employee Engagement	7
Leadership	Leadership Role	12
	Resistance Management	10
Cybersecurity	Cybersecurity Challenges	6
	Strategy	5
National Strategy	National Digitalization	5
Challenges	Resistance Management	7
	Legacy Systems	6
Employee Engagement	Employee Training	8
	Employee Buy-in	6
Customer Engagement	Data Management	5
Future Planning	Preparing for Future Changes	6
Crisis Management	Pandemic Response	4
Lessons Learned	Communication	7
	Agility	6

Source: Author's own edition, 2025

6.2.1 Change Management

Change management remains a fundamental process in financial institutions undergoing transformation, especially in volatile or transitional economies such as Hungary and Kazakhstan. This theme explores how change is conceptualised, structured, and implemented by professionals in both contexts. It considers the formal and informal mechanisms through which change is introduced, the roles assumed by organisational actors, and the degree to which risk and stakeholder interests are integrated into strategic decisions. Understanding how participants experience change contributes directly to RQ1, which addresses the types of strategies employed in contemporary banking institutions, and to RQ3, which examines how institutional and cultural legacies shape these approaches. The subthemes reveal significant contrasts between organisations that approach change as a strategic function and those where it is reactive or compliance-driven. The analysis also highlights the impact of leadership culture and regulatory influence on the internal dynamics of change.

Role and Experience

The subtheme *Role and Experience* captures how participants personally engage with and conceptualise change within their institutions. Although all interviewees held senior or transformation-focused roles, their understanding of change management differed based on organisational maturity, cultural norms, and sectoral context.

In Hungarian institutions, change management was often described as systemic and embedded within the business strategy. Participants highlighted structured approaches to change, supported by long-term planning and strategic measurement. For example:

"We define change as a structured and strategic need, not only a reaction to policy, but also a method to remain competitive and relevant." (H1)

This quote reflects how strategic integration of change supports both innovation and competitiveness, underlining a proactive culture. It speaks directly to RQ1 by illustrating how change is framed as a continual organisational capability rather than a one-off intervention.

Similarly, another Hungarian leader described a culture where change aligns with performance metrics and long-term digital strategy:

"For us, transformation is part of our identity. We have a portfolio of projects aligned with digital priorities, and we measure progress." (H2)

This institutional approach indicates clear alignment between change management and business objectives, demonstrating a context in which regulatory demands, customer needs, and innovation converge (RQ1, RQ4).

In contrast, interviewees from Kazakhstani banks often portrayed change as compliance-oriented and driven by authority, revealing a more hierarchical understanding:

"When the National Bank tells us to adopt something new, we follow. But it is not clear to the employees why we are doing it." (K1)

Here, the process of change is top-down, with little internal interpretation or strategic ownership. This reflects a post-Soviet administrative legacy where central authority dominates internal decision-making (RQ2, RQ3). The absence of internal communication and alignment with staff demonstrates the challenges in creating a shared vision or fostering innovation readiness.

Some participants in Kazakhstan described change initiatives as symbolic or temporary, lacking mechanisms for sustainability:

"Sometimes change is just a word. Projects begin, then stop. There is no one checking the results." (K2)

This quotation demonstrates a gap between strategy and implementation. It highlights how the absence of follow-through, measurement, and accountability contributes to organisational stagnation and disengagement (RQ1, RQ4).

A further contrast is visible in how change relates to client strategy. A Hungarian manager connected change directly to client experience:

"We look at the client journey and update our processes continuously. Change is part of our growth model." (H3)

This aligns change management with customer engagement, signalling that innovation is not limited to technology but also includes service design and

continuous improvement. The link between transformation and client centricity reinforces the institution's adaptive capacity (RQ1, RQ4).

Meanwhile, a Kazakh respondent described innovation as being contingent on informal power structures:

"Innovation happens only when someone important wants it. Otherwise, everything stays the same." (K3)

This quote reveals how informality and personalised authority shape transformation. It highlights a risk where institutional change depends on individual will, undermining systematisation, scalability, and long-term planning (RQ3, RQ4).

Taken together, the role and experience of participants reflect more than job titles, they reveal how change is understood, legitimated, and enacted in different institutional environments. Hungarian respondents generally described change as a professionalised function, integrated with digital strategy and stakeholder value. Kazakh respondents, however, often experienced change as fragmented, episodic, or dictated by external authority.

These interpretations matter not just because they differ, but because they inform how change initiatives are accepted, resisted, or ignored within an institution. This subtheme contributes to understanding research questions, highlighting how context and leadership maturity shape the effectiveness of transformation.

Stakeholder Engagement

This subtheme explores how participants engage internal and external stakeholders during change processes. Responses revealed differences in how collaboration and feedback are integrated into planning and execution. These differences relate closely to institutional structure, sector expectations, and national administrative traditions.

In the Hungarian interviews, several participants described efforts to involve stakeholders through cross-functional coordination and early feedback mechanisms. One strategy officer explained:

"We have implementation groups where risk, IT, and operations sit together. It helps us avoid surprises later." (H4)

This quote highlights a culture of shared responsibility and pre-emptive alignment. Cross-functional work is seen as a method to anticipate risk and reduce

inefficiencies. The approach reflects both regulatory influence and a commitment to strategic agility, relevant to RQ1 and RQ2.

Another Hungarian executive described involving business units during early design stages:

"We always ask the business lines to comment before launching any change. Their insights help us adjust timelines and priorities." (H5)

This form of engagement strengthens coordination between decisionmakers and implementers. The participant emphasises practical input from frontline units as a resource for better planning. It illustrates a structure where organisational learning supports continuous adaptation, contributing to RQ4.

In contrast, responses from Kazakhstan often revealed disconnected or isolated workflows. A participant expressed frustration with poor coordination:

"IT and compliance make their own decisions, and we only hear about it when something doesn't work." (K4)

This suggests siloed departments and a lack of communication mechanisms. Such a pattern weakens strategic integration and increases the risk of failed implementation. It points to institutional fragmentation and a command-based organisational culture. Another Kazakh respondent described a lack of consultation:

"We are not asked. Usually, we receive the decision and just have to deliver it." (K5)

This quote reveals a managerial model where decisions are centralised, and employees play a reactive role. When staff are excluded from planning, ownership and commitment decline. These practices influence outcomes and employee engagement, and they speak to cultural and institutional conditions relevant to RQ3.

Some Hungarian participants also mentioned the involvement of external experts during the change process. One executive shared:

"We involve external advisors, especially for risk and legal topics. They help us avoid mistakes that could delay the process." (H6)

The practice reflects an open system of collaboration, where outside knowledge contributes to operational and legal reliability. External guidance is used to supplement internal expertise, creating a more robust change environment.

In Kazakhstan, external engagement was often described with scepticism:

"Consultants don't understand our reality. It's easier to solve things internally, even if it takes longer." (K6)

This quote reflects low trust in external advice and a preference for internal solutions. While the approach supports internal autonomy, it limits exposure to innovative practices or comparative benchmarking, which could improve transformation efforts.

These responses show that stakeholder engagement practices are shaped by deeper structures governance styles, professional trust, and regulatory expectations. In Hungary, engagement tends to be structured and inclusive, encouraging integration of diverse perspectives. In Kazakhstan, engagement often lacks formal channels, and involvement is uneven across departments. Stakeholder participation affects the credibility, pace, and alignment of change initiatives. This theme contributes insights into research questions by showing how collaboration practices either strengthen or constrain institutional capacity for transformation.

Risk Management

In the banking sector, risk management plays a foundational role in shaping how change is understood and implemented. This subtheme explores how participants from Kazakhstan and Hungary described their involvement with risk identification, assessment, and mitigation during organisational transformation. The data reveal differences in how deeply risk considerations are embedded into change processes, which reflect broader organisational structures and sector-specific pressures.

In Hungary, several participants reported a proactive and structured approach to risk management, often integrated early into project planning. One Hungarian executive stated:

"We involve risk and compliance from the very beginning. They review the potential gaps before we even begin implementation." (H9)

This practice shows that risk functions are internal collaborators, not external gatekeepers. Their early involvement ensures that legal, reputational, and operational risks are addressed before project execution. This approach aligns with EU

regulatory standards, which often require demonstrable integration of risk analysis in transformation planning (RQ2, RQ4).

Another Hungarian respondent explained how risk units influence decision-making:

"Nothing goes to the board unless risk has assessed it. They are part of our steering groups." (H6)

Here, risk is structurally positioned within formal governance channels, suggesting an institutionalised and cross-functional risk culture. It also highlights a shared understanding that effective risk management supports organisational continuity and reinforces trust in innovation processes (RQ1, RQ2).

In Kazakhstan, participants often described less formal or reactive approaches to risk. One interviewee commented:

"We usually act, and then compliance checks if we missed something." (K8)

This illustrates a post-fact risk assessment model, where change initiatives proceed without prior evaluation. The separation of planning and risk undermines control mechanisms and increases exposure to reputational or regulatory fallout. It also signals weaker internal coordination and a low involvement risk culture, which may originate from legacy administrative structures (RQ3).

Another Kazakhstani professional noted that risk awareness is uneven across departments:

"Risk is not everyone's job. It's for the compliance department, and they join only at the end." (K9)

This quote reflects a narrow understanding of ownership, where risk is seen as a specialised responsibility rather than a shared concern. This structure may lead to blind spots or late stage disruptions during transformation projects (RQ4). It contrasts with more integrated systems where risk is distributed and embedded in early planning phases.

In Hungary, another executive shared that internal training helps promote consistent risk thinking:

"We train managers to understand risk criteria. It helps when we have to make fast decisions under pressure." (H10)

This quote illustrates how risk management is not only procedural, but developmental staff are equipped to manage complexity and uncertainty proactively. It aligns with broader goals of institutional agility and supports high-quality decision-making, especially in fast-moving regulatory contexts (RQ1, RQ4).

Across both country contexts, the extent and quality of risk integration during change varies. Hungarian banks appear to approach risk as a strategic asset, embedded through structure, training, and governance. Kazakhstani banks more often associate risk with control functions, introduced later in the process, and less integrated into planning. This subtheme contributes to understanding research by demonstrating how the ability to identify, assess, and mitigate risks shapes not only project outcomes, but also broader organisational readiness for change. When risk management is embedded within the organization, transformation is more adaptable and resilient. When it's isolated, risk becomes becomes a constraint rather than a guide.

6.2.2 Regulatory Context

In highly regulated sectors such as banking, regulatory frameworks act as structuring mechanisms for institutional change. This theme captures how participants interpret and respond to both national and transnational regulatory demands during transformation. Understanding how regulation shapes decision-making and internal alignment is critical for assessing variation between jurisdictions (Hungary vs. Kazakhstan) and determining how compliance influences organizational innovation and agility. The theme directly supports insights into RQ2 and RQ3, and indirectly informs RQ4, especially where technology adoption intersects with policy enforcement.

Regulatory Influence

Participants widely acknowledged that regulation and government policies play a decisive role in shaping change management across the banking sector. This subtheme explores how external regulatory frameworks influence internal strategies, project planning, and organisational flexibility. The perspectives reveal how compliance is perceived, as either a driving force or an operational constraint, depending on how institutions relate to the regulatory environment.

In Hungary, several participants described tight but predictable regulation that helps guide innovation while maintaining control. One Hungarian compliance officer stated:

"We know the rules in advance and can plan accordingly. The National Bank issues clear guidance, so we are not surprised." (H2)

This quote suggests a stable regulatory relationship, where foresight and clarity support strategic alignment. Such predictability facilitates long-term planning and reduces risk aversion. The structure reflects mature regulatory institutions, which help banks integrate compliance into development cycles rather than treat it as disruption (RQ2). Another Hungarian participant highlighted a cooperative tone:

"The regulator is strict, but they are also supportive. They want us to succeed within the rules." (H3)

This demonstrates a balanced approach to supervision, where enforcement is combined with sectoral guidance. The partnership model encourages banks to innovate responsibly and reflects a trust-based governance climate. It reinforces how regulation can act as a strategic compass, not only as a set of constraints (RQ2, RQ4).

In Kazakhstan, participants more frequently described regulation as top-down, directive, and often abrupt. One respondent shared:

"Sometimes we receive changes without preparation. The central bank decides, and we must adapt quickly." (K4)

This statement reflects a reactive compliance posture, where planning is secondary to adaptation. The unpredictability makes it difficult for organisations to develop forward-looking strategies, contributing to a compliance culture that focuses more on survival than innovation (RQ2, RQ3). Another Kazakh respondent explained:

"We wait for formal instructions. Without official approval, we don't move forward." (K6)

This approach points to a culture of institutional dependency, where internal initiative is limited by formal authorisation. It highlights the challenge of operating under systems where decision-making is centralised and innovation is constrained by policy timing. This restricts autonomy and responsiveness, both of which are essential for effective change management (RQ2, RQ4).

Some Hungarian participants noted that EU regulations, while demanding, also enable access to best practices and integration opportunities:

"We follow EU norms, which sometimes mean more work. But it helps us keep up with international trends." (H7)

Here, regulation is understood as a channel for modernisation, offering institutional legitimacy and global relevance. This reinforces the idea that compliance can be leveraged for long-term capability building, rather than treated as an external burden (RQ2, RQ1). In contrast, a Kazakh respondent highlighted a more rigid dynamic:

"There is no room to adapt the rules. Even if they do not match our systems, we must follow them as written." (K7)

This comment reflects a low-discretion compliance model, where adaptation or contextual interpretation is not encouraged. It can lead to inefficiencies, especially where infrastructure or legacy systems conflict with externally imposed standards. This environment weakens internal problem-solving and constrains learning loops.

Across both countries, regulation is a dominant force shaping change. However, its interpretation and operationalisation differ. Hungarian banks tend to work within a collaborative and forward-aligned model, while Kazakh institutions report compliance as externally imposed and rigidly enforced. These differences reveal not only governance traditions but also institutional trust levels and leadership flexibility.

Internal Audits

In both Hungary and Kazakhstan, participants described internal audits and external expert consultations as influential tools for ensuring transparency and supporting compliance. This subtheme focuses on how these mechanisms are understood and used within transformation efforts. The data reflect differing levels of institutional reliance on formal reviews, and how such mechanisms affect internal confidence, project quality, and risk responsiveness.

Hungarian participants generally described internal audits as embedded in institutional governance. One executive shared:

"Every major change goes through audit review. They help us stay aligned with both strategy and regulation." (H4)

This quote reflects the dual function of internal audit ensuring compliance while supporting strategic fit. Rather than acting as a barrier, audits are seen as constructive checkpoints that reinforce the alignment of transformation goals with institutional standards (RQ2). Another Hungarian participant emphasised the use of external consultation for specialised topics:

"We bring in external experts for areas like cybersecurity or GDPR. It reduces mistakes and saves time." (H8)

Here, expert consultation is used to supplement internal capacity, especially where technical expertise is evolving. This supports organisational learning and protects against reputational risk, while also speeding up complex decision-making (RQ4). The openness to external input reflects a mature audit culture that values dialogue over inspection. In Kazakhstan, the audit function was described as more compliance-focused. One participant stated:

"The internal audit team checks after the process, not before. They look for mistakes later." (K5)

This indicates a retrospective approach, where audits are used more for enforcement than prevention. The timing reduces their potential to influence project design or risk mitigation in advance. This structure limits strategic contribution and reinforces a separation between governance and execution (RQ2, RQ3). Another Kazakh respondent highlighted limited access to specialised advice:

"We do not often use external experts. It's expensive, and we prefer to manage inside." (K6)

This reflects both resource constraints and a possible lack of trust in external consultation. The reluctance to engage external support may hinder the institution's ability to keep pace with fast-changing regulatory or technological standards. It also points to a culture of internal self-reliance, which may reinforce silos and limit exposure to global best practices (RQ4).

Despite these differences, participants in both contexts acknowledged that internal and external review mechanisms play a vital role in ensuring accountability. However, in Hungary, these mechanisms are more often used as proactive tools to shape transformation outcomes. In Kazakhstan, they appear more reactive, with limited integration into the initial stages of change.

This subtheme supports insights into RQ2 and RQ4, showing how audit structures and consultation practices influence institutional readiness and the quality of implementation. When audits are integrated into design thinking, change initiatives are more cohesive; in contrast, if audits are treated as post-hoc controls, the strategic value is reduced.

6.2.3 Technology and Innovation

The integration of technology into banking operations has become central to organisational change in both financial systems. This theme explores how banks in Hungary and Kazakhstan adopt and implement new technologies and how institutional actors perceive their value, complexity, and impact. While technological transformation offers the promise of increased efficiency and improved customer experience, its success depends on factors such as internal capabilities, employee readiness, and external regulatory conditions. The subthemes in this section provide insight into the role of digital tools and the importance of employee involvement, contributing directly to RQ1 and RQ4, and shedding light on institutional and cultural factors addressed in RQ3.

Technology Adoption

The adoption of digital tools such as mobile banking platforms, AI-based chatbots, and online service channels was discussed by participants from both Kazakhstan and Hungary. These technologies were not simply seen as upgrades but as key instruments in responding to evolving customer expectations, operational efficiency demands, and regulatory shifts. The variation in how these tools is introduced and supported illustrates differences in digital maturity, institutional planning, and local infrastructure. This subtheme informs RQ1 and RQ4, by showing which technologies are prioritised, and how their adoption is enabled or constrained.

In Hungary, technology adoption was often presented as a structured response to changing customer needs and regulatory frameworks. One respondent stated:

"Our mobile banking application is already in its third version. Every year we add new features based on user feedback." (H1)

This reflects a model of iterative innovation, where digital tools are embedded in long-term service strategies. It shows that mobile banking is not viewed as a project with an endpoint, but as a core operational channel that evolves with customer behaviour. The quote also demonstrates an openness to feedback loops and ongoing system development (RQ1). Another Hungarian participant explained how AI tools are used to improve efficiency:

"We use AI-based chat to answer simple questions. It saves time for the team and helps customers get fast replies." (H2)

This indicates a functional integration of AI, where automation is linked to both internal process improvement and customer experience. AI is not presented as experimental but rather as an accepted, scalable tool within service operations. It reflects a level of institutional comfort with digital agents, and contributes to greater responsiveness under resource constraints (RQ4). In Kazakhstan, digital tools were also in use, though their deployment was sometimes reactive:

"We introduced mobile banking during the pandemic. Many people started using it, but some still don't trust it." (K1)

This quote reveals both acceleration and resistance. The shift to mobile was triggered by an external crisis rather than strategic planning, and customer adoption varies depending on trust and digital literacy. This demonstrates that while the tools are technically available, the success of their adoption depends on broader social and behavioural factors (RQ3, RQ4).

Another Kazakh respondent discussed challenges with chatbots:

"We launched an AI chatbot last year, but it's still limited. It cannot handle complex questions." (K2)

This shows a gap between technical deployment and functional depth. The chatbot is in place, but its limited capacity may reduce trust or lead to customer dissatisfaction. The institution appears to be experimenting with digital services without full readiness to support them across different needs. A positive examples also emerged from Kazakhstan. One manager noted:

"We have a mobile app now that covers payments, transfers, and even loan requests. It is getting better with updates." (K3)

This quote suggests progress toward consolidated digital platforms. The app is moving beyond basic transactions and becoming a more central channel for client interaction. It reflects gradual institutional learning and increasing reliance on mobile interfaces as primary contact points with customers (RQ1).

Another Hungarian participant explained the motivation behind early AI implementation:

"We tested AI chat features in our online banking system before it became popular. We wanted to be ready before the competition." (H3)

This shows that some institutions adopt technology not only out of need, but also as part of a proactive competitive strategy. The quote reflects a forward-looking approach, where early investment is viewed as essential for reputational and market positioning advantages.

Across both countries, digital tools such as mobile banking and chatbots are becoming common, but the degree of planning, integration, and user confidence varies. Hungarian banks often link adoption to continuous development and structured feedback. In Kazakhstan, adoption can be more reactive or fragmented, with greater variation in user readiness and organisational preparedness.

Employee Engagement

The role of employees in supporting digital transformation was emphasised across both Hungarian and Kazakh institutions. While technology tools are critical enablers of change, their success often depends on how staff are prepared to use, manage, and adapt to them. This subtheme highlights how organisations involve their workforce in technology implementation, focusing on training, knowledge sharing, and the collection of feedback. These insights contribute to RQ1 and RQ4, showing how internal capabilities and learning cultures affect the success of innovation strategies.

In Hungary, participants frequently described formal systems for training and consultation. One respondent noted:

"Before launching the new system, we gave each team a training session. It helped avoid errors and reduce resistance." (H4)

This reflects a preventative approach, where training is built into the change process. By equipping staff early, the organisation reduces the risk of confusion or error, while

reinforcing a sense of ownership. It shows that employee readiness is treated as a core component of implementation planning (RQ4). Another Hungarian manager described how staff input informed digital tool design:

"We asked employees to test the new platform and collected their comments. Some ideas were actually implemented." (H5)

This example illustrates an inclusive development model, where staff are not just recipients but contributors. Incorporating employee feedback improves functionality while reinforcing alignment between tools and user needs. It also helps foster engagement and trust, which are essential in environments experiencing rapid change (RQ1, RQ4). In Kazakhstan, experiences were more varied. One participant shared:

"After we introduced mobile banking, we had to teach the customer support team how to explain it. Some had trouble at first." (K4)

This quote shows that training is often introduced after deployment, creating potential knowledge gaps. It also reveals that employees are expected to support new tools even when preparation is limited, which may affect customer service and internal morale.

Another Kazakhstani respondent acknowledged the challenge of limited staff readiness:

"Some departments adapt faster than others. There is no unified training plan, so it depends on the manager." (K5)

This suggests a decentralised approach, where support for digital integration varies by team or leadership style. Such inconsistency may hinder full implementation and cause frustration among staff who feel underprepared. It also reflects organisational silos that prevent shared learning (RQ4).

Still, positive examples of proactive training also emerged in the Kazakhstani context:

"For the chatbot, we made short videos and quick guides. It helped the team get used to it step by step." (K6)

This shows that even with limited resources, targeted learning strategies can improve engagement and support. When training is well-designed and context-sensitive, it

helps bridge the gap between tool deployment and practical application. This also demonstrates institutional adaptation, where banks experiment with low-cost but effective training formats. In Hungary, one respondent emphasised the role of continuous feedback:

"Every two weeks we collect feedback about system issues. It helps improve the tool and shows staff that their input matters." (H6)

This quote highlights the importance of ongoing dialogue between technical teams and frontline users. Feedback loops make digital systems more responsive and reduce frustration, contributing to smoother integration and a sense of shared ownership.

Overall, employee engagement through training and feedback is seen as a critical success factor in both contexts, though its consistency and formality differ. Hungarian banks tend to invest in structured support systems, while Kazakh institutions vary more in their approach. These differences reflect broader organisational capacities and leadership priorities.

6.2.4 Leadership

Leadership is a defining factor in how change is initiated, communicated, and sustained within financial institutions. In both Hungary and Kazakhstan, participants reflected on how leaders shape the direction and pace of transformation, not only by issuing decisions but also by building trust and promoting engagement. Leadership culture influences how vision is translated into everyday operations, how staff respond to uncertainty, and whether innovation is encouraged or constrained. This theme contributes to understanding RQ1 by examining common leadership strategies in the banking sector, and to RQ3 by highlighting national differences in leadership style and institutional dynamics.

Leadership Role

Leadership plays a central role in the implementation and sustainability of change processes. In both Kazakhstan and Hungary, participants emphasised how leadership influences the overall direction of transformation, particularly by setting the institutional vision, motivating staff, and creating conditions that support innovation.

However, the way leadership is expressed and interpreted varies between the two contexts, often shaped by organisational culture and regulatory tradition. This subtheme contributes to understanding RQ1, by identifying leadership strategies used in change, and RQ3, by highlighting national and institutional differences in leadership approaches.

Hungarian participants frequently described leadership as a strategic function, linked to long-term planning and internal alignment. One executive stated:

"Our board sets a clear vision every year. Managers then translate it into concrete goals for each department." (H7)

This reflects a top-down but coordinated model, where vision-setting is followed by systematic communication and delegation. The clarity of direction supports internal cohesion and reduces uncertainty during periods of transformation. It also reinforces a performance-based culture, where innovation is tied to measurable outcomes. Another Hungarian respondent highlighted the motivational role of leadership:

"Our CEO talks about innovation in every town hall. It helps people feel involved and less afraid of changes." (H8)

This quote shows that symbolic actions, such as communication and visibility, are used to shape staff attitudes. By openly endorsing innovation, leaders signal cultural readiness and reduce psychological resistance. The example suggests a deliberate use of leadership to build collective commitment and emotional security during transformation.

In Kazakhstan, leadership was often described as directive but evolving. One participant explained:

"Usually the decisions come from the top, and we follow. But now some leaders are trying to involve us earlier." (K7)

This illustrates a shift from traditional hierarchical command models toward more participatory leadership. While authority remains centralised, there is evidence that some institutions are experimenting with consultation and early engagement. This is particularly significant in contexts where legacy systems and rigid administrative hierarchies still dominate. Another Kazakh manager described leadership's role in innovation support:

"Our director approved a budget for testing new ideas. It was the first time we had space to experiment." (K8)

This quote shows how leadership endorsement can provide material and symbolic support for innovation. By allocating resources and granting autonomy, leaders help staff move beyond routine tasks and engage with experimentation. It reflects a growing awareness that change requires flexibility, not just compliance.Some participants noted challenges. A respondent from Kazakhstan shared:

"Sometimes leaders give instructions without explaining the purpose. It makes people nervous and less open." (K9)

This highlights the risk of opaque communication, where instructions are delivered without context. The lack of shared understanding undermines trust and creates psychological resistance. In these cases, leadership becomes a source of tension rather than motivation, especially when staff are already managing operational uncertainty. In Hungary, leaders were also seen as facilitators of innovation ecosystems. One participant noted:

"We have an internal innovation group, supported by top leadership. It's part of our yearly strategy." (H9)

This example suggests that innovation is not treated as a separate function but embedded within broader governance frameworks. Leadership provides the vision, structure, and endorsement required to sustain innovation over time. It reflects a systems thinking approach, where new ideas are institutionalised rather than isolated.

Across both contexts, leadership is recognised as a driver of change, but its effectiveness depends on clarity, consistency, and institutional culture. Hungarian leaders tend to use formal vision-setting and structured motivation techniques. In Kazakhstan, leadership is more hierarchical, though examples of adaptive and enabling leadership are emerging.

Resistance Management

Managing resistance to change is a critical component of successful transformation, particularly in sectors with strong traditions, complex hierarchies, and regulated environments. This subtheme explores how banks in Hungary and Kazakhstan address resistance through employee training, transparent communication, and

participatory practices. The findings contribute to RQ1 by examining strategies commonly used to manage resistance in the financial sector, and to RQ4 by revealing how involvement and communication influence staff acceptance of technological and organisational change.

Hungarian participants generally described resistance as something anticipated and addressed through early engagement and communication. One respondent stated:

"When we explain why changes are happening, people are less sceptical. We try to involve them as early as possible." (H10)

This reflects a preventive mindset, where resistance is reduced not by pressure, but by building understanding. It suggests that leaders consider communication a strategic tool, allowing employees to mentally and emotionally prepare for upcoming transitions.

Another Hungarian manager added:

"We give short training sessions during each phase. People get used to the system step by step." (H1)

This incremental approach to training shows an awareness of learning curves and psychological adjustment. Instead of overwhelming staff, change is paced in manageable steps. This approach increases the likelihood of sustained adoption and reduces the perception of disruption.

A third Hungarian participant noted the use of feedback mechanisms as a way to reduce friction:

"Sometimes people resist because they feel unheard. When we collect feedback and act on it, they become more positive." (H3)

This reinforces the importance of two-way communication, where employee voice is recognised. The practice of collecting and responding to feedback helps to transform resistance into collaboration and suggests a more mature change culture.

In Kazakhstan, resistance was often framed as a normal reaction to unfamiliar systems or unclear instructions. One participant explained:

"People usually resist because they don't understand. If training comes too late, they already decided they don't like the change." (K10)

This statement illustrates the cost of poor timing. When training is delayed or insufficient, resistance becomes harder to reverse. It shows that in some cases, resistance is less about opposition and more about uncertainty or fear.

Another Kazakh respondent shared a case where transparency helped reduce pushback:

"Our manager showed us the full plan. It helped us understand what was coming and feel more in control." (K6)

This quote highlights the value of open communication. When staff are informed early and thoroughly, it creates a sense of control and reduces anxiety. This approach aligns with research that links transparency to trust in organisational change contexts.

Still, some participants pointed to the persistence of resistance when staff feel excluded. One employee noted:

"They tell us what is changing, but not why. That makes it feel forced." (K7)

This reflects the emotional side of resistance, where change is experienced as top-down and imposed. Even well-designed plans can meet resistance if staff interpret them as lacking explanation or justification. Without context, involvement remains superficial.

Despite these challenges, there are signs that resistance is being addressed more systematically in some Kazakh institutions. One manager described:

"We made small working groups to test the new tool. People felt proud when their feedback was used." (K8)

This strategy of forming pilot teams helps to build ownership and validate employee input. It also turns early adopters into informal change agents, spreading positive attitudes within their departments.

Across both Hungary and Kazakhstan, resistance is present but not insurmountable. In Hungarian banks, structured training and inclusive communication are more commonly used to reduce opposition. In Kazakhstan, efforts are emerging, but they are often informal or inconsistent. The quality and timing of engagement remain key factors in determining how staff respond.

6.2.5 Cybersecurity

As banks accelerate their digital transformation, the protection of digital assets and infrastructures has become an essential element of organisational resilience. Cybersecurity is no longer viewed as a purely technical issue but as a strategic concern with implications for compliance, trust, and operational continuity. In both Hungary and Kazakhstan, participants reflected on how their institutions manage digital threats and implement robust security protocols. This theme contributes to RQ1, by identifying security measures linked to digital change, and to RQ4, by examining how cybersecurity influences the pace and confidence of technological innovation.

Cybersecurity Challenges

As digital transformation advances in the banking sector, cybersecurity has become a central concern for institutions in both Hungary and Kazakhstan. This subtheme explores how participants understand and respond to cybersecurity threats, and how institutions design security protocols to mitigate risks. While both countries recognise the importance of protecting digital infrastructure, their responses differ depending on technological readiness, regulatory pressure, and organisational awareness. These findings contribute to RQ1 and RQ4, by highlighting how cybersecurity concerns shape innovation strategies and operational priorities.

In Hungary, cybersecurity was typically described as an integrated component of transformation efforts. One respondent explained:

"Every new system has to go through a cybersecurity review. It's not optional. It's part of the whole process." (H4)

This shows that digital threats are not treated as isolated incidents but as structural risks requiring institutionalised responses. Cybersecurity is embedded into the development lifecycle, which reflects a mature understanding of both the technical and strategic dimensions of risk. Another Hungarian participant highlighted collaboration with specialists:

"We work closely with IT security experts before launch. They help test for vulnerabilities." (H5)

This quote demonstrates proactive engagement with internal or external cybersecurity professionals. It suggests that Hungarian banks are building cross-functional safeguards into digital rollouts, rather than reacting to breaches after the fact. The approach increases institutional resilience and supports trust among stakeholders (RQ4).

In Kazakhstan, cybersecurity was also a concern, though the approach appeared more reactive or resource-constrained. One participant noted:

"We started improving our cybersecurity after one incident. Before that, it wasn't really a priority." (K5)

This reflects a postcrisis response model, where action is triggered by incidents rather than strategic planning. While it indicates growing awareness, the reliance on past failures for policy improvement may signal a lack of anticipatory culture. Another Kazakh respondent highlighted the need for basic awareness:

"Some departments still open suspicious emails. We need more training, not just systems." (K6)

This quote illustrates a human vulnerability dimension. Even with technical safeguards in place, gaps in employee understanding pose ongoing risks. It points to the need for holistic security models that combine technology with behavioural training and routine awareness efforts.

In both contexts, cybersecurity is increasingly tied to institutional credibility and operational continuity. However, while Hungarian institutions appear to adopt systematic and collaborative approaches, Kazakhstani banks are at a continuing stage of integration. Capacity building and staff training remain critical for improving overall readiness.

Strategy

Beyond addressing direct threats, cybersecurity in banking institutions also involves building long-term strategic safeguards. This subtheme focuses on how banks in Hungary and Kazakhstan approach cybersecurity at a structural level through encryption technologies, formal risk management procedures, and external audits. These mechanisms reflect varying levels of institutional maturity, resource availability, and compliance culture. This subtheme contributes to RQ1 and RQ4, by

showing how cybersecurity strategy is integrated into broader change initiatives, and how risk is managed in the context of digital transformation.

Hungarian participants described cybersecurity strategy as embedded within corporate governance. One participant shared:

"We follow strict encryption protocols for all customer data. It's part of our general IT policy." (H2)

This suggests that encryption is integrated into standard operating procedures. It reflects a broader compliance-oriented culture, where technological measures are aligned with institutional risk frameworks. The quote also implies that cybersecurity is not left to individual teams but is regulated at the system level. Another Hungarian respondent discussed the role of external oversight:

"We have yearly audits from independent firms. They check our cybersecurity risks and give recommendations." (H5)

External audits offer a formal mechanism for accountability and continuous improvement. They create an external layer of pressure that encourages the organisation to maintain up-to-date safeguards. This kind of structured review can also help align internal practices with international standards, especially important in regulated sectors like finance.

In Kazakhstan, cybersecurity strategy is also emerging, though sometimes from a reactive standpoint. One participant stated:

"After we had a small data issue, we improved our encryption systems. Now all transfers are encrypted." (K3)

This quote shows a learning process shaped by events. While technical upgrades are introduced, they are often implemented as responses to incidents rather than as part of long-term planning. It reflects an evolving but still event-driven strategy, common in institutions where cybersecurity capacity is being built gradually (RQ4). Another Kazakh participant highlighted limited risk management processes:

"We have some protocols, but risk evaluation is still manual. We hope to automate it soon." (K6)

This points to resource and system gaps, where risk is monitored, but not yet integrated into automated processes. Manual evaluation increases the risk of error or

delay and may reflect a lack of access to specialised cybersecurity tools or internal expertise. One Kazakh manager mentioned:

"We invited an international firm to audit our systems. It helped us understand our weak points." (K7)

This illustrates a growing recognition of the value of external expertise. Even in environments with fewer internal resources, audits are used as strategic tools to guide improvement. It suggests that cybersecurity strategy, while still developing, is being shaped by global standards and partnerships.

Across both contexts, cybersecurity strategy reflects institutional priorities and capacity. Hungarian banks appear to have more formalised processes for encryption and audits, while Kazakhstani banks are developing their systems through a combination of local experience and external support.

6.2.6 National Strategy

National digital strategies and policy frameworks play a key role in shaping how financial institutions adopt and manage technological change. Banks do not operate in isolation; they respond to government priorities, regulatory incentives, and national infrastructure investments. Participants from both Hungary and Kazakhstan reflected on how public sector initiatives, funding programs, and national digitalisation efforts influenced their institutional decisions. This theme contributes to RQ2 and RQ3, by showing how national-level forces shape the timing, design, and focus of organisational change in different regulatory and cultural environments

National Digitalization

In both Hungary and Kazakhstan, participants acknowledged the growing influence of state-led digital strategies and national innovation policies. Government initiatives can either support or constrain institutional digitalisation, depending on the level of coordination, infrastructure readiness, and clarity of objectives.

Hungarian participants described a relatively structured relationship between national policy and institutional priorities. One participant noted:

"The central bank's digital strategy is very clear. We align our priorities to match their roadmap." (H6)

This reflects a model where public institutions act as coordinators, offering guidance and timelines that shape bank-level planning. The quote suggests that digital transformation is not solely an internal decision but is shaped by regulatory and strategic alignment with state actors (RQ2). Another Hungarian managers explained:

"We received some government grants for developing mobile services. It encouraged us to move faster." (H7)

"At our bank, change refers to strategic and operational shifts driven by regulatory compliance and the need to enhance customer experience. This includes adapting to new laws, integrating advanced technologies, and improving digital channels to meet evolving customer demands while maintaining trust and security". (H6)

This highlights the role of financial incentives in accelerating change. When governments provide material support, it reduces internal resistance and shortens the time needed to justify investments. This also reflects a broader innovation ecosystem, where public and private actors interact around shared goals (RQ2, RQ4).

In Kazakhstan, digital transformation was also described as a national priority, though with different levels of implementation. One respondent shared:

"The government talks a lot about digitalisation, but the support is not always clear." (K8)

This statement points to a perception gap between policy ambition and practical guidance. While digitalisation is promoted, institutional actors may struggle to interpret how public goals apply to their specific context. This can lead to confusion or uneven adoption across the sector (RQ2, RQ3). Another Kazakh participant described limited public-private cooperation:

"There is some support for fintech startups, but traditional banks don't always benefit." (K9)

This reflects the selective nature of national digital strategies, where innovation is often focused on newer actors while legacy institutions are left to adapt with fewer resources. The quote shows that state influence can create innovation imbalances, particularly when frameworks are not inclusive.

Still, national policy was seen as a long-term enabler. A participant noted:

"The infrastructure is improving, especially in rural areas. That helps us reach more customers with digital tools." (K10)

Here, government action supports broader access and inclusion, which in turn enables banks to expand their services. This demonstrates how infrastructure investment shapes the scalability and reach of institutional transformation, particularly in large or diverse countries.

Across both contexts, national digital strategies are influencing institutional change, though with different levels of effectiveness. Hungarian banks appear more closely aligned with public policy, often benefiting from formal guidance and support. Kazakh institutions face more fragmented policy environments but recognise the potential of public initiatives when they are clear and consistent.

6.2.7 Challenges

Despite the fact that innovation and change are becoming increasingly necessary in the financial sector, banks continue to face structural and cultural challenges that can slow down or disrupt transformation processes. Participants from Hungary and Kazakhstan pointed to a range of internal and external barriers, including resistance from staff, misalignment of priorities, and limited financial resources. These challenges are not simply obstacles to be overcome; they reflect deeper institutional dynamics, including how change is communicated, managed, and supported. This theme contributes to RQ1 and RQ4, by showing how the success of change initiatives is shaped not only by planning and leadership but also by the ability to recognise and respond to resistance and constraints.

Resistance Management

Across both countries, one of the most frequently cited challenges to implementing change was resistance from staff. Employees sometimes struggle with the pace or complexity of transformation, particularly when they feel underprepared or excluded from planning processes.

One Hungarian respondent explained:

"Some employees were sceptical. They thought it was just another top-down idea that would disappear in a few months." (H8)

This quote shows that resistance often emerges from experience-based doubt, especially if previous initiatives lacked follow-through. It points to a cultural barrier driven by change fatigue or a lack of trust in management consistency and highlights the importance of credibility in sustaining change (RQ1). Another Hungarian manager mentioned resource limitations:

"We would like to digitise more processes, but budget constraints make it hard to scale." (H10)

This underscores a financial constraint that affects not only technological capability but also strategic momentum. Even when the will to change exists, limited funding can slow innovation, reduce scope, and frustrate staff who expect improvements. In Kazakhstan, several participants described resistance as a result of unclear communication or workload pressure. One stated:

"People are already overwhelmed with tasks. When you add a new system, they see it as extra work." (K3)

This reveals that resistance may not be ideological, but practical. Employees who are under operational pressure may resist change not because they oppose innovation, but because they perceive it as an added burden. This points to the need for workload-sensitive implementation strategies (RQ4). Another participant explained:

"Some departments don't want to change. They have their own way of doing things and feel that new systems are unnecessary." (K4)

This form of resistance stems from entrenched work habits, and possibly a lack of motivation to adapt. It reflects cultural inertia within certain teams, where autonomy and stability are valued more than standardisation or innovation. Such responses require engagement strategies that address underlying identity and work culture (RQ1, RQ3).

Budget-lack issues were also raised in the Kazakh context. One manager shared:

"We had a good proposal, but there was no financial support from the central level." (K5)

This quote points to institutional dependencies, where even innovative ideas remain unrealised due to lack of central funding. It shows that budget constraints can undermine local initiative and widen the gap between intention and execution.

Across both contexts, resistance and resource limitations are significant barriers. Hungarian institutions more often face cultural scepticism and long-term financial planning issues. Kazakhstani institutions encounter both operational overload and a lack of structural funding. In each case, successful change management depends on addressing both the emotional and material roots of resistance.

Legacy Systems

Several participants cited outdated or fragmented IT systems as one of the main barriers to innovation. Outdated systems create both technical and operational problems, hindering the implementation of modern digital tools or the integration of new platforms. The burden of maintaining outdated technologies limits flexibility and consumes resources that could otherwise be invested in innovation. These issues are directly related to RQ1, which explores change strategies, and RQ4, which examines critical factors determining digital transformation. In Hungary, one participant highlighted the problem of integration:

"Our core banking system is more than 15 years old. It doesn't talk easily with the new tools." (H2)

This illustrates a compatibility gap, where older infrastructure is unable to fully support new functions. As digital tools evolve, institutions relying on legacy systems face increasing costs for maintenance, interface adaptation, and workaround development. This slows implementation and limits responsiveness to customer demands. Another Hungarian manager shared:

"Even small changes take a long time because the architecture is outdated. We need external vendors for almost everything." (H4)

This reflects not only a technical constraint but also dependency on third parties, which may increase costs and reduce agility. When internal IT teams cannot modify systems directly, it delays change and creates bottlenecks in transformation processes.

In Kazakhstan, similar issues were reported, though sometimes linked to a lack of national infrastructure or early-stage digital development. One participant noted:

"Some of our platforms are based on very old software. It works, but we can't expand or modify it easily." (K2)

This reflects structural inflexibility, where systems may function on a basic level but lack scalability or adaptability. The quote reveals a tension between operational continuity and innovation readiness. Another Kazakh respondent stated:

"The system crashes when too many users log in. We had to limit some online services." (K5)

This illustrates capacity limitations rooted in older infrastructure. System performance becomes a direct barrier to customer service expansion, which undermines strategic goals like digital inclusion or efficiency. Despite these constraints, some institutions are developing strategies to transition away from legacy systems. A Hungarian executive explained:

"We started migrating some functions to the cloud. It's not easy, but it's the only way forward." (H7)

This shows that change is possible but gradual. Moving away from legacy systems often requires parallel investments, risk planning, and staff retraining, making it a long-term transformation in itself. Overall, legacy systems limit the speed, scope, and effectiveness of organisational change. In both Hungary and Kazakhstan, outdated infrastructure constrains what banks can achieve, even when leadership and staff are supportive. These limitations underscore the need to invest not only in tools but also in the foundational technology renewal.

6.2.8 Employee Engagement

Employee engagement is key for successful change management, particularly in highly regulated and complex environments such as the banking sector. Change initiatives rely on technical solutions and leadership directives, on how employees perceive, understand, and participate in the internal change process. Participants from both Hungary and Kazakhstan discussed how banks invest in staff development and involvement, highlighting strategies used to increase adaptability and build trust during periods of transition. This theme contributes to RQ1 and RQ4, by illustrating

how internal readiness and staff capabilities influence the success of innovation strategies.

Employee Training

Employee training was seen as one of the most direct tools to reduce resistance and prepare staff for new systems and expectations. Both Hungarian and Kazakhstani participants shared examples of how structured learning, phased implementation, and informal mentoring contributed to greater staff confidence and smoother adoption of digital tools and new workflows. The Hungarian participant explained:

"We organised short, topic-specific training sessions for each team. This helped people feel more secure when new systems came in." (H2)

This quote shows that training was used not only to transmit knowledge, but to reduce anxiety and build a sense of control. By segmenting training and tailoring it to team needs, the institution demonstrated sensitivity to staff concerns and learning styles, supporting employee adaptation in line with organisational strategy (RQ4). Another Hungarian respondent noted the importance of informal support mechanisms:

"We identified people who were more comfortable with change and asked them to help others. It made the process feel less forced." (H4)

This highlights the use of peer-led support as a supplement to formal training. It reflects an awareness that resistance can be emotional, and that adaptation is often more successful when modelled and supported from within teams. It also suggests a culture of internal collaboration that complements hierarchical planning (RQ1).

In Kazakhstan, training was sometimes reactive but still effective in overcoming resistance. One participant shared:

"There was pushback at the beginning, especially from older employees. But after some workshops, the mood changed." (K2)

This indicates a learning curve that includes initial reluctance, followed by gradual acceptance once staff feel more confident. The workshop model provided opportunities for repeated exposure and clarification, reducing fear of failure and promoting practical understanding (RQ4).

Another Kazakh respondent mentioned adaptation through iterative training:

"We did two rounds of training. The first one was basic, and then we focused on more complex tasks. That helped people adjust." (K3)

This staged approach reflects a recognition that adaptation is a process, not a onetime event. It also shows that change leaders understood the value of pacing learning to prevent overload, particularly when major systems were being introduced.

In both contexts, employee training was viewed as an investment in smoother transitions and higher levels of digital fluency. However, Hungarian institutions tended to describe more structured and proactive approaches, while Kazakhstani banks reported flexible, evolving practices that adapted in response to staff feedback and performance.

Employee Buy-in

Beyond technical training, many participants described the importance of securing emotional and strategic commitment from staff during change processes. Employees buy-in involves ensuring that teams understand the change, support it actively and align their behaviours with institutional goals. In both Hungary and Kazakhstan, respondents highlighted how leadership training, communication efforts, and team-level engagement played a role in building a shared purpose. This subtheme supports RQ1, by examining how buy-in facilitates smoother change, and RQ4, by exploring how leadership approaches influence staff responses.

In Hungary, employee buy-in was often framed as an outcome of deliberate leadership efforts. One participant shared:

"We focus on leadership training because we believe team leaders set the tone. If they are confident, the team follows." (H3)

This quote reflects a cascading influence model, where confidence and clarity at the leadership level shape perceptions throughout the organisation. It shows that buy-in is not achieved through general announcements but through interpersonal influence and daily interactions. Another Hungarian respondent explained:

"People are more willing to adapt when they feel the whole team is behind the change, not just upper management." (H5)

This illustrates the social dimension of buy-in. When change is seen as a collective process, peer pressure and group norms can strengthen alignment. It also highlights

the importance of shared commitment, not just individual understanding, in facilitating smooth transitions (RQ1).

Kazakhstani participants also identified buy-in as a success factor, although the approaches differed. One respondent stated:

"At first, people were unsure. But when team leaders started showing interest, the mood shifted." (K2)

This suggests that in hierarchical systems, managerial endorsement acts as a signal that change is both expected and supported. Staff begin to mirror the enthusiasm or caution of their supervisors, indicating that leadership behaviour plays a key symbolic role (RQ4).

Another participant from Kazakhstan described the importance of repeated engagement:

"We had several sessions where employees could ask questions. That helped them feel heard and more ready to support the new system." (K6)

This quote reflects a participatory engagement strategy, where buy-in is not demanded but cultivated through open dialogue. Allowing space for uncertainty, questions, and discussion supports emotional alignment and reduces defensive attitudes.

Despite contextual differences, both Hungarian and Kazakh participants emphasised that employee buy-in does not happen automatically. It requires visible leadership, honest dialogue, and repeated reinforcement. Institutions that neglect this step often face hidden resistance, even when technical plans are strong.

6.2.9 Customer Engagement

In the context of digital transformation, customer engagement is increasingly linked to data-driven services and security practices. Financial institutions are expected to serve clients efficiently and to manage sensitive data responsibly. Participants from both Hungary and Kazakhstan shared how banks address these expectations through data protection, secure systems, and transparent practices. These efforts are not only technical but also strategic, affecting trust, compliance, and service quality. This theme contributes to RQ1 and RQ4, by showing how digital transformation

intersects with privacy concerns and how customer-facing strategies influence the scope of innovation.

Data Management

Participants described data management as a central aspect of both customer service and institutional risk management. The shift to digital channels has increased customer expectations around data security and required institutions to adopt more advanced systems for encryption and access control. The Hungarian participant highlighted:

"Customers ask about data security all the time now. We use encryption and strong access policies to show we take it seriously." (H4)

This quote reflects how customer trust is shaped by data policy, not just product offerings. It also shows that institutions use security features not only for protection but as part of their communication and branding strategy. Another Hungarian respondent shared:

"All customer data is stored in compliance with GDPR. It required major updates to our infrastructure." (H6)

This illustrates the influence of regulatory frameworks on internal systems. Compliance with European standards like GDPR has pushed banks to upgrade encryption and refine access protocols. The investment in data management is therefore not just about technology, but about alignment with external expectations and avoidance of penalties (RQ4).

In Kazakhstan, participants also reported efforts to improve data control, although challenges remain. One respondent explained:

"We moved our main customer system to a more secure server and limited who can see the data." (K4)

This example shows a growing awareness of access control, especially in light of evolving privacy norms. It also signals a shift from open or ad hoc systems to more structured data governance. Another Kazakhstani participant added:

"Our old system didn't separate roles very well. Now only selected staff have access to personal data." (K5)

This reflects progress in applying role-based access controls, which are necessary for both data minimisation and audit readiness. It also demonstrates how data management is becoming more professionalised, even in systems that began without clear boundaries.

Hungarian and Kazakhstan financial institutions are realising that customer data is both an asset and a liability. Privacy measures like encryption and access control are technical tools, which central to customer engagement, institutional reputation, and regulatory compliance.

6.2.10 Future Planning

Preparing for change is important, just as responding to it. In fast changing financial sector, institutions that invest in forecasting and strategic anticipation are better positioned to adapt to disruption. Participants in both Hungary and Kazakhstan highlighted how their organisations monitor market trends, evaluate emerging risks, and plan for different scenarios. These practices signal a shift from reactive to proactive change management. This theme contributes to RQ1, RQ2 and RQ4, by exploring how banks create internal foresight capabilities and how strategic planning shapes the outcomes of transformation processes.

Preparing for Future Changes

Participants described various efforts to forecast future events and integrate them into institutional strategies. These include formal scenario planning workshops, internal initiatives to track trends, and interdepartmental meetings aimed at forecasting change. One Hungarian participant explained:

"We regularly run scenario planning exercises. It helps teams think about risks and opportunities in a structured way." (H5)

This shows how institutional foresight is being formalised. Scenario planning enables banks to consider multiple futures and design responses that are not overly reliant on one predicted path. It also fosters a shared mental model of uncertainty, aligning departments around common assumptions and expectations. Another Hungarian respondents noted:

"We track fintech and customer behaviour trends monthly. It informs both product design and risk management." (H7)

"We use scenario planning and strategic forecasting to anticipate trends like AI adoption or shifts in customer preferences. This proactive approach keeps us competitive. We prioritise long-term strategic goals while addressing short-term needs through a balanced approach. For instance, while our long-term goal is long-term is to become a digital-first bank, we implement short-term improvements like app updates to deliver immediate value to customers." (H3)

This quote highlights trend analysis as a bridge between innovation and operational strategy. By monitoring external shifts, banks can better align their services with customer preferences and competitive pressures. It demonstrates an effort to be externally aware, not just internally efficient (RQ1).

In Kazakhstan, future planning is also emerging as a priority, though sometimes more informally. One participant shared:

"We don't have a full planning department, but managers are asked to watch industry trends and report back." (K2)

This reflects a decentralised approach to foresight, where departments take on monitoring responsibilities without a dedicated forecasting unit. It suggests growing awareness but uneven institutionalisation of the process.

Another Kazakhstani participants said:

"Our team works to strike a balance by introducing new technologies gradually and pairing them with intensive training programs. We make sure that employees are not overwhelmed by too much change at once."(K7)

"During COVID, we learned the importance of having a Plan B. Now we talk more about potential risks." (K4)

This quote shows how crisis experience catalysed forward-looking thinking. The pandemic prompted reflection on institutional resilience, pushing organisations to shift from ad-hoc reaction to structured preparation.

While Hungarian institutions generally described formal planning processes, Kazakhstani banks are increasingly aware of the need to prepare for external

changes. In both contexts, anticipating change is being recognised as a core leadership and management responsibility.

6.2.11 Crisis Management

Crisis situations often accelerate or redirect change processes, forcing institutions to adopt new strategies and technologies under pressure. The COVID-19 pandemic served as a critical moment for banks in both Hungary and Kazakhstan, exposing limitations in legacy systems, challenging operational routines, and pushing digital transformation. Participants reflected on how their organisations responded, particularly in terms of technology adoption and remote work. This theme contributes to RQ1, by revealing how change strategies evolve during crises, and to RQ4, by showing how critical incidents influence the speed and scope of innovation.

Pandemic Response

Participants shared that the pandemic served as both a shock and a catalyst. Some changes that had previously been delayed or resisted were suddenly implemented in a matter of weeks. The forced shift to remote work also challenged traditional management models and accelerated the use of digital channels. The Hungarian participant explained:

"Before the pandemic, remote work was not even considered. Then we had to make it work in just a few days." (H4)

This highlights a sudden shift in mindset, where previous resistance gave way to necessity. It also suggests that flexibility, once seen as risky, became essential for survival. The pandemic created a testing ground for change, which led to long-term adjustments in policy and culture. Another Hungarian respondent said:

"The crisis pushed us to launch online services faster. What was planned for next year had to go live immediately." (H6)

Timelines were compressed, and strategic priorities were revised in real time. This shows how external pressure can overcome internal inertia and speed up innovation that might have otherwise taken years. In Kazakhstan, participants shared similar stories of rapid adjustment. One respondent stated:

"We had to equip staff with laptops and teach them to use collaboration tools. It was all very new." (K3)

This points to a digital capacity gap that had to be addressed quickly. The sudden reliance on remote platforms revealed weaknesses in IT infrastructure and staff readiness, but also created opportunities to expand digital literacy and modernise tools. Another Kazakhstani participant added:

"Many older employees were hesitant at first, but they adapted surprisingly well once they saw the benefits." (K5)

This quote reflects a behavioural shift, where scepticism turned into acceptance through experience. It shows that even resistant staff can adapt under the right conditions, especially when change is clearly linked to continuity and service quality.

Overall, the pandemic created a unique context where change was unavoidable. Both Hungarian and Kazakhstani banks responded by embracing digital tools, redefining work arrangements, and adjusting strategies. These changes often remained in place after the crisis, signalling a reconfiguration of organisational norms.

6.2.12 Lessons Learned

Reflecting on change efforts allows organisations to identify what supported or hindered successful transformation. Participants shared retrospective insights about what they had learned during major shifts, especially concerning internal communication, decision-making, and adaptability. These lessons are essential for developing more resilient and responsive organisations. This theme contributes to research questions by revealing how institutions internalise experience and refine future change strategies based on past successes and failures.

Communication

Clear and timely communication emerged as a fundamental factor in managing resistance, building trust, and aligning teams during periods of change. Participants from both Hungary and Kazakhstan repeatedly emphasised that communication was not just about informing, but about involving people in the process.

The Hungarian participant explained:

"We underestimated how important it was to keep everyone updated. People started speculating, and that created tension." (H3)

This shows that gaps in communication can generate confusion, internal talks, and resistance. When staff lack information, they fill the void with their own interpretations, which can undermine formal strategies and weaken team cohesion. Another Hungarian respondent described how communication routines were adapted:

"We started doing weekly check-ins, not just with managers, but with all teams. It helped keep people engaged." (H6)

This quote reflects a move toward horizontal communication, promoting openness and emotional reassurance. These sessions became platforms for clarification, feedback, and morale-building key elements for navigating uncertainty and complexity (RQ3). In Kazakhstan, similar patterns were observed. One participant said:

"At first, information only came from the top. But then we opened a feedback channel, and it changed everything." (K4)

This points to the power of two-way communication. Staff are more likely to accept change when they feel heard and respected. The creation of dialogue channels turns communication into a participatory tool, not just a managerial tactic (RQ4). Another Kazakhstani employee noted:

"Even just explaining the reasons behind the change made a big difference. People became more patient." (K6)

This quote highlights the explanatory function of communication. When rationale and purpose are clearly articulated, resistance often softens. It aligns with change management theory that frames communication as a key resource in shaping attitudes, not just conveying tasks.

Across both countries, communication was often cited in hindsight, as something that should have started earlier or been more inclusive. The lesson drawn by participants was that change efforts benefit when communication is seen not as an integrated part of the transformation strategy.

Agility

Participants viewed agility as both a mindset and a structural capability. It allowed institutions to adjust quickly to challenges such as regulatory changes, customer expectations, or system breakdowns. Flexibility was achieved through both decentralised decision-making and iterative project delivery.mOne Hungarian participant explained:

"We don't wait for full approval on every detail anymore. Teams can make some decisions locally, which speeds things up." (H3)

This quote reflects the move toward decentralised governance. By pushing authority closer to the point of execution, institutions reduce delays and encourage accountability. It also shows a shift in organisational culture toward empowered responsiveness (RQ1).

Another Hungarian respondent described flexibility in planning:

"We now work in shorter cycles. If something doesn't go as expected, we adjust fast and move forward." (H6)

This highlights an iterative approach to change, where agility is built into planning and execution. It prevents long delays caused by rigid procedures and enables course correction before problems escalate. Such flexibility is particularly useful in managing digital transformation projects (RQ4).

In Kazakhstan, agility was often developed as a response to unpredictability. One respondent shared:

"Rules and expectations sometimes change quickly here. We learned to build in flexibility from the start." (K2)

This quote shows that agility is not always a planned strategy but a pragmatic adaptation to volatile environments. In countries where external pressures are less stable, flexible systems become essential for institutional survival. Another Kazakhstani participant said:

"We had to redesign our digital onboarding twice because of changing compliance requirements. But our team handled it well." (K4)

This demonstrates agility in implementation, where project teams manage risk through responsiveness. It also reflects growing internal capacity to navigate regulatory shifts without losing momentum. Agility was described by participants not as a static capability, but as a practice that must be continuously supported through leadership, training, and culture. Institutions that promote open communication, fast learning, and cross-functional cooperation appear better positioned to manage uncertainty and drive change effectively.

6.3 Comparative View of the Cross-National Patterns

This subchapter presents a comparison of change management practices in the banking sectors of Hungary and Kazakhstan, based on empirical data and theoretical background introduced in Chapter 3. The comparative view addresses how each country's banking sector approaches change, considering regulatory, cultural, and organizational contexts. The comparative analysis between Hungary and Kazakhstan is shaped by the study's goals to explore how change management strategies differ across contexts and how these differences are influenced by regulatory, cultural, and organisational factors. Table 18 presents a comparative view and the change model alignment.

Table 17 *- Comparative Summary Table*

Dimension	Hungary	Model Alignment	Kazakhstan	Model Alignment
Strategic Orientation	Long-term, structured planning with transformation units	Lewin's: Unfreezing & Refreezing; Kotter's: Building Coalition, Vision Communication; ADKAR: Awareness, Knowledge, Reinforcement	Reactive, short-term responses to regulatory changes	Kotter's: Urgency; ADKAR: Reinforcement (skips Awareness, Desire); McKinsey 7S: Strategy, Systems (fragmented)
Leadership Style	Participatory, mid-level engagement	Lewin's: Unfreezing via Participation; Kotter's: Coalition Building; McKinsey 7S: Style, Staff	Centralized, top-down decision-making	Kotter's: Urgency; McKinsey 7S: Style (authoritarian)
Employee Engagement	Early involvement, training, and feedback loops	ADKAR: Awareness, Knowledge; Lewin's: Unfreezing; Bridges': Neutral Zone; McKinsey 7S: Skills, Staff	Post-decision training, limited early engagement	ADKAR: Skips Awareness, Desire; Lewin's: Limited Unfreezing; Bridges': Minimal Neutral Zone
Customer Orientation	Customer-focused, integrated into strategy	Kotter's: Vision Communication; ADKAR: Desire; McKinsey 7S: Strategy, Systems, Skills	Customer focus secondary to regulatory compliance	Kotter's: Vision Communication (limited); ADKAR: Desire; McKinsey 7S: Strategy, Systems
Fintech Adoption	Strategic, embedded in digital transformation	Kotter's: Quick Wins; ADKAR: Ability; McKinsey 7S: Systems, Skills	Reactive, dependent on regulation or customer demand	Kotter's: Urgency; ADKAR: Ability (limited); McKinsey 7S: Systems, Skills (fragmented)
Regulatory Context	Stable, innovation-friendly environment	Lewin's: Refreezing (institutionalized); McKinsey 7S: Strategy, Systems aligned	Volatile, directive regulatory context	Lewin's: Unfreezing (reactive); Kotter's: Institutionalizing Change (minimal); McKinsey 7S: Systems, Strategy misalignment

Source: Author's own edition, 2025.

Each country's approach to change is determined by its long-term planning in Hungary and a more reactive approach in Kazakhstan. Hungarian banks generally adopt a structured and long-term approach to change. Change initiatives are typically supported by clear strategic plans and transformation departments. This structured orientation is evident through alignment with Lewin's Three-Step Model, especially in the unfreezing stage, where preparation for change involves active consultation and communication across the organization. Kotter's Eight-Step Model is also reflected, particularly in the development of a vision, the creation of a guiding coalition, and the focus on empowering action. Furthermore, Hungarian banks align well with ADKAR's awareness and knowledge stages, where employees are well-informed and prepared for change. The implementation of changes is also supported by McKinsey's 7S Framework, with a strong emphasis on aligning strategy, systems, and staff to ensure consistent execution of the change process. Kazakhstani banks take a more reactive approach to change. Change is often driven by external factors such as regulatory shifts or immediate competitive pressures, rather than a proactive strategy. This aligns with Kotter's urgency, where quick action is necessary to respond to external changes, but the institutionalisation of change, critical in Kotter's model, is often less emphasized. The absence of a formal long-term strategy reflects a weak alignment with ADKAR's awareness and desire stages. In Kazakhstani banks, the change process tends to skip early preparatory steps and moves quickly into the ability and reinforcement phases, reflecting a more reactive rather than planned change process.

Leadership styles in Hungary and Kazakhstan show different levels of participation and involvement from employees in the decision-making process. In Hungary, leadership tends to be participatory, with mid-level managers actively involved in both planning and executing changes. This participatory leadership approach aligns with Lewin's unfreezing, as the involvement of employees fosters a more receptive environment for change. Kotter's coalition-building is strongly present, as leaders engage multiple levels of the organization in the change process. McKinsey's 7S Framework is evident in the alignment of style and staff, which emphasizes the importance of leadership that is adaptable and responsive to employee needs. Leadership in Kazakhstan is more centralised. Decisions are typically made at the top level, and employees are expected to follow directives without much

involvement in the decision-making process. This centralised approach reflects Kotter's urgency, as rapid decisions are often necessary to respond to external challenges. However, it limits employee engagement and participation, making it harder to implement Lewin's movement and institutionalisation phases effectively.

Hungary and Kazakhstan differ in their approach to involving employees in change and providing the necessary training and support. Hungarian banks prioritize employee engagement early in the change process, ensuring that staff members are involved in decision-making, training, and feedback loops from the outset. This approach is aligned with ADKAR's awareness and knowledge stages, as well as Lewin's unfreezing, where employees are actively prepared for the change process. Bridges' transition model is also reflected in Hungary's management of the neutral zone, where employees are supported through periods of uncertainty. McKinsey's skills and staff dimensions align well with this approach, ensuring that training and development are integral to the change strategy. In Kazakhstan, employee involvement in the decision-making process usually occurs after decisions have already been made.Training is introduced post-decision, limiting the opportunity for early engagement. This approach disrupts the ADKAR model in the awareness and desire stages, as employees are not adequately prepared for the changes. Lewin's unfreezing is not fully realized, and Bridges' neutral zone is underdeveloped, as employees are not given enough time to adapt to the changes.

Hungary focuses on integrating customer satisfaction into their change management process, while Kazakhstan tends to prioritize regulatory compliance. Hungarian banks integrate customer satisfaction as a core element of their change management strategy. This focus on customer orientation aligns with Kotter's communicate vision and ADKAR's desire, where employees are motivated by a clear vision of customer service improvements. The McKinsey 7S Framework reflects that strategy, systems, and staff are all aligned to serve customer needs. This customer-driven change process reflects Bridges' transition model, where customer feedback is integrated into the change process, making the transition smoother for both employees and customers. In Kazakhstan, customer orientation is often secondary to regulatory compliance. While customer satisfaction is acknowledged, regulatory pressures tend to dominate, limiting the focus on customer-centered change. This reflects a

disconnect between McKinsey's strategy and systems, where changes are not always aligned with customer-driven goals.

The introduction of financial technologies in Hungary is strategically enshrined in long-term plans, whereas in Kazakhstan it is largely driven by urgent tasks. Hungary has integrated fintech as part of a long-term digital transformation strategy. This aligns with Kotter's quick wins, ADKAR's ability, and McKinsey's systems and skills dimensions, as fintech adoption is seen as part of the overall strategy to improve customer experience and competitiveness. Maxwell's vision casting is reflected here, as fintech adoption is aligned with a broader vision for future growth. In Kazakhstan, fintech adoption is more reactive. Changes are often made to meet customer demand or comply with regulatory requirements. While Kotter's urgency is evident, there is less focus on embedding fintech into the long-term strategy, and the adoption process remains fragmented. This reflects a weak alignment with McKinsey's systems and skills and a lack of institutionalisation in the fintech adoption process.

The regulatory context in Hungary is stable, supporting long-term planning, whereas Kazakhstan faces more regulatory volatility, leading to reactive responses. Hungary's stable regulatory environment helps banks to align their change strategies with long-term goals. This supports Lewin's refreezing and Kotter's institutionalisation, as changes are reinforced and integrated into the regulatory framework. McKinsey's strategy and systems align well, as Hungarian banks are able to plan and implement changes that comply with long-term regulatory requirements. Kazakhstan's volatile regulatory environment forces banks to act quickly in response to changing regulations. This creates challenges for long-term planning and makes it difficult to institutionalise changes effectively. As a result, Lewin's unfreezing and Kotter's vision communication are not always implemented as thoroughly, and the constant regulatory shifts hinder Kazakhstan's ability to embed changes.

These findings directly answer the research questions by illustrating how national context, regulatory frameworks, and leadership styles shape change management strategies in both countries. The empirical data confirm the application of Lewin's, Kotter's, ADKAR's, Bridges', and McKinsey's models, while also revealing the

limitations of these models when applied to more reactive, externally driven change processes.

6.4 Results and Research Questions Synthesis

This chapter synthesizes the findings of this study with the research questions outlined in Chapter 1, aiming to bridge the empirical insights with the theoretical framework discussed in previous chapters. The results presented here demonstrate how the study's findings contribute to answering the research questions.

RQ1: What are the most commonly used change management strategies in the banking sectors of Kazakhstan and Hungary, and how do these strategies align with established change management models?

The first research question investigates the change attributes and strategies employed in Kazakhstani and Hungarian banks. The findings from Chapter 6 highlight that Kazakhstani banks, influenced by their centralized leadership style, implement change strategies focused on rapid decision-making. However, these strategies often result in employee disengagement and resistance to change. Kazakhstani leaders tend to drive change from the top, which resonates with Lewin's Change Model, where unfreezing is largely dictated by leadership, often without sufficient input from lower-level employees.

Hungarian banks, operating under a decentralized leadership model, emphasize employee involvement and participation in the change process, leading to higher engagement but slower decision-making processes. The strategies employed in Hungary reflect the principles of Kotter's 8-Step Model, where empowering employees and creating a sense of urgency are central to successfully driving change. However, the findings from Section 2.2 also indicate that while Hungarian banks enjoy greater employee buy-in, the speed of change is compromised, requiring a more streamlined decision-making process.

RQ 2: How do regulatory pressures in Hungary and Kazakhstan impact the design and implementation of change management processes?

The second research question examines how regulatory pressures in Kazakhstan and Hungary impact the design and implementation of change management processes.

According to the findings, Kazakhstan's flexible regulatory environment allows banks to rapidly adopt technological innovations, such as mobile banking and fintech. However, the uncertainty surrounding regulatory frameworks hinders the effective implementation of these innovations. This dynamic underscores the role of regulatory uncertainty as a driving force in change management, as discussed in Chapter 4.

Hungarian banks, on the other hand, benefit from a more stable regulatory environment, which provides clear guidelines for compliance, but this rigidity slows down the technological adoption process. While Hungarian banks operate within a clearly defined regulatory framework, the slow pace of change in terms of technology implementation reflects the resistance to change discussed in Chapter 2.

The findings also suggest that both countries would benefit from feedback loops between regulators and banks to ensure that regulatory frameworks are aligned with the changing dynamics of the banking sector. Kazakhstani regulators should work towards clearer guidelines that would reduce regulatory uncertainty, while Hungarian regulators could adopt regulatory sandboxes to test new technologies in a controlled environment, which would allow for quicker innovation without compromising EU compliance.

RQ 3: How do cultural, historical, and institutional differences between Kazakhstan and Hungary (e.g., demographic profiles and technological advancements) influence the implementation and outcomes of change management strategies in the banking sectors?

The third research question addresses the impact of cultural, historical, and institutional differences on the implementation of change management strategies in the banking sectors of Kazakhstan and Hungary. The findings presented in Chapter 5 (Section 5.2) show that Kazakhstani banks, shaped by their post-Soviet history, have adopted a more centralized leadership model, where decision-making is top-down. This historical context results in a cultural resistance to change, as employees are not accustomed to being involved in the change process. As a result, change efforts in Kazakhstan often encounter resistance, particularly at the employee level, aligning with the driving forces of cultural resistance as outlined in Chapter 2

In contrast, Hungarian banks benefit from their EU membership and a decentralized leadership style, which encourages employee involvement. However, while this structure promotes engagement, the challenge remains in overcoming the historical stability and rigidity in Hungary's banking system. The findings from Chapter 6 highlight that employee engagement in Hungary is high, but the slow pace of change remains a significant challenge. The technological readiness of the workforce, as discussed in Chapter 2, plays a critical role in overcoming these barriers, and Hungarian banks must work to improve digital literacy among their employees to enable faster adoption of innovations.

RQ 4: What are the critical factors affecting the implementation of innovative technologies in banks, and how do these factors influence the success of change management processes?

The fourth research question focuses on the critical factors affecting the implementation of innovative technologies in Kazakhstani and Hungarian banks. The results from Chapter 6 (Sections 6.2 and 6.3) show that Kazakhstani banks face significant challenges related to regulatory uncertainty, which inhibits technological innovation. Despite this, Kazakhstani banks are more inclined to experiment with new technologies, such as blockchain and AI, than their Hungarian counterparts. However, the lack of clear regulatory frameworks hinders the smooth integration of these technologies into daily operations.

In Hungary, EU regulations provide a stable foundation, but their rigidity often delays technological adoption. The stable but slow regulatory environment in Hungary means that while compliance is ensured, the speed of technological change is limited. The findings underscore the importance of feedback loops between banks, regulators, and employees, ensuring that technological innovations are continuously aligned with the changing needs of the banking sector.

Technological readiness was also identified as a critical factor in the successful implementation of change. In both countries, training programs and employee engagement in the change process are important to overcoming technological resistance and employee apprehension about adopting new technologies.

The synthesis of the results highlights the practical application of the conceptual framework that integrates leadership, employee engagement, technological innovation, and the regulatory environment. The findings demonstrate that Kazakhstani banks must improve employee engagement through more inclusive leadership and clearer regulatory guidelines, while Hungarian banks need to balance regulatory compliance with technological innovation and employee readiness for change.

CHAPTER 7 - DISCUSSION AND RECOMMENDATIONS

This chapter discuss the key findings from the research and provide recommendations based on the comparison of change management practices in the banking sectors of Kazakhstan and Hungary. Chapter 6 provided an in-depth look at how factors such as leadership, regulatory pressures, technology, and employee engagement impact change management. In this section, these factors are examined further to understand their influence on the success of change initiatives in both countries.

The objective is to highlight the similarities and differences between the banking systems of Kazakhstan and Hungary, while offering practical recommendations. These recommendations aim to assist financial institutions, policymakers, and regulators in improving their change management strategies, considering the unique challenges faced in each country.

7.1 Discussion on key findings

The findings provide crucial insights into how the banking sectors in Kazakhstan and Hungary manage change: technological disruption, regulatory pressures, and internal organizational dynamics. These findings, supported by empirical data, align with the theoretical frameworks discussed earlier in the dissertation and highlight the internal and external factors that drive or hinder successful change management. Figure 21 presents a visual summary of the key themes identified in the research. It helps to highlight the relative importance of each factor influencing change management in the banking sectors of Kazakhstan and Hungary.

The figure serves as a quick reference for understanding the major factors at play and their significance in the context of each country’s banking sector transformation.

Kazakhstan's banking sector is experiencing a rapid pace of digital transformation, with key institutions like Kaspi Bank leading the charge through innovative solutions such as the super-app model, which integrates a wide array of financial and non-financial services.

Figure 21 *- Summary of key themes based on interviews*

Source: Author`s own construction, 2025

The flexibility of Kazakhstan's regulatory environment allows for faster innovation and adaptation of technological advancements, providing financial institutions with the ability to respond quickly to market demands and technological trends. This trend supports the finding that technology and innovation are pivotal in Kazakhstan's change management strategies, as shown in the radar chart, where technology is one of the central driving forces. In contrast, Hungary's banking sector faces greater regulatory oversight, with EU-driven regulations like GDPR and Basel III playing a crucial role in shaping the pace of digital transformation. While Hungary's digital adoption is progressing, it is constrained by these regulations, which prioritize compliance over rapid technological integration. This regulatory environment, reflected in the figure 21 as a key factor in Hungary, has slowed down the pace at which Hungarian banks can fully embrace disruptive technologies compared to their Kazakh counterparts.

The regulatory context in both countries has a significant influence on change management strategies. Hungary's stringent EU regulations necessitate a more structured approach to change, focusing on compliance and stability. This influences the strategic direction of Hungarian banks, which must align with regulatory standards to ensure they remain compliant while implementing new technologies. In

contrast, Kazakhstan's more flexible regulatory framework provides room for greater experimentation with new technologies, although this flexibility also introduces uncertainty regarding future regulatory shifts. The findings suggest that Kazakhstan's regulatory environment allows for faster adaptation, but also highlights the risks of inconsistent enforcement and lack of long-term policy predictability. On the other hand, Hungary's EU-driven regulations impose certain constraints on technological innovation but provide a more predictable and stable framework for managing long-term change. This regulatory dichotomy is evident in the radar chart, where regulatory context plays a larger role in Hungary's approach to change management compared to Kazakhstan.

Leadership styles in both countries significantly influence the success or failure of change initiatives. In Kazakhstan, top-down leadership predominates, with decisions driven by senior management, which facilitates quick decision-making but often leads to employee disengagement. This leadership style is effective in accelerating change but may fail to engage employees in the process, especially if they are not involved in decision-making. The hierarchical structure of Kazakhstani banks presents a barrier to effective employee engagement and can contribute to resistance to change. In Hungary, collaborative leadership has become more prominent. Leaders in Hungary are increasingly focusing on employee involvement, ensuring that employees at various levels are consulted and engaged in the change process. This shift towards a more participative leadership model helps to foster a sense of ownership and commitment among employees, making it easier to implement change successfully. This is reflected in the radar chart, where leadership plays a significant role in facilitating change in both countries, but the nature of leadership differs between the authoritative model in Kazakhstan and the collaborative model in Hungary.

Employee resistance to change emerged as a significant theme in both Kazakhstan and Hungary. In Kazakhstan, hierarchical organizational structures contribute to resistance, particularly among older employees who are not accustomed to new technologies. The top-down leadership style often results in employees feeling disengaged from the change process, leading to low morale and resistance, especially when new technologies are introduced without sufficient training or involvement. In Hungary, resistance is more closely tied to concerns about job security as a result of

automation and the increasing use of AI. Employees worry that these technological advancements could lead to job losses, creating reluctance towards change initiatives. In both countries, the key to overcoming resistance is employee engagement through training programs, communication, and creating a sense of security about the future role of employees in the transformed organizational environment. The figure 21 highlights employee engagement as a significant factor influencing the success of change management initiatives.

The figure 21 visually represents the key themes identified during the research, with Change Management emerging as the central factor that determines the success of organizational adaptation. The chart emphasizes the importance of technology and innovation in Kazakhstan's transformation efforts, while regulatory context and cybersecurity are more critical for Hungarian banks, given the EU's influence.

The findings illustrate that successful change management in both countries hinges on the ability to balance technological innovation, leadership styles, employee engagement, and regulatory requirements. In Kazakhstan, the ability to innovate quickly is paramount, but the challenge lies in engaging employees and ensuring that the pace of change does not outstrip organizational readiness. In Hungary, the challenge is to implement change within the constraints of regulatory compliance while fostering a culture of innovation that aligns with EU standards.

The comparison of the cross-national patters shows that Hungary follows a structured, proactive approach to change management that aligns well with the models of Lewin, Kotter, ADKAR, and McKinsey. Long-term planning and leadership involvement in Hungary contribute to a smooth change process, particularly in terms of employee engagement, customer focus, and the implementation of financial technologies. On the other hand, Kazakhstan takes a more reactive approach to change management, mainly driven by external factors such as changes in legislation and competitive market requirements. This approach is consistent with Kotter's principle of urgency, which prioritizes rapid response to pressing issues. The centralized leadership style in Kazakhstan is consistent with Kotter's urgency principle but undermines the Levin phase, as less attention is paid to coalition building or employee involvement in the change process. Kazakhstan also aligns to some extent with McKinsey's systems, particularly in the area of short-term regulatory compliance management, but lacks alignment in the personnel,

strategy, and skills components necessary for sustainable change. In addition, Kazakhstan's unstable regulatory environment limits the change integration, weakening alignment with Levin's “refreezing” and Kotter's “institutionalization.”

In summary, the key findings demonstrate that the ability to manage change effectively in the banking sectors of Kazakhstan and Hungary depends on a complex interplay of leadership, organizational culture, regulatory context, and technological innovation.

7.2 Recommendations

Based on the findings discussed in the previous chapter, this section outlines a series of practical recommendations that aim to address the key challenges and opportunities identified in the banking sectors of Kazakhstan and Hungary. These recommendations are intended to guide financial institutions, policymakers, and regulators in both countries, as well as in other emerging economies, toward more effective change management strategies.

The need for adaptation and innovation is particularly pressing in light of the rapid technological developments, regulatory changes, and employee engagement challenges observed. To achieve meaningful and sustainable change, it is essential that leadership development, employee involvement, and technological innovation are prioritized across all sectors of the banking system.

Financial institutions in both Kazakhstan and Hungary must acknowledge the pivotal role that leadership plays in navigating and managing change. In Kazakhstan, the centralized, top-down leadership style often leads to quick decision-making but results in employee disengagement and resistance. The lack of employee involvement in decision-making can create a sense of alienation, which undermines the successful implementation of change initiatives. To address this, Kazakhstani banks should focus on developing leadership that fosters more inclusive decision-making and employee participation. Investing in training programs that promote collaborative leadership will be crucial. These programs should emphasize the importance of empowering middle management and encouraging employee engagement at all levels of the organization. This will not only improve the

implementation of change but also help mitigate resistance by ensuring that employees feel they are part of the change process rather than passive recipients.

In Hungary, the more decentralized leadership style allows for greater involvement of employees in the decision-making process. However, while this participatory approach fosters employee buy-in, it also leads to slower decision-making, which can be detrimental when the banking sector needs to respond quickly to market disruptions or technological advancements. To address this, Hungarian banks could benefit from enhancing the speed of decision-making without sacrificing the inclusivity that characterizes their current leadership style. Agility training for leaders would help them strike a balance between participatory leadership and the need for rapid, decisive actions, particularly in response to digital transformation challenges.

In both countries, employee engagement is a critical factor for the success of any change initiative. In Kazakhstan, where engagement levels are lower, the top-down management style contributes to resistance to change. Employees often feel excluded from the change process, which leads to a lack of commitment and ownership. To foster greater engagement, banks in Kazakhstan should adopt employee feedback systems that allow workers to participate in the planning and execution of change initiatives. This can include the establishment of cross-functional teams and employee task forces that provide employees at all levels with opportunities to contribute to the decision-making process. By engaging employees in the early stages of change, banks can increase buy-in and ensure a smoother transition.

In Hungary, although employee engagement is generally higher, resistance can still emerge when change initiatives are introduced too quickly or when employees are not adequately prepared. To mitigate this, Hungarian banks should implement continuous training programs that not only address technical skills but also emphasize the benefits of change. Ensuring that employees are well-informed and comfortable with the changes that are taking place is essential for maintaining their commitment throughout the process. Additionally, clear communication about the long-term benefits of technological transformations, particularly in the context of digital banking, can help mitigate resistance and build a sense of trust in the leadership.

Another major area of focus for both Kazakhstan and Hungary is the digital transformation of the banking sector. In Kazakhstan, the relatively flexible regulatory environment has enabled banks to experiment with new technologies more rapidly. However, while digital banking solutions such as mobile payment systems and AI-driven services have been adopted in certain areas, challenges remain in terms of cybersecurity and digital infrastructure. To overcome these challenges, Kazakhstani banks should prioritize investments in cybersecurity measures to protect their digital platforms from emerging threats. Additionally, infrastructure development, particularly in rural areas, should be a key priority to ensure that digital services are accessible to all segments of the population.

In Hungary, the EU regulatory framework, while providing stability, has also created barriers to the swift adoption of emerging technologies. Although digital banking services are increasingly common in Hungary, compliance with EU regulations such as GDPR and Basel III can slow down the pace of innovation. Hungarian banks should explore options for regulatory sandboxes, which would allow them to pilot new technologies and services in a controlled, compliant environment. This would enable banks to experiment with cutting-edge technologies such as blockchain and AI, while still meeting regulatory requirements. Furthermore, upgrading digital infrastructure to support these innovations is essential for remaining competitive in the global financial sector.

As digital transformation accelerates, both countries should also focus on improving customer engagement. The findings indicate that while digitalization in banking has made significant strides, customer engagement has not always kept pace. Personalized banking services, particularly those driven by AI and data analytics, are essential for retaining customer loyalty and satisfaction. Both Kazakhstani and Hungarian banks should invest in user-centered design and customer relationship management (CRM) systems to create more personalized and responsive banking experiences. By gathering and analyzing customer feedback, banks can better align their digital offerings with customer needs, ensuring that the digital transformation is not just about efficiency but also about improving the customer experience.

For policymakers and regulators, the regulatory environment plays a crucial role in determining the pace and direction of change within the banking sector. In Kazakhstan, the lack of regulatory clarity in areas such as fintech and digital

currencies has created opportunities for innovation but also uncertainty. Policymakers should aim to create a clearer and more structured regulatory framework that fosters innovation while ensuring consumer protection. This could include developing regulations for emerging technologies such as blockchain and AI to provide banks with the certainty they need to invest in these technologies.

In Hungary, while EU regulations provide a strong foundation for stability, they can also stifle technological innovation. Policymakers should look into streamlining compliance processes to allow for quicker adoption of emerging technologies. Introducing regulatory sandboxes, as mentioned previously, would help foster innovation in a safe, controlled manner without compromising regulatory standards. This would encourage Hungarian banks to experiment with new technologies such as digital currencies and cross-border digital payments, while still ensuring the integrity and stability of the financial system.

Finally, both Kazakhstan and Hungary must prioritize employee retraining to ensure that the workforce is prepared for the future of banking. The rapid pace of digital transformation means that employees will need to continuously upgrade their skills to keep up with new technologies. Governments should work closely with financial institutions to create targeted training programs that focus on digital literacy, cybersecurity, and data analytics. Public-private partnerships could help fund these initiatives, ensuring that the workforce remains adaptable and competitive in an increasingly digital world.

The recommendations outlined above provide a comprehensive approach to improving change management in the banking sectors of Kazakhstan, Hungary, and other emerging economies and are presented in Table 18.

Table 18 *- Summary of Recommendations for Financial Institutions and Policymakers*

Recommendation Area	Kazakhstan	Hungary
Leadership Development	Develop participatory leadership programs for middle management to foster more inclusive decision-making. Focus on empowering employees at all levels.	Provide agility training for senior leaders to balance employee engagement with quick decision-making.
Employee Engagement	Implement employee feedback systems such as surveys and focus groups to involve employees in early stages of change. Create cross-functional teams to ensure wider employee involvement.	Continuous training and transparent communication regarding the benefits of change and technology adoption. Maintain employee involvement through ongoing dialogue about digital transformations.
Technological Innovation	Leverage flexibility in regulatory environment to drive rapid digital transformation. Prioritize cybersecurity and digital infrastructure improvements.	Advocate for regulatory sandboxes to pilot new technologies. Focus on upgrading digital infrastructure to support new technologies.
Customer Engagement	Invest in customer-centric digital platforms that offer personalized services. Implement customer feedback loops to ensure alignment with customer needs.	Focus on user-centric design for digital banking platforms. Invest in customer-centric digital platforms that offer personalized services.
Regulatory Framework	Develop a clearer and more structured regulatory framework to foster innovation while ensuring consumer protection. Implement guidelines for fintech and digital currencies.	Streamline compliance processes to allow for faster adoption of new technologies. - Establish regulatory sandboxes for testing new technologies without violating EU standards.
Employee Retraining and Upskilling	Invest in employee retraining programs focused on digital literacy, cybersecurity, and data analytics.	Work with financial institutions to create targeted upskilling programs for employees, focusing on

	Collaborate with universities and training centers to build targeted curricula.	emerging technologies in banking. Public-private partnerships to fund workforce training programs.

Source: Author's own edition, 2025.

The recommendations outlined above provide a comprehensive approach to improving change management in the banking sectors of Kazakhstan, Hungary, and other emerging economies. By focusing on inclusive leadership, employee engagement, technological innovation, and regulatory flexibility, financial institutions can better navigate the challenges posed by rapid change. Policymakers and regulators play a crucial role in shaping the regulatory environment, ensuring that it encourages innovation while maintaining stability. Implementing these recommendations will enhance the agility, innovation, and resilience of the banking sector, enabling it to thrive in the face of global disruption and technological advancements.

CHAPTER 8 - CONCLUSION

This chapter concludes the dissertation by summarising the main findings and highlighting their significance. The novelty of the research lies in comparing two understudied contexts, Kazakhstan and Hungary, and in adapting classical change management models to the realities of emerging and transition economies. By combining theoretical discussion, new empirical evidence from interviews, and practical recommendations, the study contributes new insights into how financial institutions can manage change under conditions of digital disruption and regulatory pressure. The chapter also outlines the theoretical and managerial implications, recognises the limitations of the research, and points to possible directions for future studies.

8.1 Novelty of the research

Novelty in academic research expands the boundaries of existing knowledge and introduces new perspectives for both theory and practice. Change management in financial institutions has been widely discussed in international literature, but it is mostly examined in the context of Western economies or single-country cases. Previous studies often overlook the role of cultural and institutional environments in shaping change outcomes, especially in underrepresented regions such as Central Asia and Central Europe.

This research brings novelty by focusing on the banking sectors of Kazakhstan and Hungary. Instead of analysing change management only in mature markets, the research compares an emerging post-Soviet economy with an EU-integrated transition economy. It introduces new insights on how cultural legacies, regulatory pressures, and digital transformation influence the success or failure of change initiatives. This comparative lens is largely missing in the literature and provides understanding of how global theories operate in different contexts.

Another novel contribution is the adaptation of well-established change management models (Kotter, Lewin, ADKAR, Bridges, etc.) to the realities of transition and emerging economies. The study shows that classical frameworks do not work in the same way everywhere; for example, centralized leadership structures in Kazakhstan produce different dynamics compared to the EU-regulated environment in Hungary.

The proposed conceptual framework integrates both internal factors (leadership, culture, employee engagement) and external forces (regulation, technology, geopolitical shocks) as interdependent, which is a step beyond the more linear models that dominate existing studies.

From a methodological perspective, the novelty lies in collecting and analysing empirical evidence from expert interviews in two national contexts that are rarely studied side by side. This qualitative data reveals lived experiences of managers, employees, and regulators, adding dimensions of psychology, emotion, and resistance to change that are often absent in quantitative surveys of financial institutions.

Finally, the practical novelty is the development of recommendations that are directly relevant for financial institutions. By highlighting differences and similarities between Kazakhstan and Hungary, the study provides guidance for managers, policymakers, and regulators on how to design change strategies that reduce resistance, improve adaptability, and ensure long-term competitiveness under digital disruption and regulatory pressure.

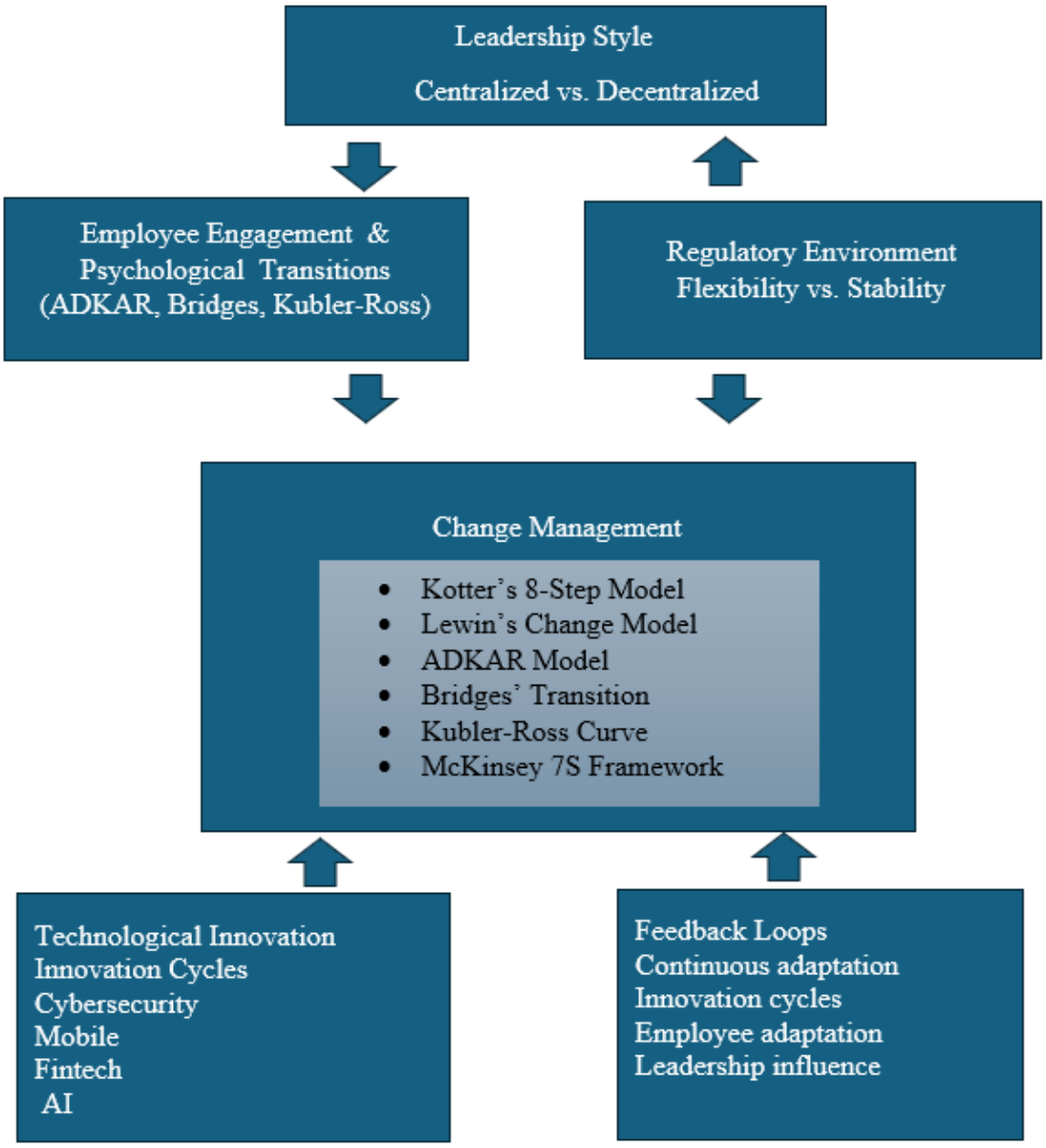
8.2 Theoretical Contributions

This study contributes to the field of change management, particularly in the banking sectors of Kazakhstan and Hungary, by addressing a significant gap in the existing literature. There has been luck research on change management in these countries, especially in financial institutions. By developing a new conceptual framework, this study adds to existing theories and offers new insights into how leadership, employee engagement, technological innovation, and the regulatory environment influence change in organizations in developing economies.

The study examines how local factors affect change management processes in Kazakhstan and Hungary. Specifically, it focuses on how different leadership styles, whether centralized or decentralized, impact the speed of decision-making and the level of employee engagement during change. It also explores how the regulatory environment in each country affects the adoption of technological innovations like mobile banking and fintech, and how these innovations, in turn, shape the change process. The study also considers the emotional and psychological transitions that

employees go through during change, something often overlooked in many traditional change management theories. How these emotional responses affect change processes in both countries is a key aspect of the findings.

Figure 22 - *Conceptual framework of change management*



Source: Author's own edition, 2025.

The main contribution of this study is developing the conceptual framework, presented in Figure 22. This framework integrates leadership styles, employee engagement, technological innovation, and regulatory environment as key factors

that shape the success of change management. Traditional change management models, such as Kotter's 8-Step Model, Lewin's Change Model, and ADKAR, are often generalized and do not account for the local context of transition economies. This study extends these models by introducing a more context-sensitive approach, one that includes the interplay between leadership, employee psychological transitions, technology, and regulation.

In Kazakhstan, where centralized leadership is common, change is often driven quickly, but employees can feel disengaged due to the lack of involvement in decision-making. This study suggests that for effective change, leadership needs to be more inclusive, ensuring that employees feel part of the process. On the other hand, Hungary's decentralized leadership fosters greater employee engagement, but it can slow decision-making and complicate the speed at which change is implemented. By recognizing these differences, this framework helps guide leadership development in both countries, ensuring that leadership styles are adjusted to meet the needs of each organizational context.

The second key contribution of this study is its focus on employee engagement and psychological transitions during change. Drawing on models such as Bridges' Transition Model and Kubler-Ross's Change Curve, the study highlights that emotional readiness plays a crucial role in the success of change management. In Kazakhstan, where leadership is more centralized, employees experience greater emotional resistance to change, making it essential for banks to engage employees early in the process and provide clear communication and support. In contrast, Hungary's employees, who are more involved in decision-making, show less emotional resistance, but the study shows that even in these environments, there are still challenges when it comes to building trust and navigating uncertainty.

Another significant contribution of this study is its exploration of how the regulatory environment in both countries affects change. In Kazakhstan, the flexibility of the regulatory framework allows for quicker adoption of technologies such as fintech and mobile banking, but it also introduces uncertainty and a lack of clear guidelines. Meanwhile, in Hungary, the stability of EU regulations provides a clear framework for compliance, but it can slow down the speed at which new technologies can be introduced. This study shows how important it is to find a balance between regulatory flexibility and compliance. It suggests that Kazakhstan should work on

standardizing regulations to reduce uncertainty, while Hungary could look for ways to streamline approval processes to facilitate quicker technological adoption.

Finally, the framework integrates technological innovation into the change management process. As technological advancements continue to reshape the banking sector, the study demonstrates that adapting to these technologies is not just about adopting new systems, but also about managing the psychological and emotional aspects of change for employees. This is where feedback loops play an important role. For example, the feedback from employees can help adjust leadership strategies, the technological feedback can guide the integration of new systems, and regulatory feedback helps ensure that the changes comply with existing laws. These continuous feedback loops create a more adaptive change management process, allowing organizations to make real-time adjustments as needed.

8.3 Practical and Managerial Implications

The findings from this study offer important implications for banking institutions in Kazakhstan, Hungary, and other emerging markets. These institutions, operating in dynamic environments, are tasked with navigating the complexities of organizational change. The conceptual framework developed in this study, with its emphasis on the interaction between leadership, employee engagement, technological innovation, regulatory environments, and feedback loops, provides a comprehensive understanding of the factors that drive successful change management. This section elaborates on how these findings can inform practice, offering strategic recommendations for financial institutions, policymakers, and regulators in managing change more effectively.

In Kazakhstan, where centralized leadership predominates, banks can enhance employee engagement by adopting a more inclusive leadership style. Incorporating feedback loops allows leaders to adapt their strategies based on employee feedback, ensuring that employees are more involved in the change process. Additionally, clearer regulatory frameworks for technology adoption will help reduce uncertainty and foster innovation, especially in areas like fintech and mobile banking. In Hungary, with its more decentralized leadership, banks should streamline decision-making to maintain speed while continuing to benefit from employee involvement.

A balance between inclusive leadership and efficiency is critical, and feedback loops can help identify where adjustments are needed. Hungarian banks can also advocate for regulatory flexibility, such as regulatory sandboxes, to accelerate technological adoption while ensuring EU compliance.

For other emerging markets, the framework highlights the need for banks to assess leadership and employee engagement within their unique cultural and regulatory contexts. By aligning technology adoption with clear regulatory guidelines, institutions can manage change more effectively and maintain financial stability while embracing innovation.

For Kazakhstani regulators, it is essential to develop clearer regulatory frameworks that balance flexibility and compliance. Feedback loops between regulators and banks can ensure that emerging technologies, such as blockchain or AI, are adopted safely and efficiently, reducing regulatory uncertainty. In Hungary, regulatory stability can be improved by introducing regulatory sandboxes to allow for the controlled testing of new technologies. This would facilitate faster innovation while maintaining regulatory oversight. Policymakers should also consider streamlining approval processes for emerging technologies to keep pace with developments in the global banking landscape.

In both countries, regulators should encourage continuous dialogue with banks to ensure that regulatory frameworks are responsive to new challenges and opportunities in financial technology. By using feedback loops, regulators can assess the impact of regulations on banks' innovation efforts and make adjustments as needed.

8.4 Limitations

This study has some limitations. One key limitation is that the findings are based primarily on the banking sectors in these two countries, which might not fully represent the challenges faced by financial institutions in other emerging markets. The conceptual framework may be applicable in other countries, but further testing will be required to understand it significance.

Furthermore, the study relies on qualitative methods, particularly interviews and thematic analysis, which can reflect subjective views. Although these methods provide rich, detailed insights, future research using quantitative methods might help validate these findings across a broader sample, enabling generalization beyond the specific cases studied here.

The importance of regulatory frameworks in shaping the operations of financial institutions was mentioned, but further research into the interplay between regulatory changes and change management strategies would be valuable. Examining how financial institutions navigate the complexities of compliance while fostering innovation and change could provide critical insights into effective change management in highly regulated environments.

In conclusion, while the present study lays the groundwork for understanding change management in financial institutions in Kazakhstan and Hungary, the identified limitations underscore the need for continued research. Expanding the scope of research to include diverse geographical contexts, employing mixed methods, focusing on the role of emerging technologies, and exploring regulatory impacts are essential steps in further developing and validating the conceptual framework of change management.

8.5 Future Research Directions

Given the limitations outlined, several directions for future research arise. One significant area is to test the conceptual framework in other sectors beyond the banking industry. While this study focuses on the banking sector, future research could examine how the framework applies to industries such as healthcare, manufacturing, or education, which also undergo significant changes but might experience different dynamics.

Future studies could also explore the psychological aspects of change in more depth, particularly how emotional responses to change, such as fear and resistance, influence employee engagement and the overall success of organizational change. This would provide a clearer understanding of the human element in the change process.

Another promising avenue for future research is cross-country comparisons to explore whether the findings of this study hold true in other transition economies.

This could include examining how leadership styles, employee engagement, technological innovation, and the regulatory environment interact in other countries with similar economic conditions. This would help determine the generalizability of the conceptual framework and provide a more comprehensive understanding of change management in emerging markets.

Finally, researchers could focus on longitudinal studies to examine how the impact of change evolves over time. This type of research could track the success of change initiatives in Kazakhstan, Hungary, or other emerging markets over several years, offering insights into the long-term effects of leadership strategies, technological innovations, and regulatory changes on organizational transformation.

REFERENCES

Akhmedov, M. (2023). Does the new management information system improve operational efficiency in the banking industry of Kazakhstan?', *The Journal of Economic Research & Business Administration*, 145(3). DOI: https://doi.org/10.26577/be.2023.v145.i3.04.

Al-Nakeeb, A., Ghadi, M. (2024). *Human resource management practices for effective organisational change: A review of research in Western and non-Western countries*. Foundations of Management, 16, pp.7-24. DOI: doi:10.2478/fman-2024-0001.

Almuqwishi, M.A. & Rosli, R.B. (2024). *Managing strategic change in business world*. International Journal on Recent Trends in Business and Tourism. doi:10.31674/ijrtbt.2024.v08i03.005

Alrajhi, A.S. (2025). *The impact of marketing change capabilities on marketing strategic change*. Decision Science Letters. doi:10.5267/j.dsl.2024.12.014

Alzawawi, B.S. (2016). Translating organizational change: A case study of transformation in the Libyan banking sector'. DOI: https://doi.org/10.5339/QFARC.2016.SSHASP1447.

Angelucci, F., Shatvoryan, A. & Di Cinzio, A. (2024). *Beyond the Euro-Western model: Public work as a boundary between mending and innovation*. TECHNE - Journal of Technology for Architecture and Environment. DOI: doi:10.36253/techne-15861

Anyieni, L. and Gidion, O.C. (2016). Organisational Change: A Critical Review of the Literature', *International Journal of Professional Management*, 11(2), pp. 1-7.

Aon (2023). Banks are turning to their talent to boost their cyber resilience'. DOI: https://www.aon.com/en/insights/articles/banks-are-turning-to-their-talent-to-boost-their-cyber-resilience.

Appelbaum, S. H., Habashy, S., Malo, J.L., & Shafiq, H (2012). Back to the future: Revisiting Kotter's 1996 change model', *Journal of Management Development*, 31(8), pp. 764-782. DOI: https://doi.org/10.1108/02621711211253231.

ARDFM (2021). Agency for Regulation and Development of the Financial Market'. ARDFM. DOI: https://www.fmr.gov.kz/en.

Arefieva, O.V., Bozhanova, O.V. and Abernikhina, I.H. (2024). Strategic Management of the Activities of Banking Institutions in the Conditions of the Information Society', *Management of Economy: Theory and Practice. Chumachenko's Annals*, pp. 24-37. DOI: https://doi.org/10.37405/2221-1187.2024.24-37.

Argitis, G. (2017). Evolutionary finance and central banking', *Cambridge Journal of Economics* . DOI: https://doi.org/10.1093/CJE/BEW058.

Armenakis, A.A. and Bedeian, A.G. (1999). Organizational Change: A Review of Theory and Research in the 1990s', *Journal of Management*, 25(3), pp. 293-315. DOI: https://doi.org/10.1177/014920639902500303.

Armstrong, M. (2009). *Armstrong's Handbook of Human Resource Management Practice*. Kogan Page.

Arynova, Z. and Nedugova, A. (2023). The impact of digitalization on the Kazakhstan banking services market', *Bulletin of the Innovative University of Eurasia* . DOI: https://doi.org/10.37788/2023-4/59-65.

Aumbur, K.S., Eyo-Udo, N.L., Onukwulu, E.C., Agho, M.O. and Azubuike, C. (2024). Green finance solutions for banking to combat climate change and promote sustainability', *Gulf Journal of Advance Business Research*, 2(6), pp. 376-410. DOI: https://doi.org/10.51594/gjabr.v2i6.54.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice Hall.

Bass, B.M., Avolio, B.J. (1994) *Improving organizational effectiveness through transformational leadership*. Thousand Oaks: Sage Publications.

Batiz-Lazo, B. (2018). A window to internal and external change in banking. *Oxford Scholarship Online*. https://doi.org/10.1093/OSO/9780198782810.003.0001

Battisti, G. and Stoneman, P. (2010). How innovative are UK firms? Evidence from the fourth UK community innovation survey on synergies between technological and organizational innovations', *British Journal of Management*, 21(1), pp. 187-206. DOI: https://doi.org/10.1111/j.14678551.2009.00629.x.

Beer, M. and Nohria, N. (2009). Cracking the Code of Change', in *The Principles and Practice of Change*. Macmillan Education UK, pp. 63-73. DOI: https://doi.org/10.1007/9781137165114_4.

Benzies, K.M. and Allen, M.N. (2001). Symbolic interactionism as a theoretical perspective for multiple method research', *Journal of Advanced Nursing*, 33(4), pp. 541-547. DOI: https://doi.org/10.1046/j.1365-2648.2001.01680.x.

Berger, R. (2015). Now I see it, now I don't: Researcher's position and reflexivity in qualitative research', *Qualitative Research*, 15(2), pp. 219-234. DOI: https://doi.org/10.1177/1468794112468475.

Besley, T. and Persson, T. (2024). Organizational dynamics: culture, design, and performance', *The Journal of Law, Economics, and Organization*, 40(2), pp. 394-415. DOI: https://doi.org/10.1093/jleo/ewac020.

Bhalla, R. (2019). FinTech innovation: Revolutionary or evolutionary business model disruption?', *Journal of Digital Banking* . DOI: https://doi.org/10.69554/qnta8110.

Bhattacharjee, I., Srivastava, N., Mishra, P., Adhav, S., & Singh, N. (2024). The Rise Of Fintech: Disrupting Traditional Financial Services. *Educational Administration: Theory and Practice*. https://doi.org/10.53555/kuey.v30i4.1408.

Bhugra, D., Till, A., Ruiz, P. (2013). Leadership and Decision-Making', in D. Bhugra, P. Ruiz, and S. Gupta. *Leadership in Psychiatry*. 1st edn. Wiley, pp. 99-106. DOI: https://doi.org/10.1002/9781118569948.ch8.

BIS (2011) *Basel III: a global regulatory framework for more resilient banks and banking systems. Bank for International Settlements*. Basle Committee on Banking Supervision., & Bank for International Settlements. DOI: https://www.bis.org/publ/bcbs189.htm.

Blyznyuk, T.P. and Blyznyuk, O.V. (2024). Cross-cultural profile of a leader: the influence of national culture. *Actual Problems of Innovative Economy and Law*, 2024. 3(10), pp.43-50. DOI: 10.36887/2524-0455-2024-3-10

Bogdan, A. and Anna, A. (2021). Changes, evolution, revolution, and adaptation of enterprise business models', in *Business Models: Evolutionary, Revolutionary, and Adaptive Change*. DOI: https://doi.org/10.4324/9781003095361-25.

Bowden, J., King, T. B., Koutmos, D., Loncan, T., & Stentella Lopes, F. S. (2021). A Taxonomy of Fintech Innovation', in *Palgrave Studies in Financial Services Technology*. DOI: https://doi.org/10.1007/978-3-030-81835-7_3.

Bower, J.L. and Christensen, C.M. (1995). Disruptive Technologies: Catching the Wave', *Harvard Business Review*, 73(1), pp. 43-53.

Braun, V. and Clarke, V. (2006).Using thematic analysis in psychology', *Qualitative Research in Psychology*, 3(2), pp. 77-101. DOI: https://doi.org/10.1191/1478088706qp063oa.

Bridges, W. (2004). *Transitions: Making Sense of Life's Changes, Revised 25th Anniversary Edition Bri*. 25th edn. Da Capo Lifelong Books.

Bridges, W. (2009). *Managing transitions: Making the most of change*. 3rd ed. Da Capo Press.

Bugubayeva, R.O., Sansyzbayevna, R.B. and Teczke, M. (2017). Approaches and models for change management', *Jagiellonian Journal of Management*, 3, pp. 195-208. DOI: https://doi.org/10.4467/2450114XJJM.17.014.9785.

Bowers, M.R., Hall, J.R. & Srinivasan, M. (2017). *Organizational culture and leadership style: The missing combination for selecting the right leader for effective crisis management*. Business Horizons, 60(5), pp.551-563. doi:10.1016/j.bushor.2017.04.001.

Burnes, B. (2004). Kurt Lewin and the Planned Approach to Change: A Reappraisal., *Journal of Management Studies*, 41(6), pp. 978-998.DOI: https://doi.org/10.1111/j.1467-6486.2004.00463.x.

Burnes, B. (2017). *Managing change*. 7th edn. Pearson.

Burns, J.M. (1978). *Leadership*. Harper & Row.

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

CEE Legal Matters (2025a). Hungary.s Cybersecurity Strategy and Financial Sector Reforms. https://ceelm.com.

CEE Legal Matters (2025b). K&H Bank launches cybersecurity education initiative. https://www.ceelegalmatters.com/cybersecurity-initiative-kh-bank-2025.

Central Banking (2023). MNB launches CBDC pilot. Central. https://www.centralbanking.com.

Chalwe, M. and Nyimbili, L. (2024). Factor that May Drive Change in an Organization Thereby Forcing a Company to Change Its Growth and Competitive Strategy., *International Journal For Multidisciplinary Research*, 6(1), p. 12419. DOI: https://doi.org/10.36948/ijfmr.2024.v06i01.12419.

Chandel, S. (2025). Innovation in financial services: Disrupting traditional banking with fintech., *Commerce Research Review*, 2(1), p. 1123. DOI: https://doi.org/10.21844/crr.v2i01.1123.

Channon, D.F. and Caldart, A.A. (2015). McKinsey 7S model., in C.L. Cooper (ed.) *Wiley Encyclopedia of Management*. 1st edn. Wiley, pp. 1-1. DOI: https://doi.org/10.1002/9781118785317.weom120005.

Chen, S.H. (2013). What determines bank productivity? International evidence on the impact of banking competition, bank regulation, and the global financial crisis., *International Finance Review*, 14. DOI: https://doi.org/10.1108/S1569-3767(2013)0000014009.

Chesbrough, H. (2003). *Open Innovation: The New Imperative for Creating and Profiting from Technology*. Harvard Business School Publishing Corporation.

Cox, P., Smith, J. and Johnson, M. (2010). Agile methodologies in financial institutions., *Financial Transformation Review*, 12(4), p. 6071.

Creswell, J.W. and Creswell, J.D. (2018) *Research design: Qualitative, quantitative, and mixed methods approaches*. 5th edn. SAGE Publications.

Cummings, S., Bridgman, T. and Brown, K.G. (2015). Unfreezing change as three steps: Rethinking Kurt Lewin.s legacy for change management., *Human Relations*, 69(1), pp. 33-60. DOI: https://doi.org/10.1177/0018726715577707.

Cummings, T.G. and Worley, C.G. (2024). *Organization Development and Change*. 12th edn. Cengage Learning.

Dai, Z. (2024). An In-depth Analysis of JP Morgan Chase & Co., *Highlights in Business, Economics and Management*, 24, pp. 2265-2272. DOI:

https://doi.org/10.54097/1tz7eb60.

Davčev, L., Fotov, R., Jovanov, T., & Sofijanova, E. (2014). The impact of mobile technologies on e-banking. *International Journal of Bank Marketing*, 21(2), 94-103. https://doi.org/10.1108/02652320310461474

Degl'Innocenti, M., Grant, K., Šević, A. and Tzeremes, N.G. (2018). Financial stability, competitiveness and banks. innovation capacity: Evidence from the Global Financial Crisis., *International Review of Financial Analysis*, 59, pp. 35-46. DOI: https://doi.org/10.1016/j.irfa.2018.07.009.

Dent, E.B. and Goldberg, S.G. (1999). Challenging "Resistance to Change"., *The Journal of Applied Behavioral Science*, 35(1), pp. 25-41. DOI: https://doi.org/10.1177/0021886399351003.

Deutsche Bank (2023). Digital transformation in banking: A case study of Deutsche Bank. https://www.db.com.

Dovhan, Z. (2020). Bank challenges in the context of the COVID-19 pandemic, *INNOVATIVE ECONOMY*, (7-8), pp. 119-124. DOI: https://doi.org/10.37332/2309-1533.2020.7-8.16.

ehuaweicom (2025). Halyk Bank upgrades digital service. https://e.huawei.com/ma/case-studies/solutions/storage/halyk-bank-upgrades-digital-service.

ENISA (2025). *Threat landscape: Finance sector 2024*. European Union Agency for Cybersecurity.https://www.enisa.europa.eu/sites/default/files/2025-02/Finance%20TL%202024_Final.pdf

ERBD (2024). New Kazakh Banking Law. The European Bank for Reconstruction and Development. https://www.ebrd.com/home/work-with-us/projects/tcpsd/20598.html#customtab-553bec23cf-item-bf90a95d06-tab.

European Banking Authority (2024). *EFIF taxonomy of Financial Innovation*. https://www.eba.europa.eu/sites/default/files/2024-10/58b1f18c-5ada-4464-a7fd-04fec2d81230/faq_for_reporting_innovations_and_upcoming_releases.pdf

European Commission (2024). In-Depth Review 2024 Hungary - Economy and Finance. https://economy-finance.ec.europa.eu/document/download/efaf659e-7a26-4cbe-a427-dc82ea6b1a9d_en?filename=ip284_en.pdf.

European Union (2024a). In-depth review 2024 Hungary - Economy and finance. https://economy-finance.ec.europa.eu/document/download/ea70dad1-da8b-410c-a683-0789e405068c_en?filename=ip312_en.pdf&prefLang=hu.

European Union (2024b). Timeline - EU sanctions against Russia. https://www.consilium.europa.eu/en/policies/sanctions-against-russia/timeline-sanctions-against-russia/.

Eurostat (2024a). Digital economy and society statistics. https://ec.europa.eu/eurostat.

Eurostat (2024b). Financial and Insurance Activities - Employment Statistics.https://ec.europa.eu/eurostat.

Everett, S., Aloudat, A.S. (2017). Analysing qualitative data using NVivo., in R. Durbarry (ed.) *Research Methods for Tourism Students*. 1st edn. New York : Routledge, 2018.: Routledge, pp. 195-202. DOI: https://doi.org/10.4324/9780203703588-16.

Ewenstein, B., Smith, W. and Sologar, A. (2015). Changing change management., *McKinsey & Company*. DOI: https://www.mckinsey.com/featured-insights/leadership/changing-change-management.

Farkas, F. (2015). Managing Change in Banking Organisations., *SSRN Electronic Journal* . DOI: https://doi.org/10.2139/ssrn.3281249.

Fehér, P. and Varga, K. (2017). Using Design Thinking to Identify Banking Digitization Opportunities - Snapshot of the Hungarian Banking System. DOI: https://doi.org/10.18690/978-961-286-043-1.12.

Fintech Futures (2023). OTP Bank Modernizes Core System with Intellect Platform. https://www.fintechfutures.com.

Gader, S.A., Bin Idrees, K., Alhabshi, S.M., Sharofiddin, A., Hasan, A. & Othman, A. (2021).The external environment driving internal organizational change: Empirical evidence from commercial banks. adoption of Islamic financial transactions in Libya., *Journal of Islamic Finance*. DOI: https://doi.org/10.31436/jif.v10i2.604.

Gehrig, T. (2015). The changing landscape of banking: What is the impact of fintech?., *Journal of Banking & Finance*, 56, pp. 63-77. DOI: https://doi.org/10.1016/j.jbankfin.2015.02.003.

Global Finance (2024). OTP Bank.s Innovation Ecosystem.https://www.gfmag.com.

Goncharenko, T. (2018). *Current transformations of banking management: Strategic analysis of external factors of direct influence activities*. Molecular Microbiology, pp.365-377. doi:10.21272/mmi.2018.2-28

Graen, G.B. and Uhl-Bien, M. (1995). Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level, multi-domain perspective., *The Leadership Quarterly*, 6(2), pp. 219-247. DOI: https://doi.org/10.1016/1048-9843(95)90036-5.

Group, O.T.P. (2025). OTP LAB recognized among the world.s best financial innovation labs. DOI: https://www.otpgroup.info/mews/otp-lab-gf-awards.

Guest, G., Bunce, A. and Johnson, L. (2006). How many interviews are enough?., *Field Methods*, 18(1), pp. 59-82. DOI: https://doi.org/10.1177/1525822X05279903.

HDFC Bank (2022). Driving digital transformation: The HDFC Bank story. H.D.F.C. https://www.hdfcbank.com.

Helmold, M. (2021). Change Management as the Trigger for New Work., in Helmold, M., *New Work, Transformational and Virtual Leadership*. Cham: Springer International Publishing (Management for Professionals), pp. 31-43. DOI: https://doi.org/10.1007/978-3-030-63315-8_3.

Hernes, T. (2021). Organizational transformation in the digital age., *Journal of Business Research*, 19(3), p. 134145.

Hiatt, J. and Creasey, T.J. (2012). *Change management: the people side of change ; an introducation to change management from the editors of the Change Management Learning Center*. Second edition. Loveland, Colo: Prosci Learning Center Publications.

Hiatt, J.M. (2006). *ADKAR: A model for change in business, government, and our community*. Prosci Research.

Hofstede, G. (2001). *Culture.s consequences: Comparing values, behaviors, institutions, and organizations across nations*. 2nd edn. Sage Publications.

Hong, Y., (2012). *Solving financing difficulties of SMEs by restructuring commercial bank value chain*. Journal of Northwest University.

IFM (2024). Republic of Kazakhstan: Financial System Stability Assessment., *International Monetary Fund. Monetary and Capital Markets Department* https://doi.org/10.5089/9798400266041.002.

Jain, N. and Kansal, J. (2025). Application of McKinsey 7S Framework as a Strategic Tool for a Knowledge-Based Organizational Development., *IEEE Engineering Management Review*, 53(2), pp. 14-26. DOI: https://doi.org/10.1109/EMR.2023.3338966.

Jalagat, R.C. (2015). The Impact of Change and Change Management in Achieving Corporate Goals and Objectives: Organizational Perspective., *International Journal of Science* . DOI: https://doi.org/10.21275/ART20163105.

Janjua, S.Y. & Mühlbacher, J. (2015). *Analysis of external and internal developments in public and private sector: Strategic guidelines for corporate leaders*. International Journal of Business and Globalisation, 15(6), pp.496-507. doi:10.1504/ijbg.2015.072529.

Jatobá, M.N., Ferreira, J.J., Fernandes, P.O. and Teixeira, J.P. (2023). Intelligent human resources for the adoption of artificial intelligence: a systematic literature review., *Journal of Organizational Change Management*, 36(7), pp. 1099-1124. DOI: https://doi.org/10.1108/JOCM-03-2022-0075.

JDSupra (2024). Rising cyber threats in Europe.s financial sector. DOI: https://www.jdsupra.com/topics/cyber-threats/.

Jo, H., Kim, S. and Koh, J. (2020). Agility and leadership in fintech adoption: A critical review., *Journal of Financial Services Marketing*, 25(12), pp. 23-36. DOI: https://doi.org/10.1057/s4126402000.

Jones, G.R. (2013) *Organizational theory, design, and change*. Pearson.

Kallio, H., Pietilä, A., Johnson, M., Kangasniemi, M. (2016). Systematic methodological review: Developing a framework for a qualitative semi-structured interview guide., *Journal of Advanced Nursing*, 72(12), p. 29542965. DOI: https://doi.org/10.1111/jan.13031.

Kam, H. J., Katerattanakul, P., Merick, G.E. (2013). Impact of external pressures on information security policy compliance in the banking industry., *International Journal of Business and Information Security* .

Kaspi (2024). *To Improve People.s Lives by Developing Innovative Products and Services*. https://ir.kaspi.kz/investor-presentations.

Kaspi (2025). Kaspi.kz 2Q & 1H 2025 Financial Results. https://ir.kaspi.kz/media/2Q_2025_Results.pdf.

Kebe, I.A., Liu, Y. and Kahl, C. (2025). Culturally Attuned Leadership and Employee Behavior During Organizational Change Initiatives in a Developing Economy., *Behavioral Sciences,* 15(3), p. 349. DOI: https://doi.org/10.3390/bs15030349.

Khan, N., Zidan, M., Inkesar, A., & Mallick, M. (2024). Humanizing leadership for effective change management: Exploring the impact of organizational culture as a moderator. *Journal of Infrastructure, Policy and Development.* https://doi.org/10.24294/jipd9374.

Kontić, L. and Kontić, J. (2014). Upravljanje promenama u merdžerima i akvizicijama banaka. *Bankarstvo,* 43(4), pp. 94-111. DOI: https://doi.org/10.5937/bankarstvo1404094K.

Kotter, J.P. (1996). *Leading change*. Harvard Business Press.

Kotter, J. P. (2012). Leading change: Why transformation efforts fail. Harvard Business Review, 80(1), 96-105.

Koptieva, H. & Nashchekina, O. (2023). *A conceptual framework for strategic change management at an enterprise*. Bulletin of the National Technical University "Kharkiv Polytechnic Institute" (Economic Sciences). doi:10.20998/2519-4461.2023.2.73

Kübler-Ross, E. (1969). *On death and dying*. Macmillan.

Kumar, D. and Mahapatra, J. (2013). Impact of HRD practices in creating employee satisfaction and improving customer service in banks., *International Journals of Marketing and Technology*, 3, pp. 176-197.

LawNow (2024). Hungary.s Fintech and Digitalisation Strategy. DOI: https://www.lawnow.com.

Lengyel, I. (1994). The Hungarian Banking System in Transition., *GeoJournal*, 32(4), pp. 381-391.

Lewin, K. (1947). Frontiers in group dynamics: Concept, method and reality in social science; social equilibria and social change., *Human Relations*, 1(1), pp. 5-41. DOI: https://doi.org/10.1177/001872674700100103.

Lewin, K. (1951). *Field theory in social science*. Harper & Row.

Mohanty, A., Skelton, B., Reiners, J., Pickford, H., & Vickers, M. (2024). LexisNexis Risk Solutions.*The true cost of compliance 2023*. EMEA. Oxford Economics www.oxfordeconomics.com/resource/the-true-cost-of-compliance/.

Li, T., Trinh, V.Q. and Elnahass, M. (2023). Drivers of Global Banking Stability in Times of Crisis: The Role of Corporate Social Responsibility., *British Journal of Management*, 34(2), pp. 595-622. DOI: https://doi.org/10.1111/1467-8551.12631.

Lincoln, Y.S. and Guba, E.G. (1985) *Naturalistic inquiry*. SAGE.

Luburić, R. (2013). Challenges in Change Management in Central Banks Challenges in Change Management in Central Banks (Based on the Systemic and Process Approach to Total Quality Management and Operational Risk Management. DOI: https://www.researchgate.net/publication/267271872.

Magnus, C.A., Temitope Oluwafunmike Sanyaolu, Adams Gbolahan Adeleke. (2024). Balancing innovation with risk management in digital banking transformation for enhanced customer satisfaction and security., *International Journal of Management & Entrepreneurship Research*, 6(9), pp. 3022-3049. DOI: https://doi.org/10.51594/ijmer.v6i9.1566.

Magomadov, M.V., Ibragimov, Y.M. and Zaripova, R.S. (2023). Fintech Innovation and the Future of Financial Services. *EKONOMIKA I UPRAVLENIE: PROBLEMY, RESHENIYA.* DOI: https://doi.org/10.36871/ek.up.p.r.2023.11.05.011.

Majid, M. A., Othman, M., Mohamad, S. F., Lim, S. A. H., & Yusof, A. (2017). Piloting for interviews in qualitative research. *International Journal of Academic Research in Business and Social Sciences*, 7(4), 1073-1080. DOI:10.6007/IJARBSS/v7-i4/2916

Marabelli, M. and Rajola, F. (2007). IT capabilities and organizational change: Digging deeper into the banking industry. DOI: https://doi.org/10.1007/978-3-540-78550-7_6.

Marozzi, E. (2020). Adapting to digital disruption: The banking sector 's response to fintech challenges., *Journal of Financial Innovation*, 14(2), pp. 76-88. DOI: https://doi.org/10.1007/s11156-020-0083-6.

Mason, J. (2006). Mixing methods in a qualitatively driven way., *Qualitative Research*, 6(1), pp. 9-25. DOI: https://doi.org/10.1177/1468794106058866.

Massis, A. and Kotlar, J. (2014). The case study method in family business research: Guidelines for qualitative scholarship., *Journal of Family Business Strategy*, 5(1). DOI: https://doi.org/10.1016/j.jfbs.2014.01.007.

Maxwell, J.A. (2013). *Qualitative research design: An interactive approach*. 3rd edn. SAGE Publications.

McGrath, R. (2021). Journalling and memoing: reflexive qualitative research tools., in J. Crossman and S. Bordia (eds) *Handbook of Qualitative Research Methodologies in Workplace Contexts*. Edward Elgar Publishing. DOI: https://doi.org/10.4337/9781789904345.00022.

McKenzie, B. (2024). Hungary: New framework for cybersecurity regulation. DOI: https://insightplus.bakermckenzie.com/bm/data-technology/hungary-new-framework-for-cybersecurity-regulation.

McKinsey and Company (2024). Global payments in 2024: Simpler interfaces, complex reality. https://www.mckinsey.com/industries/financialservices/ourinsights/globalpaymentsin2024simplerinterfacescomplexreality.

Meeh-Bunse, G. and Hermeling, A. (2017). New banks. business - Rating competence for the real sector., *Business Systems Research Journal*, 8, pp. 124-132. DOI: https://doi.org/10.1515/bsrj-2017-0010.

Meesala, R. (2019). A review on adoption of change management in the Indian banking sector., *International Journal of Advance Research, Ideas, and Innovations in Technology*, 5, pp. 568-572.

Merrino, S. and Harris, L. (2025). Basel III and South African Banking: Assessing the Effects., *South African Journal of Economics*, 93(1), pp. 3-5. DOI: https://doi.org/10.1111/saje.12396.

Mishra, R., Singh, R.K., Kumar, S., Mangla, S.K. and Kumar, V. (2025). Critical success factors of Blockchain technology adoption for sustainable and resilient operations in the banking industry during an uncertain business environment., *Electronic Commerce Research*, 25, pp. 595-629. doi:10.1007/s10660-023-09707-3

Mikel-Hong, K. Mikel-Hong, K., Li, N., Yu, J., & Chen, X. (2023). Resistance to Change: Unraveling the Roles of Change Strategists, Agents, and Recipients., *Journal of Management*. DOI: https://doi.org/10.1177/01492063231198189.

Miller, G. (2014). The role of risk management and compliance in banking integration., *Compliance & Risk Management eJournal*. DOI: https://doi.org/10.2139/ssrn.2527222.

Mitra, S., & Soni, S. (2024). The influence of change management on organizational dynamics and employee behavior. *ShodhKosh: Journal of Visual and Performing Arts*, https://doi.org/10.29121/shodhkosh.v5.i3.2024.4296

MNB (2023). Annual Report. Magyar Nemzeti Bank. https://www.mnb.hu/letoltes/mnb-annual-report-2023-final.pdf.

MNB (2024). Digitalization Report. Magyar Nemzeti. https://www.mnb.hu/letoltes/mnb-digital-report-2024.pdf.

MNB (2025a). Financial Stability Report. Magyar Nemzeti Bank. Dhttps://www.mnb.hu/letoltes/financial-stability-report-may-2025.pdf.

MNB (2025b). Annual Report 2024. Magyar Nemzeti. https://www.mnb.hu.

Moran, J.W. and Brightman, B.K. (2000). Leading organizational change.,. *Journal of Workplace Learning*, 12(2). DOI: https://doi.org/10.1108/13665620010316226.

Munira, M.S.K. (2025). Digital transformation in banking: A systematic review., *Strategic Data Management and Innovation*, 2(1). DOI: https://doi.org/10.2139/ssrn.5161354.

Mutale, T. (2025). The dynamics of organizational change and employee performance among selected banks in Victoria Falls, Zimbabwe., *International Journal of Research and Scientific Innovation* . DOI: https://doi.org/10.51244/ijrsi.2025.12020074.

Nagy, S., Molnár, L. and Papp, A. (2023). Customer adoption of neobank services - Hungary., *Decision Making: Applications in Management and Engineering*, 7(1), pp. 187-208.

Narayan, P. (2023). Technologies for digital disruption in banking., *South Asian Journal of Social Studies and Economics*, 22(3), pp. 966-982. DOI: https://doi.org/10.9734/sajsse/2025/v22i3966.

NBK (2023a). Annual report 2023. National Bank of Kazakhstan. https://nationalbank.kz/en.

NBK (2023b). Bulletin N.B.K.Cybersecurity. National Bank of Kazakhstan. https://nationalbank.kz/en/news/kiberbezopasnost.

NBK (2023c). Digital transformation and the future of banking., *National Bank of Kazakhstan Annual Report* https://www.nationalbank.kz.

NBK (2023d). Kaspi Bank.s digital transformation strategy. National Bank of Kazakhstan. https://www.nationalbank.kz.

NBK (2024). Financial Sector Review 2024. National Ban k of Kazakhstan. https://nationalbank.kz/en/page/godovye-otchety.

NBK (2025). Kazakhstan National Bank to regulate the crypto sector. https://thepaypers.com/fintech/news/kazakhstan-national-bank-to-regulate-the-crypto-sector.

Nichkasova, Y. and Shmarlouskaya, H. (2020). Financial technologies as a driving force for business model transformation in the banking sector., *International Journal of Business and Globalisation.* DOI: https://doi.org/10.1504/ijbg.2020.10031311.

Nicoletti, B. (2015). Mobile banking: Evolution or revolution? Palgrave Macmillan. DOI: https://doi.org/10.1002/CJAS.1336.

Noda (2025). Wierzbicki,S, Open banking in Hungary: Trends, adoption, and regulations. DOI: https://noda.live/articles/open-banking-in-hungary.

Ogundeji, I.A., Omowole, B.M., Adaga, E.M. & Sam-Bulya, N.J. (2023). Strategic leadership in banking for resilient growth during economic uncertainty., *International Journal of Management and Organizational Research*, 2(1), pp. 115-127. DOI: https://doi.org/10.54660/ijmor.2023.2.1.115-127.

Oladimeji, S.B. and Olanitori, I.P. (2022). Organizational change and performance of employees in some selected banks in Ondo State., *Innovare Journal of Social Sciences* . DOI: https://doi.org/10.22159/ijss.2022.v10i5.43596.

Oluoha, O. and Odeshina, B. (2021). Project management innovations for strengthening cybersecurity compliance across complex enterprises., *International Journal of Multidisciplinary Research and Growth Evaluation* . DOI: https://doi.org/10.54660/.ijmrge.2021.2.1.871-881.

Olutimehin, A.T. (2025). Assessing the effectiveness of cybersecurity frameworks in mitigating cyberattacks in the banking sector., *Asian Journal of Research in Computer Science*, 18(3), p. 10 9734 2025 18 3583.

Pardo Del Val, M. and Martínez Fuentes, C. (2003). Resistance to change: a literature review and empirical study., *Management Decision*, 41(2), pp. 148-155. DOI: https://doi.org/10.1108/00251740310457597.

Parsons, R. and Nguyen, J. (2017). Bank consolidation before and after the 2008 crisis., *Applied Economics Letters*, 24(2), pp. 101-98. DOI: https://doi.org/10.1080/13504851.2016.1164815.

Peters, T. and Waterman, R.H. (1982) *In search of excellence: Lessons from America.s best-run companies*. Harper & Row.

PetrauskaitėJocienė, L. and Korsakienė, R. (2024). The factors impacting employee commitment to change: The case of the banking sector., *Management Theory and Studies for Rural Business and Infrastructure Development*, 46(1), pp. 46-56. DOI: https://doi.org/10.15544/mts.2024.05.

Podolskaya, T., Zhuravlev, M.S. & Sidelnikov, A. (2019). *Features ensuring financial control in a commercial bank: Russian and foreign experience*. The EUrASEANs: Journal on Global Socio-Economic Dynamics, 2(15), pp.40-49. doi:10.35678/2539-5645.2(15).2019.40-49.

Pollack, J. and Pollack, R. (2015). Using Kotter.s Eight Stage Process to Manage an Organisational Change Program: Presentation and Practice., *Systemic Practice and Action Research*, 28(1), pp. 51-66. DOI: https://doi.org/10.1007/s1121301493170.

Pramudito, D.K., Gata, W. and Hadikristanto, W. (2025). The Rise of Fintech: Transforming Traditional Banking Through Digital Platforms, Automation, and Big Data., *The Journal of Academic Science*, 2(3), pp. 892-901. DOI: https://doi.org/10.59613/ey3jmp43.

Prezelj, I,. Kopač, E., Žiberna, A., Kolak, A., & Grizold, A. (2015). Evolutionary reality of the revolution in military affairs: Results of a comparative study., *Romanian Journal of Political Science* .

Prosci (2020) *Best practices in change management*. 11th edn. Prosci Research.

Richardson, G. (2007). The Collapse of the United States Banking System during the Great Depression, 1929 to 1933. New Archival Evidence., *Australasian Accounting, Business and Finance Journal*, 1(1), pp. 39-50. DOI: https://doi.org/10.14453/aabfj.v1i1.4.

Rubin, H.J. and Rubin, I.S. (2012) *Qualitative interviewing: The art of hearing data*. 3rd edn. SAGE.

Sakal, M., Matković, P. and Tumbas, P. (2011). Web 2.0 technologies in internal and external communications in the banking sector., *International Journal of Bank Marketing*, 7, pp. 87-97.

Saunders, M., Lewis, P. and Thornhill, A. (2019) *Research methods for business students*. 8th edn. Pearson Education.

Schein, E. (2010) *Organizational Culture and Leadership*. 3rd edn. A Wiley Imprint. http://www.untagsmd.ac.id/files/Perpustakaan_Digital_2/ORGANIZATIONAL%20CULTURE%20Organizational%20Culture%20and%20Leadership,%203rd%20Edition.pdf.

Schindler, J.W. (2017). Fintech and Financial Innovation: Drivers and Depth. DOI: https://doi.org/10.17016/FEDS.2017.081.

Schwartz, S.H. (1999). A theory of cultural values and some implications for work., *Applied Psychology*, 48(1), pp. 23-47. DOI: https://doi.org/10.1111/j.1464-0597.1999.tb00047.x.

Selmi, N. and Hachicha, N. (2014). Can bank be a cause of contagion during the global financial crisis., *International Journal of Economics and Financial Issues*, 4, pp. 353-362.

Sensen, Z., Kai, W. and Xin, J. (2024). Data Operation and Management Practices in Ping an Group., in J. Feng et al. (eds) *Edge Computing - EDGE 2023*. Cham: Springer Nature Switzerland (Lecture Notes in Computer Science), pp. 82-91. DOI: https://doi.org/10.1007/978-3-031-51826-3_8.

Sharma, M. (2024). Comparative study on cultural dimensions of organisational change in India and New Zealand IT industry.. https://doi.org/10.34074/thes.6635.

Singh, A. and Johri, S. (2024). Emerging Trends in Fintech: Revolutionizing Financial Services in Commerce., *International Journal For Multidisciplinary Research* . DOI: https://doi.org/10.36948/ijfmr.2024.v06i02.15546.

Sinyagovsky, Y. (2021). Object field of crisis management at the bank. Vìsnik Sums′kogo deržavnogo unìversitetu. DOI: https://essuir.sumdu.edu.ua/handle/123456789/85339.

Sirkin, H., Keenan, P. and Jackson, A. (2005). The hard side of change management., *Harvard Business Review*, 83(10), p. 158. DOI: https://doi.org/10.1109/EMR.2014.6966953.

Smajlovic, L. and Bandur, K. (2025). The Impact of Transformational Leadership on Employee Resistance in Bosnia and Herzegovina.s Banking Sector., *International Business Research* . DOI: https://doi.org/10.5539/ibr.v18n1p43.

Smith, K. (2025). 6 Reasons Why Change Management Fails and How To Avoid Them. DOI: https://www.prosci.com/blog/whychangemanagementfails.

Smollan, R.K. and Sayers, J.G. (2020). Employee change readiness: The role of perceived organizational support and commitment., *Journal of Organizational Change Management*, 33(6), pp. 1153-1170. DOI: https://doi.org/10.1108/JOCM0120200024.

Sohail, S., Rasul, F. & Fatima, U. (2017). *Is internal and external* mechanism *of governance enriching the performance of the banking sector of Pakistan*. Corporate Governance, 17, pp.629-642. doi:10.1108/CG-05-2016-0116.

Somogyi, T. and Nagy, R. (2022). Cyber Threats and Security Challenges in the Hungarian Financial Sector., *CONTEMPORARY MILITARY CHALLENGES*, 24, pp. 15-29. DOI: https://doi.org/10.33179/bsv.99.svi.11.cmc.24.3.1.

Stanleigh, M. (2008). Managing innovation and change in the financial services sector., *Innovation Management Journal*, 9(5), p. 5568.

Stouten, J., Rousseau, D.M., De Cremer, D. (2018). Successful Organizational Change: Integrating the Management Practice and Scholarly Literatures., *Academy of Management Annals*, 12(2), pp. 752-788. DOI: https://doi.org/10.5465/annals.2016.0095.

Symon, G. and Cassell, C. (2012). *Qualitative Organizational Research: Core Methods and Current Challenges*. 1 Oliver.s Yard, 55 City Road London EC1Y 1SP: SAGE Publications, Inc. DOI: https://doi.org/10.4135/9781526435620.

Szikra, D. and Varga, G. (2022). Digital transformation in Hungarian banking: A study of OTP Bank.s strategy., *Journal of European Financial Services*, 34(2), pp. 56-72. DOI: https://doi.org/10.1556/204.2019.41.3.2.

Tashkinov, A. (2024). Project management methodology in the context of digital transformation of the enterprise., *Scientific Research and Development. Russian Journal of Project Management*. DOI: https://doi.org/10.12737/2587-6279-2024-13-3-3-9.

Teece, D.J. (2012a). *Dynamic Capabilities and Strategic Management: Organizing for Innovation and Growth*. Oxford University Press.

Teece, D.J. (2012b). Dynamic Capabilities: Routines versus Entrepreneurial Action., *Journal of Management Studies*, 49(8), pp. 1395-1401. DOI: https://doi.org/10.1111/j.14676486.2012.01080.x.

Temple, B. and Young, A. (2004). Qualitative research and translation dilemmas., *Qualitative Research*, 4(2), pp. 161-178. DOI: https://doi.org/10.1177/1468794104044430.

Tengstrand, S.N., Tomaszewski, P., Borg, M., & Jabangwe, R. (2021). Challenges of adopting SAFe in the banking industry: A study two years after its introduction. DOI: https://doi.org/10.48550/arXiv.2104.13992.

The Banker (2025). How HSBC transformed HR services with data-driven outsourcing. https://resorsi.com/2025/03/21/real-world-case-study-how-hsbc-transformed-hr-services-with-data-driven-outsourcing.

Todnem By, R. (2005). Organizational change management: A critical review., *Journal of Change Management*, 21(4), pp. 299-323. DOI: https://doi.org/10.1080/14697010500359250.

Tohtamysh, T. and Bukanova, O. (2019) in *THEORETICAL ASPECTS OF ANTI-CRISIS MANAGEMENT IN THE BANK. Market Infrastructure*. DOI: https://doi.org/10.32843/infrastruct37-96.

Trade Magazin (2025). OTP Streamlines Access to Improve Cybersecurity. DOI: https://trademagazin.hu.

Trivedi, T.M. (2018). Impact of role ambiguity on resistance for change in banks within Gujarat., *International Journal for Research in Applied Science and Engineering Technology*, 6, pp. 3182-3184. DOI: https://doi.org/10.22214/IJRASET.2018.1440.

Trompenaars, F. (1993) *Riding the waves of culture: Understanding cultural diversity in business*. McGraw-Hill.

Tumenbayeva, O. and Zhaksybekova, G.N. (2016). Implementation of the integrated system of risk management in the banks of Kazakhstan., *Indian Journal of Science and Technology*, 9(5), p. 87607. DOI: https://doi.org/10.17485/ijst/2016/v9i5/87607.

Vázquez, C. (2022). The impact of reinforcement strategies in organizational change: A focus on digital transformation., *Journal of Business Strategy*, 45(4), pp. 30-43. DOI: https://doi.org/10.1108/JBS-05-2021-0134.

Vrcelj, N. (2023). Towards successful organizational change management: New process model identification., *Journal of Process Management and New Technologies*, 11(3-4), pp. 1-15. : https://doi.org/10.5937/jpmnt1145953.

Vullinghs, J.T. and Dóci, E. (2020). A temporal approach to studying organizational leadership., in Y. Griep and S.D. Hansen (eds) *Handbook on the Temporal Dynamics*

of Organizational Behavior. Edward Elgar Publishing. DOI: https://doi.org/10.4337/9781788974387.00025.

Waliullah, M. and George, M. (2025). Assessing the influence of cybersecurity threats and risks on the adoption and growth of digital banking., *American Journal of Advanced Technology and Engineering Solution*, 1(01). DOI: https://doi.org/10.63125/fh49az18.

Walk, A. (2024). Managing employee resistance to digital transformation in banks., *Human Resource Management Journal*, 34(2), pp. 298-315. DOI: https://doi.org/10.1111/17488583.12356.

Wang, J. (2013). *The operational transformation of European banking sector after the crisis*. International Banking and Finance Review, 1(1). https://www.semanticscholar.org/paper/The-Operational-Transformation-of-European-Banking-Jia-qian/105a6f99a011b9ad41eff997173d267a568d5656

Whyte, J. (2025). Crisis communication strategies and organizational resilience: Lessons from Nigerian financial institutions., *International Journal of Research and Innovation in Social Science*, 9(3), pp. 219-227. DOI: https://doi.org/10.47772/IJRISS.2025.90400177.

Wisniwski, S. (2005). *Bankers. perspectives - Dynamic banking in a changing market*. Banking in Southeast Europe.(pp.131-162). DOI:10.1007/3-540-26963-0_11

World Bank (2023). Global Financial Development Database. https://databank.worldbank.org/source/global-financial-development.

World Bank (2024). Annual Report 2024. https://www.worldbank.org/en/about/annual-report#anchor-annual.

Wu, C. and Dong, Z. (2025). Robo-Advisory Services and Bank Risk: Evidence from Chinese Commercial Banks., *Finance Research Letters*, p. 108296. DOI: https://doi.org/10.1016/j.frl.2025.108296.

Yin, R.K. (2014) *Case study research: Design and methods*. 5th edn. SAGE Publications.

Yin, R.K. (2018) *Case study research and applications: Design and methods*. 6th edn. SAGE Publications.

Yoshikawa, H., Weisner, T., Kalil, A., & Way, N. (2008). Mixing qualitative and quantitative research in developmental science: Uses and methodological choices., *Developmental Psychology*, 44(2), pp. 344-354. DOI: https://doi.org/10.1037/0012-1649.44.2.344.

Zarandi, H., Amirkabiri, A. and Azimi, H. (2017). The role of organizational change on improving organizations. financial and economic performance: A case study of Bank Shahr. *Journal of Urban Economics and Management,* 5 (18).

Zawiła-Niedźwiecki, J. and Rakoczy, A. (2018). Public crisis management in the activities of financial institutions., *Studia i Materiały Wydział Zarządzania Uniwersytet Warszawski*, 2018(1), pp. 48-54. DOI: https://doi.org/10.7172/1733-9758.2018.26.4.

Zhao, D. and Zhang, W. (2021). Fintech Towards Intelligent Finance., *Financial Mathematics and Fintech*. Springer, Singapore. https://doi.org/10.1007/978-981-16-5592-0_1.

Appendix

Appendix 1 - Summary of themes, subthemes and illustrative quotes of the thematic analysis

Theme	Subtheme	Code	Frequency
Change Management	Role and Experience	Overseeing transformation, aligning with goals	15
	Stakeholder Engagement	Cross-functional teams, stakeholder feedback	12
	Risk Management	Identifying, assessing, and mitigating risks	10
Regulatory Context	Regulatory Influence	Regulatory compliance, government policies	9
	Internal Audits	External expert consultation, internal audits	7
Technology and Innovation	Technology Adoption	Digital tools, AI chatbots, mobile banking	13
	Employee Engagement	Training, feedback for technology integration	7
Leadership	Leadership Role	Vision setting, motivating, fostering innovation	12
	Resistance Management	Training, open communication, involvement	10
Cybersecurity	Cybersecurity Challenges	Digital threats, robust security protocols	6

	Strategy	Encryption, risk management, external audits	5
National Strategy	National Digitalization	Digital transformation strategy, government support	5
Challenges	Resistance Management	Employee resistance, budget constraints	7
	Legacy Systems	Technological limitations, system constraints	6
Employee Engagement	Employee Training	Employee adaptation, overcoming resistance	8
	Employee Buy-in	Full team buy-in, leadership training	6
Customer Engagement	Data Management	Data privacy, encryption, access control	5
Future Planning	Preparing for Future Changes	Scenario planning, trend analysis	6
Crisis Management	Pandemic Response	Digital adoption, remote work	4
Lessons Learned	Communication	Role of communication in managing change	7
	Agility	Agility, flexibility in managing risks	6