INPLASY

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

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ADMINISTRATIVE INFORMATION

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Conflicts of interest - None declared.

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Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 23 August 2025 and was last updated on 23 August 2025.

INTRODUCTION

*R*eview question / Objective Population: Focus on consumers adopting FinTech. Banking systems integrating FinTech in their operations.
intervention: Consumer adoption in the form of digital payment solutions and similar applications. Banking system FinTech integrations for enhanced customer satisfaction.
comparison: Focus on enablers and barriers impacting FinTech adoption on the consumer and banking ends.
Comparative inspection of factors impacting bank performance.
outcome: Successful consumer adoption of FinTech solutions.
Bank performance efficacy in terms of operational management, profitability, and customer retention.

research questions:
• RQ1: Which enablers and barriers affect FinTech adoption from a consumer perspective?

• RQ2: How does FinTech adoption influence bank performance?

Condition being studied The study examines the adoption of financial technology (FinTech) by consumers and its impact on the performance of banks. The review focuses on enablers and barriers influencing FinTech adoption (e.g., trust, digital literacy, perceived ease of use, regulatory support) and evaluates how adoption in FinTech affect bank profitability, efficiency, and competitiveness.

METHODS

Search strategy We adhered to the PRISMA 2020 reporting guidelines for systematic reviews. 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 a 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 software. Records were screened in Rayyan (titles/abstracts, and then full texts) by two reviewers, and any disagreements were resolved by discussion.

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 PUBYEAR > 2014 AND ("survey" OR "case study" OR "empirical study" OR "quantitative analysis")) AND NOT TITLE-ABS-KEY("Islamic finance" OR "Islamic fintech" OR "green finance" OR "systematic review")) 23/12/2024 4,811 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") 23/12/2024 846 articles

RQ2:
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 ("Islamic

finance" OR "Islamic fintech" OR "green finance" OR "blockchain" OR "cryptocurrency" OR "systematic review") AND (LIMIT-TO(DOCTYPE, "ar")) 1/1/2025 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") 1/1/2025 1103.

Participant or population Focus on consumers adopting FinTech. Banking systems integrating FinTech in their operations.

Intervention Consumer adoption in the form of digital payment solutions and similar applications. Banking system FinTech integrations for enhanced customer satisfaction.

Comparator Focus on enablers and barriers impacting FinTech adoption on the consumer and banking ends. Comparative inspection of factors impacting bank performance.

Study designs to be included Study designs to be included:This review will include empirical, quantitative studies employing modern and comparable methodologies with advanced statistical techniques (e.g., regression analysis, structural equation modeling, panel data analysis, experimental/quasi-experimental designs, and other well-reputed econometric or statistical methods). Only studies published in indexed peer-reviewed journals will be considered.Study designs to be excluded:Systematic literature reviews, conceptual or theoretical papers, book chapters, conference proceedings, commentaries, case reports, and studie.

Eligibility criteria RQ1: For the first research question, studies were included if they used modern and reputable methodologies with advanced statistical techniques, while weaker or outdated designs were excluded. Eligible studies explicitly focused on consumer adoption of FinTech services or technologies, but articles related to Islamic finance, green or energy-related finance, or those examining corporate adoption or

technological development without a consumer focus were excluded. Only empirical, quantitative studies published in indexed journals were considered, whereas systematic reviews, book chapters, non-indexed outlets, and other non-research publications were excluded. The disciplinary scope was limited to business, management, economics, finance, and social sciences, with other fields excluded. Finally, only English-language studies published between 2016 and 2024 were eligible.

RQ2: For the second research question, eligible studies had to employ modern, advanced, and reputable statistical methodologies, with weaker or older designs excluded. Inclusion was limited to studies explicitly analyzing the relationship between FinTech adoption and bank performance, while those focused solely on consumer adoption without exploring bank performance, or those examining FinTech in non-banking industries, were excluded. Journals needed to be indexed and include empirical, quantitative research articles; incomplete abstracts, commentaries, short papers, systematic reviews, book chapters, and conference proceedings were excluded. The scope was confined to disciplines in business, management, economics, finance, and the social sciences, with studies from other fields omitted. Only English-language publications were eligible, and the timeframe was restricted to studies published between 2016 and 2024 to capture contemporary insights into the evolving relationship between FinTech and banking performance.

Information sources Web of science and scopus.

Main outcome(s) The review will synthesize evidence on two primary outcomes.

(1) Consumer adoption of FinTech: The review will identify and classify the enablers and barriers influencing consumer adoption of financial technology services (e.g., mobile banking, payment applications, peer-to-peer lending platforms, digital investment tools). Outcomes will include categorized themes such as economic and financial motivators, digital infrastructure, service personalization, trust and security, financial literacy, and regulatory or institutional support. Timing is not restricted to a specific adoption stage, but focuses on published studies between 2016–2024.

(2) Impact of FinTech on Bank Performance:
The review will evaluate how FinTech adoption influence bank-level performance outcomes. Positive impacts include enhanced profitability (e.g., ROA, ROE), improved operational efficiency,

strengthened market competitiveness, and customer growth. Negative impacts include margin compression, short-term restructuring and compliance costs, competitive displacement, and regulatory or cybersecurity burdens. Outcomes will be grouped thematically to capture both financial and operational dimensions of bank performance, with a focus on studies published between 2016–2024.

3) Integrative contribution:
This review combines two previously independent research areas—consumer FinTech adoption and bank performance—into a single analytical framework. By linking micro-level consumer behaviors such as trust, digital literacy, and perceived ease of use with macro-level indicators of profitability, competitiveness, and regulatory alignment, the study demonstrates how individual adoption patterns shape strategic and institutional performance.

Quality assessment / Risk of bias analysis The quality of primary studies will be assessed using predefined eligibility and methodological criteria. Each study will be evaluated based on the appropriateness of its research design, the robustness of statistical methods, the validity and reliability of measurement constructs, and the clarity of reporting. We will exclude studies with weak or outdated designs. Risk of bias will be considered in terms of selection bias (sample representativeness), reporting bias (incomplete results), and publication bias (non-indexed sources). The quality assessment will follow guidelines adapted from PRISMA and Joanna Briggs Institute (JBI) critical appraisal tools, tailored to the management and finance research context.

Strategy of data synthesis We conducted a 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 software. Records were screened in Rayyan (titles/abstracts, and then full texts) by two reviewers, and any disagreements were resolved by discussion.

For RQ1 , our combined Scopus and Web of Science searches yielded 5,657 records. After removing 512 duplicates, 4,145 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 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 , we identified 2,006 records and removed 589 duplicates, screening 1,417 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.

Subgroup analysis For Research Question 1 (consumer adoption), subgroup analysis will consider different types of FinTech services (e.g., mobile payments, digital lending, investment platforms), regional or country contexts (developed vs. emerging markets), variations in theoretical models applied (e.g., TAM, UTAUT, TPB) and enablers or barriers.

For Research Question 2 (bank performance), subgroup analysis will be conducted based on country context, distinguishing between developed and emerging economies. Findings will also be categorized according to positive impacts (e.g., profitability, operational efficiency, competitiveness) and negative impacts (e.g., margin compression, compliance costs, and regulatory or cybersecurity challenges).

Sensitivity analysis This review will not conduct a formal statistical sensitivity analysis, as it is not a meta-analysis. Instead, robustness will be assessed narratively by comparing results across study designs, regions, and contexts, and by considering whether the exclusion of lower-quality studies affects the overall thematic conclusions.

Country(ies) involved Belgium.

Keywords Fintech, adoption, bank performance, enablers, barriers, systematic literature review.

Contributions of each author
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