



(REVIEW ARTICLE)



A Scientometric examination of ten years of Fintech research: Key findings and implications

Paulin Kamuangu *

Liberty University, Business School, Lynchburg, Virginia, United States of America.

World Journal of Advanced Research and Reviews, 2024, 21(03), 2248–2256

Publication history: Received on 14 February 2024; revised on 25 March 2024; accepted on 27 March 2024

Article DOI: <https://doi.org/10.30574/wjarr.2024.21.3.0961>

Abstract

The past ten years have seen the rapid and significant growth of Financial Technology (Fintech), a disruptive influence fundamentally transforming the financial industry's structure. This study delves into a decade's worth of Fintech research, intending to extract the fundamental nature of its revolutionary influence on scholars, practitioners, and policymakers. By employing a comprehensive approach involving systematic research and literary synthesis, we can reveal the dynamic patterns and vivid nuances that characterize the evolving landscape of Fintech. Within the innovation framework, various patterns become apparent, resembling constellations in the night sky. Regulatory obstacles appear as towering cliffs and the twin pillars of financial inclusion and sustainability beckon like distant beacons in the fog. Our exploration of Fintech research uncovers a constantly changing ecosystem characterized by evolving paradigms, methodological changes, and the elusive possibility of long-term consequences. Through the lens of scholarly investigation, we delve into the complicated relationship between interdisciplinary collaboration and innovation, which serves as the driving force behind advancements in the field of Financial Technology (Fintech).

Keywords: Fintech; Financial Technology; Research; Trends; Implications; Regulation; Innovation.

1. Introduction

In the ever-evolving field of Financial Technology (Fintech), a seismic shift has happened, fundamentally altering the fabric of financial services and how they interface with the lives of both individuals and organizations. The previous ten years have observed an unparalleled increase in attention from academics, professionals in the field, and decision-makers, all engrossed by the transformative capacity and inventive impetus of Financial Technology (Fintech). This introductory chapter sets the premise for an intensive examination covering a decade of Fintech research aimed at deciphering the deep tapestry of trends, discoveries, and consequences driving this dynamic sector.

1.1. Background and Significance

Enter Financial Technology, or FinTech is generally known as a dynamic force altering the traditional financial services landscape. The historical trajectory of FinTech extends back to the dawn of the 20th century, marked by the pioneering introduction of the original credit card by Diners Club in 1950—a watershed moment signaling the arrival of electronic payments and the dawn of financial metamorphosis [1]. However, it was not until the later part of the 20th century and the advent of the 21st century that FinTech truly reached its stride, spurred by fast advancements in digital innovation and new consumer paradigms. The past decade has witnessed an incredible rise in growth and inventiveness across all financial areas. The availability of cell phones, the internet, and digital platforms has democratized financial services, giving people unparalleled access and convenience globally. From the realms of mobile banking and digital wallets to the growth of peer-to-peer lending platforms and the arrival of robo-advisors, FinTech has ushered in a new era of financial management, credit accessibility, and investing methods [2].

* Corresponding author: Paulin Kamuangu



Figure 1 Four Stages of FinTech's Evolution [3]

Moreover, the preceding decade has been distinguished by a genuine deluge of technology advancements and disruptive innovations within FinTech. Enter blockchain technology, originally intended as the underpinning of cryptocurrencies such as Bitcoin, is now drawing global attention for its promise to revamp financial transactions, reinforce transparency, and slash intermediation costs [4]. Figure 1 displays the four stages of the step-by-step evolution of FinTech. In parallel, the ascension of artificial intelligence (AI) and machine learning algorithms has been nothing short of meteoric inside FinTech circles, heralding a new era of automated procedures, personalized consumer experiences, and risk mitigation techniques [5]. Furthermore, the regulatory winds of change, epitomized by initiatives like open banking and Payment Services Directive 2 (PSD2) rollout in the European Union, have fostered an environment ripe for heightened competition, collaborative synergy, and boundless innovation within the financial ecosystem. These regulatory waves have encouraged the formation of fresh business paradigms, strategic alliances, and expansive ecosystems, propelling FinTech further into innovation and disruption [6].

In summary, FinTech's historical voyage, its developmental trajectory over the past decade, and the paradigm-changing developments witnessed therein underline a transformational odyssey characterized by technological brilliance, regulatory reform, and shifting consumer preferences. As FinTech continues its relentless march, reshaping the contours of the financial landscape, it behooves researchers, industry practitioners, and policymakers alike to decipher the implications and seize upon the opportunities afforded by these seismic shifts, navigating this ever-evolving terrain with aplomb.

1.2. Research Objectives

This article strives to cast a wide net, presenting a panoramic perspective spanning a decade of Fintech research, weaving together significant insights, exposing nascent patterns, and proffering actionable instructions for stakeholders at large. Through a rigorous review of an eclectic array of literature, this project strives to unravel the ever-evolving tapestry of FinTech, examine its multidimensional influence across multiple fields, and throw light on lacunae within current understanding. Armed with an interdisciplinary perspective, our aim is to enhance understanding of the opportunities and challenges presented by FinTech, with broad implications for research priorities, operational strategies, and policy imperatives.

The rest of the paper is organized as follows:

Section 2 shows a labyrinthine trip through the dense web of the extant literature on Fintech, unraveling its complexity and untangling its various threads. Section 3 lays bare the delicate patterns of data gathering, analysis, and synthesis, weaving together diverse strands into a cohesive story. Section 4 looks deep into an array of trends and themes in Fintech research. Section 5 works as a nexus, combining the different shards of knowledge obtained from the literature review. Finally, in Section 6, the way for future research activities.

2. Literature Review

The rise of Financial Technology, or Fintech, has had a profound impact on the financial industry. With the use of technological advancements, Fintech has introduced innovative solutions such as mobile payments, peer-to-peer lending, and blockchain technology, potentially revolutionizing traditional financial services and expanding financial inclusion (sections 2.1 and 2.2). Extensive research has delved into the multifaceted nature of Fintech, shedding light on its key characteristics and effects. For example, studies have examined the role of mobile money in promoting financial inclusion and the potential of blockchain technology to disrupt financial markets (section 1.2).

Furthermore, recent research has explored the factors influencing the adoption of Fintech by consumers and organizations (section 1.2). However, despite the growing body of knowledge, there are still significant gaps in our understanding. Existing research has mainly focused on financial inclusion and access, with less attention given to potential risks to financial stability (section 1.3). Additionally, the regulatory challenges posed by emerging technologies like artificial intelligence and cryptocurrencies require further exploration (section 1.3). This literature review aims to address these gaps by comprehensively analyzing existing research on Fintech. Through a critical evaluation, we will identify key findings, explore emerging themes, and ultimately guide future research directions within the dynamic landscape of Fintech. Financial Technology, or Fintech, has emerged as a transformative force in the financial sector. By harnessing technological advancements, Fintech offers various innovative solutions, including mobile payments, peer-to-peer lending, and blockchain technology. This could revolutionize traditional financial services and broaden financial inclusion (sections 2.1 and 2.2). A growing body of research has explored the multifaceted nature of Fintech. Previous reviews have shed light on its key characteristics and impacts. For instance, studies have examined the role of mobile money in financial inclusion and the potential of blockchain technology to disrupt financial markets (section 1.2).

Additionally, recent research has investigated the factors influencing Fintech adoption by consumers and organizations (section 1.2). However, despite this growing body of knowledge, our understanding still needs to be improved. Existing research has primarily focused on financial inclusion and access, with less emphasis on potential risks to financial stability (section 1.3). Furthermore, the regulatory challenges posed by emerging technologies like artificial intelligence and cryptocurrencies require further exploration (section 1.3). This literature review aims to address these gaps by comprehensively analyzing existing research on Fintech. Through a critical evaluation, we will identify key findings, explore emerging themes, and ultimately inform future research directions within the dynamic landscape of Fintech.

2.1. Definition and Evolution of Fintech

The literature on Financial Technology (Fintech) spans several fields, reflecting the interdisciplinary nature of the area. Scholars [7] have contributed to defining Fintech as the application of technology to financial services, including a wide range of advances, including digital payments, peer-to-peer lending, robo-advisors, and blockchain technology. This definition underlines the revolutionary potential of Fintech in changing traditional financial intermediation and enabling greater financial inclusion [8].

Moreover, the evolution of Fintech has been impacted by technical advancements and increasing consumer tastes. Early research [9] underlined the relevance of mobile banking and digital platforms in improving financial access, particularly in developing nations. Subsequent studies [10] have investigated the growth of crowdfunding and decentralized finance (DeFi) as disruptive forces, threatening conventional banking structures and regulatory norms.

2.2. Previous Reviews of Fintech Research

Several extensive reviews have summarized the increasing literature on Fintech, providing significant insights into its key characteristics and ramifications. Notably, the work [11] studied the impact of mobile money in fostering financial inclusion, emphasizing the importance of user uptake and regulatory frameworks. Similarly, literature reviews [12] have investigated the influence of blockchain technology on financial markets and the broader economy, noting its potential to change transactional processes and minimize intermediation costs.

Furthermore, recent meta-analyses [13] have investigated the determinants of Fintech acceptance among consumers and organizations, giving insights into aspects like as trust, perceived utility, and regulatory compliance. These evaluations provide a basis for our study, informing our understanding of the growing Fintech ecosystem and directing our selection of relevant literature for analysis.

2.3. Gap Identification

Despite the rising quantity of literature on Fintech, significant gaps and opportunities for further research exist. For instance, whereas earlier studies have studied Fintech's influence on financial inclusion and access, comparatively less attention has been paid to its implications for financial stability and systemic risk [14]. Additionally, the regulatory issues raised by Fintech innovation require sophisticated study, particularly in light of new technologies like artificial intelligence and cryptocurrencies [15].

By integrating and critically analyzing existing research, this literature review attempts to uncover gaps in knowledge and inform the subsequent analysis of major results and implications for Fintech research.

3. Methodology

Methodology uncovers the complicated pattern of adopting Digital Transformation Innovations within the dynamic terrain of the FinTech Industry. The financial sphere is undergoing a profound metamorphosis spurred by the unrelenting march of digital developments, especially the omnipresence of Artificial Intelligence (AI) and the subtle accuracy of Machine Learning (ML). These disruptive technologies have unfurled various possibilities inside financial services, ushering in an era of unprecedented efficiency, automation, and customization. This discourse goes on a journey to unravel the complicated web of digital transformation, AI, and ML advancements, tracking their progression across the FinTech domain and traveling through the maze of applications, advantages, and challenges.

3.1. Data Collection

Embarking on this voyage into the core of Fintech study, our technique unfurled like a map of scholarly exploration over the last decade. Picture a thorough excavation of the digital environment, probing through the labyrinthine depths of academic databases. PubMed, Scopus, Web of Science, and Google Scholar stood as sentinels guarding the troves of knowledge. At the same time, our search, fuelled by terms like "Fintech," "Financial Technology," and their numerous avatars, sought to capture the elusive spirit of innovation. This journey did not end with the mere collection of data; rather, it was simply the first step in a tremendous odyssey toward inclusivity and rigor. Through numerous rounds of screening, we sieved through the chaff, discovering the jewels of relevance amidst the flood of information. Duplicate records fell by the wayside, casualties of our tireless pursuit of clarity.

3.2. Inclusion and Exclusion Criteria

In creating the bounds of our research, we created a realm of inclusion and exclusion, a domain where only the worthy might go. Studies, like celestial things, had to meet certain conditions to win their spot in our celestial sphere. From empirical research to theoretical thoughts, from case studies to conceptual analyses, our net was cast wide to ensnare the core of Fintech.

Amid the wealth, shadows of irrelevance and insubstantiality lurked. Articles that failed to satisfy the gaze of rigor or ventured beyond the temporal bounds of our time were exiled from our pantheon. Non-peer-reviewed sources were deemed unworthy of our attention.

3.3. Data Analysis Techniques

As the dust fell on our data trove, we entered into the maze of analysis, equipped with nothing but our wits and a quest for understanding. Themes arose like constellations in the night sky, directing our interpretation through the immense expanse of literature. Each study, a star in our firmament, contributes its own hue to the fabric of knowledge.

Through the alchemy of thematic analysis, we teased out the underlying patterns and relationships, integrating them into the fabric of our narrative. Authorship, publication year, methodology—each thread was skilfully weaved into the rich tapestry of knowledge. Thus, through the crucible of analysis, we emerged not just with findings but with a greater grasp of the Fintech environment, ready to define the route of future inquiry.

4. Trends and Themes in Fintech Research

4.1. Diving into Adoption Dynamics

Delving deep into the labyrinth of Fintech research reveals a plethora of pathways for studying adoption and usage trends throughout the different fabric of consumers, enterprises, and financial institutions. Researchers rigorously

scrutinize aspects impacting adoption, from the subtleties of user demographics to the ethereal realm of perceived advantages and regulatory compliance [16]. Moreover, the expedition extends to the distant reaches of geographical landscapes, unraveling the knotted skein of adoption rates and user preferences across diverse market groups [17]. Navigating through these patterns is analogous to navigating a course across a tumultuous sea, needed for Fintech firms and authorities to navigate towards mainstream adoption and usage of novel financial services.

4.2. Technological Odyssey in Fintech

Embarking on a technical expedition, Fintech researchers voyage through a vast expanse of disruptive technologies: from the mystical realms of blockchain to the artificial intelligence cosmos, from the data analytics galaxy to the cloud computing nebula. Each discovery unfurls new frontiers, from the potential of blockchain to transform financial landscapes to the cryptic algorithms of artificial intelligence, orchestrating symphonies of credit score, risk assessment, and fraud detection [18]. Grasping the ramifications of these advances is analogous to deciphering cryptic codes, important for Fintech firms to navigate the celestial realms of competitiveness and regulators to maintain the cosmic balance of innovation and consumer interests.

4.3. Navigating Regulatory Quagmires

In the ever-shifting sands of Fintech innovation, regulatory obstacles loom huge like towering monoliths, casting shadows over policymakers and regulators globally. Researchers enter into the regulatory labyrinth, sifting through the numerous frameworks governing Fintech activities, from the convoluted paths of licensing requirements to the maze of consumer protection and cybersecurity [19]. Among this regulatory maze, the rise of regulatory sandboxes and innovation hubs offers glimmers of optimism, giving safe havens for experimentation among the stormy seas of Fintech evolution [20]. Navigating these problems is vital for policymakers and regulators to sail a steady path between innovation and stability, preventing the financial ecosystem from turbulent upheavals.

4.4. Bridging the Inclusion Chasm

Fintech serves as a bridge across the gaping chasm of financial exclusion, delivering a lifeline to underserved communities in the broad expanse of the financial world. Researchers dig into the depths of financial inclusion indicators, from the caverns of credit availability to the oases of savings, insurance, and investment options [21]. Amidst the digital desert, digital payments, mobile banking, and alternative financing platforms emerge as beacons of hope, illuminating the route toward inclusive economic growth in the hinterlands of developing countries and rural areas [12]. Understanding the causes and challenges of inclusion through Fintech is crucial, assisting policymakers and practitioners in creating solutions that empower underrepresented communities and cultivate fair prosperity.

4.5. Safeguarding the Digital Citadel

Within the digital citadel of Fintech, cybersecurity, and data privacy stand as strong guardians, warding off the specters of data breaches and cyber dangers. Researchers go on a mission to find vulnerabilities and hazards hidden in the shadows, from the labyrinthine depths of data breaches to the perilous cliffs of phishing attacks and ransomware [6]. Amidst this treacherous environment, regulatory remedies and best practices emerge as guiding stars, illuminating the route toward robust security safeguards and consumer trust [5]. Understanding these problems is vital for Fintech firms to build their defenses and for regulators to erect bulwarks that defend the financial ecosystem from digital marauders.

4.6. Charting a Course towards Sustainable Horizons

In the ever-expanding galaxy of Fintech, a new constellation emerges: the intersection of Fintech and sustainable finance. Researchers set sail towards this new zone, researching the convergence of technology with environmental, social, and governance factors [7]. From the verdant fields of green finance to the coasts of impact investing and corporate social responsibility, Fintech lights avenues towards sustainable vistas [10]. Understanding this nexus is crucial, steering towards a future where financial prosperity intertwines with social and environmental stewardship, producing a legacy of resilience and sustainability.

These patterns and themes provide an image of the ever-evolving Fintech world, a tapestry woven with threads of intricacy and creativity. By unraveling these intricacies, researchers, practitioners, and policymakers may sail the turbulent seas of Fintech with clarity and purpose, establishing a route towards sustainable growth and prosperity.

5. Results

In the ever-evolving landscape of financial technology (Fintech), researchers have embarked on a decade-long voyage, navigating through a dynamic realm characterized by rapid technological advancements, shifting consumer behaviors, and evolving regulatory frameworks. This journey through scholarly exploration delves into various facets of Fintech, from adoption patterns and technological innovations to regulatory challenges and the pursuit of financial inclusion. As we delve into the depths of Fintech research, we encounter a rich tapestry of themes and narratives that shape the discourse. Central to this narrative is the examination of adoption and usage patterns, where researchers dissect the intricate interplay of demographics, trust dynamics, and regulatory environments that shape the trajectory of Fintech innovations. Amidst this exploration, attention is drawn to the transformative potential of emerging technologies such as blockchain, artificial intelligence (AI), and big data, heralding a new era of financial intermediation and risk management.

Furthermore, the narrative expands to encompass regulatory considerations as experts navigate the complex landscape of policies to analyze their impact on innovation, competition, and consumer protection. Additionally, Fintech's role in promoting financial inclusion emerges as a beacon of hope, offering solutions to address the shadows of exclusion. However, significant knowledge gaps persist amidst the wealth of insights and revelations, calling for further investigation. Questions surrounding Fintech's impact on stability, systemic risks, and market dynamics still need to be answered, urging researchers to delve deeper into empirical analysis. Moreover, concerns about the long-term implications of emerging technologies like blockchain and AI underscore the need for empirical evidence to inform responsible innovation and policymaking. Through synthesizing critical insights gleaned from a decade of Fintech exploration, a clear message emerges—a call to action for policymakers, regulators, industry leaders, and scholars to collaborate in navigating the complexities of Fintech to foster inclusivity, innovation, and sustainable growth. As we reflect on the insights gleaned from this journey, let us heed the clarion call to use these findings as a compass guiding future voyages in the ever-evolving terrain of Fintech towards shores of enlightenment and progress.

5.1. Overview of Fintech Research Landscape

Embark on a voyage through a decade's worth of Fintech exploration as the landscape unfurls in a kaleidoscope of dynamics. It is a domain distinguished by the frantic pace of technical progress, the chameleon-like fluctuations in consumer behavior, and the ever-changing outlines of regulatory frameworks. Dive into the depths of scholarly investigation, diving into adoption patterns, tech advances, regulatory impediments, financial inclusion, cyber security, and the pursuit of sustainable finance. The literature echoes with a crescendo of inquiry, striving to uncover the enigma of Fintech's impact across broad spectra of stakeholders - from the average consumer to the towering edifices of financial institutions and the custodians of policy defining our societal fabric.

5.2. Analysis of Major Research Themes

Amidst the maze of Fintech study, identifiable patterns emerge, analogous to constellations in the night sky. Central to the narrative are the narratives of adoption and usage, as researchers deconstruct the complicated dance of demography, trust, and regulatory frameworks defining Fintech's trajectory. However, amidst the commotion, the spotlight shines brilliantly on technical marvels — blockchain, AI, and big data - heralding a new era of financial intermediation, risk navigation, and customer happiness. Regulatory crossroads beckon as experts negotiate the labyrinth of policies, analyzing their impacts on innovation and competition and defending the interests of the common folk. Moreover, the narrative expands further, exposing Fintech's transformative potential in the sphere of financial inclusion, a beacon of hope amidst the shadows of exclusion. Cybersecurity appears as a sentinel, guarding the gates against digital marauders, while the murmurs of sustainability resound, pushing Fintech to be a steward of environmental, social, and governance factors.

5.3. Identification of Significant Knowledge Gaps

Despite numerous discoveries, there are still gaps in our understanding that require courageous investigation. Questions persist, seeking answers regarding Fintech's impact on stability, systemic risks, and market dynamics. The future presents looming uncertainties, prompting concerns about the potential long-term effects of technological advancements such as blockchain and AI. Empirical evidence is scarce, making it crucial to carefully examine the effectiveness of regulatory interventions and policy initiatives in fostering responsible innovation and protecting consumer interests.

5.4. Synthesis of Critical Insights

In this labyrinth of investigation, a torch of insight emerges. The summation of a decade's worth of Fintech odyssey highlights the importance of teamwork and empirical rigor. It is a siren cry to politicians, regulators, industry titans, and scholars to join in the pursuit of a single purpose — navigating the tumultuous waters of Fintech to create inclusivity, innovation, and sustainable growth.

Through this synthesis, a clarion call resounds — let these ideas be the compass guiding future voyages in the ever-evolving terrain of Fintech, heading towards shores of enlightenment and progress.

5.5. Future Directions for Fintech Research

In the dynamic realm of financial technology (Fintech), scholars continuously push the boundaries of knowledge, venturing into unexplored territories and pioneering new avenues of inquiry. As we look toward the future of Fintech research, we are met with a landscape ripe with emerging areas of interest, methodological innovations, and long-term implications that promise to shape the trajectory of financial services and the global economy. At the forefront of future Fintech research are emerging areas of interest that promise to revolutionize the financial landscape. From the intersection of Fintech with cutting-edge technologies like quantum computing, Internet of Things (IoT), and Augmented Reality (AR) to the rise of decentralized finance (DeFi) and central bank digital currencies (CBDCs), scholars are embarking on a voyage into the unknown, seeking to understand the transformative potential of these innovations on financial intermediation, monetary policies, and global finance. Moreover, there is a growing emphasis on Fintech's cultural and ethical dimensions as researchers grapple with algorithmic bias, digital divide, and socioeconomic inequality, aiming to foster more inclusive and equitable financial services.

However, navigating these uncharted waters requires bold exploration, methodological innovations, and interdisciplinary approaches. Future Fintech research demands integrating powerful analytics technologies like machine learning and natural language processing to navigate vast oceans of data, uncovering insights into Fintech adoption, usage, and impact. Collaboration becomes paramount as academia, industry, and policymakers converge to validate results and co-create solutions, employing a diverse array of methodologies—from quantitative analytics to qualitative case studies—to gain a comprehensive understanding of the multifaceted Fintech landscape. As researchers peer into the distant horizons, they are tasked with deciphering their discoveries' long-term implications and predictions. Through scenario analysis and longitudinal investigations, they seek to anticipate the twists and turns of technological evolution, regulatory shifts, and market dynamics, providing critical insights to guide strategic decision-making and policy formulation in the ever-evolving Fintech ecosystem. The future of Fintech research is a narrative of exploration and discovery fueled by curiosity, invention, and collaboration. As scholars traverse the uncharted waters ahead, they embrace the challenges and opportunities that lie before them, charting a course toward a more informed, inclusive, and sustainable financial future.

5.5.1. Emerging Areas of Interest

In the ever-evolving domain of Fintech, academics are setting their sights on exciting new frontiers. One such frontier resides at the confluence of Fintech and cutting-edge technologies like quantum computing, IoT, and AR. Delving deep, they strive to unwrap the promise these breakthroughs offer in changing financial services, increasing user experiences, and fighting daunting opponents like cybersecurity and data privacy. Moreover, the rise of decentralized finance (DeFi) and central bank digital currencies (CBDCs) has kindled curiosity, motivating scholars to examine their impact on financial intermediation, monetary policies, and the stability of global finance. It is a voyage into the unknown, exploring how these upheavals affect established banking practices, regulatory environments, and the fundamental fabric of our financial institutions. However, the adventure does not end there; there is an increasing focus on Fintech's cultural and ethical components as experts wrestle with challenges ranging from algorithmic biases to the digital divide, and the shadow of socio-economic inequality looms large. As they traverse these uncharted waters, academics are entrusted with finding the hidden hazards and unintended repercussions of Fintech advances, charting a road towards more ethical and inclusive financial services.

5.5.2. Methodological Innovations and Approaches

Nevertheless, it is not just about mapping new areas; it is about how we navigate through them. Future Fintech research necessitates daring methodological advances and interdisciplinary methods to solve the challenging challenges that lie ahead. Armed with powerful analytics technologies like machine learning and natural language processing, academics are combing through massive oceans of data, deciphering patterns, and revealing insights regarding Fintech acceptance, usage, and effect. Collaboration is vital on this expedition, as academics, industry, and policymakers come together to pool their resources, validate results, and co-create solutions. From the quantitative world to the qualitative domain,

researchers are adopting various methodologies—from interviews and focus groups to immersive case studies—to get a complete knowledge of the Fintech landscape's complexity.

5.5.3. Long-Term Implications and Predictions

As the expedition unfolds, researchers stare beyond the distant horizons, considering the long-term consequences of their discoveries. Through scenario analysis and longitudinal investigations, they strive to foresee the twists and turns of technical evolution, regulatory shifts, and market dynamics in the Fintech ecosystem. By casting their vision into the future, they strive to unravel the mysteries of Fintech's impact on society and the financial industry, giving essential insights to guide strategic decision-making and policy formulation. It is a voyage of discovery that promises to reveal the route forward in the ever-shifting environment of Fintech.

In conclusion, the future of Fintech research is a narrative of exploration and discovery, fuelled by curiosity, invention, and collaboration. As we traverse the uncharted waters ahead, let us embrace the difficulties and opportunities that lie before us, charting a course towards a more educated, inclusive, and sustainable financial future.

6. Conclusion

The synthesis of ten years of Fintech research has provided significant insights into the growing environment of financial technology, emphasizing key trends, problems, and opportunities affecting the industry. Through a comprehensive examination and analysis of the literature, this study has shed light on Fintech's adoption patterns, technological advancements, regulatory obstacles, and societal implications. Overall, the findings underscore the transformative potential of Fintech in changing financial services, boosting consumer welfare, and driving inclusive economic growth. However, the quick rate of innovation has also raised issues surrounding cybersecurity, data privacy, regulatory compliance, and ethical considerations, needing thorough inspection and proactive actions to manage risks and preserve consumer interests. Furthermore, the synthesis of important findings has indicated various avenues for future research, including the exploration of emergent technologies, societal and ethical implications of Fintech, methodological innovations, and long-term predictions. By addressing these research gaps and embracing interdisciplinary approaches, academics can better understand the intricate interplay between technology, money, and regulation in the Fintech ecosystem.

In conclusion, this study has provided useful insights into Fintech research's past, present, and future, delivering practical recommendations for researchers, practitioners, policymakers, and industry stakeholders. By working and developing together, we can leverage the revolutionary potential of Fintech to create a more inclusive, efficient, and sustainable financial system for all.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

References

- [1] Deville, J. (2013). Paying with plastic: The enduring presence of the credit card. In *Accumulation* (pp. 87-104). Routledge.
- [2] Liu, J., Li, X., & Wang, S. (2020). What have we learned from 10 years of fintech research? A scientometric analysis. *Technological Forecasting and Social Change*, 155, 120022.
- [3] ZIGURAT, Evolution of Fintech: The 5 Key Eras, 25/08/2022. <https://www.e-zigurat.com/en/blog/evolution-of-fintech/>
- [4] Ahmi, A., Tapa, A., & Hamzah, A. H. (2020). Mapping of financial technology (FinTech) Research: A bibliometric analysis. *Globalization*, 2, 2008.
- [5] Dosso, M., & Aysan, A. F. (2022, April). The technological impact in finance: a bibliometric study of fintech research. In *Eurasian Business and Economics Perspectives: Proceedings of the 35th Eurasia Business and Economics Society Conference* (pp. 193-209). Cham: Springer International Publishing.

- [6] Bajwa, I. A., Ur Rehman, S., Iqbal, A., Anwer, Z., Ashiq, M., & Khan, M. A. (2022). Past, present and future of FinTech research: A bibliometric analysis. *Sage Open*, 12(4), 21582440221131242.
- [7] Elia, G., Stefanelli, V., & Ferilli, G. B. (2023). Investigating the role of Fintech in the banking industry: what do we know?. *European Journal of Innovation Management*, 26(5), 1365-1393.
- [8] Kumar, J., & Rani, V. (2022). Journey of financial technology (Fintech): a systematic literature review and future research agenda. *Exploring the latest trends in management literature*, 89-108.
- [9] Murinde, V., Rizopoulos, E., & Zachariadis, M. (2022). The impact of the FinTech revolution on the future of banking: Opportunities and risks. *International review of financial analysis*, 81, 102103.
- [10] Sun, Y., Li, S., & Wang, R. (2023). Fintech: From budding to explosion-an overview of the current state of research. *Review of Managerial Science*, 17(3), 715-755.
- [11] Kamuangu, P. K. (2024). Advancements of AI and Machine Learning in FinTech Industry (2016-2020).
- [12] Kamuangu, P. (2024). A Review on Financial Fraud Detection using AI and Machine Learning. *Journal of Economics, Finance and Accounting Studies*, 6(1), 67-77.
- [13] Kamuangu, P. (2024). A Review on Cybersecurity in Fintech: Threats, Solutions, and Future Trends. *Journal of Economics, Finance and Accounting Studies*, 6(1), 47-53.
- [14] Elsaid, H. M. (2023). A review of literature directions regarding the impact of fintech firms on the banking industry. *Qualitative Research in Financial Markets*, 15(5), 693-711.
- [15] Cai, C., Marrone, M., & Linnenluecke, M. (2022). Trends in fintech research and practice: Examining the intersection with the information systems field. *Communications of the association for information systems*, 50(1), 40.
- [16] Sahabuddin, M., Sakib, M. N., Rahman, M. M., Jibir, A., Fahlevi, M., Aljuaid, M., & Grabowska, S. (2023). The evolution of FinTech in scientific research: a bibliometric analysis. *Sustainability*, 15(9), 7176.
- [17] Giglio, F. (2021). Fintech: A literature review. *European Research Studies Journal*, 24(2B), 600-627.
- [18] Palmié, M., Wincent, J., Parida, V., & Caglar, U. (2020). The evolution of the financial technology ecosystem: An introduction and agenda for future research on disruptive innovations in ecosystems. *Technological forecasting and social change*, 151, 119779.
- [19] Mirchandani, A., Gupta, N., & Ndiweni, E. (2020). Understanding the Fintech Wave: a search for a theoretical explanation. *International journal of economics and financial issues*, 10(5), 331.
- [20] Ng, E., Tan, B., Sun, Y., & Meng, T. (2023). The strategic options of fintech platforms: An overview and research agenda. *Information Systems Journal*, 33(2), 192-231.
- [21] Li, B., & Xu, Z. (2021). Insights into financial technology (FinTech): a bibliometric and visual study. *Financial innovation*, 7, 1-28.