

Reconfiguration of the Banking Intermediation Model in the Era of Digital Disruption: A Modern Financial Economics Perspective

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ABSTRACT

Keywords:

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Background: Background: Digital transformation has driven fundamental changes in the banking intermediation model, moving from a conventional, institution-based system to a more open and integrated digital financial ecosystem. The emergence of financial technology, big data, artificial intelligence, and blockchain has shifted the traditional role of banking toward platform-based models, raising important questions about how intermediation functions are being reconfigured and what implications this holds for the financial system.

Method: This study employs a qualitative approach with a descriptive-analytical design using library research. Data were collected through documentation studies and systematic literature reviews of scientific journals, industry reports, and policy documents from the Financial Services Authority (OJK) and Bank Indonesia. Data analysis was conducted using interactive qualitative analysis techniques including data reduction, data presentation, and conclusion drawing, supported by thematic and conceptual comparative analysis.

Results: The findings reveal a shift from bank-based intermediation to platform-based intermediation, where banks are transforming into orchestrators in the digital financial ecosystem through the integration of open banking and embedded finance concepts. Four driving factors were identified: technological development, changing customer behavior, fintech emergence, and regulatory policies. This transformation improves operational efficiency and financial inclusion but also presents new risks such as cyber risk, regulatory complexity, and potential systemic risk.

Conclusion: The reconfiguration of banking intermediation represents a paradigm shift from centralized institution-based systems to hybrid network-based financial ecosystems. Adaptive strategies from banks and responsive policies from regulators are essential to balance innovation with financial system stability.

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INTRODUCTION

Banking, as a financial intermediary institution, plays a strategic role in connecting those with excess funds (surplus units) with those in need of funds (deficit units). Within the framework of classical financial economics, this intermediation function is the backbone of financial system stability because it reduces information asymmetry, lowers transaction costs, and manages liquidity risk. However, developments in digital technology over the past few decades have brought significant changes to how the global financial system operates (Broby, 2021). Digital disruption, marked by the emergence of financial technology (fintech), big data, artificial intelligence, and blockchain, has shifted the traditional role of banking toward a more open, integrated, and platform-based model.

The phenomenon of digital disruption has not only transformed the structure of the financial industry but also given rise to new actors capable of performing the intermediation function more efficiently and flexibly. Peer-to-peer lending platforms, crowdfunding, and other digital financial services have accelerated the process of disintermediation, with the role of banks as primary intermediaries diminishing. Meanwhile, a new form of reintermediation has emerged: the integration of banking and digital technology through the concepts of open banking, embedded finance, and digital financial ecosystems. In this context, banks no longer function as a single entity, but rather as part of an interconnected network of financial services (Chakma, 2025; Stefanelli, 2022).

In Indonesia, the dynamics of this transformation are increasingly complex, driven by demands to expand financial inclusion while maintaining financial system stability (Boot, 2020). The role of the Financial Services Authority (OJK) as the regulator of the financial services sector and Bank Indonesia as the monetary authority are crucial in responding to these changes. Adaptive policies are needed to accommodate innovation without neglecting prudential regulation. Furthermore, changes in customer behavior, which are increasingly digitally oriented, are also driving banks to transform their services to remain relevant and competitive amidst competition from fintech.

From a modern financial economic perspective, this change can be understood as a shift from an institution-based intermediation model (bank-based intermediation) to a market-based and platform-based intermediation model. This approach emphasizes efficiency, transparency, and the use of information technology to improve the quality of financial services. However, this transformation also presents new challenges, such as increased cyber risk, regulatory complexity, and the potential for systemic risk originating from non-bank actors (Duygun, 2021). Therefore, a comprehensive analytical framework is needed to understand how the banking intermediation model is being reconfigured in the digital era and its implications for the financial system as a whole.

Previous research has extensively discussed the impact of digital disruption on the banking intermediation model, with a focus on changes in banking business due to the emergence of fintech, bigtech, and other digital technologies. Broby (2021) developed an analytical framework explaining how innovative financial technologies are transforming traditional intermediation functions and offering adaptation strategies for banks. Vives (2019) highlighted the transformation of the banking industry towards a more customer-centric platform-based model and the regulatory challenges in maintaining a balance between innovation and financial stability. A study by Chakma (2025) introduced the concept of “protocolized intermediation” that reconceptualizes intermediation theory by incorporating the role of decentralized protocols and smart contracts, suggesting a hybridization between centralized and decentralized financial systems. However, most research is still limited to conceptual frameworks or case studies in developed countries, while the specific impacts of the reconfiguration of the intermediation model in various economic contexts and its implications for financial inclusion and systemic risk have not been widely explored empirically (Sibanda, 2020; Jiang, 2022). The novelty of this study lies in the comprehensive analysis of the reconfiguration of the banking intermediation model from a modern financial economics perspective that integrates aspects of digital technology, regulation, and market dynamics simultaneously, while filling the gap in understanding the transformation of the intermediation function in an increasingly complex hybrid financial ecosystem. Thus, this research is expected to provide new contributions in understanding the evolution of banking business models in the era of digital disruption and its implications for modern financial economic policies and practices.

Based on this description, this study aims to analyze the reconfiguration of the banking intermediation model in the era of digital disruption and its implications from a modern financial economics perspective. This research is expected to provide theoretical contributions to the

development of a more contextualized concept of financial intermediation for the digital era, while also providing practical recommendations for the banking industry and regulators in formulating adaptive and sustainable strategies. Thus, this study is relevant in addressing the challenges of financial sector transformation amidst the dynamics of ever-evolving technology.

METHOD

This research employs a qualitative approach with a descriptive-analytical approach, aiming to comprehensively understand and explain the phenomenon of the reconfiguration of the banking intermediation model in the era of digital disruption (Sugiyono, 2022). This approach was chosen because the research focuses on conceptual and interpretive analysis of changes in the structure and function of financial intermediation from a modern financial economics perspective. Therefore, this research not only describes the phenomenon but also critically examines the dynamics of transformation occurring within the financial system.

The approach used is library research, which involves reviewing various relevant scientific sources, such as reputable international journals, financial economics textbooks, industry reports, and official policy documents. The primary data sources include publications from authoritative institutions such as the Financial Services Authority (OJK) and Bank Indonesia, relating to the development of digital banking, financial system stability, and fintech regulation in Indonesia. The data used in this study is secondary data, consisting of academic literature, institutional reports, and regulatory documents relevant to the research topic.

Data collection techniques include documentation studies and a systematic literature review. A documentation study was conducted by collecting various written documents, such as official reports, scientific articles, and related policies. A systematic literature review was conducted by selecting sources based on their relevance, credibility, and currency. This process aimed to ensure that the data used truly reflected the latest developments in the study of financial intermediation and digital disruption.

Data analysis was conducted using interactive qualitative analysis techniques, including data reduction, data presentation, and conclusion drawing. Data reduction involved selecting and focusing information relevant to the research objectives, while data presentation was conducted in the form of a structured conceptual narrative. Conclusions were then drawn through critical interpretation of the patterns of relationships between concepts found in the literature (Miles et al., 2014). Furthermore, this study employed thematic analysis to identify key patterns in the transformation of banking intermediation and conceptual comparative analysis to compare traditional intermediation models with digital-based models.

To ensure data validity, this study employed source triangulation by comparing various references from scientific journals, official reports, and policy documents from the Financial Services Authority and Bank Indonesia. In addition, the principle of sufficient references is used, prioritizing credible and up-to-date scientific sources, and an audit trail is used to ensure transparency and consistency in the data analysis process. With this approach, the research results are expected to have high validity and reliability and to make a significant contribution to the development of modern financial economics studies.

RESULTS AND DISCUSSION

Transformation of the Banking Intermediation Model in the Digital Era

Research results indicate that the transformation of the banking intermediation model in the digital era represents a structural change that is not only technological in nature but also encompasses institutional aspects, market behavior, and financial distribution mechanisms. In the traditional intermediation model, banks function as institutions that collect funds from the public in the form of deposits and redistribute them in the form of credit. This function is supported by banks' strengths in managing information asymmetry, conducting credit screening, and mitigating risk through portfolio diversification. However, this model tends to be centralized and relies on the bank's internal capacity to manage the entire intermediation process.

Along with the development of digital technology, there has been a shift towards a more open and distributed intermediation model. Technologies such as financial technology (fintech), big data, artificial

intelligence, and blockchain enable the intermediation process to take place directly between those with funds and those needing funds, eliminating the need for banks as primary intermediaries. Peer-to-peer lending platforms, crowdfunding, and various other digital financial services provide faster, more flexible, and more efficient alternatives to conventional banking mechanisms. This marks the emergence of a disintermediation phenomenon, the diminishing role of banks in the financial intermediation chain.

However, this study also found that this phenomenon does not simply lead to the disappearance of banks, but rather to a new form of reintermediation. Banks still play a significant role, but are no longer the sole dominant actors. Banks are beginning to transform by adopting digital technology and collaborating with fintech companies to create more innovative services. In this context, banks are shifting their function from mere intermediaries to financial infrastructure providers and service ecosystem managers (platform providers). This model allows banks to remain relevant by leveraging their strengths in public trust, risk management, and regulatory compliance.

This transformation is also driven by changing customer behavior, which is increasingly digitally oriented. People now prioritize ease of access, speed of service, and cost efficiency when using financial services. Mobile banking applications, digital wallets, and other app-based financial services have become part of everyday life. This situation encourages banks to continuously innovate their services to meet increasingly high customer expectations. Furthermore, massive internet penetration and smartphone use have accelerated the adoption of digital financial services across all levels of society.

On the other hand, the role of regulators such as the Financial Services Authority (OJK) and Bank Indonesia (BI) is becoming increasingly crucial in overseeing this transformation process. Adaptive regulation is needed to strike a balance between innovation and financial system stability. Various policies related to digital banking, payment systems, and fintech demonstrate that regulators function not only as supervisors but also as facilitators of innovation in the digital financial ecosystem.

Thus, the transformation of the banking intermediation model in the digital era can be understood as a shift from a centralized, institution-based model to a more open, collaborative, and technology-based one. This change does not eliminate the role of banks, but requires them to adapt by becoming part of the broader digital financial ecosystem. This transformation also emphasizes that the future sustainability of banking depends heavily on the ability to adapt to technological dynamics and changing market behavior.

The Emergence of Platform-Based Intermediation

Research results indicate that one of the most prominent forms of reconfiguration of financial intermediation in the digital era is the emergence of platform-based intermediation, an intermediation model based on the integration of services within a digital ecosystem. In this model, the processes of collecting, managing, and distributing funds are no longer carried out separately by a single institution, but rather are connected through a digital platform capable of integrating various financial service providers. Thus, financial intermediation is shifting from a linear model to a network-based model, where various actors interact within a coordinated system.

In this context, banks are no longer the sole institutions controlling the entire intermediation value chain, but are transforming into platform providers that facilitate interactions between various parties, including customers, fintech companies, technology companies, and other financial institutions. Banks provide core infrastructure such as payment systems, data management, and transaction security, while additional services such as alternative financing, digital investment, and financial management can be provided by partners within the ecosystem. This transformation allows banks to expand their service reach without having to develop all innovations internally.

The development of the open banking concept has been a key driver of this model's emergence. Open banking enables the secure exchange of financial data through application programming interfaces (APIs), allowing third parties to access and develop data-based banking services with customer consent. This creates a more competitive and collaborative environment, as banks no longer maintain closed systems but instead open access to external innovation. In practice, this has encouraged the creation of various integrated financial applications, such as financial aggregators, cross-platform payment services, and data-driven financing solutions.

Furthermore, the concept of embedded finance further strengthens integration within platform-based intermediation. Embedded finance allows financial services to be "embedded" directly within non-financial platforms, such as e-commerce, digital transportation, or other service applications. For example, users can access credit, payment, or insurance facilities directly within a single application without having to interact directly with the bank. In this scheme, the bank remains the core service provider behind the scenes (back-end provider), while the user interface is managed by the digital platform. This demonstrates that financial intermediation is becoming increasingly invisible (invisible banking), yet remains essential in supporting digital economic activity.

Furthermore, this study found that in a platform-based intermediation model, banks act as orchestrators in the digital financial ecosystem. This role includes managing relationships between actors, providing reliable infrastructure, and ensuring compliance with regulations and security standards. In this position, banks not only compete with fintech companies but also forge strategic partnerships to create added value for customers. This collaboration enables faster innovation and greater responsiveness to market needs.

However, the transformation to a platform-based model also presents its own challenges. The complexity of system integration, data security risks, and dependence on third parties are important issues that must be carefully managed. Therefore, the role of regulators such as the Financial Services Authority (OJK) and Bank Indonesia is crucial in establishing standards for interoperability, data protection, and governance of the digital financial ecosystem.

Thus, the emergence of platform-based intermediation marks a new phase in the evolution of the financial system, where intermediation is no longer dominated by a single institution but is instead built through collaboration within an integrated digital ecosystem. This model not only increases efficiency and innovation but also fundamentally changes the way financial services are produced, distributed, and consumed in the modern economy.

Factors Driving the Reconfiguration of Intermediation

Research results show that the reconfiguration of the banking intermediation model in the digital era does not occur spontaneously, but is driven by a complex interaction between technological factors, market behavior, industry dynamics, and regulatory policies. These four factors reinforce each other and form a new ecosystem within the modern financial system.

First, the development of digital technology is a key driver of the transformation of financial intermediation. Technologies such as artificial intelligence (AI), big data, and blockchain have transformed the way financial institutions manage information, assess risk, and provide services to customers. AI enables the automation of credit analysis processes through alternative data-based credit scoring, thereby accelerating decision-making and improving the accuracy of risk assessments. Meanwhile, big data enables the processing of large amounts of data in real time to gain a deeper and more personalized understanding of customer behavior. Blockchain provides a transparent, secure, and decentralized transaction recording system, potentially reducing the need for traditional intermediaries. This combination of technologies not only improves operational efficiency but also opens up opportunities for the emergence of new, more flexible, digital-based intermediation models.

Second, changes in customer behavior are also a crucial factor in driving the reconfiguration of intermediation. Modern customers tend to prioritize ease of access, speed of service, transparency, and a good user experience. The development of digital lifestyles, supported by internet penetration and smartphone use, has driven expectations for instant, ubiquitous financial services. Services such as mobile banking, digital wallets, and integrated financial applications have become essential needs, no longer complementary. This change forces banks to adapt by developing digital-based services that are more responsive and customer-oriented.

Third, the growing role of fintech as a new actor in the financial system is a significant driving factor. Fintech not only acts as a competitor challenging banks' dominance in certain services but also as a strategic partner in creating innovation. Fintech companies offer faster, more efficient, and often more inclusive solutions, particularly in services such as digital payments, microfinance, and app-based investments. The presence of fintech encourages healthy competition and collaboration through partnership models, co-creation, and service integration within the digital ecosystem. In this context,

banks can no longer rely on traditional business models but must be able to innovate and collaborate to maintain their relevance.

Fourth, the role of policy and regulation is a crucial factor in directing and controlling the intermediation transformation process. In Indonesia, the Financial Services Authority (OJK) and Bank Indonesia (BI) play a strategic role in creating a regulatory framework that adapts to technological developments. Policies such as the development of digital payment systems, fintech regulations, and the promotion of financial inclusion demonstrate that regulators function not only as supervisors but also as enablers of innovation. Furthermore, regulators must ensure that emerging innovations remain within the framework of financial system stability through the application of prudential regulation, consumer protection, and systemic risk management.

Furthermore, this study found that there is a synergistic interaction between these factors. Technological developments drive changes in customer behavior, which in turn creates demand for more innovative services. Fintech exists to meet these needs, while regulators play a role in ensuring that the entire process runs safely and sustainably. This interaction creates a dynamic that accelerates the transformation of the intermediation model from a conventional one to a more digital, open, and collaborative one.

Thus, the reconfiguration of banking intermediation is the result of the convergence of various interrelated factors, not simply a consequence of technological developments alone. Understanding these driving factors is crucial for banks and other stakeholders in formulating appropriate adaptation strategies amidst the increasingly complex financial landscape.

The Impact, Risks, and Paradigm Shift of Intermediation from a Modern Financial Economic Perspective

Research findings indicate that digital transformation in banking intermediation has had a significant impact on operational efficiency and financial inclusion, while simultaneously introducing new risks and driving a paradigm shift in the modern financial system. These three aspects are interrelated and constitute the main characteristics of the reconfiguration of intermediation in the era of digital disruption.

From an efficiency perspective, digitalization has enabled banks and financial institutions to optimize business processes more quickly, accurately, and cost-effectively. The use of technologies such as service automation, artificial intelligence, and big data analytics has reduced operational costs, accelerated transaction processing, and improved decision-making quality. Financial services that previously required time and lengthy procedures can now be performed instantly through digital applications. Furthermore, digitalization has reduced reliance on physical infrastructure such as branch offices, expanding service coverage without significantly increasing costs. This creates efficiencies not only for financial institutions but also for customers in the form of easier access and reduced transaction costs.

Furthermore, from a financial inclusion perspective, digital transformation has significantly contributed to expanding access to financial services for the public, particularly to previously underserved groups (the unbanked and underbanked). The presence of services such as mobile banking, digital wallets, and technology-based financing platforms enables people in remote areas or those with limited access to conventional banking to maintain access to financial services. Thus, the reconfiguration of intermediation not only impacts industry efficiency but also equitable economic access and strengthens inclusive development. Digitalization ultimately becomes a crucial instrument in bridging the financial gap in society.

However, despite these benefits, this study also identifies new risks and challenges in digital intermediation. One major risk is increased cyber risk, such as system hacking, data theft, and misuse of customer personal information. Reliance on digital technology also increases vulnerability to system failures, which can have a broad impact on the stability of financial services. Furthermore, the emergence of various non-bank entities in the digital financial ecosystem poses challenges in terms of supervision and regulation. This complexity is exacerbated by the regulatory imbalance between the more stringent banking system and the more flexible fintech system, potentially creating a regulatory gap that could trigger new systemic risks.

In this context, the role of regulators such as the Financial Services Authority and Bank Indonesia is crucial in maintaining the balance between innovation and stability. Adaptive regulation is needed to ensure that technological developments do not compromise consumer protection, data security, and financial system resilience. A risk-based supervisory approach and strengthening the digital regulatory framework are crucial steps in anticipating these challenges.

Furthermore, this study's results indicate a paradigm shift in the perspective of modern financial economics, from a bank-based financial system to a hybrid, network-based financial system. In this new paradigm, financial intermediation is no longer linear and centralized, but involves various actors, including banks, fintechs, and digital platforms, interconnected within an ecosystem. Relationships between actors become more dynamic, collaborative, and based on real-time data exchange. This reflects a shift from a hierarchical model to a more flexible and adaptive ecosystem model.

Thus, a relevant intermediation model in the digital era is one that integrates technological efficiency, expanded financial inclusion, and balanced risk management. Financial intermediation no longer focuses solely on the function of channeling funds, but also on creating value through collaboration, innovation, and the use of technology. Therefore, the success of the financial system in the digital era is largely determined by the ability of all actors, including banks and regulators, to adapt to a new, more open, connected, and technology-based paradigm, while maintaining the principles of stability and prudence.

CONCLUSION

This study concludes that the reconfiguration of the banking intermediation model in the era of digital disruption is an inevitability driven by technological developments, changes in customer behavior, financial industry dynamics, and regulatory policies. The traditional centralized, institution-based intermediation model has shifted toward a more open, decentralized, and platform-based model. In this context, banks no longer act as sole financial intermediaries but rather as part of a collaborative digital financial ecosystem, where interactions between banks, fintechs, and other actors form a more complex and dynamic intermediation structure. The emergence of platform-based intermediation, reinforced by the concepts of open banking and embedded finance, demonstrates that banks are now transforming into orchestrators in the digital financial ecosystem.

From a modern financial economics perspective, this transformation has broad implications for financial efficiency and inclusion, while also presenting new challenges related to cyber risk, regulatory complexity, and potential systemic risk. Therefore, adaptive strategies from the banking industry and responsive policies from regulators such as the Financial Services Authority and Bank Indonesia are needed to maintain a balance between innovation and financial system stability.

Implicitly, this research provides a theoretical contribution by expanding the concept of financial intermediation within the framework of modern financial economics based on technology and digital ecosystems. Practically, the results can serve as a reference for banks in formulating digital transformation strategies, particularly in developing platform-based business models and collaborating with fintech companies. For regulators, these findings emphasize the importance of strengthening adaptive regulations, including the development of a risk-based supervisory framework, consumer data protection, and standardizing interoperability within the digital financial ecosystem.

However, this research has several limitations. First, the qualitative approach used is based on a literature review, thus not providing empirical evidence to quantitatively measure the impact of intermediation transformation on banking performance or financial system stability. Second, this research is still conceptual with a general focus, so it does not specifically explore differences in implementation across different types of banks or specific market characteristics. Third, the limited availability of secondary data can also affect the depth of the analysis, particularly in capturing the latest, rapidly changing dynamics in the digital financial industry.

Based on these limitations, further research is recommended to conduct empirical testing using quantitative approaches, such as SEM or PLS-SEM models, to measure the relationships between variables in digital intermediation transformation. Furthermore, future research could examine specific sectors, such as Islamic banking, MSMEs, or digital customer behavior, more specifically to obtain more contextual results. Comparative studies between countries or financial systems are also important to

understand the variations in digital intermediation models in a global context. Furthermore, future research could integrate sustainable finance and digital ethics perspectives to enrich the study of financial intermediation in facing the increasingly complex challenges of the modern economy.

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