FinTech

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Review

Enablers and Barriers in FinTech Adoption: A Systematic Literature Review of Customer Adoption and Its Impact on Bank Performance

Amna Albuainain [1,2,3,*] and Simon Ashby [1,2]

[1] Department of Accounting, Corporate Finance and Taxation, Faculty of Economics and Business Administration, Ghent University, 9000 Ghent, Belgium
[2] Department of Accounting and Finance, Vlerick Business School, 1210 Brussels, Belgium; simon.ashby@vlerick.com
[3] Department of Finance and Economics, Qatar University, Doha P.O. Box 2713, Qatar
* Correspondence: amna.albuainain@ugent.be

Abstract

The rise of financial technology (FinTech) has generated substantial research on its adoption by customers and the associated implications for traditional banks. This systematic review addresses two questions: (1) What factors enable or hinder consumer adoption of FinTech? (2) How does consumer adoption of FinTech affect the performance of traditional banks? Following the PRISMA guidelines, we screened and analyzed 109 peer-reviewed articles published between 2016 and 2024 in Scopus and Web of Science. The findings show that adoption is driven by economic incentives, digital infrastructure, personalized services, and institutional support, while barriers include limited literacy, perceived risk, and regulatory uncertainty. At the bank level, adoption enhances operational efficiency, customer loyalty, and revenue growth but also generates compliance costs, cybersecurity risks, and competition. Consumer adoption studies primarily employ the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT), often extended with trust and privacy constructs. In contrast, bank performance research relies on empirical analyses with limited theoretical grounding. This review bridges behavioral and institutional perspectives by linking consumer-level drivers of adoption with organizational outcomes, offering an integrated conceptual framework. The limitations include a restriction of the retrieved literature to English publications in two databases. Future work should apply longitudinal, multi-theory models to deepen the understanding of how consumer behavior shapes bank performance.

Keywords: fintech; adoption; bank performance; enablers; barriers; systematic literature review

JEL Classification: G21; G23; O33; G20; G30; L26

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1. Introduction

Financial technology (FinTech) describes the implementation of modern technological solutions to deliver financial services that improve operational efficiency, individualized service delivery, and accessibility for both consumers and institutions [1]. Over the past decade, FinTech has transformed global financial services by disrupting conventional banking systems and creating new financial products such as mobile payments, peer-to-peer lending, robo-advisory services, and blockchain-enabled solutions. The expanding FinTech

ecosystem includes startups, incumbent banks, technology providers, and regulators, who jointly drive financial innovation [2]. Consumer adoption of FinTech is pivotal as it prompts banks to revise their business models, foster innovation, and integrate technological advancements to remain competitive [3].

Various enablers, such as convenience, ease of use, and enhanced customer experiences and institutional support, encourage consumer adoption of FinTech [4]. By institutional support we mean policy, governance, and resource arrangements such as regulatory clarity, supervisory guidance, and shared digital infrastructure. At the same time, significant barriers—including trust issues, cybersecurity concerns, and inadequate financial literacy—continue to impede the widespread adoption of FinTech [2]. Together, these consumer-level dynamics shape banks' strategic responses, operational efficiency, customer engagement, and overall market competitiveness.

The integration of FinTech presents both opportunities and challenges for traditional banks. On the one hand, banks can leverage FinTech to enhance their operational efficiency, offer improved and personalized customer services, and develop new revenue streams through innovative products and services [2]. On the other hand, banks face considerable challenges in adapting to rapid technological changes, particularly in the context of maintaining customer trust and managing risks associated with digital transformations, related to data security, regulatory compliance, and potential disruptions in customer service [3]. We use digital transformation to describe an organization-wide, strategy-led redesign of processes and service models using digital technologies (e.g., APIs, mobile platforms, data analytics, and AI) to deliver measurable performance outcomes.

Academic interest in FinTech has expanded rapidly, particularly along two dimensions: (1) the factors that drive or hinder consumer adoption, and (2) the impacts of its adoption on bank performance. Several systematic reviews have mapped these domains in isolation; for example, the authors of [4] analyzed 16 studies on FinTech adoption. In doing so, they showed that trust, financial literacy, user attitudes, and perceived risk act as essential drivers according to the Technology Acceptance Model (TAM) and Unified Theory of Acceptance and Use of Technology (UTAUT) models. They examined payments, lending, crowdfunding, and blockchain to analyze relevant security aspects, legislative frameworks, and business model innovations. The authors of [5] performed a meta-analysis to synthesize empirical research on the determinants of the adoption of services such as mobile banking, mobile money, e-wallets, and internet banking. They analyzed these factors through the lens of established technology adoption models such as the TAM and UTAUT, then categorized and quantified the effects of various determinants of adoption and highlighted some research gaps, especially the under-representation of supply-side studies and large-scale field experiments. On the performance side, the authors of [6] studied both bank- and country-level FinTech metrics, compiling key determinants influencing bank profitability. They examined previous research methods and theoretical approaches, including disruptive innovation and consumer theory, before suggesting future research directions for Islamic banking, developing economies, and risk management. The authors of [7] used bibliometric and thematic methods to show how FinTech affects bank efficiency, profitability, risk management, stability, and competitiveness. They also examined how regulatory frameworks and infrastructure can both support and hinder these effects. However, the existing body of review work lacks a comprehensive study connecting micro-level drivers of adoption to macro-level performance results. While adoption research is richly grounded in models such as the TAM, UTAUT, and the Theory of Planned Behavior (TPB), performance studies have typically remained empirical. Recent reviews still look at consumer adoption and bank performance as two separate areas. For example, Ref. [8] provided a review of the use of FinTech and how it affects financial inclusion, while Ref. [9] systematically analyzed how FinTech-based innovation affects financial performance

and stability. While these studies contribute to the field, they are limited to one aspect of the adoption–performance dichotomy. Our systematic literature review is, to the best of our knowledge, the first to bring these two areas together into a unified framework. We combine these two research streams into thematic clusters that link consumer-level enablers of and barriers to the adoption of FinTech (e.g., digital literacy and ease of use) with bank-level outcomes (e.g., profitability, efficiency, and competitiveness). In this way, we offer a novel cross-level perspective that addresses a major gap in the literature.

This review extends the application of the TAM and UTAUT, which are conventionally employed to clarify technology adoption at the individual level, in order to examine how behavioral factors influencing FinTech adoption—such as trust, digital infrastructure, and personalized customer experiences—impact organizational performance outcomes. We think of these individual adoption traits as being either enablers or barriers that indirectly affect a bank's performance by affecting customer engagement, service innovation, and operational efficiency. Through integrating these behavioral models with the literature on profitability, competitiveness, and regulatory compliance, we formulate a theoretical linkage between micro-level adoption dynamics and macro-level strategic performance. Our analysis expands on this relationship by combining the results into a single framework that shows how consumer adoption affects bank-level outcomes.

This study aims to develop an integrated conceptual framework that links consumer-level enablers and barriers of FinTech adoption to organizational-level bank performance outcomes, including operational efficiency, profitability, and competitiveness. Guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework [10] and recommended methodologies [11], we address the following research questions:

- RQ1: Which enablers and barriers affect FinTech adoption from a consumer perspective?
- RQ2: How does FinTech adoption influence bank performance?

Synthesizing evidence across pertinent domains, this review (a) consolidates fragmented findings, (b) identifies theoretical and methodological gaps, and (c) provides a conceptual foundation for future cross-level research in digital finance.

Our findings also significantly contribute to both academia and industry by (a) clarifying the relationship between consumer-driven FinTech adoption and bank performance, and (b) offering actionable insights for practitioners, policymakers, and researchers. This comprehensive understanding can then support stakeholders in formulating targeted strategies to effectively leverage the adoption of FinTech to enhance consumer trust, optimize bank performance, and manage the risks associated with digital transformations in financial services.

The remainder of this paper is structured as follows. Section 2 explains the methodology, including the PRISMA-based search strategy, eligibility criteria, and data sources applied in the systematic review. Section 3 presents the results, organized around the two research questions: the enablers of and barriers to consumer adoption of FinTech (RQ1) and the impacts of FinTech adoption on bank performance (RQ2). Section 4 discusses these findings in depth, integrating theoretical perspectives and highlighting the linkages between micro-level adoption drivers and macro-level institutional outcomes. Section 5 outlines the theoretical, practical, and policy implications arising from the review. Section 6 identifies promising avenues for future research. Finally, Section 7 concludes by summarizing the study's key contributions, limitations, and overall insights.

2. Methodology

2.1. Research Strategy

We adhered to the PRISMA 2020 reporting guidelines for systematic reviews. The PRISMA flow diagrams for RQ1 and RQ2 are shown in Figures 1 and 2, and the completed PRISMA 2020 checklist is provided in the Supplementary Material Table S1. Our two

main research questions (RQ1 and RQ2) focus on key barriers and enablers impacting the adoption of FinTech solutions alongside bank performance indicators or indices. We conducted separate keyword searches for both research questions, in order to collect the most relevant data published between 2016 and 2024. To enhance scrutiny and the management of bulk literature, all identified articles were exported to the Rayyan.ai. Records were screened in Rayyan (titles/abstracts, and then full texts) by two reviewers, and any disagreements were resolved by discussion. The reasons for full-text exclusion are summarized in the PRISMA diagrams and described in the text.

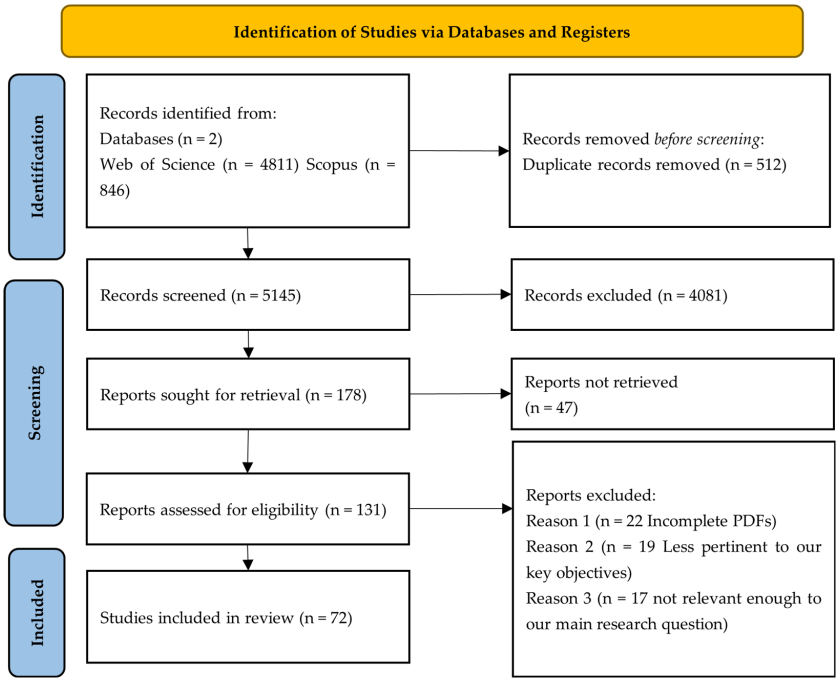


Figure 1. PRISMA flowchart for RQ1.

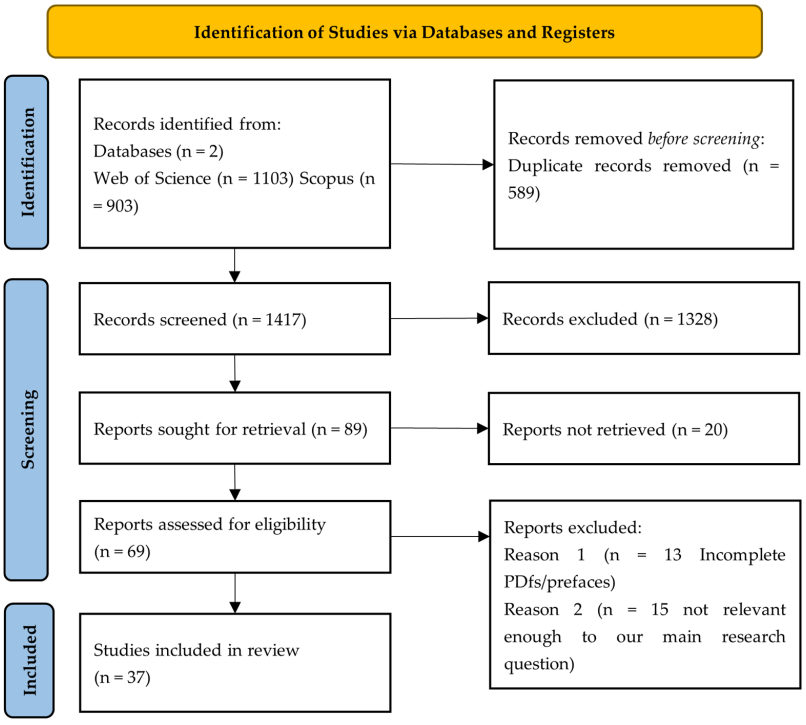


Figure 2. PRISMA flowchart for RQ2.

2.2. Eligibility Criteria

For our study, we used the Population, Intervention, Comparison, Outcome (PICO) framework. Figure 3 identifies the relevant elements of the framework in terms of our assessment, which focused on opportunities and challenges related to consumers adopting FinTech and banking system efficiency when integrating FinTech technology.

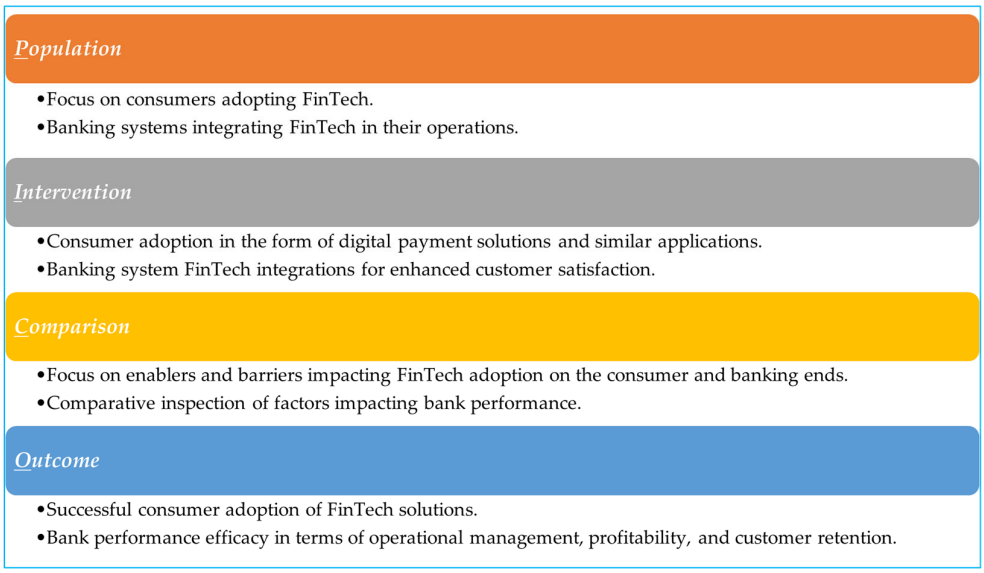


Figure 3. PICO framework for our systematic literature review.

All keyword selection and research criteria were tailored to identify studies that examine the impacts of FinTech technologies on financial behaviors and progress from the customer perspective, including enablers of and barriers to adoption. To ensure the quality and relevance of the evidence base, we only included peer-reviewed primary studies with a clearly defined research design and measurable outcomes.

The review excluded gray literature sources, including working papers, theses/dissertations, industry and government reports, conference proceedings, book chapters, and non-indexed journals, to preserve peer-review standards and achieve replicable screening. The inclusion and exclusion criteria that we used to screen and select the articles are summarized in Table 1.

We only included articles written in English because the greater part of global scientific publications (95–98%) are published in that language [10]. Thus, to ensure accessibility to the most extensive and visible academic databases, we restricted the search to English-only sources for the key subject. Furthermore, limiting our database search to the last eight years provided a more up-to-date and evolving perspective of research advances in the field. It also enabled the detection of salient trends and developing frameworks.

Our study did not include topics related to Islamic finance, green finance, and blockchain technologies, in order to ensure that the focus remained on examining the enablers of and barriers to FinTech adoption and its effects on bank performance. These areas frequently bring about distinct financial models, regulatory frameworks, and a rate of adoption that diverges from normal FinTech ecosystems. Although including these can provide a comprehensive view of various FinTech facets, it can also lead to a diluted analysis of the key determinants of FinTech adoption and its impact on banking institutions. Thus, by excluding these specialized domains, our study provides a sharper assessment of the baseline factors that facilitate or hinder FinTech adoption in the conventional banking sector.

Table 1. Eligibility criteria for selecting research items.

Criteria	Research Question 1		Research Question 2	
	Inclusion	Exclusion	Inclusion	Exclusion
Study design	Modern comparable methodologies with advanced statistics and well-reputed designs.	Weak/old study designs.	Modern comparable methodologies with advanced statistics and well-reputed designs.	Weak/old study designs.
Study focus	Studies that explicitly discuss consumer adoption of FinTech services or technologies.	Articles discussing the corporate adoption or technological development of FinTech without focusing on consumers. Articles related to Islamic finance/FinTech and green and energy-related finance.	Studies explicitly analyzing the relationship between FinTech adoption and bank performance.	Articles focusing on FinTech consumer adoption without exploring bank performance. Studies discussing FinTech in industries other than banking. Articles related to Islamic finance/FinTech and green and energy-related finance.
Publication Type	Journals containing research articles that only include empirical data, emphasizing quantitative studies.	Journals excluded from indexing, systematic literature review publications, and book chapters.	Indexed journals containing research articles that only include empirical data, emphasizing quantitative studies.	Incomplete abstracts, commentaries, and short papers. Journals excluded from indexing, systematic literature review publications, and book chapters. Conference proceedings and papers centered around conceptual discussions.
Key disciplines	Articles from business, management, economics, finance, and social sciences.	Other disciplines.	Articles from business, management, economics, finance, and social sciences.	Other disciplines.
Language	Articles in English only (or easily translatable to English).	Articles in any language other than English.	Articles in English only.	Articles in any language other than English.
Time frame	2016–2024			

2.3. Data Source and Research Strategy

The use of Scopus and Web of Science databases was necessary because they offer extensive multidisciplinary coverage with standardized metadata, citation information, and advanced filtering/deduplication capabilities required for a reproducible PRISMA workflow. The exclusion of Google Scholar was necessary because it combines peer-reviewed and non-peer-reviewed materials and lacks standard filters for document type and indexing status. SSRN was excluded because it mainly hosts working papers that have not been peer-reviewed in journals. We acknowledge that the exclusion of these sources may have resulted in the omission of some relevant studies, and we note this as a limitation.

Using variable keywords and their combinations, we conducted a preliminary search in Web of Science and Scopus. Rayyan was used to store, highlight, document, and include the retrieved articles when synthesizing the results. In the following, we emphasize the PICO framework. This is to ensure that only relevant articles are included. These are articles that yield qualitative and quantitative deliverables vis-à-vis the key research questions.

The search strategy involved free text words, keywords, mixed keywords, and truncation operators. We initially categorized the studies based on titles and abstracts, which

was followed by in-depth full-text reviews utilizing the Rayyan software. Through this, we recorded the prescribed information on PICO for each of the research items in tabular form. Excel data sheets were maintained in the form of pre-designed sheets for ease of synthesis and bias assessment at the end of the systematic review.

2.4. Research Strings

We used the following research strings for a detailed investigation and thorough exploration of research directions on the specified research questions. The barriers and impacts on bank performance using FinTech technologies were assessed using the keywords tabulated in Appendix A (Tables A1 and A2) representing the Web of Science and Scopus searches for RQ1 and RQ2. We included 73 articles for RQ1 (enablers of and barriers to FinTech adoption) and 37 articles for RQ2 (impact of FinTech on bank performance). After the final selection in Rayyan, the included studies were exported along with their full-text PDFs. This was followed by an in-depth evaluation and thematic analysis using Excel spreadsheets. The PRISMA flowcharts in Figures 1 and 2 illustrate the screening and selection process for each research question.

For RQ1 (Figure 1), our combined Scopus and Web of Science searches yielded 5657 records. After removing 512 duplicates, 4145 titles and abstracts were screened, of which 178 full-text articles were assessed for eligibility. We excluded 106 reports for the following reasons: a total of 22 were unavailable in full (incomplete PDFs), 19 addressed topics unrelated to our objectives (e.g., technology adoption in non-financial contexts or descriptive use cases without the analysis of enablers/barriers), and 17 did not directly tackle our core research question of mapping consumer-level enablers of and/or barriers to FinTech adoption. This left 72 studies for the final synthesis.

For RQ2 (Figure 2), we identified 2006 records and removed 589 duplicates, screening 1417 titles and abstracts. From the resulting 69 full-text articles, we excluded 32 reports: a total of 13 were missing essential sections (incomplete PDFs or prefaces), 15 investigated outcomes only tangentially related to bank performance (for example, broader economic impacts of FinTech without specific performance metrics), and 4 lacked direct measures linking FinTech uptake to profitability, efficiency, or competitiveness. A total of 37 studies were retained for inclusion.

3. Results

The adoption of FinTech has gained significant attention in recent years due to the rapid digital transformation and growing demand for seamless financial services. In our review of papers from 2016 to 2024, we observed a clear uptick in publications on both enablers or/barriers to consumer adoption and organizational performance, reflecting the field's expanding scholarly focus.

We focused on 72 research papers, the details of which are tabulated in Appendix A (Table A3). The journals in which they were published are based on the Best Scopus Quartile (Q1, Q2, Q3, and Q4). Emerald published most of the research articles (21% on FinTech services). The Springer Database contained 16% of these journals, and they ranked Q2 for business and management and Q3 for marketing and engineering. The results further indicate that Emerald publishes research articles from diverse fields, including business, management, sciences, finance, technology, and economics. Therefore, Emerald can be considered an appropriate database and publisher for gathering information related to the adoption of FinTech and/or its impact on organizational performance. Elsevier published 18% of the research articles, while MDPI published 16%.

3.1. Theories Used

Researchers were found to employ a range of theories regarding consumer adoptions of FinTech services or technologies. These theories and their frequencies are summarized in Table 2. The TAM emerged 48 times, making it the most favored approach. The extended TAM was repeated 11 times. Studies utilizing the TAM often extended it to incorporate additional constructs, such as perceived risk, trust, and COVID-19-related factors. This reflects the adaptability of the TAM in addressing evolving technological and contextual challenges related to the adoption of FinTech.

Table 2. Theories focusing on FinTech services or technologies used in studies.

Sr #	Theory	Frequency
1	Technology Acceptance Model (TAM)	48
2	Extended Technology Acceptance Model (Extended TAM)	11
3	Unified Theory of Acceptance and Use of Technology (UTAUT)	6
4	Extended Unified Theory of Acceptance and Use of Technology (UTAUT2)	4
5	Stimulus–Organism–Response (S-O-R) Model	2
6	Information Systems Success Model (ISSM)	2
7	Theory of Planned Behavior (TPB)	5
8	Diffusion of Innovations (DOIs)	3
9	SERVQUAL (Service Quality Model)	1
10	Risk Perception Theory	2
11	Continuance Usage Intention Framework	1
12	Hofstede's Cross-Cultural Dimension (Uncertainty Avoidance—UA)	1
13	Trust Theory	1
14	Task–Technology Fit (TTF) Model	1
15	Decomposed Theory of Planned Behavior	1
16	Meta-UTAUT Model	1
17	Trust-Based Technology Acceptance Model (TB-TAM)	1
18	DeLone & McLean Information Systems (D&M ISs) Success Model	1
19	Self-Determination Theory (SDT)	1
20	Interactivity Theory	1
21	Theoretical Framework on Financial Inclusion Through FinTech	1
22	Consumer Behavior and Influencer Marketing Theories (implied)	1
23	Theories about Customer Behavior in Response to Technological Innovations (implied)	1
24	Resource Dependency Theory	1
25	Agency Theory	2
26	Socio-Technical Systems Theory	1
27	Strategic Alliance Theory	1

The UTAUT and its extended version (UTAUT2) were also widely used: when combined, they appeared 10 times. This highlights their relevance in capturing behavioral intentions and moderating factors such as social influence and facilitating conditions. Other frequently used theories include the TPB and Diffusion of Innovations (DOIs), which appeared five and three times, respectively. This provides insight into intentional and innovation-driven adoption behaviors. Less frequently used theories, such as the Stimulus–Organism–Response (S-O-R) Model, Risk Perception Theory, and Trust Theory, offer niche perspectives on emotional, risk-based, and trust-related dimensions of adoption. Many studies integrated multiple theories, such as the TAM with UTAUT or TPB, with the intention of developing holistic frameworks that address the multifaceted nature of FinTech adoption.

The research studies investigating RQ2 (FinTech adoption effects on bank performance) lack theoretical foundations. Indeed, the 37 studies reviewed only included four instances where macro-level theories were explicitly applied; namely, through Agency Theory, Resource Dependency Theory, Socio-Technical Systems Theory, and Strategic Alliance Theory. The frameworks were used to analyze governance structures, organizational innovation capacity, and the strategic implications of FinTech partnerships. Most studies also used empirical models as their primary approach without any theoretical framework, which suggests a lack of conceptual rigor. Thus, future research should bridge the theoretical gap between micro-level adoption studies and macro-level performance research by integrating organizational and institutional theories to explain how FinTech affects bank strategies, operations, and profitability.

Overall, the frequency table (Table 2) reveals a strong reliance on established adoption models. Moreover, there are adaptations to incorporate contextual and technological nuances, particularly in mobile banking, digital payments, and COVID-19-related FinTech adoption studies. This trend underscores the need for continued theoretical innovation to address emerging challenges in FinTech adoption research.

3.2. Context

Table 3 shows that most of the research on the adoption of FinTech and its effect on bank performance has been carried out in emerging markets, where FinTech adoption is changing quickly. This concentration is not unexpected, considering the capacity of digital financial services to surpass conventional banking infrastructure and foster financial inclusion in these scenarios [12].

Table 3. The countries in which studies focused on FinTech consumer adoption and bank performance were performed.

Country	Frequency	Country	Frequency
India	21	Seville (city in Spain)	1
China	12	Greece	1
Jordan	10	Kuwait	2
Malaysia	6	Algeria	1
Thailand	1	Taiwan	1
Not Specified	4	Nigeria	3
Ghana	3	Tunisia	1
Spain	2	Bahrain	3
Saudi Arabia	4	Oman	4
Vietnam	4	Iran	1
United States	2	Lebanon	2
Pakistan	3	United Kingdom	1
Bangladesh	2	Thailand	1
Indonesia	2	Hungary	1
Brazil	1	International (multiple countries)	1
Latvia	1	United Arab Emirates	4
Malaysia and Nigeria	1	Portugal	1
International (multiple countries)	1	Europe	1
European Union	1	Italy	1
Sub-Saharan Africa, specifically focusing on the East African community	1	Palestine Hungary	1 1

India was the most studied country, appearing in 21 studies. This prominence is due to its large population [13], quick digital transformation [14], and push for financial inclusion through policy [15], all of which have sped up the adoption of FinTech [13–15]. China and Jordan have 14 and 10 studies, respectively. The prominence in China is due to its well-known mobile payment ecosystem (e.g., Alipay and WeChat Pay) and the fact that

many people use smartphone-based financial services [16]. Jordan's strong presence, on the other hand, is a result of targeted policies and rules that encourage mobile payment use, especially among groups that do not have access to them [17].

Malaysia (6 studies) is an area of significant focus in FinTech adoption research due to its high rates of digital adoption and a favorable regulatory and financial environment. Empirical evidence also shows that Malaysian consumers are very interested in mobile banking, e-wallets, and mobile payment services [11,18–20]. The inclusion of countries like Ghana, Vietnam, and Pakistan—each represented by two or three studies—illustrates an increasing academic focus on digital finance for enhancing financial inclusion in low-income and low-banking-access contexts.

The limited number of studies from developed economies, including the United States and the United Kingdom, indicates that much of the research is motivated by contexts in which FinTech is perceived as a means to address infrastructure deficiencies rather than merely as a competitive differentiator. Countries such as Brazil, Latvia, and Oman, which each had only one or two studies, are examples of niche research settings where the adoption of FinTech is growing but scholarly attention remains limited.

Finally, the addition of studies from multiple countries and regions shows that this area of research is looking at the world as a whole. Comparative analyses are crucial as they help to elucidate the impacts of institutional, cultural, and regulatory disparities on FinTech adoption and performance outcomes [12]. This geographic diversity underscores the need for future research to reconcile insights from emerging markets with those from developed economies, facilitating a more thorough comprehension of cross-country variations in relevant drivers, obstacles, and effects on bank performance.

3.3. Enablers and Barriers in FinTech Adoption

The academic literature has, moreover, established that FinTech adoption is a complex concept, one that is influenced by various enablers and barriers [13]. These include the following:

- Economic factors: High transaction costs, cost-effectiveness, incentives, and increased revenue and profitability;
- Technological factors: Internet and technology accessibility limited financial and digital literacy, smartphones, internet penetration, and personalized and AI-driven services;
- Regulatory factors: Security concerns, trust and security improvements, financial and digital literacy, convenience and accessibility, government regulatory support, and improved customer experience and retention;
- Behavioral factors: Lack of trust, social influence, and improved customer experience and retention;
- Other factors: Enhanced operational efficiency and business model shifts.

It is necessary to understand these barriers and enablers because they play major roles in the promotion of FinTech solutions and innovation in an organization's financial ecosystem. The application of technology-driven financial solutions also transforms organizational value chains and has positive impacts on traditional financial services, channels, and clients [14].

The ubiquity of automated information processing and the internet are fundamental enablers of FinTech adoption. As the authors of [15] have noted, it also promotes innovation and provides ways to develop new financial services. In particular, mobile technology appears as a catalyst of FinTech adoption because it enables convenient access to financial services via mobile devices and smartphones [16]. Consumer purchasing behaviors are, in turn, influenced by the integration of e-commerce platforms, mobile phones, digital payment systems, and social media channels. Indeed, consumers have reported that

technological innovation provides solutions that enhance customer satisfaction, streamline the purchase process, and offer the best cost and time value. This helps to promote effective purchase decisions, enable record logging, eradicate intermediaries, and ensure punctual product delivery [17].

The chances of data loss and cyber threats have increased due to breaches of data privacy and security [18]. A lack of familiarity with FinTech solutions also enhances concerns regarding online transactions and security. Consequently, digital literacy deficits, cybersecurity issues, and data privacy concerns act as major barriers to FinTech adoption [19]. According to [20], mobile payment intention is positively influenced by usefulness and perceived ease of use. Price value, social influence, effort expectancy, uncertainty avoidance, and performance expectancy positively impact behavioral intentions. In contrast, perceived risk has a negative impact on intention to pay via mobile means. However, the authors of [21] demonstrated that facilitating conditions do not affect behavioral intentions to use a specific app (JoMoPay).

We can see that privacy and security concerns restrict FinTech adoption [22]. Perceived usefulness, in turn, affects individuals' behaviors and attitudes toward such adoption. Importantly, the utilization of FinTech services depends on the quality of services [23]. In this regard, satisfaction and trust impede the perception of risk and encourage the continued use of FinTech [24].

FinTech adoption is also influenced by government support, as how a government changes its policies can restrict the technology's use [25]. Web features, awareness, and perceived usefulness greatly promote the use of digital banking systems. In summary, although digital literacy, perceived usefulness, and ease of use have positive influences on the adoption of mobile banking, perceived risk and resistance to change can serve as restrictions [26]. It is also worth noting that facilitating conditions have been shown to enhance the adoption of mobile applications in India [27].

3.4. Impact of FinTech Adoption on Bank Performance

Banks' environmental, social, and economic performance is enhanced in the presence of FinTech enablers [28]. Specifically, FinTech adoption has several positive impacts such as enhanced operational efficiency, increased revenue and profitability, improved customer experience and retention, business model shifts, foreign and national investment, capital adequacy, financial stability, total deposits and net profits, business and regulatory costs, and the competitiveness of financial institutions. However, it can also lead to increased cybersecurity risks, implementation expenses, and regulatory concerns [29]. Thus, while banks' financial performance has increased with improvements in service offerings and efficiency [30], adverse effects such as cybersecurity risks and the cost of technology adoption must also be taken into consideration. In summary, although adopting technology and its spillover effects can enhance bank profits, some FinTech developments may negatively impact their profitability [31]. More specifically, FinTech adoption positively impacts bank performance by optimizing liability structures and lending rates. Financial patents and innovation also help enhance bank performance [32].

Moreover, as [33] noted, return on investment and equity have improved with the adoption of digital banking. In emerging markets, adopting digital technology (FinTech) confers a competitive advantage, which means that competitor banks must innovate their systems [34].

4. Discussion

The rapid growth of financial technology has impacted the entire financial services ecosystem, creating both opportunities and problems for emerging FinTech firms and traditional

banking services alike [35]. Our study offers a comprehensive analysis of enablers of and barriers to FinTech adoption and their effects on bank performance worldwide. In this way, we analyzed the existing topical literature through a systematic review and thematic organization, with the goal of showing that FinTech adoption results from enablers such as financial incentives, technological infrastructure, customer-centric design, and institutional support. However, the adoption of FinTech faces major obstacles due to a widespread lack of digital literacy. Security concerns and trust issues, in turn, prevent its wider adoption. In a similar vein, although FinTech benefits institutions through operational efficiency and competitive advantage, it also generates regulatory expenses and short-term profitability issues.

The systematic literature review results shown in Table 4 present the thematic findings that identify both enablers and barriers affecting the adoption of FinTech and their effects on bank performance. The literature primarily identifies economic and financial motivators, digital infrastructure, personalized customer experiences, and human capital with institutional support as significant enablers of FinTech adoption. Conversely, notable barriers to adoption include financial and knowledge constraints, issues of trust, and perceived risks concerning security and privacy. Studies have also highlighted both positive impacts (e.g., enhanced financial performance, improved market competitiveness, and operational efficiencies) and negative impacts (e.g., short-term restructuring costs, competitive displacement risks, and regulatory burdens). In short, the table highlights the complex relationships between FinTech adoption factors and bank performance results, offering important insights for future strategic and regulatory measures.

Table 4. Themes and subthemes of enablers of and barriers to FinTech adoption and determinants of bank profitability.

Author and Date of Publication	Research Question 1: Enablers and Barriers in FinTech Adoption							Research Question 2: Impact of FinTech on Bank Performance							Ref.
	Enablers of FinTech Adoption				Barriers to FinTech Adoption			Positive Impact				Negative Impact			
	Economic and Financial Motivators	Digital Infrastructure and Access	Customer Experience and Service Personalization	Human Capital and Institutional Support	Financial and Knowledge Constraints	Perceived Risk and Security and Privacy Concerns	Trust	Financial Performance and Profitability	Operational and Strategic Transformation	Market Position and Competitiveness	Technology-Driven Cost and Efficiency Gains	Short-Term Profitability and Restructuring Costs	Competitive Displacement and Market Erosion	Regulatory Burdens and Compliance Costs	
(Huang, Wang, and Huang 2024)					√										[20]
(Alkhwaldi et al., 2024)					√										[21]
(Al-Qudah et al., 2024)				√			√	√							[22]
(N. Sharma and Fatima 2024)			√				√								[23]
(P. Yadav et al., 2024)						√	√								[24]
(Igamo et al., 2024)	√			√											[25]
(Elhajjar and Ouaida 2019)				√											[26]
(Sobti 2019)	√														[27]
(Abdalmajeed Alsmadi et al., 2023)															[28]
(Alafeef et al., 2024)								√							[29]
(Alqahtani et al., 2024)													√		[30]

Table 4. *Cont.*

Author and Date of Publication	Research Question 1: Enablers and Barriers in FinTech Adoption							Research Question 2: Impact of FinTech on Bank Performance							Ref.
	Enablers of FinTech Adoption				Barriers to FinTech Adoption			Positive Impact				Negative Impact			
	Economic and Financial Motivators	Digital Infrastructure and Access	Customer Experience and Service Personalization	Human Capital and Institutional Support	Financial and Knowledge Constraints	Perceived Risk and Security and Privacy Concerns	Trust	Financial Performance and Profitability	Operational and Strategic Transformation	Market Position and Competitiveness	Technology-Driven Cost and Efficiency Gains	Short-Term Profitability and Restructuring Costs	Competitive Displacement and Market Erosion	Regulatory Burdens and Compliance Costs	
(Song, Yu, and He 2023)										√		√			[31]
(T.-K. Liu 2022)									√						[32]
(Sobhi Awwad 2021)												√			[33]
(Phan et al., 2020)										√					[34]
(Maan et al., 2019)	√			√											[36]
(Wang et al., 2022)										√					[37]
(Shilpa Agarwal, Malik, and Gautam 2024)		√				√									[38]
(Md Faudzi, Abu Bakar, and Ahmad 2024)					√		√								[39]
(Hasan et al., 2024)				√			√								[40]
(Purohit and Arora 2023)				√		√									[41]
(Abu-Taieh et al., 2022)				√		√									[42]
(Albort-Morant, Sanchís-Pedregosa, and Paredes Paredes 2022)						√									[43]
(Al Amin et al., 2022)		√		√											[44]
(Ho et al., 2020)				√											[45]
(Agyei et al., 2020)			√	√											[46]
(S. K. Sharma et al., 2017)				√											[47]
(Nguyen et al., 2024)				√											[48]
(Chinnasamy, S, and Jain 2024)			√				√								[49]
(S. K. Sharma and Sharma 2019)	√		√												[50]
(Alalwan et al., 2016)	√			√											[51]
(P.H. 2023)			√				√								[52]
(Siyal et al., 2019)				√	√	√									[53]
(Silanoi, Naruetharadhol, and Ponsree 2023)		√	√			√	√								[54]
(Yan et al., 2021)			√	√											[55]
(Almubarak and Aljughaiman 2024)										√					[56]
(Haryono et al., 2024)											√			√	[57]
(Kaddumi et al., 2023)										√	√				[58]
(Baker et al., 2023)								√						√	[59]
(Al-Shouha et al., 2024)								√						√	[60]
(Almulla and Aljughaiman 2021)													√	√	[61]
(Xihui Chen, You, and Chang 2021)					√						√				[62]
(Olalere et al., 2021)									√				√	√	[63]
(Lee et al., 2021)									√		√	√			[64]
(Del Gaudio et al., 2021)								√			√				[65]
(Arena, Catuogno, and Naciti 2023)								√	√						[66]

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(Alattass 2023)													√		[67]
(Pham et al., 2024)								√			√				[68]
(Fang et al., 2022)									√	√				√	[69]
(Elangovan and Babu 2024)		√				√									[70]
(Cardoso et al., 2024)		√						√							[71]
(Antonio et al., 2024)		√		√	√										[72]
(Jiang et al., 2024)					√	√	√								[73]
(Dendrinos and Spais 2024)							√								[74]
(Tian and Chan 2024)			√	√		√									[75]
(Amnas, Selvam, and Parayitam 2024)			√		√										[76]
(Kelly and Palaniappan 2023)	√				√	√									[77]
(Hakimi, Jaafar, and Aziz 2023)							√								[78]
(Kumari and Biswas 2023)			√			√									[79]
(Alenizi 2023)			√			√									[80]
(Almaiah et al., 2023)					√										[81]
(A. K. Singh and Sharma 2023)				√			√								[82]
(Martínez-Navalón, Fernández-Fernández, and Alberto 2023)				√			√								[83]
(Rosli et al., 2023)	√		√			√									[84]
(Tian et al., 2023)			√			√									[85]
(Yin and Lin 2022)		√													[86]
(Alkhawaldeh, Matar, and Rdaydeh 2022)		√				√									[87]
(Okocha and Awele Adibi 2020)	√			√											[88]
(Jaziri and Miralam 2019)							√								[89]
(Baabdullah et al., 2019)				√											[90]
(Muñoz-Leiva, Climent-Climent, and Liébana-Cabanillas 2017)		√	√			√									[91]
(Ananda, Devesh, and Al Lawati 2020)				√											[92]
(Khobragade et al., 2024)		√				√									[93]
(Alnemer 2022)	√				√		√								[94]
(D. Chawla and Joshi 2017)			√			√									[95]
(Tariq, Maryam, and Shaheen 2024)							√								[96]
(Banerjee and Sreejesh 2022)							√								[97]
(Merhi, Hone, and Tarhini 2019)	√			√											[98]
(Khuong et al., 2022)	√	√	√				√								[99]
(Bailey et al., 2022)															[100]

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(Ullah et al., 2022)	√			√											[101]
(D. Chawla and Joshi 2020)			√												[102]
(D. Chawla and Joshi 2021)					√		√								[103]
(S. Singh, Sahni, and Kovid 2020)			√	√		√									[104]
(Daragmeh, Lentner, and Sági 2021)	√			√			√								[105]
(Garškaitė-Milvydienė and Tvaronavičienė 2024)														√	[106]
(Jarah et al., 2024)								√	√	√					[107]
(Zheng et al., 2023)								√	√					√	[108]
(Yoon, Lee, and Oh 2023)								√			√				[109]
(Mustapha 2018)											√				[110]
(Chhaidar, Abdelhedi, and Abdelkafi 2023)											√				[111]
(Owusu Kwateng, Osei-Wusu, and Amanor 2019)											√				[112]
(J. Zhao et al., 2022)											√				[12]
(Katsiampa et al., 2022)											√				[113]
(Y. Liu et al., 2021)									√			√		√	[114]
(Ky, Rugemintwari, and Sauviat 2024)									√					√	[115]

In this section, we explore the factors that enhance or impede FinTech adoption. In doing so, we focus on performance-related outcomes for banks and firms. This involves analyzing the multidimensional aspects of economic incentives, digital economy infrastructure, customer satisfaction, human resources, and institutional support [13].

4.1. Thematic Synthesis for RQ1: Enablers of FinTech Adoption

Four key themes stand out when it comes to enablers of FinTech adoption in the context of RQ1. These themes are: (1) Economic and Financial Motivators, (2) Digital Infrastructure and Access, (3) Customer Experience and Service Personalization, and (4) Human Capital and Institutional Support. We now discuss these in turn.

4.1.1. Theme 1: Economic and Financial Motivators

Legal, economic, and financial motivations are distinct and fundamental factors influencing the uptake of FinTech solutions. Specifically, these factors capture the direct financial impacts and general economic value gained by businesses and consumers when adopting a technology. Rewards can come in diverse forms, such as improvements in

resource allocation, cost cuts, achieving competitive market advantages, and increased revenue [116,117].

A primary reason why businesses and consumers adopt FinTech is to reduce operational costs and improve efficiency [118]. In this sense, FinTech solutions often automate routine processes, streamline workflows, and eliminate redundancies, leading to substantial cost reductions [76,118]. This economic efficiency creates a strong value proposition, encouraging firms to shift from traditional models to more agile, technology-driven solutions.

Beyond cost savings, FinTech enables businesses to boost their revenues by expanding customer reach, offering new products and services, and improving pricing strategies [119]. However, prior research has often overlooked the broader macroeconomic context—including the state of the banking system or access to finance—which can significantly shape FinTech's impacts on profitability [120]. When taken together, these financial gains (at the firm level and systemic level) establish FinTech adoption as both a technological upgrade and a strategic move toward sustainable growth [121].

4.1.2. Theme 2: Digital Infrastructure and Access

The adoption of FinTech solutions depends on digital infrastructure and access. Specifically, the necessary ecosystem for successful FinTech services depends on reliable internet availability, smartphone penetration, and telecommunication network strength [121]. Advanced FinTech solutions become inaccessible to major population segments when basic internet access is unavailable. Moreover, the speed at which smartphones and internet access spread throughout a population determines its readiness to use FinTech services [17,122]. Higher penetration levels are consistently linked with greater FinTech uptake, as individuals equipped with smartphones and data access can more easily engage with mobile banking, payment apps, and other digital financial tools.

Several scholars have highlighted that regions with advanced digital infrastructure show significantly higher FinTech adoption rates [17,121]. Conversely, areas with a persistent digital divide face barriers to inclusion. Indeed, people without internet-ready devices or affordable data plans are effectively excluded from FinTech opportunities.

In summary, the availability of smartphones together with affordable internet plans serves as a fundamental factor for both financial inclusivity and the acceleration of economic participation. The expansion of digital infrastructure enables underserved communities with economic limitations to join the FinTech ecosystem. As noted in [123], this drives financial system development and regional economic expansion. Indeed, studies have underscored how digital infrastructure functions as both a necessary condition for and a fundamental enabler of FinTech adoption. Moreover, areas with better smartphone availability and more affordable internet services show substantially higher adoption rates. The literature further indicates that digital infrastructure functions as a threshold element as other enablers, such as personalization and financial incentives, become ineffective until basic access levels are achieved. Indeed, research confirms that digital access serves as the essential condition enabling all other adoption drivers to become effective.

4.1.3. Theme 3: Customer Experience and Service Personalization

Customer experience and service personalization affect the degree to which an individual customer can effortlessly interact with FinTech solutions (i.e., engaging in self-directed, seamless financial activities) [124]. Importantly, Theme 3 relates to (a) the implementation of explicit analytics, AI, and other technologies; and (b) how these factors enhance customer satisfaction, deepen loyalty, and provide customized financial products and services. FinTech firms can use AI and data-driven tools to provide customized financial guidance, proactive support, and personalized product recommendations through individual cus-

tomer profiles [125]. These platforms employ advanced algorithms to predict customer needs while offering custom financial solutions and automated care. According to [17], this enhances the value and relevance of digital interactions.

FinTech innovations provide customers with the ability to conduct transactions at any time from any location via their smartphones or digital devices. This helps to remove the requirement for physical bank branches and reduces transaction costs [96,126,127]. The system also provides both simplified financial access and expanded participation opportunities for young tech-oriented consumers at any time [96]. All this helps to improve customer experience and retention. Research findings have demonstrated that customer experience stands as a primary factor driving FinTech adoption [17,128]. The delivery of seamless personalized interactions leads to higher customer satisfaction, stronger relationships, and better retention rates, which helps to establish a market-leading position for pertinent firms [129,130]. FinTech firms that adapt to customer needs through data insights to improve their services can achieve long-term growth while developing customer loyalty.

The FinTech industry requires personalized and integrated customer experiences to achieve business success. Companies that deliver customized interactions and proactive services will gain a better market position and enhanced customer engagement, thereby achieving a lasting competitive advantage [128]. The literature demonstrates that personalization and user experience serve as fundamental factors determining FinTech adoption rates. Our review further demonstrates a consistent pattern—one in which FinTech services that focus on convenience, responsiveness, and tailored interactions garner higher adoption rates and user retention across markets. In other words, the success of FinTech implementations depends on customer-centric design as a fundamental element.

4.1.4. Theme 4: Human Capital and Institutional Support

Human capital and institutional support refer to the essential knowledge, skills, and policy frameworks that enable both individuals and organizations to adopt and benefit from FinTech solutions. Theme 4 highlights two main pillars: (i) financial and digital literacy (i.e., the digital and financial competencies of users) and (ii) government regulatory support (vis-à-vis the regulatory and policy environment that governs FinTech development and safeguards innovation).

Regarding (i), the foundation for individual users depends on their financial and digital literacy skills. Specifically, the ability to effectively use financial products along with the mastery of digital tools and secure online practices constitutes this competency [18]. Consumers who lack these competencies experience difficulties when it comes to safely using FinTech as they become exposed to errors and fraud, thus increasing the risk of being excluded from the relevant services [131,132]. Indeed, the full potential of FinTech remains unrealized, with underdeveloped human potential—especially in terms of digital skills—acting as a primary barrier [116]. Thus, the spread of FinTech's benefits across different economic and demographic groups depends on societal literacy development, which will determine how widely the benefits can reach.

Regarding (ii), the adoption of FinTech depends heavily on the institutional frameworks that government regulations establish. Here, the implementation of effective policies achieves a kind of equilibrium between supporting innovation, protecting consumer safety, and financial stability [133,134]. The relevant regulatory body must, in turn, maintain open competitive markets through protecting consumer rights and managing risk related to systemic stability and data privacy [19]. Indeed, the absence of supportive regulatory frameworks leads to either the suppression of FinTech innovation or uncontrolled growth, which endangers trust and sustainability [135].

Human capital, together with institutional support, also serves as an essential factor enabling the adoption of FinTech. Digital financial services become accessible to consumers through strong individual competencies and the development of smart, flexible regulatory systems that establish the conditions for innovation to thrive. The delivery of the transformative potential of FinTech requires addressing profit generation, equitable access, and systemic stability by paying equal attention to these areas. Our review demonstrates that human capital and institutional support function as two interconnected elements driving the adoption of FinTech. Studies have demonstrated a consistent pattern in which digital and financial literacy enable people to use FinTech solutions with confidence, while regulatory frameworks determine the conditions for safe, sustainable, and scalable usage. Our review confirms that capacity-building and governance serve as fundamental requirements for achieving long-term FinTech integration.

4.2. Barriers to FinTech Adoption

The integration of financial technologies has transformed financial services for many people. The impacts of FinTech on financial services are altering the dynamics of personal and corporate finances, making their management far more convenient, efficient, and accessible [136,137]. That said, to fully seize the transformative potential of FinTech, we must first comprehend the full scope of the barriers that constrain its inclusive deployment [117]. In this regard, numerous multi-factor challenges remain. Each requires in-depth exploration due to the limitations they pose in terms of widespread adoption [13], [35]. The respective challenges range from limited finances to deep-rooted insecurities and low levels of trust. In one way or another, these affect FinTech integration [13]. It follows that a comprehensive understanding of the relevant challenges will help to broaden the applicability of FinTech across different demographics, regions, cultures, and societal layers.

Our systematic review identified three key themes that reflect fundamental challenges hindering the adoption of FinTech solutions: (1) financial and knowledge constraints, (2) perceived risk and security and privacy concerns, and (3) trust [138,139]. In the context of RQ1, we discuss these key themes and how they serve as barriers to FinTech adoption below. We then briefly outline some resultant integrated theoretical insights.

4.2.1. Theme 1: Financial and Knowledge Constraints

Limited financial literacy entails a limited understanding of basic concepts and products. As pointed out in [134], this results in doubt and aversions to involvement in FinTech solutions. The deficiency of knowledge and skills required to use digital technologies effectively is called "limited financial literacy," which effectively restricts people from accessing and using FinTech [131].

Our review shows that one of the most persistent barriers to FinTech adoption lies in the combined challenges of limited financial resources and insufficient financial and digital literacy. These constraints disproportionately affect marginalized groups, older populations, and individuals in developing economies. Such a situation reinforces existing inequalities and limits the reach of FinTech innovation.

Theme 1 can be delineated into two key issues: (i) limited financial and digital literacy, and (ii) high transaction costs. Regarding (i), the ability to understand basic financial concepts, risks, and products is a fundamental requirement for securing FinTech platform usage. Users who lack financial literacy face challenges when assessing products and making wise choices about digital financial management tools [18,134]. Digital literacy also enables people to use and trust online platforms. This has become essential for FinTech service adoption as platforms now depend on smartphones and web-based transactions and apps [131,140]. Thus, the absence of combined financial and digital literacy skills acts

as a major obstacle—one that prevents many older adults and less-educated individuals from participating.

Regarding (ii), the financial expenses involved in using FinTech, such as mobile data costs and service and platform fees, act as barriers to low-income users and small businesses. This can be the case even after knowledge barriers are resolved [76,121]. In fact, elevated transaction expenses reduce the perceived worth of FinTech solutions, which leads users to choose conventional financial services or informal alternatives.

We can see that low literacy combined with high costs forms a self-perpetuating cycle, one that worsens financial exclusion. Research has indicated that vulnerable populations cannot benefit from FinTech services without specific interventions. This naturally leads to increased social and economic segregation [141,142]. It is also worth noting that the fast-growing digital economy particularly affects the gig and freelance sectors. According to [135], these sectors need accessible digital financial services, yet often receive insufficient attention during policy development.

4.2.2. Theme 2: Perceived Risk and Security and Privacy Concerns

Our review demonstrates that the barrier cluster of security, privacy, and trust is tightly interconnected, in a manner that substantially impacts the adoption of FinTech through both actual risks and perceived threats. In particular, the literature suggests that perceived risk functions as a key factor influencing user behavioral intentions, as perceived risk represents an individual's personal sense of vulnerability or potential harm [16,143]. Indeed, users experience multiple types of risk perception when it comes to FinTech providers, including data security concerns, transaction fraud worries, and doubts about provider integrity and reliability [119,144]. Often, the psychological impact of perceived risk outweighs actual technical risks. This can dissuade potential users, especially those who lack experience with digital platforms.

Several important contextual factors, including low digital literacy, unfamiliarity with FinTech systems, ambiguous regulatory protections, and the general anonymity of online transactions, work together to amplify uncertainty and fear [121]. Media coverage of cyberattacks, data breaches, and identity theft cases also intensifies public fears about digital finance, even though security technology continues to advance [18,145]. Importantly, research has shown that digital trust remains unestablished in emerging economies. As before, this tends to affect older generations and less-educated groups in particular [23,146].

The adoption landscape also faces additional real-world security challenges. This makes it harder for FinTech platforms to succeed and justifies some public concerns. Specifically, FinTech platforms face continuous cyber threats from criminals, who use system weaknesses to steal customer information and conduct fraudulent schemes [147]. These risks require organizations to implement strong security measures, including data encryption and multi-factor authentication. They must also develop secure application designs and instill rigorous data-governance protocols. That said, technical solutions by themselves are insufficient as users must understand them and trust their efficacy [23,133].

4.2.3. Theme 3: Trust

The relationship between perceived risk and user intention depends heavily on trust, which functions as a central mediator. The adoption of FinTech services becomes more likely when consumers view providers as competent, transparent, and benevolent while demonstrating ethical business practices [143,148]. In this regard, studies based on the TAM and UTAUT have demonstrated that perceived ease of use, usefulness, and social influence require trust barriers to be overcome before adoption occurs [104,149].

The importance of technological defense enhancement requires parallel efforts to communicate the relevant defenses and protections to consumers through educational resources and regulatory clarity. As before, trust barriers are not only technical challenges but also deeply social and psychological obstacles. Effectively addressing them requires a combination of technological innovation, user-centered design, transparent communication, and supportive institutional frameworks. Such integrated strategies are the only way for FinTech firms, policymakers, and regulators to work together to reduce user hesitancy and foster more inclusive, confident engagement with digital financial services.

4.2.4. Integrated Theoretical Insights

Our analysis of thematic similarities and differences between regions, demographic groups, and FinTech types revealed intricate adoption barrier patterns. Such financial and knowledge barriers are more severe in developing countries and underserved populations, and specific targeted interventions are needed to address these inequities. On our account, the pertinent solutions should focus on user education, intuitive design, and simplified materials. Simplicity, rather than complexity, can help to address security and privacy concerns; which, as mentioned above, are most prominent among those with limited digital skills.

The level of trust-related barriers differs substantially between different FinTech categories. Specifically, users show greater skepticism toward platforms that are new or lack proper regulation. The TAM, UTAUT, and TPB provide explanations for these patterns by revealing the social attitudes, behavioral intentions, and perceptions that influence user decisions:

- The TAM shows that perceived ease of use and usefulness stand as essential factors [16].
- The expanded version of the UTAUT (which includes personal innovation and perceived safety factors) provides a good understanding of consumer behaviors in omnichannel environments [149].
- The TPB and similar models demonstrate how social influence, perceived risk, and trust influence the formation of intentions and eventual adoption [104,149].

These frameworks provide essential perspectives, helping FinTech providers, policymakers, and researchers to create interventions that reduce practical barriers and resolve attitudinal and perceptual frictions. In turn, this may boost the inclusivity and impact of digital financial innovation.

4.3. Thematic Synthesis for RQ2: Impact of FinTech on Bank Performance

Our discussion in this section combines various research findings related to the effects of FinTech adoption on bank performance. We examine both enabling factors (positive impacts) and challenging obstacles (negative impacts), weighing beneficial aspects against operational and strategic challenges to engender a combined understanding of these findings. In this way, we offer an overarching perspective on how FinTech transforms the financial industry by weighing its beneficial aspects against its operational and strategic challenges.

4.3.1. Positive Impacts (Enablers of Bank Performance)

Regarding positive impacts, we identified four key themes: (1) Financial Performance and Profitability, (2) Operational and Strategic Transformation, (3) Market Position and Competitiveness, and (4) Technology-Driven Cost and Efficiency Gains. We discuss these themes in turn below, before turning to the converse negative impacts (i.e., barriers and challenges).

Theme 1: Financial Performance and Profitability

The implementation of FinTech technology creates pressure on profitability during its initial stages. Research has indicated that FinTech development starts with competition effects surpassing technology spillover advantages, which results in short-term decreases in ROA and ROE performance indicators [32]. The authors of [31] found that FinTech development has an inverted U-shaped relationship with bank operating performance, where FinTech adoption first boosts performance but may reduce it before achieving stability or improvement. The negative effects tend to be stronger among smaller banks with limited agility and financial institutions operating in regions with low FinTech development, as they must bear higher implementation expenses and face stronger competition. The adoption of innovative FinTech solutions, together with organizational adaptation improvements, leads to performance enhancements after initial declines. The findings indicate that researchers should study the timing of FinTech adoption effects on bank profitability, as this aspect remains underdeveloped in the existing literature.

Theme 2: Operational and Strategic Transformation

The implementation of FinTech technology enhances operational efficiency through automated workflow management, streamlined task processing, and data-based decision support [127]. Moreover, digital banking platforms enable customers to conduct transactions through various devices, which transforms the customer–bank relationship into a personalized digital experience [150,151]. The market also becomes more competitive and responsive through the implementation of new service models, which include mobile banking and online lending.

Theme 3: Market Position and Competitiveness

The adoption of FinTech enables banks to enhance their market position through increased agility, innovation, and expanded customer reach [121,152]. Indeed, banks that implement FinTech tools—including digital lending platforms, mobile payments, and robo-advisors—gain a competitive advantage over traditional banks. In this way, FinTech startups can boost their domestic and international investment appeal [30,153]. As noted in [127], the competitive advantage then depends on innovation capabilities and the ability to serve new markets while delivering quick market responses.

Theme 4: Technology-Driven Cost and Efficiency Gains

Through automation, advanced analytics, and digital innovation, FinTech helps banks to reduce their costs while improving efficiency and customer experience [136]. FinTech also allows for the automation of compliance checks, fraud detection, and regulatory reporting, which helps to streamline back-office operations. The implementation of advanced data analytics, in turn, enables banks to make accurate credit risk assessments, leading to cost-effective and efficient decision-making processes [154].

4.3.2. Negative Impacts (Barriers and Challenges)

Regarding negative impacts, we identified three key themes: (1) Short-Term Profitability and Restructuring Costs, (2) Competitive Displacement and Market Erosion, and (3) Regulatory Burdens and Compliance Costs. We discuss these in turn below, before explicating some integrative insights.

Theme 1: Short-Term Profitability and Restructuring Costs

The adoption of FinTech technology provides promising long-term benefits. However, research has indicated that banks can experience short-term profitability declines. Banks experience decreases in ROA, ROE, and NIM because they spend large amounts on sys-

tem updates, staff training, and operational model restructuring when adopting digital innovations [155–157]. Moreover, as noted in [29,31], the high implementation costs and cybersecurity risks associated with FinTech often offset any efficiency or service gains. This tends to burden less-agile incumbents.

In China, for instance, financial innovations have negatively affected bank performance across different institution types by damaging asset quality and reducing profitability [12]. The rapid expansion of FinTech in Indonesia and Gulf Cooperation Council countries has, similarly, led to negative impacts on traditional banking financial performance indicators. This has resulted in decreased returns and elevated operational costs [34,158].

Theme 2: Competitive Displacement and Market Erosion

The growth of FinTech introduces agile technology-based competitors, who attack traditional banks and steal their market share. The research in [12,158] revealed that the aggressive entry of FinTech into core banking sectors pushes traditional institutions to adopt defensive strategies, including price cuts, hurried product releases, and small FinTech acquisitions that raise operational expenses while shrinking profit margins. Such a reactive approach creates unstable pricing systems while risking customer trust through unsuccessful or insufficiently supported innovation products. As demonstrated in [34] and [32], traditional banks may experience a steady market decline unless they implement quick and effective adaptation strategies.

Theme 3: Regulatory Burdens and Compliance Costs

As intimated above, FinTech adoption can introduce significant operational and compliance challenges. According to [35], the integration of new technologies creates increased cybersecurity risks, system failures, and data breaches, which put pressure on bank operations. Moreover, the implementation of new technologies by small- and medium-sized banks requires substantial investments in infrastructure and training [29,30]. That said, the regulatory environment can advance faster than banks can adapt [31,34], leading to increased legal and reputational risks.

In summary, the financial sector faces both growth opportunities and operational challenges when it comes to FinTech innovations, that test the stability of traditional banks, which must maintain a balance between innovation and risk management to reap the benefits of FinTech while protecting their long-term profitability.

4.4. Integrative Insights: Linking FinTech Adoption Drivers to Bank Performance

We have discussed how consumer-level drivers of and barriers to FinTech adoption accumulate in the context of bank-level performance outcomes. This provides a more complete understanding of the topic than was previously apparent, which helps to connect relevant micro- and macro-perspectives. To date, the topical literature has predominantly focused on studying consumer or organizational impacts separately, with little exploration of how individual behaviors influence organizational innovation, profitability, and competitiveness. Our discussion integrates both enabling and constraining factors, in order to explain their combined impact on banks.

Banks can expand their customer base, improve service satisfaction, and reduce operational costs through FinTech enablers, including personalization, accessibility, and user-friendly digital interfaces [16,127,130]. The benefits also increase when supported by AI-driven solutions, such as chatbots and automated financial guidance, which can help to increase customer engagement while reducing service costs [121]. However, such advantages depend on banks being able to overcome barriers such as privacy concerns, cybersecurity risks, and trust deficits [35,96]. Even the most innovative FinTech solutions

can backfire and lead to reputational damage and customer attrition if robust security frameworks and transparent practices are not in place.

Enablers of FinTech—including perceived ease of use, trust, personalization, and digital accessibility—help banks to acquire new customers, retain existing ones, and reduce service costs [13,16]; for instance, AI-based chatbots and virtual assistants not only improve customer satisfaction through personalized guidance [121], but also decrease operational costs. As noted in [127], omnichannel platforms enable users to transact and manage their finances across devices, increasing both satisfaction and loyalty. These enablers improve banks' brand value and optimize liability structures while supporting sustainable profitability [159].

However, adoption rates decrease when privacy concerns, low digital literacy, and lack of trust prevail [29,35]. The failure to resolve cybersecurity issues, algorithmic discrimination, and problems relating to data ethics can result in customer loss, regulatory challenges, and financial fines [96]. Indeed, the research in [18,35] showed that consumer fears about fraud and misuse prevent the success of banking innovations when proper safeguards are absent. Such challenges tend to be more severe in marginalized communities and underserved segments, which leads to increased financial exclusion. Therefore, banks must create inclusive strategies through low-cost learning tools, interface simplification, trust-building investments, consumer education, transparent governance, and ethical frameworks [130,135,160].

The authors of [160] emphasized that organizational elements, including risk frameworks and culture and talent management, are essential for FinTech integration that goes beyond consumer-level factors. Many studies have used the TAM and UTAUT at the individual level, but most research fails to connect these findings to organizational performance outcomes [76,96]. Moreover, the research evidence exhibits conflicting results; some studies suggested that FinTech adoption leads to profitability growth, while others demonstrated neither benefits nor negative effects when adoption is non-strategic [12,31,34]. Such inconsistencies demonstrate the need for researchers to conduct longitudinal multi-level studies that examine how individual behaviors based on trust, risk perception, and literacy ultimately produce macro-level performance results.

Figure 4 presents an integrative framework that links enablers of and barriers to FinTech adoption at the consumer level with key bank performance outcomes. This model synthesizes the findings from the reviewed literature and shows how adoption drivers, including digital infrastructure, institutional support, and customer experience, contribute to organizational outcomes (e.g., efficiency, strategic transformation, and profitability).

Barriers such as trust deficits, regulatory burdens, and low digital literacy can have the opposite effect, often resulting in competitive erosion or restructuring costs. Importantly, our framework connects these micro- and macro-level factors. In doing so, it provides an overarching perspective for understanding how the adoption of FinTech influences institutional success. It also highlights the need for future research to further explore these cross-level dimensions in longitudinal settings and through theory-integrated approaches.

Our review establishes a vital connection between two distinct research areas focused on consumer adoption of FinTech and bank organizational performance. The review combines research from both domains in order to show how consumer adoption factors such as digital literacy, ease of use, and social influence can impact organizational performance through profitability, innovation capacity, and regulatory adaptability. It follows that the connection between FinTech adoption and institutional performance requires recognition, as it enables the development of both better theory and practical applications. Our review further underscores the requirement that future research should develop integrative methods that surpass the current isolated approaches by studying cross-level dynamics.

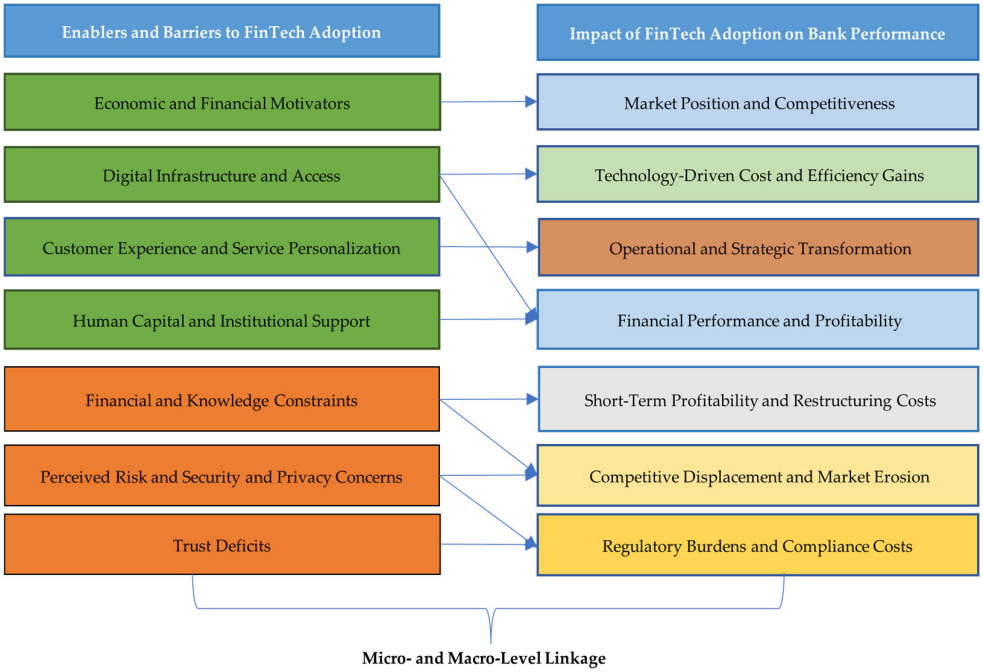


Figure 4. Integrated framework linking FinTech adoption drivers to bank performance outcomes.

5. Implications

Our study carries several important implications for the FinTech domain. These can be categorized into (1) theoretical implications and (2) practical and policy implications.

5.1. Theoretical Implications

Our systematic literature review demonstrates how established behavioral theories, including the TAM, UTAUT, and TPB, have been extensively used in research on consumer FinTech adoption, and the value of these models in explaining factors such as ease of use, perceived usefulness, and behavioral intention has been shown. However, given the increasing complexity of digital finance, our findings suggest that these models could be meaningfully complemented with additional frameworks that account for cultural, institutional, regulatory, and/or organizational dimensions. This would enable researchers to better understand how individual-level adoption dynamics translate into systemic and performance-related outcomes at the organizational level.

Moreover, research into how FinTech adoption affects bank performance has mainly taken the form of empirical studies without sufficient theoretical foundations. Our review of 37 performance-focused studies revealed that only 4 studies used macro-level theoretical frameworks, including Agency Theory and Socio-Technical Systems Theory. The literature, in turn, points to a lack of theoretical frameworks linking individual adoption behaviors to organizational performance results.

Thus, our research reveals an essential knowledge gap: a lack of established cross-level theories explaining how consumer adoption leads to bank-level outcomes. The current models face limitations as they fail to explain how FinTech adoption transforms from individual behaviors into institutional performance. Therefore, multi-level theoretical frameworks that can explain the complete range of systemic effects that FinTech has on both users and firms should be developed in future research.

5.2. Practical and Policy Implications

Practically, this study emphasizes how important it is for banks and other financial institutions to make strategic investments to improve their digital infrastructure, educate

their employees about digital literacy, ethically integrate AI, and establish thorough data governance frameworks. These strategic investments are essential for leveraging the potential advantages of FinTech and guaranteeing the inclusivity, equity, and security of digital financial services. Moreover, our research identifies essential design priorities for banks and FinTech firms to overcome barriers to adoption through localized interfaces, affordable solutions, and trust-building mechanisms. In practice, this means modernizing mobile/web channels for reliability and low-bandwidth use; delivering mandatory digital literacy courses to staff; adopting an AI use policy with basic bias checks and human oversight for high-impact decisions; and enforcing role-based data access, encryption, and clear data-retention schedules. The research revealed critical design requirements for banks and FinTech firms to address adoption-related challenges through localized interfaces, budget-friendly solutions, and trust-enhancing features. The implementation of localized interfaces requires banks to use local language/script and currency/date formats, together with nationally accepted eKYC/authentication methods. A basic low-fee tier should be available to customers, and the total fees must be displayed before confirmation. Trust-enhanced features include default two-factor authentication, simple fraud/last-login alerts, and a visible dispute channel.

From a policy standpoint, our research stresses the importance of balanced regulatory frameworks that effectively blend consumer protection with the flexibility needed for innovation. Policymakers must create balanced regulatory frameworks that protect consumers while allowing sufficient flexibility for innovation. They should also establish strict data protection and anti-fraud systems, together with specific guidelines that enable innovative FinTech business models. Regulators should implement this balance through three measures: establishing tiered KYC (Know Your Customer) requirements for low-value, low-risk accounts; operating time-bound regulatory sandboxes to pilot innovations under defined safeguards; and requiring plain-language disclosures, standard incident-reporting timelines, and accessible consumer redress.

FinTech firms will need to design their products and services with specific solutions for known adoption challenges, including localization efforts, user interface simplification, trust-building features, and cost accessibility. In practical terms: keep onboarding to a few steps, meet basic accessibility/readability standards, cap incidental fees, show the total cost before confirmation, and include brief in-app guidance on safe use and privacy. Specifically, our analysis demonstrated that tailored solutions—including accessible interfaces, localized adaptations, and educational support—significantly enhance adoption rates and long-term consumer retention.

In conclusion, our review provides distinctive value through its ability to merge theoretical knowledge with practical recommendations for both practitioners and policymakers. These contributions also enhance our understanding of the complex processes underlying the adoption of FinTech and associated performance results.

6. Future Research Directions

Multiple promising research directions emerge from the findings of this review. In particular, future research should advance past dominant frameworks such as the TAM, UTAUT, and DOIs. This can be carried out by adopting underexplored theories such as Socio-Technical Systems Theory, Institutional Theory, and Resource-Based View. These theories can enrich our understanding through the examination of organizational capabilities, user behaviors, governance structures, and regulatory dynamics at multiple analytical levels.

As highlighted in Section 3.2 and Table 3, prior research on FinTech adoption has most frequently examined emerging markets such as India, China, Jordan, and Malaysia. Building on this context, future research could focus on conducting more detailed comparative

studies between developed and developing economies, emphasizing cross-national and cultural disparities in the determinants, obstacles, regulatory measures, and performance effects of FinTech adoption. These comparative findings could elucidate how varying institutional environments influence consumer behaviors and organizational outcomes. Future studies could also include neglected constructs related to consumer cybersecurity perceptions, environmental sustainability, algorithmic fairness, and digital readiness. Expanding research to these dimensions can provide a more nuanced understanding of the multifaceted effects of FinTech.

Methodologically, there is significant potential for diversity. Researchers are encouraged to use longitudinal designs to track the evolution of FinTech innovations and their effects on banking performance, customer trust, and regulatory frameworks over long periods of time. Experimental approaches could, in turn, allow for systematic evaluation of the causal impacts of particular FinTech interventions on consumer behaviors and institutional results. Moreover, the use of mixed-method techniques that integrate quantitative precision with qualitative richness might uncover deeper insights into consumer experiences, organizational adjustments, and regulatory obstacles related to FinTech developments. Future studies could also examine the governance ramifications of FinTech, which is expected to yield a better comprehension of its enduring effects on financial ecosystems and global economic stability.

7. Conclusions

This review combined two independent research areas—consumer FinTech adoption and bank performance—into a single analytical framework. Our research connects individual consumer behaviors such as trust, digital literacy, and perceived ease of use to macro-level performance indicators, including profitability, competitiveness, and regulatory alignment, in order to demonstrate how micro-level adoption patterns affect strategic and institutional performance.

The synthesis revealed that FinTech adoption leads to improved bank performance through efficiency gains, broader accessibility, and deeper customer engagement; however, achieving these benefits depends on resolving existing barriers. The potential advantages of FinTech adoption are diminished when financial and digital literacy remain low, digital security risks persist, and regulatory complexities exist. The analysis demonstrated that targeted interventions combining policy-driven and organizational approaches must be implemented to enhance adoption readiness and resilience.

Theoretically, our findings revealed a gap in the application of behavioral models, such as the TAM and UTAUT, to organizational outcomes. These models demonstrate a strong ability to explain individual decision-making, yet have not been commonly used to establish links between drivers of adoption and bank-level performance. Bridging this gap requires integrative frameworks that account for both behavioral and strategic dimensions, supported by longitudinal, multi-regional, and multi-level analyses to capture the evolving impacts of FinTech adoption.

Although this review offers valuable insights, it is subject to several methodological constraints. The exclusion of non-English studies and gray literature sources (including industry reports and government publications) may have led to language and publication biases, resulting in an over-representation of Anglophone research and positive results while excluding null or negative findings. The search restriction to the Scopus and Web of Science databases might have produced coverage bias because regional outlets without database indexing could remain undetected, impacting the geographic and thematic distribution of the synthesis. The study results should be viewed as identifying patterns and associations instead of measuring population-level effects, and any generalizations

to under-represented regions should be made with caution. To mitigate these risks, we followed a transparent search protocol, recorded explicit reasons for exclusion, and triangulated themes across multiple journals. Future reviews should expand the database search to include multiple languages and perform meta-analyses, once sufficient data are available.

Our review contributes both to theoretical development and practical application by illustrating how consumer adoption factors interact with institutional strategies to shape the roles of FinTech in global banking. For practitioners, the findings highlight the importance of aligning adoption initiatives with broader strategic objectives, ensuring that the integration of digital financial technologies supports innovation, inclusivity, and long-term stability; for policymakers and technology developers, they underline the value of collaborative governance and adaptive regulatory frameworks to balance innovation with risk management.

Supplementary Materials: The following supporting information can be downloaded at: https://www.mdpi.com/article/10.3390/fintech4030049/s1, Table S1: preferred reporting items for systematic reviews and meta analysis extension for scoping review (PRISMA ScR) checklist.

Author Contributions: Conceptualization, A.A.; Methodology, A.A.; Software, A.A.; Validation, A.A. and S.A.; Formal Analysis, A.A.; Investigation, A.A.; Resources, A.A.; Writing—Original Draft Preparation, A.A.; Writing—Review and Editing, A.A. and S.A.; Visualization, A.A. and S.A.; Supervision, S.A.; Project Administration, S.A. All authors have read and agreed to the published version of the manuscript.

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Appendix A

Table A1. Search strings and databases for RQ1.

Database	Search Strings	Search Date	Results
Scopus	TITLE-ABS-KEY((“fintech*” OR “financial technolog*” OR “digital bank*” OR “mobile bank*” OR “online bank*” OR “payment technolog*” OR “crowdfunding*” OR “peer-to-peer lending*” OR “digital payment*”) AND (“adopt*” OR “accept*” OR “use*” OR “uptake” OR “customer adoption” OR “consumer adoption” OR “user adoption” OR “user acceptance”) AND (“enabl*” OR “driver*” OR “facilitat*” OR “motivator*” OR “support*” OR “promot*” OR “success factor*” OR “barrier*” OR “challenge*” OR “obstacl*” OR “hindrance*” OR “constraint*” OR “risk*” OR “resist*” OR “limitation*”) AND (“survey” OR “case study” OR “empirical study” OR “quantitative analysis")) AND PUBYEAR > 2014 AND NOT (TITLE-ABS-KEY(“Islamic finance” OR “Islamic fintech” OR “green finance” OR “systematic review”))	23 December 2024	846 articles
Web of Science	TS=(“fintech*” OR “financial technolog*” OR “digital bank*” OR “mobile bank*” OR “online bank*” OR “payment technolog*” OR “crowdfunding*” OR “peer-to-peer lending*” OR “digital payment*”) AND TS=(“adopt*” OR “accept*” OR “use*” OR “uptake” OR “customer adoption” OR “consumer adoption” OR “user adoption” OR “user acceptance”) AND TS=(“enabl*” OR “driver*” OR “facilitat*” OR “motivator*” OR “support*” OR “promot*” OR “success factor*” OR “barrier*” OR “challenge*” OR “obstacl*” OR “hindrance*” OR “constraint*” OR “risk*” OR “resist*” OR “limitation*”) AND PY=(2014-2025) AND TS=(“survey” OR “case study” OR “empirical study” OR “quantitative analysis”) NOT TS=(“Islamic finance” OR “Islamic fintech” OR “green finance” OR “systematic review”)	23 December 2024	4811 articles

Table A2. Search strings and databases for RQ2.

Database	Search Strings	Search Date	Results
Scopus	TITLE-ABS-KEY((“fintech*” OR “financial technolog*” OR “digital bank*” OR “mobile bank*” OR “online bank*” OR “payment technolog*” OR “peer-to-peer lending*” OR “crowdfunding*” OR “digital payment*") AND (“bank performance” OR “financial performance” OR “profitability” OR “efficiency” OR “return on assets” OR “ROA” OR “return on equity” OR “ROE” OR “net interest margin” OR “NIM” OR “operational efficiency” OR “loan quality” OR “market share” OR “stability")) AND PUBYEAR > 2014 AND NOT TITLE-ABS-KEY(“Islamic finance” OR “Islamic fintech” OR “green finance” OR “blockchain” OR “cryptocurrency” OR “systematic review”) AND (LIMIT-TO(DOCTYPE, “ar”))	1 January 2025	903 articles
Web of Science	TS=(“fintech*” OR “financial technolog*” OR “digital bank*” OR “mobile bank*” OR “online bank*” OR “payment technolog*” OR “peer-to-peer lending*” OR “crowdfunding*” OR “digital payment*”) AND TS=(“bank performance” OR “financial performance” OR “profitability” OR “efficiency” OR “return on assets” OR “ROA” OR “return on equity” OR “ROE” OR “net interest margin” OR “NIM” OR “operational efficiency” OR “loan quality” OR “market share” OR “stability”) AND PY=(2014-2025) NOT TS=(“Islamic finance” OR “Islamic fintech” OR “green finance” OR “blockchain” OR “cryptocurrency” OR “systematic review”)	1 January 2025	1103

Table A3. Journals, publishers, and rankings.

Journal Name	Publisher	Best Scopus Quartile
International Journal of System Assurance Engineering and Management	Springer	Q3 (Engineering)
Humanities and Social Sciences Communications	Springer Nature	Q1 (Social Sciences)
Global Knowledge, Memory and Communication	Emerald	Q2 (Information Science)
International Review of Management and Marketing	Econ Journals	Q4 (Business, Economics)
Journal of Risk and Financial Management	MDPI	Q2 (Finance)
Sustainability	MDPI	Q2 (Environmental Science)
International Journal of Information Management Data Insights	Elsevier	New (Not yet ranked)
Financial Innovation	Springer	Q1 (Finance)
Paper Asia	Research India Publications	Not indexed (Scopus)
Journal of Marketing Analytics	Palgrave Macmillan (Springer)	Q3 (Marketing)
Journal of Open Innovation: Technology, Market, and Complexity	Elsevier	Q2 (Business, Innovation)
Journal of Innovation and Entrepreneurship	Springer	Q2 (Business, Management)
Journal of Financial Services Marketing	Palgrave Macmillan	Q3 (Marketing, Finance)
International Journal of Bank Marketing	Emerald	Q2 (Business, Finance)
Journal of Islamic Marketing	Emerald	Q2 (Business, Marketing)
Journal of Modelling in Management	Emerald	Q3 (Management)
International Entrepreneurship and Management Journal	Springer	Q2 (Business, Management)
International Journal of Emerging Markets	Emerald	Q2 (Business, Economics)
Scientific Papers of the University of Pardubice, Series D: Faculty of Economics and Administration	University of Pardubice	Q4 (Economics)
Human Behavior and Emerging Technologies	Wiley	Q2 (Psychology, Technology)
Economic Research-Ekonomska Istraživanja	Taylor & Francis	Q3 (Economics)
Journal of Global Marketing	Taylor & Francis	Q3 (Marketing)
International Journal of Business Information Systems	Inder Science	Q3 (Information Systems)
Technology in Society	Elsevier	Q1 (Social Sciences, Technology)
International Journal of Information Management	Elsevier	Q1 (Information Systems)
Benchmarking: An International Journal	Emerald	Q2 (Business, Management)
Journal of Asian Finance, Economics and Business	Korea Distribution Science Association	Q3 (Economics, Finance)
African Journal of Science, Technology, Innovation and Development	Taylor & Francis	Q3 (Innovation, Development)
Entrepreneurship and Sustainability Issues	Entrepreneurship and Sustainability Center	Q3 (Business, Sustainability)
International Journal of Computing and Digital Systems	University of Bahrain	Q3 (Computer Science)

Table A3. *Cont.*

Journal Name	Publisher	Best Scopus Quartile
International Journal of Business & Management Science	Asian Economic and Social Society	Not indexed (Scopus)
Spanish Journal of Marketing	Emerald	Q2 (Marketing)
Review of International Business and Strategy	Emerald	Q2 (Business, Strategy)
Journal of Social and Economic Development	Springer	Q3 (Economics, Development)
Computers in Human Behavior	Elsevier	Q1 (Psychology, Technology)
Digital Business	Elsevier	New (Not yet ranked)
Entrepreneurial Business and Economics Review	Cracow University of Economics	Q2 (Business, Economics)
Heliyon	Elsevier	Q2 (Multidisciplinary)
Journal of Enterprise Information Management	Emerald	Q2 (Information Systems)
Information & Computer Security	Emerald	Q2 (Cybersecurity)
SAGE Open	SAGE	Q2 (Social Sciences)
Social Sciences	MDPI	Q2 (Social Sciences)
Economies	MDPI	Q2 (Economics)
The International Review of Retail, Distribution and Consumer Research	Taylor & Francis	Q3 (Business, Marketing)
Frontiers in Psychology	Frontiers Media	Q1 (Psychology)
Aslib Journal of Information Management	Emerald	Q2 (Information Science)
Global Business Review	SAGE	Q3 (Business, Economics)
Management Decision	Emerald	Q1 (Business, Management)
Journal of Advances in Management Research	Emerald	Q3 (Management)
Environmental Science and Pollution Research	Springer	Q2 (Environmental Science)
Journal of Behavioral and Experimental Finance	Elsevier	Q2 (Finance, Behavioral Economics)
International Journal of Data and Network Science	Growing Science	Q2 (Computer Science)
International Journal of Financial Studies	MDPI	Q2 (Economics, Finance)
Journal of Infrastructure, Policy and Development	Elsevier	Q2 (Economics, Development)
International Journal of Sustainable Development	Inderscience	Q3 (Environmental Science)
International Journal of Monetary Economics and Finance	Inderscience	Q3 (Economics, Finance)
Asian Economic and Financial Review	AESS Publications	Q3 (Economics, Finance)
Banks and Bank Systems	Business Perspectives	Q3 (Finance, Banking)
Pacific-Basin Finance Journal	Elsevier	Q1 (Finance)
Journal of the Knowledge Economy	Springer	Q2 (Economics, Innovation)
Journal of Global Information Management	IGI Global	Q2 (Information Systems)
Cogent Economics & Finance	Taylor & Francis	Q2 (Economics, Finance)
Technological Forecasting and Social Change	Elsevier	Q1 (Business, Innovation)
Journal of International Money and Finance	Elsevier	Q1 (Finance)
International Review of Economics & Finance	Elsevier	Q2 (Economics, Finance)
European Management Journal	Elsevier	Q1 (Business, Management)
European Journal of Innovation Management	Emerald	Q2 (Business, Innovation)
International Journal of Advanced and Applied Sciences	Elsevier	Q3 (Multidisciplinary)
Review of Quantitative Finance and Accounting	Springer	Q2 (Finance, Accounting)
International Journal of e-Collaboration	IGI Global	Q3 (Information Technology)

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