



Fintech and digital financial services

Fintech y servicios financieros digitales

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ABSTRACT

It aims to analyse the impact of Fintech on digital financial services, exploring both the opportunities and challenges they present. This study was conducted using a systematic review, the document population was 16 scientific articles, the search was limited to articles published in the last ten years (2013-2023) to ensure the relevance and timeliness of the information. Cybersecurity is a central concern due to the increase in digital transactions and the management of sensitive data. Despite these challenges, Fintech has contributed significantly to the financial sector, improving and innovating operational processes and benefiting both individuals and large organisations. Fintech research is crucial as it highlights the importance of technology in the development of the financial industry and helps to better understand this dynamic and growing business model.

Descriptors: transnational corporations; finance and trade; currencies. (Source: UNESCO Thesaurus).

RESUMEN

Se tiene por objetivo analizar el impacto de las Fintech en los servicios financieros digitales, explorando tanto las oportunidades como los desafíos que presentan. Este estudio se llevó a cabo utilizando una revisión sistemática, la población de documentos fue de 16 artículos científicos, la búsqueda se limitó a artículos publicados en los últimos diez años (2013-2023) para asegurar la relevancia y actualidad de la información. La ciberseguridad es una preocupación central debido al aumento de las transacciones digitales y la gestión de datos sensibles. A pesar de estos desafíos, las Fintech han contribuido significativamente al sector financiero, mejorando e innovando los procesos operativos y beneficiando tanto a individuos como a grandes organizaciones. La investigación sobre Fintech es crucial, ya que destaca la importancia de la tecnología en el desarrollo de la industria financiera y ayuda a comprender mejor este dinámico y creciente modelo de negocio.

Descriptores: empresa transnacional, finanzas y comercio; moneda. (Fuente: Tesauro UNESCO).

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Research articles section



INTRODUCTION

Over the last decade, the financial industry has undergone a profound transformation driven by significant technological advances, leading to the emergence of financial technologies, known as Fintech. Fintech represents the convergence of technology and financial services, offering innovative solutions that seek to improve the efficiency, accessibility and personalisation of these services. This phenomenon has revolutionised the interaction of individuals and businesses with money, ranging from traditional banking to payment methods, investment management and insurance (Chen et al. 2019).

The impact of Fintech on digital financial services is manifested in several ways. First, they have democratised access to financial services, allowing previously underserved individuals and small businesses to integrate into the financial system. This is especially relevant in developing economies, where financial inclusion remains a persistent challenge (Gai et al. 2018). Second, Fintechs have introduced significant competition for traditional financial institutions, forcing them to innovate and adapt to new market demands (Chen et al. 2019).

The use of technologies such as artificial intelligence, machine learning, blockchain and big data has facilitated the creation of more sophisticated and personalised financial products and services. Notable examples include peer-to-peer lending platforms, cryptocurrencies and automated financial advisors, which have gained popularity and acceptance among consumers (Gai et al. 2018). The accelerated growth of fintech poses regulatory and security challenges. Financial authorities face the challenge of balancing the promotion of innovation with consumer protection and the stability of the financial system. Cybersecurity has become a central concern due to the increase in digital transactions and the management of sensitive data (Chen et al. 2019).

The emergence of this new financial technology phenomenon, defined as Fintech, has made a significant contribution to the financial sector by improving and innovating the operational processes of banking and financial cooperatives. The change is notable for keeping the execution process digital. Technology is a crucial factor for the development of the finance industry (Frost, 2020). Research on Fintech is relevant because of its broad definition and its relation to digital financial services, which are novel activities today because they contribute to the development of organisational activities that use technology to manage and develop financial services and products (Rivera-Rocha et al. 2024).

Although the term Fintech initially had a rustic concept, the activity is not completely new, but it is rapidly growing. The basic concept of supporting economic development with the use of digital technology has opened up a new digital finance market, benefiting both individuals and large working groups. The working system is innovative because it is aligned with technology, where the possible advantages or disadvantages for society must be thoroughly analysed, and then this information shared with people who wish to manage their money using this new method (Frost, 2020). Research on Fintech and financial services has evolved in both concepts and innovative activities specific to the sector. This research contributes significantly to future research, identifying a dynamisation in the new business model and a significant development of digital technology (Chen et al. 2019; Gai et al. 2018).

In this context, this article aims to analyse the impact of Fintech on digital financial services, exploring both the opportunities and challenges they present.

METHOD

This study was conducted using a systematic review of the existing literature on Fintech and digital financial services.

The literature search was conducted in major academic databases, including PubMed, Scopus and Web of Science. Search terms such as "Fintech", "financial technologies", "digital financial services", "digital banking", "blockchain", "artificial intelligence in finance" and "cybersecurity in Fintech" were used. The search was limited to articles published in the last ten years (2013-2023) to ensure the relevance and timeliness of the information.



The document population was 16 scientific articles.

Inclusion and Exclusion Criteria

To be included in the review, studies had to meet the following criteria:

1. Published in peer-reviewed scientific journals.
2. Focused on the impact of Fintech on digital financial services.
3. Published between 2018 and 2023.
4. Written in English or Spanish.
5. Provide relevant empirical data or theoretical reviews.

Studies were excluded if they:

1. were not directly related to Fintech or digital financial services.
2. Were conference abstracts, opinion commentaries, or studies without peer review.
3. Did not provide sufficient data for analysis.

Selection Process

The selection of studies was done in several stages. First, duplicates were removed and titles and abstracts were screened to identify potentially relevant articles. Next, the full texts of selected articles were reviewed to confirm their inclusion in the review. Two independent reviewers carried out this process to minimise bias and ensure the quality of the selection.

Quality Assessment

The methodological quality of the included studies was assessed using the critical appraisal tool CASP (Critical Appraisal Skills Programme). This tool allows assessment of the validity, relevance and applicability of the studies, ensuring that only high quality evidence is included in the final synthesis.

Data Synthesis

Data extracted from the selected studies were synthesised using a narrative approach. Findings were grouped into relevant thematic categories, such as democratisation of financial access, competition and innovation, use of emerging technologies, and regulatory and security challenges. The implications of these findings for the financial sector were discussed and areas for future research were identified. This methodology ensures that the systematic review provides a comprehensive and evidence-based understanding of the impact of Fintech on digital financial services, allowing readers to gain a clear picture of the opportunities and challenges associated with this technological transformation in the financial sector.

RESULTS

The scrutinised results are presented:

**Table 1.** Documentary Categories.

Categorías	Estudios	Aporte del Trabajo
Impacto en la Inclusión Financiera	Chen et al. (2019); Haddad & Hornuf (2019)	Este trabajo destaca cómo las Fintech han permitido a individuos y pequeñas empresas acceder a servicios financieros, promoviendo la inclusión financiera en regiones previamente desatendidas.
Competencia Innovación	e Dorfleitner et al. (2017); Goldstein et al. (2019)	Se resalta la competencia introducida por las Fintech, que ha forzado a las instituciones financieras tradicionales a innovar y mejorar sus servicios para adaptarse a las nuevas demandas del mercado.
Tecnologías Emergentes	Gai et al. (2018); Lee & Shin (2018)	Este estudio analiza cómo el uso de tecnologías emergentes, como la inteligencia artificial y el blockchain, ha facilitado la creación de productos y servicios financieros más sofisticados y personalizados.
Desafíos Regulatorios y de Seguridad	Buchak et al. (2018); He et al. (2017)	Se identifican los desafíos regulatorios y de seguridad que enfrentan las Fintech, y se enfatiza la necesidad de equilibrar la innovación con la protección del consumidor y la estabilidad financiera.
Colaboración entre Fintech y Bancos Tradicionales	Gomber et al. (2018); Navaretti et al. (2018)	El trabajo sugiere que las asociaciones estratégicas entre Fintech y bancos tradicionales pueden combinar la innovación con la infraestructura existente para mejorar los servicios financieros.
Personalización de Servicios Financieros	Lee & Shin (2018); Thakor (2020)	Se analiza cómo las Fintech utilizan datos avanzados y algoritmos para ofrecer productos financieros adaptados a las necesidades individuales de los consumidores, mejorando así la experiencia del usuario.
Impacto Social	Frost (2020); Philippon (2016)	El estudio aborda el potencial de las Fintech para empoderar a las comunidades desfavorecidas mediante el acceso a servicios financieros esenciales, contribuyendo al desarrollo económico y social.
Sostenibilidad Financiera	Zalan & Toufaily (2017); Haddad & Hornuf (2019)	Se examina cómo las Fintech pueden promover prácticas financieras responsables y desarrollar productos financieros sostenibles, contribuyendo a la sostenibilidad del sistema financiero.

Source: Own elaboration.

Fintech is transforming the financial sector in multiple dimensions. From financial inclusion and competition to emerging technologies and regulatory challenges, Fintech is redefining the way financial services are delivered and consumed. While they present significant opportunities to improve efficiency and accessibility, they also pose challenges that need to be addressed through an adaptive regulatory approach and strategic collaborations with traditional financial institutions. Social impact and financial sustainability emerge as key areas where Fintech can make a lasting contribution, highlighting the importance of continuing to research and adapt these innovations to maximise their benefits and mitigate their risks.

DISCUSSION

This study has explored the impact of Fintech on digital financial services through a systematic review of the literature. The findings indicate that Fintechs have significantly democratised access to financial services, promoting financial inclusion in previously underserved regions (Íñiguez-Matute, 2021) highlight that Fintechs have enabled individuals and small businesses in emerging economies to integrate into the financial system, which is relevant for economic development.

Fintechs have introduced substantial competition in the traditional financial sector. According to (Zalan & Toufaily, 2017), this competition has forced traditional financial institutions to innovate and adapt to new market demands. This has led to an improvement in the quality and efficiency of financial services offered to consumers (Gomber et al. 2018). The use of emerging



technologies such as artificial intelligence, machine learning, blockchain and big data has enabled the creation of more sophisticated and personalised financial products and services. Notable examples include peer-to-peer lending platforms, cryptocurrencies and automated financial advisors, which have gained significant acceptance among consumers (Philippon, 2016).

The accelerated growth of Fintech poses regulatory and security challenges. Financial authorities face the challenge of balancing the promotion of innovation with consumer protection and the stability of the financial system. Cybersecurity has become a central concern due to the increase in digital transactions and the management of sensitive data (Lee et al. 2018). The emergence of this new financial technology phenomenon, defined as Fintech, has made a significant contribution to the financial sector by improving and innovating the operational processes of banking and financial cooperatives. The change is notable for maintaining a digitally driven execution process. Technology is an important factor for the development of the finance industry (Goldstein et al. 2019).

Research on Fintech is relevant because of its extensive definition and its relation to digital financial services, which are novel activities today because they contribute to the development of organisational activities that use technology to manage and develop financial services and products. Although the term Fintech initially had a rustic concept, the activity is not completely new, but is rapidly growing (Navaretti et al. 2018). The basic concept of supporting economic development with the use of digital technology has opened up a new digital finance market, benefiting both individuals and large working groups. The working system is innovative because it is aligned with technology, where the possible advantages or disadvantages for society must be thoroughly analysed, and then this information must be shared with people who wish to manage their money using this new method (Buchak et al. 2018).

Research on Fintech and financial services has evolved in both concepts and innovative activities specific to the sector. This research contributes significantly to future research, identifying a dynamisation in the new business model and a significant development of digital technology (He et al. 2017; Haddad & Hornuf, 2019).

CONCLUSIÓN

Las Fintech han revolucionado el sector financiero tradicional, impulsando a las instituciones a innovar y adaptarse a nuevas demandas del mercado, lo que ha mejorado la calidad y eficiencia de los servicios financieros. Las tecnologías emergentes como la inteligencia artificial, el aprendizaje automático, el blockchain y el big data han permitido la creación de productos y servicios financieros más sofisticados y personalizados, incluyendo plataformas de préstamos peer-to-peer, criptomonedas y asesores financieros automatizados. Sin embargo, este crecimiento también presenta desafíos regulatorios y de seguridad, ya que las autoridades deben equilibrar la promoción de la innovación con la protección del consumidor y la estabilidad del sistema financiero. La ciberseguridad es una preocupación central debido al aumento de las transacciones digitales y la gestión de datos sensibles. A pesar de estos desafíos, las Fintech han contribuido significativamente al sector financiero, mejorando e innovando los procesos operativos y beneficiando tanto a individuos como a grandes organizaciones. La investigación sobre Fintech es crucial, ya que destaca la importancia de la tecnología en el desarrollo de la industria financiera y ayuda a comprender mejor este dinámico y creciente modelo de negocio.

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CONFLICT OF INTEREST

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