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Change Management in the Digital Payment Industry

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Abstract – EN

The thesis analyzes change management in the digital payments sector, focusing on the challenges posed by the PS3 Directive and the adaptation of European banks to the current context. Through a literature review and a study on UniCredit, the work examines the application of four established models used to address effective transitions.

Organizations in the digital payments sector face transformations accelerated by technological innovations, such as AI and open banking, and regulatory pressures, including the PS3, which modernizes the PS2 Directive by emphasizing security, transparency, and competition between banks and FinTechs. The main challenges include compliance costs, IT infrastructure upgrades, employees' difficulty in accepting change, and lack of skills.

The thesis adopts a qualitative approach through a literature review on change management. It analyzes the models of Lewin, Kotter, ADKAR, and Anderson-Ackerman. The study on UniCredit CEE demonstrates various practical applications of the aforementioned models, deriving operational guidelines generalizable to other sector operators.

Finally, regarding possible future developments, the thesis suggests conducting empirical research on PS3 Directive implementations through quantitative metrics and comparisons with non-European organizations.

Abstract - IT

La tesi analizza il change management nel settore dei pagamenti digitali, focalizzandosi sulle sfide poste dalla Direttiva PS3 e sull'adattamento delle banche europee al contesto odierno. Attraverso una revisione della letteratura e uno studio su UniCredit, l'elaborato analizza l'applicazione di quattro modelli consolidati per sviluppare transizioni efficaci.

Le organizzazioni del settore die pagamenti digitali affrontano trasformazioni accelerate da innovazioni tecnologiche, come AI e open banking, e pressioni regolatorie, inclusa la PS3, la quale modernizza la PS2 penendo l'enfasi su sicurezza, trasparenza, e concorrenza tra banche e FinTech. Le principali sfide includono costi relativi alla compliance, all'upgrade delle infrastrutture IT, alla difficoltà dei dipendenti nell'accettare un cambiamento, e alla mancanza di competenze.

La tesi adotta un approccio qualitativo attarverso la revisione della letteratura sul change management. Vengoino analizzati i modelli di Lewin, Kotter, ADKAR, e di Anderson-Ackerman. Lo studio su UniCredit CEE dimostra varie applicazioni pratiche dei precedenti modelli citati, derivando linee guida operative generalizzabili ad altri operatori del settore.

Infine, riguardo possibili sviluppi futuri, la tesi suggerisce la possibilità di svolgere ricerche empiriche sulle implementazioni della Direttiva PS3 attraverso metriche quantitative e confronti con organizzazioni extraeuropee.

Table of contents

Abstract – EN iii

Abstract - IT iv

List of abbreviations III

1. Introduction and context 5

1.1. Presentation of the topic 5

1.2. The evolution of change management 6

1.3. The digital payments industry 7

1.4. The role of PS3 Directive 9

2. Relevance and research motivation 17

2.1. Change management in dynamic sectors 17

2.2. Theoretical foundations of change management 17

2.3. Research motivation 20

2.4. UniCredit case: operational guidelines for change management 21

3. Research questions 24

3.1. First question 24

3.2. Second question 25

3.3. Conclusion for the European digital payments sector 25

4. Literature review 27

4.1. History and trends of digital payments 27

4.2. History and foundations of change management 28

4.3. Change process methodologies 31

4.4. Transformation as a fullstream process 35

4.5. Main change management models 38

4.6. Comparison between models 52

4.7. Digital payments and banking regulation 53

4.8. Institutional framework 57

5. Methodology 62

6. Case study analysis: UniCredit 64

6.1. Qualitative overview of UniCredit 64

6.2. Current operating model 66
6.3. Evidence of change management foundations in UniCredit 68

7. Conclusion and future perspectives 72
7.1. Implications for UniCredit and European banking industry 73
7.2. Study limitations and suggestions for future research 73

Bibliography 75

List of abbreviations

ADKAR	Awareness, Desire, Knowledge, Ability, and Reinforcement
AI	Artificial Intelligence
AISP	Account Information Service Provider
API	Application Programming Interface
ATMs	Automated Teller Machines
BCG	Boston Consulting Group
CBPR2	Cross-border Payments Regulation
CEE	Central and Eastern Europe
CFPB	Consumer Financial Protection Bureau
DLT	Distributed Ledger Technology
DMAIC	Define-Measure-Analyse-Improve-Control
DORA	Digital Operational Resilience Act
EBA	European Banking Authority
EC	European Commission
ECB	European Central Bank
EEA	European Economic Area
EMV	Europay, MasterCard, and Visa
EPC	European Payments Council
EU	European Union

FCA	Financial Conduct Authority
FiDA	Financial Data Access
FinTech	Financial Technology
GDPR	General Data Protection Regulation
IBAN	International Bank Account Number
IFR	Interchange Fee Regulation
ML	Machine Learning
OBE	Open Banking Europe
PCT	Prosci Change Triangle
PISP	Payment Initiation Service Providers
PS	Payments Service
PSD	Payments Service Directive
PIP	Payment Infrastructure Providers
PSP	Payments Service Provider
PSR	Payment Services Regulation
RPA	Robotic Process Automation
SCA	Strong Customer Authentication
SEPA	Single Euro Payments Area
SWIFT	Society for Worldwide Interbank Financial Telecommunication
TIPS	Target Instant Payment Settlement
TPP	Third-Party Providers

1. Introduction and context

1.1. Presentation of the topic

Today's organizations are undergoing rapid transformations driven by technological advancements, regulatory changes, and shifting stakeholder expectations. Effective change management strategies are therefore essential for companies operating in dynamic sectors, to stay resilient and competitive in this evolving environment (Ray et al. 2024, p. 1749).

What is change management and why is it relevant for organizations operating today? Modern organizations face accelerating transformations driven by technological disruption, regulatory evolution, and shifting stakeholder demands. Change management provides structured models and strategies designed to help employees to embrace new developments (Phillips & Klein 2022, p. 189). This includes planning process redesigns, integrating technologies like Artificial Intelligence (AI) and machine learning (ML), and adapting organizational structures. In today's volatile environment, developing effective change management strategies is a priority for companies across sectors in order to ensure resilience and competitiveness.

The following represent the key drivers for impactful change management initiatives, which will be analysed in depth in the next chapters (Ray et al. 2024, p. 1752):

- Well-developed organizational culture, ready to change
- Effective leadership styles and driving change initiatives
- Successful communication strategies
- Training for skill development

While the thesis addresses change management broadly, it applies these principles specifically to the digital payments industry, a sector that is undergoing particularly intense transformation due to regulatory pressures (e.g. PS3 Directive), real-

time payment mandates, and FinTech competition. Through the UniCredit case study, the analysis examines how established change models support adaptation to these dynamics, offering actionable insights for banking operators.

1.2. The evolution of change management

The field of change management has evolved significantly, shaped by the increasing need for organizations to adapt to shifting markets, technologies, and customer demands (Carreño 2024, pp. 2-3). Early theories emphasized top-down, linear processes, such as Kurt Lewin's three-stage model from the 1940s (Lewin 1947, as cited in Hussain, S. et al. 2018, p. 123).

As business become more unpredictable, models are focusing more on people and leaders. The ADKAR (Awareness, Desire, Knowledge, Ability, and Reinforcement) model, developed by Jeffrey Hiatt in the 1990s, addressed personal transitions through five stages, recognizing that organizational success depends mostly on employee readiness (Hiatt 2006, as cited in Carreño 2024, pp. 2-3; Dziak 2024).

Later frameworks incorporated comprehensive, multi-phase processes for complex transformations. Ackerman and Anderson's Nine-phase change process model provides a detailed roadmap. It emphasizes creating supportive physical and cultural environments for sustainable change (Ackerman/Anderson 2001, p. 169).

John Kotter's eight-step model, introduced in the 1990s and refined in works like Accelerate (2014) and Change (2021), prioritizes leadership-driven urgency, coalitions, vision, empowerment, short-term wins, and structuring changes in culture (Carreño 2024, pp. 2-3). The analysis of Carreño reveals that Kotter's model can be integrated with Agile and Lean methodologies. In fact, Kotter's operating system enables iterative sprints for quick adaptation. Lean principles can be integrated in order to enhance waste reduction in steps like generating wins and sustaining acceleration, making it ideal for volatile sectors like digital payments.

This progression reflects a move toward hybrid models balancing structure that ensures flexibility in fast-paced environments (Carreño 2024, pp. 2-3; Dziak 2024).

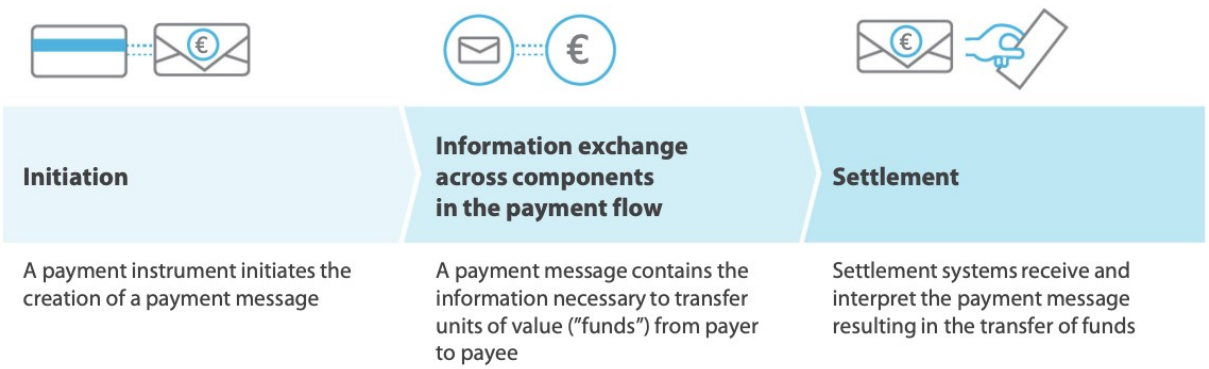
1.3. The digital payments industry

This section provides a concise definition of the digital payments industry, explains payment processing mechanics, and analyses key sector operators.

The digital payments industry encompasses electronic transactions where funds are transferred between parties without physical cash, often through mobile devices or digital channels (European Court of Auditors 2025, p. 6). These transactions are facilitated through mobile apps, cards, digital wallets, online payment gateways, and digital banking systems for speed and traceability (Pathward 2025). This sector has evolved from cash-heavy systems to fully digital exchanges, driven by digitalization that mitigates risks such as counterfeiting and money laundering, accelerating the shift toward a "cashless society" (Palacardo 2020, p. 7).

In general, every digital payment process encompasses three main stages (see Figure 1) (European Court of Auditors 2025, p. 6).

Figure 1: Main stages of a payment process



Source: European Court of Auditors 2025, p.6. Based on graphic material from US Federal Reserve Bank.

The ecosystem relies on interconnected participants to ensure secure transactions:

- Payments service providers (PSPs): banks and payment institutions. Their role is to enable the payer or the payee to initiate payments and to provide payment messages with the information necessary to execute payment transactions (see Figure 1). PSPs are the most important players within the sector (European Court of Auditors 2025, p. 6).
- Payers and payees: consumers initiate payments (e.g., via apps), while merchants receive them. The group of merchants include individuals, businesses, and e-commerce (Pathward 2025).
- Issuer and acquirer banks: the bank of the payer debits funds, while the payee's bank credits them, after handling verification, availability checks, and settlement (Pathward 2025).
- Regulatory authorities that take care of compliance, such as the European Central Bank (ECB) or national bodies enforcing anti-fraud and data rules (Pathward 2025).
- Industry associations and standard setting bodies: define protocols for interoperability and security (Pathward 2025).

Transactions in the sector of digital payments range from partially digital (e.g., cash pickups after electronic transfer) to fully digital (e.g., card or wallet payments). The latter offer consumers speed while businesses gain risk reduction, data analytics, and global reach (Pathward 2025). These advancements address cash inefficiencies in a context of rapid digital adoption, boosted by events like the 2020 pandemic (Palacardo 2020, p. 7). The PS3 Directive is built on this foundation and its role will be explored in the next section.

1.4. The role of PS3 Directive

In the context of the digital payments industry outlined in the previous section, regulation plays a crucial role in ensuring integrity.

The exceptionals waves of innovations which occurred in the last 20 years created unprecedented issues. In this landscape, payment services directives (PSDs) have progressively shaped Europe's payment market architecture in order to ensure continuous regulatory updates (Calabrese et al. 2010, p. 4; Petrović 2020, p. 1; Škrabka 2024, pp. 221-223).

This is where the directive on payment services and e-money services (PS3) fits in, designed to strengthen and modernize existing rules, address emerging risks, and support an innovative, competitive, and secure payments ecosystem; the following subsections will analyse its content and implications in detail.

1.4.1. The environment before PS3 directive

The establishment of harmonized payment markets within the European Union (EU) has been essential for the creation of a truly integrated European single market. The PS Directive 2007/64/EC (PS1 Directive, European Commission), introduced in 2007, laid down a set of common rules aimed at removing barriers to entry and fostering fair competition within the EU payment landscape. This directive was the first comprehensive EU legislation governing payment services, allowing new market participants to enter while enhancing transparency and consumer protection. By clarifying obligations and reinforcing user rights, PS1 Directive played a crucial role in the practical realization of the Single euro payments area (SEPA), which standardized payment processes across member states, by facilitating cross-border transactions (Calabrese et al. 2010, p. 4).

Due to changes in the financial services industry, the PS1 Directive had to be updated. For these reasons, the European authorities have adopted a “Revised Payment Services Directive” also known as “PS2 Directive”, Directive (EU)

2015/2366, which extends the framework to all foreign currencies across the EU and the European Economic Area (EEA), as well as to payment transactions in all currencies in which only one of the payment service providers is in the EU/EEA territory (Petrović 2020, p. 1).

The PS2 Directive entered into force on 13 January 2016, with a legal obligation for all EU Member States and EEA countries to transpose it into their national laws by 12 January 2018. PS2 Directive fundamentally revised the EU regulatory framework for payment services by extending its scope and ensuring a high level of competition and transparency towards consumers (Škrabka 2024, pp. 221-223).

Among the main benefits pursued with the PS2 Directive, there are (Palacardo 2020, p. 34):

- Greater consumer protection
- Development of new payment solutions
- Regulation of new market players
- Uniform fees for card payments
- Increase in the level of competition within the industry
- Overcoming differences between the disciplines of European Member States
- General increase in efficiency through the infrastructure standardization

PS2 Directive played a crucial role in establishing pan-European open banking by asking banks to provide secure access to customer data to licensed third-party providers, in order to boost innovation and enhance consumer protection. The aim of these regulatory reforms is to promote transparency, increase market harmonization, and stimulate the development of new financial technologies across the EU (Škrabka 2024, pp. 221-223).

PS2 Directive reshaped the European payments landscape by introducing and regulating new market players such as Payment Initiation Service Providers (PISPs)

and Account Information Service Providers (AISPs), expanding the range of payment services, and operationalizing open banking through mandatory Application Programming Interfaces (APIs) that give licensed third parties secure access to customer data. At the same time, the implementation of Strong customer authentication (SCA) requiring multifactor verification based on knowledge, possession, and inherence factors, significantly strengthened payment security. The result of the PS2 Directive adoption is the following: the average value of fraudulent transactions across the EU decreased from 2020 to 2021 by almost 50% for card payment services providers (European Commission 2023c). In addition to this, SCA intensified competitive pressure on incumbent banks, which must now redefine their strategies in response to the rise of Financial Technology (FinTech) and Big Tech intermediaries and to the structural shift from cash to electronic payments accelerated by the COVID□19 pandemic (Global Data, 2020; Petrović 2020, p. 12).

1.4.2. What is happening nowadays?

The findings reveal how AI and ML drive predictive analytics, fraud detection, and personalized service delivery (Tsindeliani et al. 2021, as cited in Munira 2025, p. 79). These technologies enable institutions to identify anomalies and suspicious patterns across vast datasets, thereby enhancing the integrity of financial systems. Integrating such technologies reflects the sector's commitment to adopting proactive measures in safeguarding customer trust and ensuring operational resilience (Widharto et al. 2020, as cited in Munira 2025, p. 79). In the meantime, mobile banking and digital wallets revolutionize accessibility and convenience, especially in underserved regions (Munira 2025, p. 78; Widharto et al. 2020, as cited in Munira 2025, p. 79).

Regarding challenges, there are many that affect mobile banking and digital wallets: including cybersecurity threats, regulatory compliance, and environmental implications, particularly the energy demands of digital infrastructures (Munira 2025, p. 78). Adopting digital and management strategies enables banks to enhance

their decision-making processes and foster financial inclusion by reaching underbanked populations (Tsindeliani et al. 2021, as cited in Munira 2025, p. 79). This systemic transformation has reshaped how financial services are conceptualized and delivered, emphasizing efficiency and customer-centricity as critical success factors (Munira 2025, p. 78).

A significant driver of digital transformation in banking is the increasing demand for accessible and user-friendly financial services (Matt et al. 2015, as cited in Munira 2025, p. 79). Mobile banking and digital wallets are examples of how digital technologies meet this need, by offering customers real-time access to financial transactions and services (Khattak et al. 2023, as cited in Munira 2025, p. 79). Despite its advantages, when organizations integrate digital technologies into banking operations face significant challenges. In fact, implementing digital ecosystems requires substantial investments in infrastructure, employee training, and change management practices (Diener/Špaček 2020).

1.4.3. The impact of PS3 Directive

As already mentioned, the digital payment services market has changed significantly in recent years. Electronic payments in the EU have been constantly growing, reaching €240 trillion in value in 2021, compared with €184.2 trillion in 2017. New players, thanks to new digital technologies, have entered the market. An important innovation has been open banking, thanks to which FinTechs securely share financial data with banks. More sophisticated types of fraud have also emerged, putting consumers at risk and affecting trust (European Commission 2023a).

This is where PS3 Directive fits in. It is designed to strengthen and modernize existing rules, address emerging risks, and support an innovative, competitive, and secure payments ecosystem. The PS3 Directive was published on 28 June 2023 by the EC, with a package of legislative proposals, designed to ensure that the EU's

financial sector is fit for purpose and capable of adapting to the ongoing digital transformation (Škrabka 2024, p. 217).

The Commission proposes to modernise the Payment Services Directive (PSD2) which will become PS3 and establish, in addition, a Payment Services Regulation (PSR). The reason behind these two measures is that an EU regulation is directly applicable across all Member States without the need for national implementing measures, while an EU directive requires Member States to incorporate its provisions into their national laws within a specified timeframe (European Court of Auditors 2025, p.14). These two measures were written to ensure that consumers can safely and securely make electronic payments and transactions in the EU, domestically or cross-border, in both euro and non□euro currencies. While safeguarding their rights, they also aim to provide a wider choice of payment service providers on the market (European Commission 2023a).

With a revised Payment Services Directive and the PSR, the EC expected to (European Commission 2023c, p.2):

1. Make widely available a service to check the name of the payee and bank account number match each other, before a transfer is confirmed.
2. Give victims of fraud a right of refund by their bank or other PSP in specific circumstances.
3. Help banks and other PSPs cooperate against fraud through increased fraud□related information sharing.
4. Oblige banks to improve customers' awareness of fraud.

In order to reach these four goals, two types of measures were defined in 2023: measures to improve customers' payment experiences and measures to support FinTechs. Focusing on the former, the directive seeks to (European Commission 2023c, p. 2):

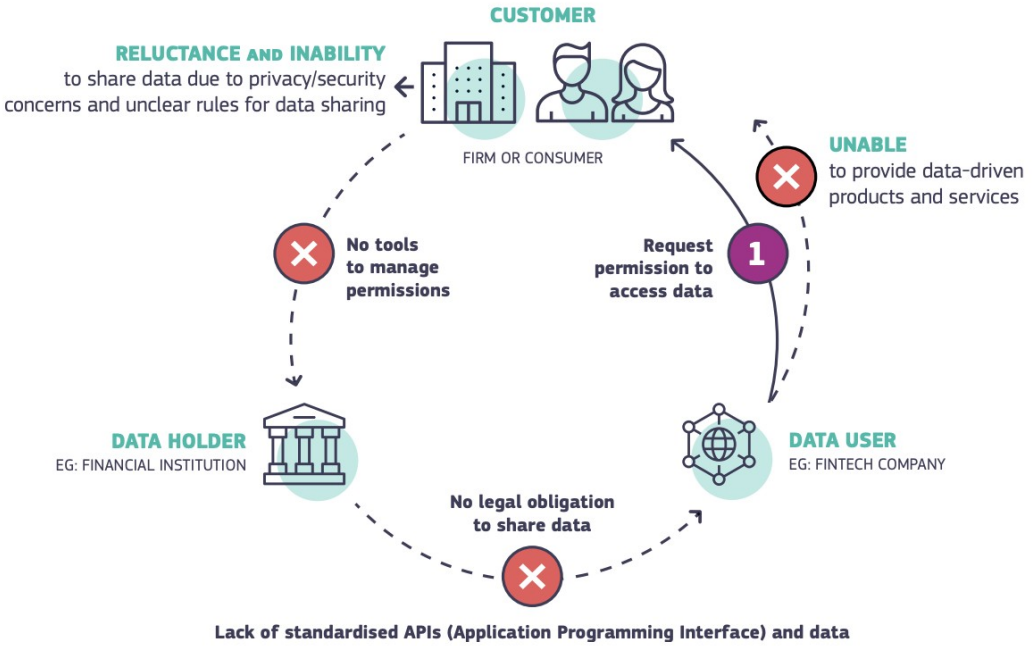
- Make SCA more accessible to disabled people and others with difficulties.

- Increase transparency on specific payments, especially about ATM withdrawal charges and estimated charges for payments to non□EU countries.
- Ensure better access to cash, both through cash withdrawals in shops without requiring a purchase and by easing conditions for independent ATM providers.

Regarding the measures supporting FinTechs, these can be summarised as follows: improvements to the functioning of open banking so that innovative payment services can be offered more efficiently; fairer competition between banks and over 1,000 non-bank payment service providers, helping to drive down prices; streamlining of rules for around 270 e-money institutions and 800 payment institutions, simplifying administrative procedures; and better, more harmonised implementation and enforcement of the rules (European Commission 2023c, p. 2).

Therefore, the impact of the PS3 Directive and the PSR will help resolve current frictions in the data flow process, as illustrated in Figure 2 (European Commission 2023c, p. 3):

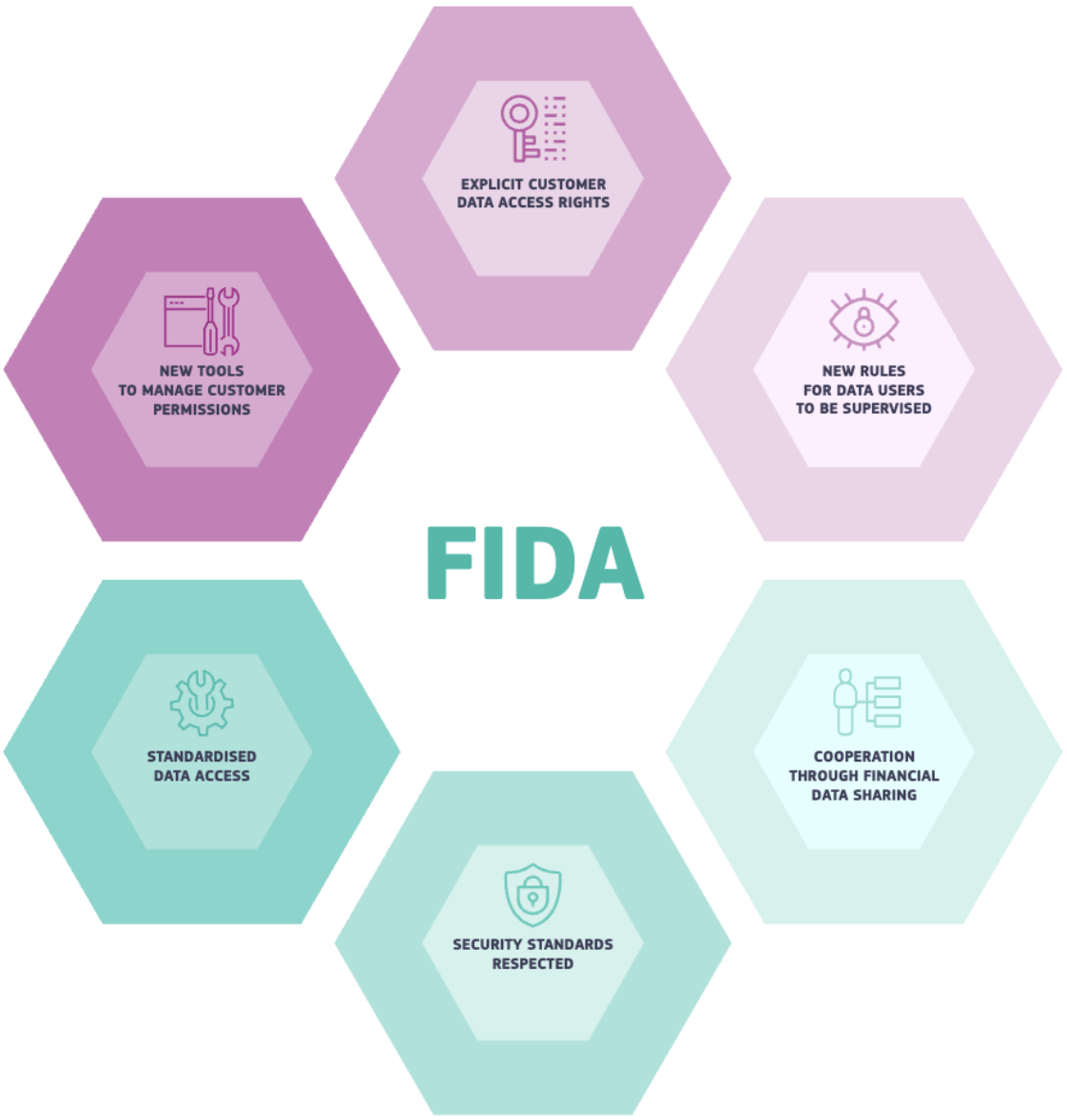
Figure 2: Today: problems in the current data flow process in the financial sector



Source: European Commission 2023c, p. 3.

In addition to the previously outlined decisions, thanks to the Financial Data Access (FiDA) Framework (see Figure 3) introduced with the PS3 Directive and the PSR, the EC aims to achieve benefits for customers and for data users. Customers will enjoy greater transparency and control over their data-sharing relationships, increased trust and confidence in data sharing, and, lastly, more innovative and cheaper financial services to choose from. On the data users' side, there will be an increased access to key customer data sets in order to boost innovation. Moreover, new services will be developed that will secure new revenue streams for data users (European Commission 2023c, p. 3).

Figure 3: Elements of the FiDA Framework



Source: European Court of Auditors 2025, p. 5.

2. Relevance and research motivation

2.1. Change management in dynamic sectors

Effective change management is essential for all organizations, especially those operating in rapidly changing environments like banking and digital payments. As discussed in Chapter 1, the sector faces unprecedented technological advancements and regulatory evolution. Consequently, organizations must adapt quickly or risk to lose competitiveness and customer trust. Change management provides a structured approach to navigate these transformations by overcoming barriers such as employee resistance, cultural inertia, and skill gaps that are primary obstacles to digital transformation identified in academic literature (Adeola et al. 2024).

The effectiveness of change management practices directly correlates with organizational performance, operational efficiency, and the ability to innovate. Various researches show that successfully managed change processes enhance readiness for continuous transformation, help integrate technologies such as AI and digital payments, and support the sustainable development goals of financial institutions. This is especially critical in financial services, where compliance requirements, risk management, and customer expectations are constantly evolving (Mavlutova et al. 2023).

Finally, the academic study of change management enables a deeper understanding of the environment between strategy, technology, people, and regulation within financial ecosystems. By systematically evaluating best practices and obstacles, the literature allows leaders to develop adaptive strategies and mitigate implementation risks (Škare et al. 2021).

2.2. Theoretical foundations of change management

As defined by Moran and Brightman in 2001, “change management is the process of continually renewing an organization’s direction, structure, and capabilities in

order to satisfy the constantly changing needs of external and internal stakeholders". Changing is part of businesses of all size. Yet, the way change is confronted and implemented varies dramatically, from small firms to large corporations, especially in terms of time and effort required (Moran/Brightman 2001, as cited in Hussain et al. 2018, p. 124).

Various models and frameworks have been developed to guide organizational change. These frameworks enable quick responses to internal and external pressures while anticipating shifts in individuals, products, technology, and markets (Van Ossten, 2006, as cited in Hussain et al. 2018, p. 124). Research literature consistently links different classes of organizational events to change. Models are needed to describe the causes of change, explain organizational functions (i.e., how A leads to B), and clarify the deliberate causation of model evolution (Hussain et al. 2018, p. 124). Internal and external pressures drive organizations to change. Two types of change can be distinguished: reactive change, triggered by external or internal forces, and proactive change, initiated by the organization itself when it decides that transformation is desirable (Pierce et al. 2002, as cited in Hussain et al. 2018, p. 124).

Having established the theoretical foundations, the following four pillars identified by Ray et al. (2024), help structure change management strategies, especially in the context of technological advancements in banking (Ray et al. 2024, p. 1752). Firms need to consider them always, as they form the foundations for structuring the change.

1. **Well-developed organizational culture, ready to change**

The prevailing culture within an organization significantly impacts its openness to change. A culture that fosters innovation, continuous learning, and experimentation is more likely to embrace new technologies compared to a risk-averse and hierarchical culture (Ray et al. 2024, p. 1752). In the literature review, there will be one paragraph on the history and foundations of change management and

another on change process methodologies, which will explain the importance of culture during change by using change management frameworks and models.

2. **Effective leadership styles and driving change initiatives**

The leadership style used by management plays a crucial role in driving change initiatives, as highlighted in the Lewin's change model (see Figure 8). It influences the culture in an organization and, consequently, how the employees accept changes. Transformational leadership, characterized by inspiring communication and the ability to empower employees, is essential for successful technological transformation. Leaders who can articulate the benefits of new technologies, motivate employees, and manage resistance will be instrumental in guiding the organization through a period of change (Ray et al. 2024, p. 1752).

3. **Successful communication strategies**

Effective communication is key to managing employee resistance and ensuring the adoption of new technologies. Transparency, clear and consistent messaging about the change process and its rationale, and open dialogue with employees throughout the implementation are crucial (Ray et al. 2024, p. 1752).

The literature review will explore how communication plays a fundamental role in addressing change, as will be explained in greater depth in Carreño's fourth step of organizational transformation.

4. **Training for skill development**

Upskilling and reskilling employees are vital to ensure they possess the necessary skills and knowledge to utilize new technologies effectively. This includes providing comprehensive training programs that equip employees with the technical expertise and proficiency required to navigate the new systems effectively (Ray et al. 2024, p. 1752). The importance of training employees is illustrated in the

downstream phase of Anderson and Ackerman's change process model (see Figure 6) and in Prosci's ADKAR model, as discussed in the literature review.

2.3. Research motivation

Building on the change management foundations (2.2) and industry challenges outlined in 2.1, this thesis investigates how organizations respond to disruptive external forces. Regarding the digital payments sector, the previous sections have already outlined the key regulatory forces (PS3 Directive), technological forces (AI/open banking), and competitive forces (FinTech challengers). While PS3 Directive represents a critical case study, the research motivation extends to any rapid external change requiring internal organizational adaptation.

PS3 Directive exemplifies the type of regulatory shock that demands to apply change management. It strengthens PS2's Directive data sharing, consumer protection, and risk mitigation rules in the context of AI-driven innovation and open finance competition (Škrabka 2024, pp. 221-223; Miglionico 2023). However, the frameworks analysed (Lewin's model, Kotter's 8-steps, ADKAR, Nine-phase) are generalizable to other external disruptions, like cybersecurity threats, blockchain adoption, or Big Tech entry, by forcing banks to rapidly restructure operations, culture, and capabilities or risk obsolescence.

This research contributes to:

- Test change management models use in addressing real-world transformation.
- Identify generalizable best practices for organizations in order to adapt to external shocks.
- Provide organizations with actionable insights applicable beyond PS3 Directive compliance

2.4. UniCredit case: operational guidelines for change management

By analyzing UniCredit's digital transformation allows us to extract practical, generalizable operational guidelines applicable to any disruptive external shock: regulatory, technological, or competitive.

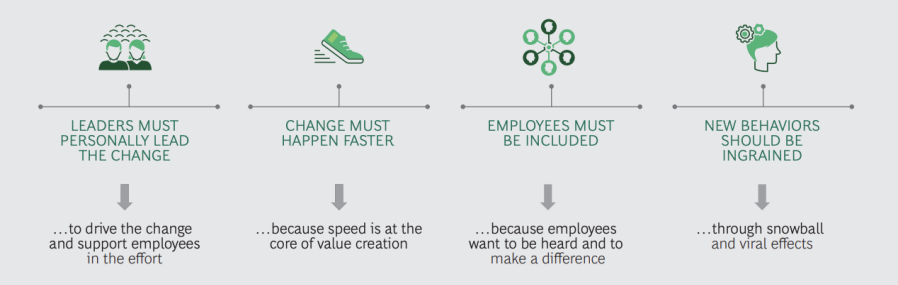
Building directly on the theoretical foundations and four pillars outlined in 2.2, this section examines how the CEE division of UniCredit has operationalized these principles through innovative, digital-enabled practices. UniCredit CEE is a great example because spans 11 of the bank's 14 core markets, is a market leader in those countries and accounts for more than 20% of the group's total revenues (BCG 2018).

BCG (2018) hat extend Ray's framework. The study identifies four general imperatives applicable by organizations operating in various contexts (see figure 4):

1. Leaders must personally lead the change
2. Change must happen quickly
3. Employees must be included
4. New behaviours must take root organically

These four imperatives exploit the use of digital tools to accelerate transformation while embedding change through bottom-up mechanisms (BCG 2018, p. 1).

Figure 4: The four new imperatives for digital-era change management



Source: BCG 2018.

UniCredit CEE division had based its change management strategy on these imperatives, serving as a testing ground for digital solutions in less mature markets. Its practices have achieved viral adoption across 11 countries and cultures not through top-down mandates, but via digitally-based mechanisms (BCG 2018, pp. 1-2).

UniCredit CEE demonstrates how the first imperative (leaders must personally lead) translates into practice through livestreamed management committee meetings reaching 2.000 to 3.000 employees live, alongside cross-country successor pools that filled 80% of senior roles internally. For faster change, the Agile CEE network trained 5.000 employees across 30–40 simultaneous projects, while the Marketplace platform connected 2.400 users to 470 cross-border assignments. Active employee participation emerged organically through crowdsourced initiatives like “Remove” (waste reduction ideas), and new behaviours took root via viral Best Practice Sharing videos related to Transform 2019 targets (BCG 2018, pp. 3-4).

To complement BCG's framework, will be analyzed a document by Riva and Pilotti (2017) that describes Lean Six Sigma and digital integration following Monozukuri (process excellence), Hitozukuri (people development), and Kotozukuri (making things happen) principles. Using DMAIC methodology (Define-Measure-Analyse-Improve-Control), value stream mapping, and KPI trees alongside balance scorecards, UniCredit systematically eliminated banking wastes while scaling omnichannel services like mobile payments and Business Easy remote advisory (Riva/Pillotti 2017).

From these proven practices, five generalizable operational guidelines can be highlighted:

1. Leadership transparency builds trust across multinational operations.
2. Agile networks and digital platforms accelerate delivery, that are useful for regulatory compliance during innovation race.

3. Crowdsourced talent platforms unlock hidden organizational skills, replacing silos with cross-functional collaboration.
4. Sharing best practices through video platforms creates a self-sustaining culture change without top-down imposition.
5. Lean Six Sigma and digital omnichannel eliminates process waste.

These guidelines derived from UniCredit case provide other banks with a proven operational blueprint for a rapid adaptation to shocks, like what can be the PS3 Directive. Not only banks: other organizations operating in different sectors can also exploit the principles behind these guidelines.

Chapter 3 will formalize research questions in order to provide theoretical validation through structured model analysis.

3. Research questions

3.1. First question

What are the main change management challenges in the digital payments industry?

The digital payments industry faces significant change management challenges deriving primarily from digital transformation pressures on banking institutions. From a regulatory compliance perspective, payment institutions and electronic money institutions face increased administrative costs and complexity due to mandatory re-authorisation requirements and enhanced documentation obligations (Škrabka 2024, p. 224). These institutions must also take into consideration IT system upgrades. This includes implementing stronger client fund safeguarding measures, including diversification across multiple accounts and investment in low-risk assets, as well as dedicated open banking interfaces as mandated by PSR (Škrabka 2024, p. 221). Implementation risks are incremented by potential delays in regulatory technical standards from authorities like the EBA (European Banking Authority), which could create security gaps and operational disruptions similar to those experienced during PS2 Directive implementation (Škrabka 2024, p. 224).

Beyond technical compliance, data protection challenges intensify as open finance mandates broader data sharing while simultaneously requiring stronger authentication mechanisms, creating tensions between innovation, customer privacy, and regulatory compliance (Škrabka 2024, p. 222). At the organizational level, digital transformation faces staff resistance and skills gaps. This requires not just technological upgrades but also mindset shifts and competency development across the institution (Diener/Špaček 2021, p. 3). Traditional banks face difficulties regarding rapid market-driven innovation, due to their historically centralized decision-making structures and limited change agility (Diener/Špaček 2021, p. 23). Finally, customer adaptation represents a critical challenge, as digitalization fundamentally transforms customer-bank relationships while simultaneously elevating

expectations for security, seamless usability, and service continuity (Diener/Špaček 2021, p. 20).

3.2. Second question

How can the main change management models support an effective adaptation?

The change management models that will be examined in Chapter 4 provide robust foundations for developing adaptation strategies. They equip organizations with essential tools to manage workforce transitions and introduce changes smoothly after regulatory and technological disruptions.

All the models analysed remain conceptual at a high level, but in different ways. Lewin's model, for example, structures change strategies without providing granular tactical guidance. Similarly, Kotter, ADKAR, Prosci, and Nine-phase change process model offer structured approaches that still require customization to the organization's specific context. Effective adaptation demands tailoring solutions to factors such as organizational complexity, size, and maturity: younger, agile FinTechs adapt more fluidly, while mature incumbents face greater inertia from legacy structures and cultural resistance (Diener/Špaček 2021, p. 3).

In conclusion, these main change management models support industry operators' adaptation by giving change leaders a proven framework to structure responses to challenges, by mitigating compliance costs, IT upgrade delays, and employee resistance (Škrabka 2024, p. 224), while allowing flexibility for organization specific implementation.

3.3. Conclusion for the European digital payments sector

This analysis reveals that the digital payments sector faces multiple change management challenges: regulatory (PS3 Directive and PSR costs, IT upgrades), technological (dedicated APIs, SCA), organizational (staff resistance, skills gaps), and customer-related (trust, usability).

The main change management models offer strategies that are useful for effective adaptation. If well designed and improved, they can help organizations to mitigate regulatory delays and build competencies.

For European operators, frameworks like Kotter (guiding coalitions for compliance) and ADKAR (reskilling for open finance) accelerate agility, overcoming legacy inertia in traditional banks while bridging the gap with agile FinTechs (Diener/Špaček 2021, p. 3; Škrabka 2024, p. 224).

Proactive adoption of these models ensures regulatory resilience, competitiveness in the single payments market, and sustained customer trust

4. Literature review

4.1. History and trends of digital payments

Payment systems have continuously evolved over time. Early forms of exchange were based on barter; however, as societies became more complex, new media of exchange such as coins and later paper money were introduced (Davies 2010, p. 27). The emergence and consolidation of banks and financial institutions further transformed the payment landscape, enabling more structured and reliable transaction mechanisms (Goetzmann 2016, p. 150).

During the 20th century, the introduction of electronic payment systems marked a major turning point. Credit cards were launched in the 1950s, followed by Automated Teller Machines (ATMs) in the 1960s. These innovations significantly improved consumer access to financial services and increased the convenience of transactions. With the advancement of digital technologies, new payment instruments such as mobile payments, digital wallets, and cryptocurrencies have become widely accessible. Today, transactions can be executed electronically within seconds, regardless of time or location (London & Zurich 2025).

In Europe, the development of the digital payments sector has been strongly influenced by regulatory initiatives, particularly the PS1, PS2, and the upcoming PS3 Directive. At a global level, a key trend is the progressive shift toward cashless transactions. According to PwC, global cashless payment volumes are expected to grow by more than 80% between 2020 and 2025 and to almost triple by 2030. This transition is mainly driven by technological progress, evolving consumer preferences, and the widespread diffusion of mobile devices. Furthermore, the rapid adoption of digital wallets and mobile payment solutions has enhanced customer convenience, accelerating their use worldwide (PwC 2021).

Despite this global trend, cash continues to play an important role in certain countries. In Germany, for example, cash accounted for 51% of all transactions in 2023,

reflecting strong cultural habits and a high level of trust in physical currency (Deutsche Bundesbank Eurosystem 2023). In contrast, in countries such as Italy, the adoption of digital payment instruments has accelerated significantly. According to the Innovative Payments Observatory of the Politecnico di Milano, the total value of digital payment transactions reached €444 billion in 2023, representing a 12% increase compared to the previous year. This growth was largely driven by contactless payments, which amounted to €240 billion and accounted for nearly 80% of in-store digital transactions in the Italian market (Osservatorio Innovative Payments 2024). These data highlight a growing consumer preference for digital payment solutions.

Overall, the digital payments ecosystem is characterized by rapid growth and continuous innovation. While digital payment systems offer clear benefits in terms of speed, efficiency, and convenience, they also pose significant challenges related to cybersecurity, regulation, and consumer protection. Effectively addressing these issues is essential to maintain trust and ensure the long-term stability of the financial system.

4.2. History and foundations of change management

As discussed in the previous paragraph, the digital payments sector is undergoing significant transformation. In such a dynamic environment, organizations must continuously adapt in order to survive. Numerous approaches exist to influence change, and these differences require change managers to carefully consider strategies that can increase acceptance and reduce resistance. A change manager is responsible for planning, developing, leading, evaluating, assessing, supporting, and sustaining the implementation of change. Change management therefore consists of models and strategies designed to help employees accept new organizational developments (Phillips/Klein 2022, p. 189).

As in many other disciplines, there is a gap between theory and practice in the field of change management. Academic researchers seek to better understand

practitioners' actions in order to define and systematize the tools used in practice. However, it is often difficult to apply theoretical models in real organizational contexts, including the models discussed in the following section (Bamford/Forrester 2003, p. 560). While these models are useful for analyzing and studying change management strategies, they cannot, by themselves, represent a complete change management approach.

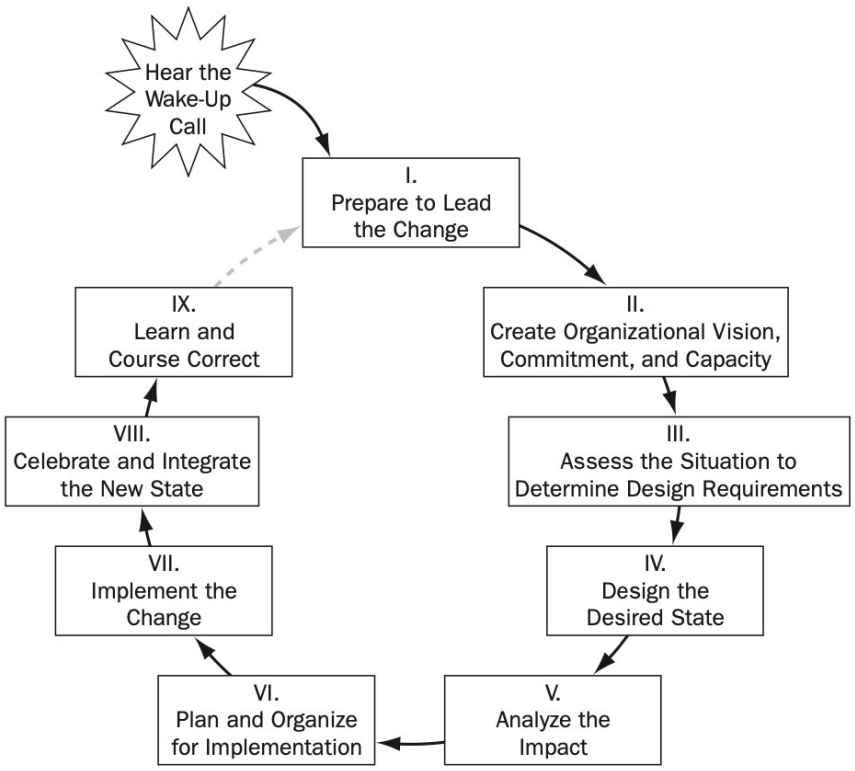
In 2009, Neves suggested that change appropriateness is positively related to effective commitment. In other words, employees' perceptions of whether a change is beneficial to the organization are influenced by their level of job satisfaction. Moreover, effective commitment was found to mediate the relationship between change appropriateness and individual change, indicating the extent to which employees adapt to and adopt new systems.

Consequently, universal theories of change management are often inappropriate. Organizational change is highly context-specific, and no single model can fully capture its complexity (Saka 2003). One of the key challenges lies in the fact that the timeline of change varies significantly across organizations (Pollack/Pollack 2015).

It is also important to distinguish between change frameworks and change process models. Change frameworks identify the key topics relevant to change and outline the procedures that organizations should consider during the change process. However, they do not provide detailed guidance on how to implement each step or the sequence in which actions should be taken. In contrast, change process models specify the actions required to achieve change and the order in which these actions should be carried out (Anderson/Ackerman 2001, pp. 159-160). Change process models are tools of conscious process thinking. They are both action oriented and results producing. They organize the activities of the change process, in order to achieve the transformation's desired over time. Change process models differ in their levels of effectiveness, based on how accurately and completely they reflect

the actual process dynamics of transformation (Anderson/Ackerman 2001, pp. 159-160). Figure 5 portrays the nine-phase Change Process Model for Leading Conscious Transformation. Designed by the authors, it includes what is required of a comprehensive change process model fit for transformation (Anderson/Ackerman 2001, pp. 168-169).

Figure 5: The nine-phase change process model for leading conscious transformation



Source: Anderson/Ackerman 2001, p. 169.

The nine-phase Change Process Model is best understood as an experience-based roadmap rather than a prescriptive or strictly linear recipe for managing change. Drawing on more than twenty-five years of direct involvement in organizational transformation initiatives, the model embodies a pragmatic view of change as a complex, uncertain, and inherently iterative journey (Anderson/Ackerman 2001, p. 160).

Although the framework was introduced in 2001, before the acceleration of contemporary digital transformation, it already highlights elements that remain highly important today, such as leadership readiness, organizational commitment, continuous learning, and the willingness to correct course when necessary. The authors are explicit that a roadmap cannot guarantee success; however, it can substantially increase the likelihood of recognizing recurring obstacles and making informed choices at critical junctures. In this sense, the model should be read as a guiding structure that supports sense-making and disciplined action, while still leaving room for adaptation to context-specific challenges and emerging dynamics that shape real-world change processes.

While frameworks often highlight variables or theoretical foundations that support change, models focus on the concrete processes that lead to change, as shown by the Nine-phase change process model.

From change frameworks and change process models can be derived the change strategy, that is a specific process designed from a model or framework. Multiple models and frameworks often contain similar strategies, and change managers apply these tools contextually, selecting and combining strategies across different models and frameworks as appropriate (Anderson/Ackerman 2001, pp. 159-160).

4.3. Change process methodologies

Change process methodologies are structured approaches used to design and guide change initiatives, aiming both to achieve transformation goals and to develop lasting change capabilities in people and in the organization. An effective transformational change methodology typically (Anderson/Ackerman 2001, pp. 160-161):

- Recognizes transformation as a multi-dimensional process that affects structures, people, and culture.
- Provides skills to design the change journey, by integrating content (what changes) and people (who change).

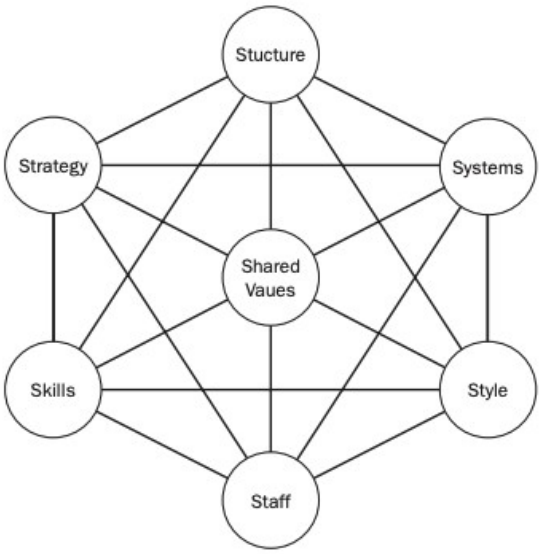
- Supports ongoing facilitation, enabling learning and correction during implementation.
- Keeps systematic attention on leaders, employees, and all key stakeholders.
- Establishes the necessary infrastructures, roles, and conditions for the change to succeed.
- Includes strategies to address individual and collective dynamics, such as shifting mindsets and culture.
- Defines approaches to manage the interface between day-to-day operations and the rollout of the transformation.

Clearly, defining some kind of change model is helpful to assist leaders to address all the activities during the transformation (Anderson/Ackerman 2001, p. 161).

Many models are designed to help organizations to change and grow. There are two categories: frameworks and process models, as seen in the previous paragraph. Most models available today are frameworks. Both frameworks and process models are valuable for leading change, but a process model is essential in order to have an effective transformation. Let's explore their differences (Anderson/Ackerman 2001, p. 161).

Change frameworks highlight the main areas that require leadership attention to achieve change. For example, McKinsey's 7-S Framework (Peters/Waterman, 1982) that identifies content, people, and process, is a good example. In general, frameworks help to structure what should be considered during a change process. They serve as practical tools to identify and organize the key areas that require attention, such as when using the 7-S Framework (Figure 6) to support an organizational redesign (Anderson/Ackerman 2001, p. 161).

Figure 6: McKinsey's 7-S Framework



Source: Peters/Waterman, 1982.

The seven elements of the McKinsey 7-S Framework are all interconnected. The model highlights the key areas that may require redesign but does not provide specific guidance on how to implement such changes. Because of its static nature, it is not sufficient to support an ongoing transformation process. For this reason, a more dynamic model is needed to serve as a roadmap.

Change process models, instead, describe action. They offer practical guidance on what to do to achieve change and in what sequence. A valuable example is Kotter's 8-Step Model. In the first four stages, the model defines a process flow where each step follows the previous one. The last four stages, however, resemble a framework model, as they identify key areas that demand continuous attention (Anderson/Ackerman 2001, p. 163).

Anderson and Ackerman (2001) observed that most change process models are either too generic or only partially capture what is necessary to lead transformational change. They argue that a truly comprehensive model must address both human transformation and business content. Yet, twenty-five years later, many

transformational leaders still rely on the same models. Leaders and consultants therefore need an effective and integrated approach that supports transformation in practice. Such a model should combine conceptual clarity with pragmatic guidance, showing how to plan, manage, and execute the actions required to achieve the desired outcomes. It should serve as a map that helps leaders navigate the complex terrain of change. In summary, the following provides a comprehensive description of the elements required for a transformation process (Anderson/Ackerman 2001, p. 163):

> "Your roadmap must be a process model fit for transformation, not a project management methodology. Your roadmap can and should guide action, but not mandate it. It can and should inform process design decisions, but not prescribe them. It can and should organize your plan, but not rigidify it. In other words, your change process model can be structured, but it must accommodate the evolving, multi-dimensional process nature of transformation" (Anderson/Ackerman 2001, p. 163).

In this context, it is useful to define the notion of thinking discipline. According to Michael D. Watkins, it is a mental capacity that can be developed through experience by focusing on pattern recognition, systems analysis, mental agility, problem-solving, visioning, and political savvy (Filosofia dell'innovazione 2025).

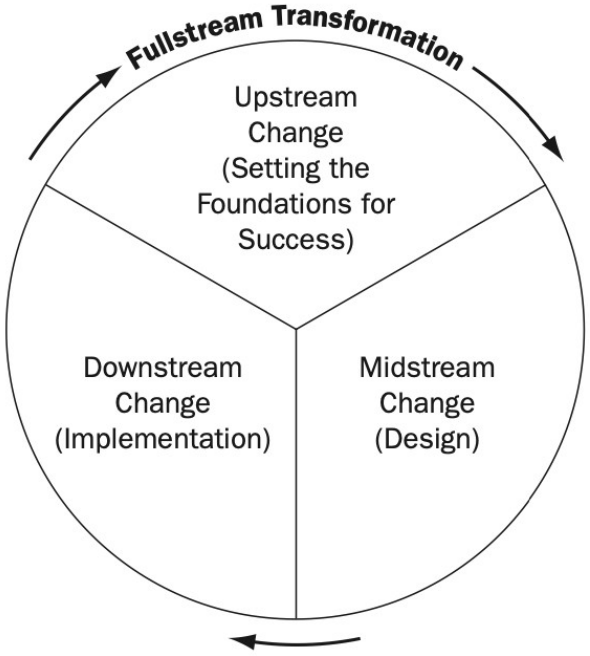
Therefore, before initiating a transformational change, a leader must have a guidance system to discipline their thinking. However, the change process model should not take control of the change itself. The operating context may evolve and should be continuously assessed through critical thinking to ensure effective transformation management (Anderson/Ackerman, 2001, p. 163).

To sum up, the ultimate purpose of a change process model is not to provide automatic answers, but to enhance the leader's awareness, allowing them to better structure the process and navigate it in real time (Anderson/Ackerman, 2001, p. 163).

4.4. Transformation as a fullstream process

When a transformational change is required, the processes of thinking, planning, and communicating directly influence how the change will develop and how employees will respond to it. An effective change process model must therefore consider the entire journey, from the design of the transformation to the achievement of the desired state. Anderson and Ackerman defined this approach as a "fullstream transformation" (see Figure 7) (Anderson/Ackerman 2001, p. 165).

Figure 7: Fullstream transformation model



Source: Anderson/Ackerman 2001, p. 165.

The transformation process consists of three interconnected components: the upstream, midstream, and downstream stages. The upstream stage focuses on

planning and laying the foundations for success. The midstream stage centers on designing the desired future state, while the downstream stage concerns implementation. As previously discussed, a comprehensive change process model must integrate all three components to be considered fullstream (Anderson/Ackerman 2001, p. 165).

The upstream stage marks the starting point of transformation and begins with the "wake-up call". In this phase, change leaders assess their organization's capacity for change, determine who will lead the effort, develop a change strategy, and identify the infrastructures needed to support the achievement of the desired outcomes. A communication and participation plan is developed to align leadership focus, as leadership alignment is essential to motivate and engage employees throughout the process (Anderson/Ackerman 2001, p. 166).

During the upstream phase, employees are not only motivated but also actively involved in planning. They are informed about the reasons that drive the transformation and, in many cases, contribute to structuring the process to minimize downstream resistance. This preparatory work takes place before designing the desired future state, meaning that employees become involved long before the design and implementation stages (Anderson/Ackerman 2001, p. 166).

This first phase establishes the level of commitment within the organization. The time and attention dedicated to it pay off exponentially in the subsequent stages of the change process (Anderson/Ackerman 2001, p. 166).

The midstream stage involves the design of the desired solution. Like testing a new car before releasing it on the road, the solution is evaluated, refined, and its impact carefully assessed. Decisions made upstream are tailored during this phase to prepare the organization for implementation. Moreover, the organization's capacity to succeed in the transformation continues to develop (Anderson/Ackerman 2001, p. 167).

However, designing the desired state can be extremely costly, especially when leaders attempt to overcontrol the outcome. Excessive focus on design often leads to neglecting implementation. Once the design is complete, leaders may hurry to execute it without sufficient planning or resources, much like writing the perfect script but forgetting to try the play. In such cases, attention remains fixed on design, while both preparation and execution are underestimated (Anderson/Ackerman 2001, p. 167).

The downstream stage covers implementation and integration of change, training employees for the new environment, and making necessary adjustments. It also includes celebrating achievements and dismantling temporary change structures once they are no longer needed (Anderson/Ackerman 2001, p. 168).

A common mistake in this stage occurs when leaders rush into implementation before completing the required upstream and midstream work. The absence of adequate preparation makes execution challenging and often forces interruptions that generate employee frustration and resistance. Traditionally, many leaders have associated change management with implementation and overcoming resistance, neglecting the preparatory stages that ensure lasting success. Effective transformation requires balanced attention to all three stages. When the earlier phases are handled properly, implementation proceeds more smoothly, and employee commitment is stronger (Anderson/Ackerman 2001, p. 168).

The fullstream transformation model offers a conceptual overview of the entire change process, helping leaders to understand its underlying dynamics and interdependencies. It provides a valuable framework for understanding that transformation is not a linear sequence of isolated steps but an integrated flow that connects preparation, design, and implementation. Due to its general and descriptive nature, the model alone cannot serve as a sufficient guide for managing complex and adaptive transformations in practice. Real transformation requires tools and methodologies that translate conceptual understanding into actionable strategies.

Therefore, while the fullstream transformation model remains essential for structuring the process, it must be complemented with more operational and context-specific models capable of guiding decisions and monitoring progress (Anderson/Ackerman 2001, p. 168).

4.5. Main change management models

The digital payments industry is undergoing rapid transformation, much like other sectors, and organizations must adopt new technologies while coherently adjusting their behaviors and processes. Leaders, therefore, need structured approaches to plan change rather than relying on ad hoc decisions.

For banks and payment service providers that operate in this fast-changing environment, the ability to select and combine suitable models and methodologies is a key leadership skill. The following section presents the main change management models (in chronological order) used in the literature and highlights those that offer practical guidance for transformational change. Several change management models provide a useful foundation for navigating technological transformations, although their effectiveness may vary depending on the specific technology adopted and the sector an organization operates (Ray et al. 2024, p. 1752).

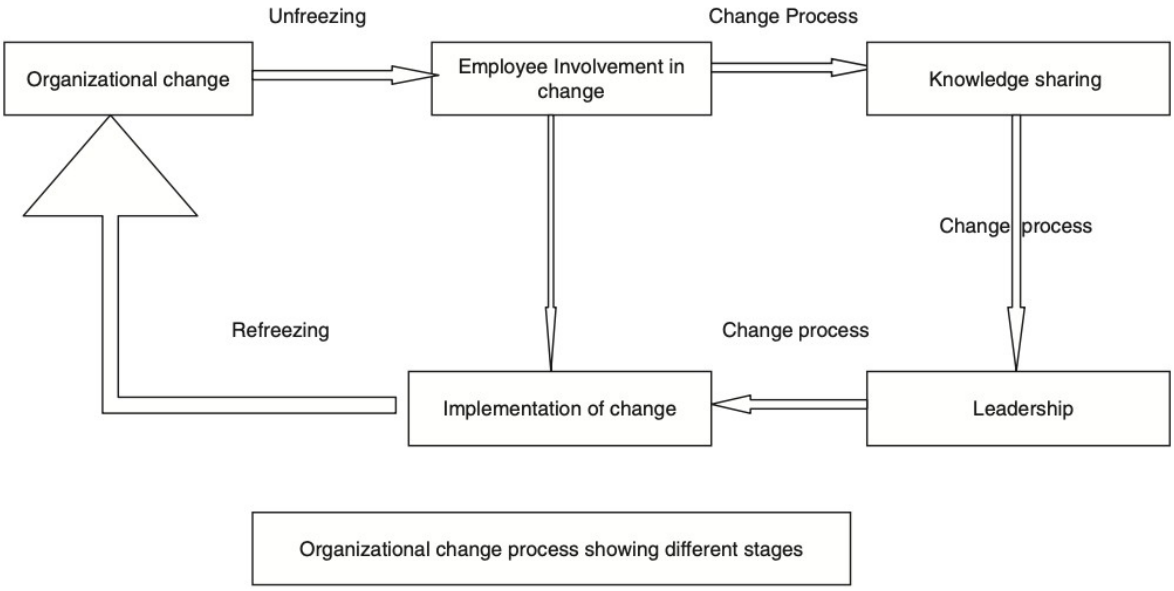
4.5.1. Lewin's change model

Introduced in 1947, Kurt Lewin’s three-step model is one of the earliest and most influential theories of change management. It describes change as a movement from a known current state to an unknown desired future state, emphasizing that people often resist change because it threatens established norms and a sense of stability. To find a solution, Lewin argues that successful change depends on managing the balance between forces that maintain the status quo and those that push for change, by strengthening the drivers, weakening the restraints, or using both strategies together (Lewin 1947, as cited in Hussain et al. 2018, p. 123).

As it is showed in Figure 8, the model is articulated through three stages: unfreezing, change process, and refreezing.

The unfreezing phase involves reducing the hold of existing behaviours by creating awareness of the need for change and motivating individuals and groups to move away from the status quo. This stage often requires leaders to highlight external and internal pressures, communicate the risks of not changing, and begin to reduce the psychological and organizational forces that keep the current state in place. In this perspective, motivation and readiness are not optional preconditions but essential levers for initiating any meaningful transformation (Hussain et al. 2018, p. 123).

Figure 8: Model of organizational change shows the Kurt Lewin's three steps model*



Source: Hussain et al. 2018, p. 126.

*Note: the arrows show different stages of Kurt Lewin's three steps model and not the relationship between variables.

The second stage, change process, refers to the actual transition from the old state to the new one. Here, new processes are introduced, and employees are guided through the unfamiliar territory of the change process with an effective involvement (see Figure 8). Leadership plays a central role in this phase by communicating clearly, providing task and emotional support, and actively involving employees in planning and implementation in order to reduce resistance and increase commitment. Knowledge sharing is also crucial: by exchanging information, ideas, and experience across units, organizations solve problems and adapt solutions more easily (Hussain, S. et al. 2018, pp. 124-125).

The final stage, refreezing, is designed to stabilize the organization at the new equilibrium in order to make change become part of everyday practice. This involves including new behaviours into existing structures and culture. In this way, the organization aligns rewards and recognition with the new way of working and builds the necessary support mechanisms to sustain the change over time. Refreezing is not only about “locking in” a new configuration, but is consolidating gains and ensuring that employees no longer feel pulled back toward the old routines. In this sense, implementation planning and appropriate change management structures are fundamental in order to make the new state durable and coherent (Hussain, S. et al. 2018, p. 125).

The main strengths of the Lewin’s model are simplicity and clarity: it offers a straightforward framework that helps leaders structure their thinking and communicate the logic of the change journey to employees. It also highlights the importance of preparation (unfreezing) and consolidation (refreezing), often underestimated in practice, and underlines the role of leadership and employee involvement, as key drivers to move from one stage to the next. At the same time, the three-step model, in its original form, can oversimplify the complexities of contemporary organizational environments, especially where change is continuous, non-linear, and shaped by rapid technological innovation (Prosci 2025).

Nowadays, the idea of a stable “refrozen” state may not fully capture the need for ongoing adaptation. Moreover, Lewin's model focuses mainly on group and organizational dynamics. It does not address individual change or provide detailed tools for implementation. For these reasons, while Lewin's model remains a valuable foundation for planned change, many authors recommend complementing it with more detailed approaches that better suit ongoing changes.

4.5.2. Kotter's eight-step model

Introduced in 1995, after a study of more than 100 companies over a decade, John Kotter's eight-step model offers a detailed roadmap for leading large-scale organizational change. Unlike simpler approaches, it helps leaders fight inertia and poor teamwork, by avoiding leadership gaps and insufficient planning. Kotter stresses creating urgency, fostering leadership coalitions, and consolidating gains. This structure gives clear direction and improves stakeholders’ involvement, which is fundamental for complex change management projects (Carreño 2024, pp. 2-3).

The model was designed for top-down leadership in structured environments, but applies perfectly to contemporary challenges such as technological disruption and market volatility. At the core of Kotter’s thesis there is the argument that sustainable organizational change is only achievable through strong leadership and a deliberate, structured approach. As already seen, organizations, particularly in the last years, face unprecedented technological advancements. In such this environment, Kotter’s principles must be reconsidered in order to meet the need for more adaptive approaches to transformation, such as Agile and Lean frameworks, which promote a continuous, iterative approach to change (Carreño 2024, p. 3).

The model takes a top-down approach and structures a step-by-step process. Each step builds upon the previous one, ensuring a comprehensive strategy that addresses the common challenges of organizational change. It works well when change needs strong direction from the top. The table below (Table 1) shows a detailed breakdown of each step (Carreño 2024, p. 3).

Table 1: Eight steps for organizational transformation

Step	Description
1	Establishing a sense of urgency
2	Forming a powerful guiding coalition
3	Creating a vision
4	Communicating the vision
5	Empowering others to act on the vision
6	Planning for and creating short-term wins
7	Consolidating improvements and producing still more change
8	Institutionalizing new approaches

Source: Carreño 2024, p. 4, adapted from Kotter 1995.

The eight steps are therefore illustrated.

1. **Establishing a sense of urgency**

Fundamental is starting to define a reason for change that resonates throughout the organization. Leaders assess market conditions and inefficiencies, then show risks of not changing versus benefits of change. This shared urgency reaches all levels, helping employees understand the need and feel personally involved. Without it, adaptation will be slow from the start (Carreño 2024, pp. 3-6).

2. **Forming a powerful guiding coalition**

The second step is assembling a team of influential leaders with credibility and skills from various areas of the organization. This group unites behind the vision,

overcomes resistance, motivates employees, and ensures consistent leadership. A weak coalition can derail the entire effort (Carreño 2024, pp. 3-6).

3. **Creating a vision**

By developing a clear vision of the future, employees will see a realistic path and how their roles contribute. Involving diverse stakeholders ensures ownership and emotional connection to the change (Carreño 2024, pp. 3-6).

4. **Communicating the vision**

Then is important to share the vision frequently through multiple channels with clear messages. Appealing to both rational and emotional aspects helps build deeper connections, making the change more effective. Two-way communication, where employees can ask questions and provide feedback, fosters engagement and trust (Carreño 2024, pp. 3-6).

5. **Empowering others to act on the vision**

Is essential to remove barriers like rigid structures or risk-adverse culture. To do this, change leaders must provide tools, resources, and ensure autonomy. Employees need to feel confident contributing to the change and taking initiative (Carreño 2024, pp. 3-6).

6. **Planning for and creating short-term wins**

Early successes must be celebrated publicly to build confidence, convert skeptics, and maintain momentum. These wins provide learning opportunities and fight the fear of change (Carreño 2024, pp. 3-6).

7. **Consolidating improvements and producing still more change**

Another key driver of change success is building on early wins to address deeper issues and expand change. By aligning structures, rewards, and leadership new

behaviours will be embedded more easily. Change leaders have to remember to avoid declaring victory too soon. They must keep pushing for bigger improvements with sustained urgency (Carreño 2024, pp. 3-6).

8. Institutionalizing new approaches

The last key point defined by Kotter is to embed new behaviours in the culture by aligning policies, rewards, and systems. Leaders have to structure desired actions consistently. Then, planning leadership succession is fundamental to ensure that the change endures and adapts to future needs (Carreño 2024, pp. 3-6).

Kotter's model has three key strengths. First, it provides a clear, sequential structure that gives leaders a step-by-step roadmap for managing change. This reduces confusion and defines clear milestones like establishing urgency and creating short-term wins, making it highly practical for large, hierarchical organizations. Then, the model places leadership at the center, emphasizing guiding coalitions, vision creation, and consistent communication. Leaders must motivate and demonstrate commitment, ensuring strong direction and accountability throughout the transformation. The last one is that it shows broad practical applicability across industries and contexts (e.g. restructurings and digital transformations). The simplicity and universality of the eight-step process have enabled it to be successfully applied in sectors such as finance, healthcare, manufacturing, and education (Carreño 2024, p. 7).

Of course it has also some weaknesses. The linear step-by-step approach feels rigid in today's continuous transformation environments. Modern organizations need iterative adaptation (like Agile), not a fixed sequence with a clear endpoint (Mankins/Litre 2024, as cited in Carreño 2024, p. 8). Secondly, a top-down leadership focus overlooks middle managers, informal leaders, and employee-driven change (Mankins/Litre 2024, as cited in Carreño 2024, p. 8). This can alienate staff in flat or collaborative structures, common in tech and creative industries. Then, the urgency-driven approach may clash with consensus cultures or incremental change

preferences. Lastly, it lacks detailed implementation tools and doesn't address individual change experiences, making day-to-day execution challenging (Carreño 2024, p. 8).

Despite the model has more than 30 years, Carreño, in 2024, stated that John Kotter's eight-step model is still a foundational framework for guiding organizational change. As organizations contend with challenges like rapid technological advancements, market volatility, and the increasing need for agility, Kotter's model provides a structured approach that can be enhanced by integrating modern methodologies such as Agile and Lean. These methodologies are primarily applied to project management and process improvement, but they offer complementary practices that can enhance the adaptability of Kotter's change management framework, especially in the finance sector, as discussed earlier (Carreño 2024, p. 9).

4.5.3. Prosci's ADKAR model

Created in 1998 by Jeff Hiatt, founder of Prosci, the model aims to facilitate smoother transitions within organizations by addressing both emotional and practical aspects of change. In fact, this model focuses on the individual's readiness for change, identifying five building blocks: awareness, desire, knowledge, ability, and reinforcement (ADKAR) (Dziak 2024).

The initial step, awareness, focuses on informing stakeholders about upcoming changes and their significance. Awareness can help employees, managers, and other parts of an organization to fully support a change, even if it challenges them to modify how they approach their tasks. Creating awareness can reduce passivity or resistance among employees and keep them from returning to previously established but outdated habits (Dziak 2024).

The second step, desire, encourages individuals to actively support the change process. During a change, two groups of employees can be defined: those who merely accept a change and those who actively support and want the change. The former

group needs to be involved in the change, while the latter moves itself to make the change successful. Leaders can bring all employees on board by explaining how the change will benefit both individuals and the organization (Dziak 2024).

The third step, knowledge, provides the necessary information and training to evolve with and support the change. A change also means new technologies, so people inside the organization will likely need training to learn how to use them. This knowledge will give employees the confidence to support the change (Dziak 2024).

The fourth step, ability, ensures that individuals can apply this knowledge practically. It is fundamental for employees to know how to use the information provided in the previous phase. In order to do this, leaders supply hands-on training exercises to instill new skills in employees and make them ready to face real-life situations (Dziak 2024).

The last step, reinforcement, mainly takes place after the change has happened. It emphasizes the importance of sustaining the change, monitoring its adoption, and addressing any backslides into old habits. Leaders may provide and accept feedback during this time in order to help them gauge how well the change is being adopted (Dziak 2024).

The ADKAR model is particularly valuable for addressing employee concerns and tailoring support throughout the change process to ensure successful individual adoption of new technologies (Ray et al. 2024, p. 1752). It is at the core of Prosci Methodology, that can be defined as a comprehensive approach. It comprises (Prosci 2025):

- Prosci's ADKAR model.
- Prosci three phase process: prepare approach, manage change, and sustain outcomes. It is a detailed approach that guides change managers through

the steps needed to scale individual change successfully at the organizational level.

- Prosci change triangle (PCT) model: it is a framework that enables assessment and addressing of the critical aspects of an organizational change.

The Prosci's ADKAR model is built on 25 years of extensive change management research, providing a robust and evidence-based foundation that leaders can trust. Unlike many approaches that treat change as a one-time event, it correctly perceives change as an ongoing process, recognizing the need for sustained effort over time. The methodology includes practical tools and resources, such as the ADKAR Assessment and the 10 aspects of change impact, that help evaluate and support change at individual, organizational, and enterprise levels. Its flexibility allows integration with other models like the Kübler-Ross Change Curve or Agile methodologies, making it adaptable to different contexts. Most importantly, it excels at managing individual-level change by focusing on the human side, ensuring people are equipped throughout their journey (Prosci 2025).

Despite these strengths, the model has clear limitations in specific situations. It may not be suitable for large-scale transformations or major strategic shifts, where broader organizational dynamics require different approaches. Fundamentally, ADKAR is useful to address individual change rather than organizational or strategic-level transformation, making it less effective for complex initiatives (Dziak 2024).

The comprehensive Prosci's methodology enables success with all key aspects of individual and organizational change. It is designed expressly to help organizations prepare, equip, and support people through their change journeys. Rather than driving change with top-down directives and incomplete approaches, the Prosci's methodology equips companies to use change management into the organization, building change capabilities over time (Prosci 2025). In fact, by the early 2020s, ADKAR remained widely in use (Dziak 2024).

4.5.4. Anderson and Ackerman's Nine-phase change process model

This model did not achieve the same level of popularity as the three models analyzed before, but it still has value in the context in which change leaders operate today. In fact, similarly to Kotter's eight-step model, it provides a clear and sequential structure that offers change leaders a step-by-step roadmap for managing change (Carreño 2024, p. 7).

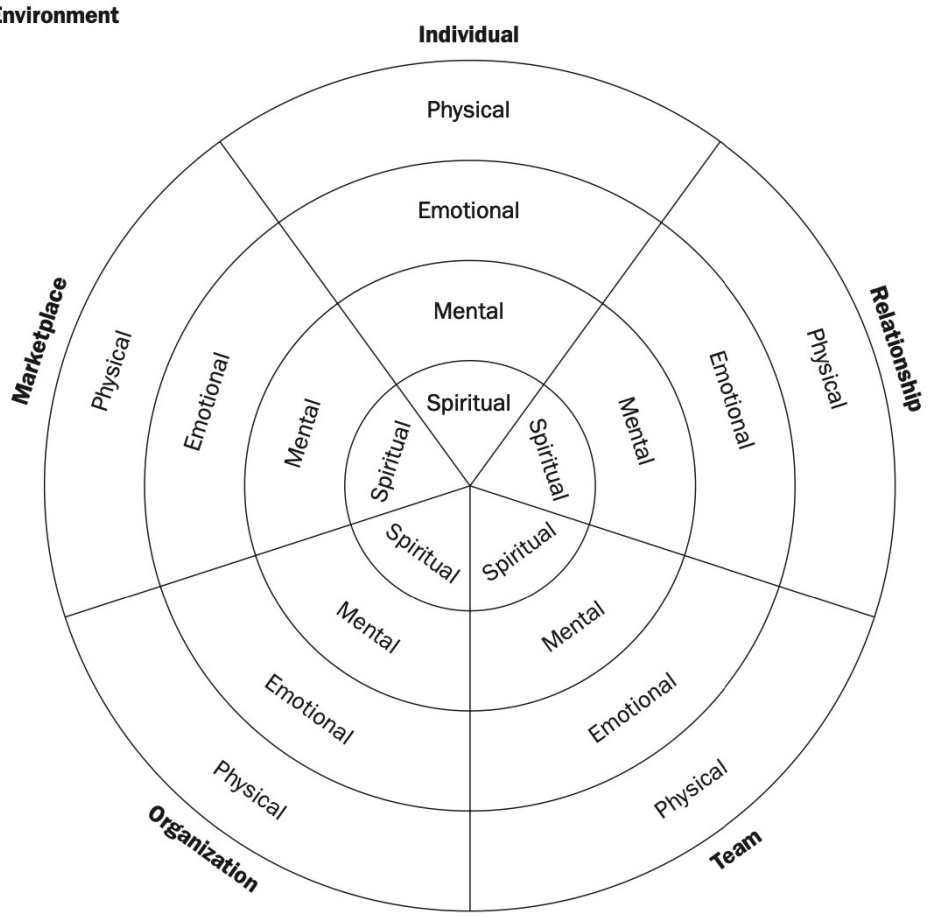
One of the main strengths of the model is its high level of detail. It incorporates the full-stream transformation model (see Figure 7), as three of the nine phases refer to upstream processes, three to midstream processes, and three to downstream processes. Phases I to III represent the upstream stage, focused on setting the foundations for success; Phases IV to VI correspond to the midstream stage, related to design; and Phases VII to IX define the downstream stage, dedicated to implementation (Anderson/Ackerman 2020, p. 170). Another advantage is its applicability to transformations of different sizes. In addition, the model is versatile, as it can be used both by executives who need only a high-level conceptual view and by change process leaders or consultants who benefit from greater detail, as shown in Figure 10 (Anderson/Ackerman 2020, p. 171).

As stated above, the model is based on nine phases that represent the generic process through which change takes place in organizations over time. It integrates change strategy elements related to content, people, and process, and it addresses twenty-one dimensions (Anderson/Ackerman 2020, p. 169). These dimensions are fundamental in order to meet the demands of both the internal and external aspects of successful transformation (Anderson/Ackerman 2020, p. 51).

Anderson and Ackerman support a "multi-dimensional" approach to leading transformation and argue that change leaders must consider both internal and external reality, as well as possess expertise in content and people. This approach can be expanded into twenty-one critical dimensions, both internal and external, that

change leaders must become aware of and capable of addressing (see Figure 9) (Anderson/Ackerman 2020, p. 65).

Figure 9: Twenty-one dimensions of conscious transformation



Source: Anderson/Ackerman 2001, p. 66.

Figure 9 can be divided into five slices, each representing different levels of how people organize. The smallest unit is the individual. Individuals form relationships and create teams, multiple teams form an organization, and multiple organizations form an industry or marketplace. Each element is both a part and a whole at the same time, a part/whole. This concept represents an important insight that conscious change leaders must understand (Anderson/Ackerman 2020, pp. 66–67).

Within each level of organization, four domains of human experience exist: physical, emotional, mental, and spiritual. The physical domain represents external reality, while mental, emotional, and spiritual domains form internal reality. Physical reality includes tangible structures, emotional reality relates to feelings, mental reality includes thoughts and beliefs, and spiritual reality concerns meaning and purpose. These domains apply to individuals and to all organizational levels. Considering four domains across five organizational levels, the final dimension is the environment, resulting in a total of twenty-one dimensions (Anderson/Ackerman 2020, pp. 67–68).

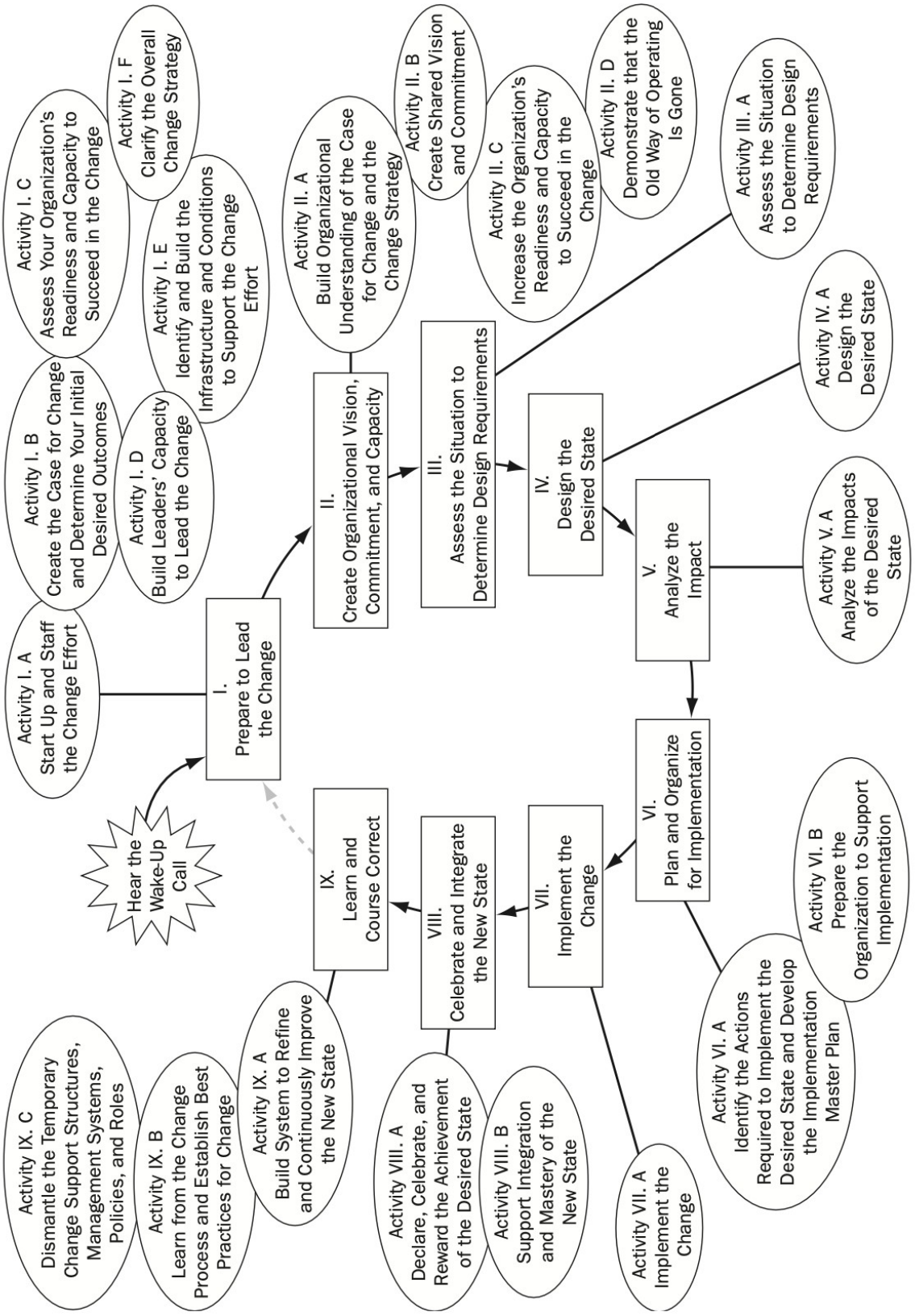
For the change leader, it is therefore essential to consider these dimensions during the planning of change processes, as each dimension has an impact in every one of the nine phases.

It is important to note that a key concept of the model is that its sequential logic can be wrongly interpreted as requiring the completion of one phase before moving to the next. In practice, transformation is not linear, and organizations may operate in two, three, or even four phases at the same time. Moreover, different change initiatives, business units, or regions may be in different phases simultaneously (Anderson/Ackerman 2020, p. 170).

Despite its strengths, the high level of detail may create the impression that the model is a “cookbook” for successful transformation. However, transformation cannot be fully managed, and the Anderson and Ackerman model should be understood as a thinking discipline rather than a project management methodology. In addition, because the model is very comprehensive, it may require adaptation in cases of smaller or less complex change initiatives (Anderson/Ackerman 2020, p. 174).

Figure 10 illustrates the Nine-phase change process model at the activity level, providing a detailed view of the practical steps involved across each of the nine phases discussed above.

Figure 10: Nine-phase change process model: activity level



Source: Anderson/Ackerman 2020, p. 173.

4.6. Comparison between models

The four models analysed do not compete with each other, but illuminate different dimensions of change. Lewin's three-step model offers a foundational view of transformation as a movement from a stable current state to a new equilibrium, highlighting the importance of readiness and consolidation. Kotter's 8-step model translates this logic into a detailed, leadership-driven roadmap for large-scale transformations. Prosci's ADKAR model shifts the focus to the individual level, clarifying what each person needs to successfully adopt new ways of working. Finally, Anderson and Ackerman's nine-phase model provides a highly articulated process view that integrates content, people and process across upstream, mid-stream, and downstream stages of transformation.

In the digital payments industry, these differences matter because not all changes have the same scale or nature. Core banking or payment platform replacements, for instance, are multi-year, high-risk transformations that affect processes, regulation, IT architecture, and customer experience at the same time. In such cases, Kotter's structured, top-down approach and Anderson and Ackerman's nine-phase model are particularly useful as strategic roadmaps to orchestrate leadership alignment, stakeholder engagement, and governance (Ray et al. 2024, p. 1752). Their strength lies in providing a comprehensive sequence of activities and decision points that can be tailored to complex banking environments.

By contrast, many initiatives in digital payments concern the adoption of specific technologies, such as mobile banking apps, digital wallets or new authentication tools. Here, Prosci's ADKAR model is more appropriate because it focuses on the individual level, which is crucial to secure effective user adoption and reduce resistance in highly regulated contexts like banking. ADKAR can therefore complement more strategic frameworks by ensuring that people change their behaviours in line with new digital solutions.

Lewin's model can still play an important role, but less as an operational template and more as a conceptual foundation. It helps leaders understand that they must:

- First lose the attachment to legacy systems (unfreezing)
- Then manage the transition to new digital channels (movement)
- And finally adopt new practices (refreezing)

However, the idea of a definitively "refrozen" state is less realistic in a context of continuous regulatory change and rapid technological innovation. The concrete sequencing of activities is better guided by more recent models such as Kotter, ADKAR, and the nine-phase process model.

4.7. Digital payments and banking regulation

Following the high-level analysis of the digital payments industry and the review of change management foundations and models, this section provides an in-depth examination of the sector's innovations, trends, and regulatory challenges.

This exploration is useful because it reveals operational pressures that necessitate adaptable change management strategies in order to ensure organizational agility, regulatory adherence, and competitive positioning. By grounding the analysis on these developments, this section also establishes the foundation for the institutional framework that will be discussed in section 4.8.

4.7.1. Integration of digital payments in banking

The banking landscape has undergone profound digital transformation in recent years. Integrating advanced technologies, such as AI, ML, and cloud computing into legacy core banking systems requires careful strategies in order to prevent disruptions and operational failures (Widharto et al. 2020, as cited in Munira 2025, p. 78). These strategies encompass both digital transformation roadmaps and change management frameworks to streamline operations, enhance decision-making, and promote efficiency alongside customer-centricity.

A primary driver of this transformation is the growing demand for accessible, user-friendly financial services (Matt et al. 2015, as cited in Munira 2025, p. 78). Mobile banking and digital wallets have emerged as pivotal tools, offering 24/7 access to transactions, bill payments, and account management directly from customers' devices (Laukkanen 2016, as cited in Munira 2025, p. 84). The widespread adoption of solutions like PayPal, Apple Pay, and Google Wallet underscores their role in enabling secure, real-time payments (Khan/Mujtaba 2023, as cited in Munira 2025, p. 84)

Studies show that over 70% of global banking customers now prefer digital channels over in-branch visits, obliging banks to restructure service delivery (Khattak et al. 2023, as cited in Munira 2025, p. 79). This shift demands organizational changes, including unified platforms for automated payments, investment tracking, and financial advisory services. All these services must be offered on a single, seamless platform; otherwise, customers can easily switch to competitors that meet their need. Yet, integration poses challenges: digital ecosystems require major investments in infrastructure, employee training, and change management practices (Diener/Špaček 2020).

All these innovations, together with the trends outlined in the next section, originate in the digital payments sector and are progressively reshaping and integrating into the banking industry.

4.7.2. Main innovations and regulatory trends

The rapid pace of technological innovation often overcome regulatory frameworks' ability to adapt, creating compliance challenges for banks, particularly in data protection and AML (Diener 2020). Addressing these gaps is crucial for sustaining digital transformation in payments and banking.

These innovations help banks navigate modern challenges:

- AI and ML: indispensable for real-time fraud detection and cybersecurity, enabling risk monitoring (Tsindeliani et al. 2021, as cited in Munira 2025, p. 79). AI chatbots and personalized dashboards allow banks to structure customer-centric approaches (Zuo et al. 2021, as cited in Munira 2025, p. 79), while ML and robotic process automation (RPA) automate compliance, fraud checks, and credit analysis, which are labour-intensive tasks (Widharto et al. 2020, as cited in Munira 2025, p. 81). Predictive analytics enhances forecasting accuracy, minimizing risks and boosting efficiency; targeted applications also improve customer experiences and cross-selling opportunities (Maracine et al. 2020, as cited in Munira 2025, pp. 83-84).
- Blockchain and Distributed Ledger Technology (DLT): these are game-changers for secure, transparent transactions, especially cross-border payments and trade finance (Tratkowska 2020, as cited in Munira 2025, p. 79). For identity verification, blockchain enables decentralized systems where customers control data sharing, overcoming repetitive submissions in traditional methods (Buck et al. 2023, as cited in Munira 2025, p. 83).
- Open banking and API integration: both are regulated in the PS2 Directive and strengthened in PS3 Directive and PSR. These two innovations enable secure data sharing between banks and authorized third-party providers (TPPs) via standardized APIs.
- Big Data analytics: this further revolutionized the banking industry by enabling personalized offerings (Mohan 2016, as cited in Munira 2025, p. 79).
- Cloud computing: provides scalable and cost-effective data storage solutions (Aguayo/Ślusarczyk 2020, as cited in Munira 2025, p. 79).

These technologies have allowed banks to compete with FinTechs by offering secure, transparent, and data-driven services (Bashir/Madhavaiah 2015, as cited in Munira 2025, p. 81). However, in order to realize this potential, it is required to

navigate a complex regulatory landscape that balances innovation with security and consumer protection, particularly with the rising of cybersecurity threats.

In the digital banking era, banks face escalating risks from phishing, ransomware, insider threats, and AI-enhanced attacks, compounded by regulatory divergence, geopolitical tensions (e.g., Russia-Ukraine conflict), and third-party supplier vulnerabilities (Block et al. 2019, as cited in Munira 2025, p. 85; UniCredit Financial Report 2025, p. 217). These challenges demand advanced encryption, multi-factor authentication, secure protocols, and agile infrastructure for rapid adaptation.

Regulatory frameworks play a pivotal role in addressing these cybersecurity challenges within the banking sector:

- AML and data protection: these represent two of the most challenging areas for regulatory frameworks, generating significant compliance hurdles for banks (Diener, 2020).
- General Data Protection Regulation (GDPR), PS3 Directive, and the new PSR impose strict data protection and transaction security rules (Aguayo/Ślusarczyk 2020, as cited in Munira 2025, p. 85).
- SEPA Regulation was adopted in 2012 and amended in 2024. This regulation aims to create an integrated and efficient market for electronic payments in euro within the EU. It establishes rules for instant credit transfers and direct debits. The regulation also requires the use of the international bank account number (IBAN) (European Court of Auditors 2025, p. 10).
- Cross-border Payments Regulation (CBPR2): the revised regulation, adopted in 2019, has the objective to enhance the single market's efficiency by eliminating barriers that still exist between payment service users. It covers cross-border payments in euro or the national currencies of participating Member States (excluding Romania and Sweden). PSPs must apply identical charges for cross-border and domestic payments. (European Court of Auditors 2025, p. 10).

- Interchange Fee Regulation (IFR) was adopted in 2015 with the aim to create a single market for card payments and to prevent competition restrictions. It establishes unified technical and business requirements for card-based payment transactions in the EU (European Court of Auditors 2025, p. 10).

Aligning with these frameworks and regulations demands substantial investments in technology and human resources, creating particular difficulties for smaller institutions (Wang et al. 2023, as cited in Munira 2025, p. 85). This reinforces the need for adaptable change management strategies to balance innovation, compliance, and sustainability across the digital payments' ecosystem.

4.8. Institutional framework

The digital payments industry operates within a complex ecosystem that includes regulatory bodies, infrastructure providers, service operators, and industry associations. These institutions play a key role in shaping, enabling, and supervising payment activities across national and international markets (Frolov/Lavrentyeva 2019).

Regulatory and supervisory authorities

Regulatory bodies define the legal framework and ensure compliance, competition, and consumer protection within the digital payments space. In Europe, the European Central Bank (ECB) plays a central role by overseeing payment systems such as TARGET2 and Target Instant Payment Settlement (TIPS), as well as promoting innovation and safety in the payments sector. The EC is responsible for proposing directives, which aim to harmonize and modernize the payment landscape across the EU. The EBA provides technical standards and supervisory guidelines, particularly around SCA and risk management. National central banks, such as the Bank of Italy, implement these rules at the domestic level. Outside the EU, regulators like the Financial Conduct Authority (FCA) in the United Kingdom and

the Federal Reserve or Consumer Financial Protection Bureau (CFPB) in the United States carry out similar functions adapted to their respective jurisdictions.

Payment infrastructure providers (PIPs)

These institutions provide the core infrastructure systems through which digital payments are processed and settled. Global card scheme operators such as Visa and Mastercard operate proprietary card-based payment networks used by financial institutions and merchants worldwide.

In Europe, PIPs like the European Payments Council (EPC) manage SEPA schemes (credit transfers, direct debits) across the Member States. The ECB operates TARGET2 (real-time gross settlement for large-value euro payments) and TIPS (instant payments between banks). SWIFT, even if it is not a payment system itself, remains the dominant global messaging network for cross-border payment instructions.

PSP and Big Tech

The operational delivery of digital payments involves various actors. Traditional banks (e.g., UniCredit, ING, BNP Paribas) integrate payment services within comprehensive banking offerings. FinTech PSPs like Adyen, Stripe, Square (Block Inc.), and Checkout.com are specialized in payment gateways, APIs, and processing for e-commerce or digital businesses. Big Tech platforms like Apple Pay, Google Pay, and Samsung Pay, provide digital wallets embedded in smartphones and wearables. Neobanks such as Revolut, N26, and Monzo offer app-centric banking and payment experiences. Thanks to these characteristics, they offer user-friendly design and cross-border functionalities.

Industry associations and standard-setting bodies

To ensure interoperability, security, and industry coordination, several organizations develop technical standards and promote best practices. The EPC is a key

actor in managing SEPA schemes and facilitating harmonization across European PSPs. Payments Europe represents card issuers and acquirers and advocates for a balanced regulatory environment. Europay, Mastercard and Visa (EMV) Co, a consortium supported by major card networks, maintains EMV specifications used globally in chip cards and contactless payments. The Web Payment Working Group develops open standards for web-based payments, while Open Banking Europe (OBE) focuses on enabling secure data sharing and payment initiation through APIs in line with PS2 and PS3 Directives frameworks.

4.8.1. Company adaptation to the institutional framework

Companies adapt to the institutional framework by aligning their strategies, structures, and behaviours with the formal and informal rules that govern the markets in which they operate. Besides regulations and norms, the institutional framework includes cultural expectation and industry standards, and adapting to it is essential for legitimacy, competitiveness, and long-term success.

From a theoretical perspective, the institutional theory outlined by Di Maggio and Powell, suggests that organizations often conform to institutional pressures to gain legitimacy. These institutional pressures can be divided into coercive, normative, and mimetic. Coercive pressures derive from laws and regulations, such as the PS Directives. Normative pressures emerge from professional standards and expectations (e.g., cybersecurity norms), while mimetic pressures involve imitation of successful competitors during uncertainty (e.g., adopting mobile payments or open banking models) (Di Maggio/Powell 1983).

Companies respond to these pressures in different ways (Di Maggio/Powell 1983):

- Compliance and formal alignment: updating internal policies, procedures, and technologies in order to meet new legal requirements (e.g., GDPR, PS3 Directive).

- Strategic adaptation: rethinking business models, product offerings, or market approaches in order to adapt to institutional expectations (e.g., offering instant payments or open APIs).
- Proactive engagement: participating in regulatory discussions, lobbying, or collaborating with regulators in order to shape future frameworks.
- Symbolic adoption: implementing visible changes to demonstrate legitimacy, even if a full transformation is not yet achieved.

It is important to note that adaptation is not just passive compliance. Firms must innovate within institutional constraints, in order to turn regulation into a strategic advantage. For instance, by being early adopters of compliant technologies or by marketing trust and transparency as value propositions.

4.8.2. Institutional influence on change management

Institutional theory provides the theoretical foundation in order to understand the institutional influence on change management practices. DiMaggio and Powell (1983), in their Institutional theory, argue that organizations conform to institutional pressures to gain legitimacy beyond mere efficiency.

To demonstrate this influence practically, empirical evidence from China shows that bank digital transformation, measured by the number of digital patents issued, significantly increases the number of patents filed by financed companies (including invention patents and grants), as well as their innovation efficiency (patents per R&D euro spent). This happens mainly because digital banks have easier access to loans and better financing terms. This also strengthen company governance by limiting fund misuse by managers. The effects are even stronger for smaller companies or those with tighter budget (Zhou/Lin 2023, p. 3).

In Europe, PS2 and PS3 Directives pressures drive similar adaptations: banks have to enhance innovation capability (e.g. FinTech partnerships, open APIs) and resilience (e.g. AI fraud detection, compliance automation), in order to design strategic

responses to regulatory shocks and fostering operational agility (Diener & Špaček 2021). These cases illustrate institutional pressures' tangible impact on organizational performance.

The regulatory frameworks in the digital payments sector have not only standardized risk and operational controls, but have also institutionalized best practices for technological change, such as agile implementation, cross-functional teams, innovation labs, and external partnerships (e.g., FinTech collaborations), as evidenced by German banks' responses to PS Directive pressures (Diener & Špaček 2021, p. 12). These frameworks force organizations to conform, in order to have uniform compliance and fostering mimetic/normative learning through shared practices (e.g., API standardization, employee upskilling).

Such frameworks demand substantial technological innovations and investments in human resources (Wang et al. 2023, as cited in Munira 2025, p. 85), requiring adaptable change strategies that embed institutional legitimacy into organizational transformation. Thus, change management is profoundly shaped by institutional dynamics.

5. Methodology

Research design

This thesis has adopted a qualitative case study methodology that combines a theoretical analysis of change management with an empirical investigation of UniCredit in the digital payments context. The research follows a two-step logic: first, it builds a conceptual framework grounded in academic literature on change management and institutional adaptation; second, it applies this framework to the UniCredit case in order to derive operational insights.

Analytical framework

In the first part, the thesis has defined the key analytical dimensions to be used in the case study. A central axis concerns the triggers of change, focusing on the identification of internal and external forces that drive transformation, with particular emphasis on regulatory pressures such as those arising from the PS3 Directive. A second axis examines organizational responses to institutional change, posing the base to analyse how UniCredit interprets and reacts to regulatory and technological shifts in the digital payments sector.

Then, building on the work of BCG, the analysis then explores four critical imperatives for successful transformation: leaders must personally lead the change, change must happen quickly, employees must be included, and new behaviours must take root organically. These imperatives provide a bridge between abstract change management theory and concrete organizational practice.

Model application and case analysis

The second step is the thesis's core objective: evaluating which of the four established change management models UniCredit applied to operationalize BCG's four imperatives. Specifically, Kotter’s model assesses alignment within the key stages (creating urgency, articulating a clear vision, and generating short-term wins);

Lewin's framework examines unfreezing, changing, and refreezing dynamics; ADKAR explores development of individual and collective capabilities; and the Nine-phase model tests fit with a sequential transformation path. This targeted mapping reveals the extent of theoretical adoption in practice, by identifying Kotter as the dominant framework.

On this basis, the empirical case analysis focuses in particular on the development of the UniCredit CEE division in the pre-Covid period. This time frame is chosen deliberately, as it is not distorted by exceptional economic or social shocks, and because it has already been examined in depth by a high-quality study that analyses UniCredit across the four critical points structuring the change process. The thesis thus reviews the strategies adopted by UniCredit to adapt to environmental and regulatory changes, and evaluates to what extent, and in which ways, these strategies are consistent with the change management models previously discussed. This integrated methodological design allows for a coherent dialogue between theory and practice. It supports the extraction of generalizable lessons for digital payments and banking operators facing similar transformation challenges.

6. Case study analysis: UniCredit

6.1. Qualitative overview of UniCredit

6.1.1. Company profile

UniCredit Group is a pan-European banking and financial services powerhouse headquartered at Gae Aulenti square in Milan, Italy. Formed in 1998 through the merger of UniCredito and Credito Italiano, alongside other entities, it has grown via strategic consolidations, establishing a robust footprint in Central and Eastern Europe (CEE). (Riva/Pillotti 2018, p. 8).

UniCredit operates in 13 European countries, with direct presence via subsidiaries, branches, or partnerships, serving over 20 million clients across more than 30 markets. As of June 2025, it employed 68,000 people across 3,000 branches, especially in Italy, Germany, Austria, Poland, and high-growth CEE nations (UniCredit 2025; UniCredit Annual Report 2024). This structure positions UniCredit as a leading commercial bank, combining the know-how in local market with group-wide strengths.

6.1.2. Mission and vision

UniCredit's mission prioritizes customer value:

"We UniCredit people are committed to generating value for our customers.

As a leading European bank, we are dedicated to the development of the communities in which we live, and to being a great place to work.

We aim for excellence and we consistently strive to be easy to deal with.

These commitments will allow us to create sustainable value for our shareholders. (UniCredit 2025)"

This framework centers clients while embedding community impact, employee well-being, operational simplicity, and long-term shareholder returns, fostering tailor-made solutions across corporate banking, transaction services, capital markets, structured finance, and investments (Riva/Pillotti 2018, p. 9).

UniCredit's vision positions it as the Bank for Europe's future, a pan-European institution. Guided by the purpose of "Empowering Communities to Progress", UniCredit provides the communities it serves with instrumental mechanisms for advancement, delivering products tailored to all stakeholders while developing the potential of its employees and clients (UniCredit 2025).

6.1.3. Japanese-inspired operational philosophy

At the base of this lean and results-oriented operational model, UniCredit builds its strategy on three fundamental and complementary concepts borrowed from Japanese culture: Monozukuri, Hitozukuri, and Kotozukuri. These concepts extend Toyota's philosophy to foster sustainable value creation (Riva/Pillotti 2018, p. 9; Ballé et al. 2019).

Monozukuri embodies the art of "making things" focusing on quality, cost, time, and continuous improvement, maintaining craftsmanship in industrial-scale production. In banking, this is translated in streamlining processes, eliminating waste, and delivering robust digital payment solutions reliably and affordably (Riva/Pillotti 2018, p. 9).

Hitozukuri, the art of "making people", emphasizes lifelong learning, problem-solving skills, and cross-functional collaboration to develop talent. For UniCredit, it involves reskilling employees for agile environments and fostering a culture that drives innovation through hands-on problem resolution (Riva/Pillotti 2018, p. 9).

The third concept is Kotozukuri and it means "making things happen". It captures the passion for turning bold visions into reality via strong narratives, customer resonance, and energetic leadership (Ballé et al. 2019). It addresses three challenges:

crafting resonant stories aligned with client expectations, identifying talents to realize them, and energizing cross-functional execution from design to delivery.

UniCredit adapts these concepts for digital transformation in order to ensure operational excellence (Riva/Pillotti 2018).

6.2. Current operating model

6.2.1. UniCredit's recent transformation efforts

UniCredit employs a Lean banking methodology to drive process efficiency, performance, and waste elimination, to identify and remove non-value-added activities. It is focused on the customer (Cosma 2003, as cited in Riva/Pillotti 2018, p. 2). As outlined in Chapter 4, Lean methodologies enhance Kotter's change management model by providing operational discipline. This synergy makes UniCredit's operating model particularly relevant for analysis.

Besides being a low-cost way to eliminate non-value-added activities, Lean banking in UniCredit is used to redesign the internal processes of the bank, focusing on customer satisfaction and waste reduction. It targets both the upper income statement (revenues) through higher customer retention and the lower (costs), via containment and elimination of unnecessary waste (Majorana/Morelli 2011, as cited in Riva/Pillotti 2018, p. 10).

Quality of service, speed of execution and costs are the three fundamental variables in the banking and financial sector and today many banks are now shifting their focus to improve operational efficiency. Financial institutions leveraging lean banking operations report results of strong cost reduction and maintain cost-efficiency ratios below the industry average (Kovacs 2016, as cited in Riva/Pillotti 2018, p. 2).

UniCredit's Lean banking strategy follows a structured five-phase process (Delgado et al. 2010, as cited in Riva/Pillotti 2018, p. 13):

- Phase A: set project objective, scope, and key milestones, then map the process to identify problem areas and error causes.
- Phase B: identify quality metrics and identify waste along with inefficient steps.
- Phase C: brainstorm cause and effect relationships and investigate root causes of inefficiencies.
- Phase D: ideate solutions by problem area, prioritize them, convert top priorities into specific initiatives, and develop detailed action plans.
- Phase E: define and track KPIs, ensure results through change management strategies, and apply structured implementation monitoring.

This model exemplifies UniCredit's operational excellence in digital payments adaptation.

6.2.2. UniCredit’s current positioning in the digital payments sector

UniCredit has decisively strengthened its competitive positioning in the digital payments sector through the acquisition, completed on March 6, 2025, of Aion Bank SANV and Vodeno Sp. zo.o. for an amount of €376 million. This strategic move marks an acceleration in digital banking expansion and represents one of the first operations of its kind by a major European bank: acquiring full ownership of core technology without third-party dependencies, sharply differentiating from pure technology providers (UniCredit Financial Report 2025, p.27).

The combined capabilities of Aion (with a Belgian banking license) and Vodeno (a cloud-native business-as-a-service platform with blockchain elements) provide UniCredit with next-generation core banking technology: a scalable, flexible, and fully operational platform based on advanced API connectivity and integrated smart contracts. This infrastructure enables seamless integration with traditional

banking processes, drastically reducing time-to-market for new solutions. The acquisition enhanced internal expertise through the integration of approximately 200 engineers, developers, and data scientists, and enabling rapid innovation in response to market changes. The result is a hybrid offering that combines the premium user experience of neobanks (high quality, intuitiveness) with the financial strength of a systemic player like UniCredit (UniCredit Financial Report 2025, p. 49).

6.3. Evidence of change management foundations in UniCredit

The BCG analysis of UniCredit's CEE division, already cited in Chapter 3, demonstrates that the bank has long been structured to adopt effective change management strategies, creating a culture of transparency, agility, inclusion, and organic evolution.

This section explores these foundations through BCG's four digital imperatives (see Figure 4).

1. **Leaders must personally lead the change**

Since 2015, UniCredit CEE's management committee has established open-door management committee meetings. Employees can interact via Slido, an audience interaction tool for meetings and conferences, asking questions to UniCredit Group's top management, the CEE division head, and committee members, while responding to instant polls. The reason behind this choice is that, by joining the discussion, employees can understand the most important issues related to their division (BCG 2018, p. 2).

This practice has also required senior managers to come better prepared and ready to be challenged, rather than directing change from behind closed doors. By

leading openly, they build employee confidence that their efforts deliver real results (BCG 2018, p. 2).

BCG highlights UniCredit CEE's ongoing leadership pipeline development through the "Extended Succession Planning Program", which assesses top-management readiness. From 2014 to 2017, cross-functional experience among business/competency line leaders more than tripled (12% to 45%), while cross-country experience rose 17 percentage points (45% to 62%). This huge effort allowed the Italian bank to have effective leaders, ready to drive change initiatives (BCG 2018, p. 3).

Andrea Orcel, UniCredit's current CEO, is a clear example of effective leadership, despite its controversy. Known as the "shark of global finance" for his aggressive dealmaking and negotiation capability, Orcel drives consistent growth by using bold structural reforms (World Finance 2019). His top-down style breaks inertia, imposes urgency, and forces transformation, aligning with Kotter's 1 st step: creating a sense of urgency.

2. **Change must happen quickly**

In 2018, UniCredit CEE head Carlo Vivaldi noted: “What is most difficult about change today, is altering how the organization works, adapting people to the speed of change outside of the organization." In order to do this, Vivaldi adopted Agile methodologies (BCG 2018, p. 3). As discussed in Chapter 4, Kotter's model is enhanced by integrating Agile's iterative approach.

UniCredit began with teams experimenting independently, supported by Agile CEE, a group of trained senior managers delivering workshops. This idea of having a powerful guiding coalition to start a successful change process, is outlined in the 2nd step of Kotter’s model. In fact, by January 2018, more than 5.000 people had completed Agile training, participated in Agile workshop, or attended an Agile

webinar (BCG 2018, p. 3). This trained employees across the organization to be ready for change.

Adopting agile, allowed the company to overcome the obstacle of having many cultures inside of it. The result was clear: multiple cross-country projects have been rolled out simultaneously within six months versus two to three years previously, with significant productivity gains. For instance, the number of CEE mobile-banking releases has doubled in less than one year (BCG 2018, pp. 3-4).

In this way, organizational culture has been promoted throughout the entire organization, fostering the readiness to change.

3. **Employees must be included**

Employees today value transparency and they want their voices to be heard in collaborative work environments. Digital supports this kind of inclusiveness, in terms of more open communication and new ways of working. In order to promote this need, UniCredit CEE has adopted numerous approaches. Firstly, as already described, the company decided to livestream its management committee meetings. Moreover, back in 2017, was launched a digital task assignment platform: Marketplace. This agile-based platform was designed to connect those seeking skills unavailable in the local office with employees based elsewhere who were looking for collaboration. In this way, cross-functional collaboration was encouraged and employees' skills have been efficiently exploited (BCG 2018, p. 4).

Beyond satisfaction, Marketplace offers participants tangible rewards: points that can be exchanged for books, courses, and even dinner with their local CEO. The platform boosted engagement, cuts costs, and speeds up execution (BCG 2018, p. 5). This rewards-based system is aligned with the 8 th step of Kotter's model: "Institutionalizing new approaches". It is the last step and explains that by aligning rewards, is easier for a company to embed new behaviours.

4. New behaviours must take root organically

In order to have a lasting change, new behaviours must become ingrained naturally within the organization. UniCredit CEE do this by starting small, engaging early adopters, and sharing best practices (BCG 2018, p. 5). This mirrors Kotter's 6th step: generating short-term wins. After these successes, leaders communicate victories widely, spreading positivity and engagement across the workforce to build momentum for broader adoption.

7. Conclusion and future perspectives

This thesis has demonstrated that the digital payments sector faces multifaceted change management challenges: regulatory (PS3 Directive and PSR compliance costs, IT upgrades), technological (API integration, SCA mandates), organizational (staff resistance, skills gaps), and customer-related (trust and seamless usability). Structured change management models like Kotter eight-step model, provide actionable pathways to mitigate and address these challenges, as evidenced by its application in UniCredit CEE division context. As illustrated in Chapters 4 and 6, Kotter's model benefits from integration with Agile and Lean methodologies. These enhancements deliver measurable value and drive structural transformations during rapid digital disruption.

Anderson and Ackerman, in their analysis, emphasized that effective transformational change must be comprehensive, addressing both human and business dimensions that generic models often overlook. In the today’s environment, this means to:

- Recognize transformation as a multi-dimensional aspect, that impact structures, people, and culture.
- Design change journeys that integrate content (what changes) with people (who change).
- Enable ongoing facilitation for learning and course correction.
- Prioritize leaders, employees, and stakeholders systematically.
- Build the necessary infrastructures, roles, and conditions for success.
- Manage mindset and culture shifts.

These principles underscore the need for adaptive strategies in a sector where seamless platforms are essential and is demanded heavy investments in infrastructure, training, and compliance.

7.1. Implications for UniCredit and European banking industry

For UniCredit and other European incumbents, realizing digital potential requires navigating regulatory complexity and institutional dynamics that profoundly shape change processes (Wang et al. 2023, as cited in Munira 2025, p. 85).

Institutional theory explains how change management in digital payments is profoundly shaped by external pressures: regulative (PS3 Directive and PSR mandates), normative (industry standards for open finance), and cognitive (taken-for-granted digital-first mindsets). UniCredit's adaptation reflects isomorphic tendencies: coercive alignment with EU regulations, mimetic adoption of FinTech practices, and normative benchmarking against agile competitors. This framework reveals why structured models like Kotter succeed, they bridge institutional constraints with internal transformation.

In this fast-moving, disruptive digital era, change management demands flexible approaches beyond formal programs. Kotter's evolution with Lean and Agile exemplifies practical adaptation: organic, digitally enabled practices create "snowball effects" where initial successes inspire further transformation. As UniCredit CEE's Vivaldi noted: "Change that sticks through the snowball effect will take off and its success serves as an example, breeding more efforts. That's the only way to create sustainable change in an environment where everything changes so quickly" (BCG 2018, p. 6).

7.2. Study limitations and suggestions for future research

This thesis provides theoretical and case-based insights into change management in digital payments but has various limitations. It is focused on European and Italian market, relies on secondary sources, and it uses a qualitative methodology without quantitative validation of models.

Future research should empirically test the analysed change management models in PS3 Directive implementations via surveys in order to measure the level of compliance and adoption rates; follow FinTech-bank convergence over time through institutional pressures; develop quantitative metrics; explore AI integration with traditional models; and compare EU vs. non-EU contexts for adaptable strategies.

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List of Interview Partners

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Schneider, Paul, Vice-President, Coffee 123, Lausanne, Telephone Interview, August 22, 2015.

Zarc, Anna, Head of Business Development, Happy Food AG, Email, July 5, 2015.

Appendix

Note: Items like questionnaires, summaries of interviews, interview guidelines or large tables and illustrations which are not directly necessary for the comprehensibility of the text are placed into the appendix. For case studies, an appendix is generally not permitted.

Declaration on honor

Note: Print the declaration on honor separately, sign it and add it at the end of your thesis. The declaration on honor must be part of the bound copies.