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Research paper

The Effect of Blockchain Adoption on Fintech Development: The Moderating Role of Organizational Agility, An Empirical Study of Digital Wallet

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Abstract

This article investigates the moderating effect of organizational agility on the association between blockchain adoption and fintech development, focusing on the digital wallet in Jordan. Transforming the digital economy with financial technologies, blockchain, a foundational innovation, offers improved transparency, security, and operational efficiency. However, the extent to which these benefits materialize depends on an organization's ability to respond quickly to change, a quality known as organizational agility. In line with this, we explore how the adoption of blockchain adds to the relationship between fintech development outcomes and how organizational agility interplays in this relationship. We adopted a quantitative methodology that involved employees and stakeholders in the digital wallet. The results show that blockchain adoption positively influences fintech development, and organizational agility significantly moderates this relationship. Such findings provide practical contributions for fintech firms and technology strategists to use blockchain innovations to grow dynamically in organizations, in Jordanian emerging financial markets.

Keywords: *Technological Readiness; Perceived Benefits; User Acceptance; Organizational Agility; Fintech Development.*

1. Introduction

The fintech industry has been experiencing rapid change fueled by technological changes, regulations, and customer behavior (Zhang et al., 2024). Blockchain disrupts how transactions are generally secured, verified, and stored within these innovations across financial services(Abbas & Ali, 2024). With fintech enterprises seeking to gain a competitive edge in a fast-moving digital ecosystem, successful blockchain implementation is viewed as a lever for executing further fintech development(Mittal, 2024). Internal capability, organizational agility, and the capacity to sense and respond rapidly to changes have been getting increasing attention to achieve the full potential of a technological transformation(Mishra, 2024). Jordan is a part of the digital wallet platform. SMEs can grow due to Jordan's allowing for an open environment for digital financial services in the country, particularly through its Vision 2030 program(Almaqtari, 2024). Since digital wallets have adopted blockchain within their operations and transaction mechanisms, this brings up the internal and external factors of blockchain influence(Gharaibeh et al., 2020). If a company is agile enough, blockchain optimizes the operational process. It builds customer confidence over the long term, so Blockchain adoption and its role in bringing fintech to the forefront will very much depend on how agile an organization is(Hammi et al., 2023). In the same way that blockchain establishes a decentralized security infrastructure for data sharing, organizational agility delivers real-time adjustability, enables cross-team collaboration, and sharp decision-making, which are crucial in such a volatile financial environment(Perano et al., 2023). Against this background, the relationship between implementing a new technology, blockchain, and organizational agility can be a fascinating research field (Khan et al., 2020). Combining these makes a difference in the technological innovation and effectiveness of the fintech development(Amini & Bakri, 2019). Digital wallet is an interesting case study because it is in the lead regarding digital financial services in Jordan, and it aligns with the country's national digital transformation objectives(Al-Ahmadi, 2011). Though the blockchain technology has proven that it can vastly improve operational efficiency, customers' confidence, and financial transparency, its adoption into fintech services as a whole remains difficult(Technology,

2023). For organizations' digital wallets, blockchain implementation is not a technology upgrade; it is a business change that must be firmly connected with internal capabilities and external regulatory requirements. The core challenge is identifying how blockchain can be tailored to support business functions, including secure digital wallet processing, fraud detection, and identity verification, while navigating the typical technical, cultural, and strategic barriers that often hinder the adoption of emerging technologies.

Its real-world potential in fintech is spotty at best (Bashatweh et al., 2020). It could be limited if the firm is not flexible to adjust its processes, strategies, and/or resources to the fast changes in markets and/or technologies. Fintech: With banking regulations shifting, product lifecycles shortening, and innovation becoming even more customer-centric, organizational agility is a significant advantage for a fintech culture. Companies could fail to convert the theoretical benefits of Blockchain into practical business agility. This research aims to uncover the impact of blockchain penetration on fintech innovation and verify the moderating effect of organizational agility via the use of a digital wallet (Bashatweh et al., 2023). To fill the existing gap and to achieve the goals of the study, the following research questions are formulated:

- RQ1: How does blockchain adoption affect the fintech development of digital wallets in Jordan?
- RQ2: How does organizational agility moderate the relationship between blockchain adoption and fintech development?
- RQ3: How can organizational agility be strategically leveraged to enhance the impact of blockchain implementation in fintech operations?

Existing literature has investigated the advantages and use of blockchain technology in financial services; however, there is a lack of understanding of the organizational environment in which blockchain implementation creates the most value. Of interest, the moderator effect of organizational agility in the link between blockchain adoption and fintech has not been significantly examined. Most previous works focusing on fintech and agility specifically have focused on technological components, including the blockchain infrastructure or specific examples of innovation in fintech. This research generally lacks a systematic evaluation of how internal factors, particularly organizational agility, impact the outcomes. Furthermore, although literature on fintech in developing countries is increasing, there is limited empirical work on contextual factors influencing fintech firms in the Gulf region, including Jordan. This constrains the external validity of prior models for the Jordan fintech, with distinctive cultural, regulatory, and strategic conditions that may characterize the technological results within that system. By examining the digital wallet, the study seeks to help fill this gap by effectively providing road maps to exploit blockchain in a high-growth, innovation environment. The results are designed to contribute to the theoretical and practical foundations of fintech performance by detailing the organizational readiness and adaptability required

2. Literature Review

2.1. Technological Readiness

Technological readiness refers to the degree to which an institution possesses the necessary technological infrastructure, digital capacity, and strategic approach to leverage new technologies effectively (Aditya, 2021). In the fintech sector, implementing blockchain requires significant system integration, data exchange, and cybersecurity measures to ensure seamless operation (Hammi et al., 2023). This is where technology-savvy companies excel; they can handle blockchain solutions and ensure they are reliable, scalable, and aligned with their business strategies. As digital wallet advances into increasingly blockchain-based services, their technological readiness is essential for implementing risk reduction measures and facilitating successful implementation (Adebimpe & Lola, 2024). Research indicates that unpreparedness can lead to delays, cost overruns, and suboptimal performance, thereby undermining the potential benefits of blockchain innovation.

2.2. Perceived Benefits

Blockchain's perceived advantages are a critical factor in adopting Blockchain in fintech environments (Obaid et al., 2022). The advantages of using blockchain technology include increased transparency of transactions, enhanced security, decreased operational costs, and real-time data (Jawabreh et al., 2023). In financial services, digital wallet infrastructures and Blockchain's distributed and decentralized ledger introduce trust-enabling elements that alleviate the dependence on classical third-party validation (Atta et al., 2023). This builds client trust, plus satisfies regulatory requirements. Furthermore, the potential for blockchain to enable smart contracts and digital identity schemes gives it future value, which other strategic investments across the fintech world may not (Almustafa et al.,2023). The more organizations realize these benefits, the more blockchain adoption is woven into their digital transformation journey.

2.3. User Acceptance

A high level of acceptance by employees and customers characterizes acceptance by users. Blockchain fintech services must run smoothly. Although the technology is a perfect fit for operational needs, resistance to change, technical incompetence, and misbelief in the organization that Blockchain is almost worthless prevent the implementation (Alrjoub et al., 2021). Perceived ease of use and perceived usefulness in the TAM underpin the users ' acceptance of a new system (Alkhazaleh et al., 2023). Regarding the digital wallet, it has been concluded that fostering an innovation-oriented culture, offering adequate training, and clearly communicating user benefits are key strategies for driving comprehensive system adoption. Without the commitment of all involved, blockchain has no digital wallet, despite its technical strengths (Shehadeh et al., 2024).

2.4. Organizational Agility

Organizational agility refers to the capability of a firm to quickly react to market shifts, customer demands, and technological disruptions (Aslam et al., 2020). It serves as a strategic enabler for adopting innovation and enhancing performance in fast-paced sectors, including fintech. (Jameel, 2024). Blockchain solutions enable agile firms to reallocate resources, redesign workflows, and swiftly adapt their strategies to accommodate new technologies. Agility promotes cross-functional cooperation, and the pace of decision-making helps fintech companies to ride on new trends and reduce frictions in the operations. Agility within the Zain digital wallet may function to moderate the influence of blockchain on fintech development, strengthening its impact and guiding outcomes by enabling technological experimentation and advancement. (Shehadeh et al., 2024).

2.5. Fintech Development

Fintech development is advancing financial technology services, including digital wallets, P2P transfers, and blockchain technology. (Allahham et al., 2024). Leveraging disruptive innovations, including blockchain, is essential for transforming service delivery models, enhancing customer experience, and expanding financial inclusion (Morshed et al., 2024). The effort in Jordan, through its Vision 2030, to foster fintech development has encouraged digital wallets to invest in digital infrastructure and innovative solutions. The advancement of these technologies has made fintech development increasingly reliant on available tools and the surrounding internal and external conditions, including leadership commitment, regulatory alignment, and organizational agility. A fundamental fintech catalyst, blockchain drives this changing trend by providing financial ecosystems that are more secure, more efficient, and more scalable(A. A. Sharabati et al., 2024).

2.6. Critical Views on Blockchain and Fintech

While blockchain implementation has been praised for its promise of improved transparency, security, and efficiency, rival views illuminating headwinds that could threaten its scalability and real-world applications come to the fore. Academics question whether blockchain networks can handle fast transaction flows without overburdening them. For instance, Khan et al. We have highlighted in (2020) the scalability and interoperability obstacles that still hamper blockchain to be broadly adopted in industrial and financial environments. Policy concerns are also affecting said adoption, as fintech firms must navigate innovation and regulatory compliance in emerging legal ecosystems. On theoretical grounds, one should also refer to appropriate models. The technology acceptance model (TAM) introduced by Davis (1989) is a well-known structure that explains perceived ease of use (EOU) and perceived usefulness (PU) affecting intentions of users to adopt new technologies. Utilizing TAM on fintech systems empowered with Blockchain emphasizes that user acceptance is the core, as the success of adoption lies in both technical performance and the value proposition brought to stakeholders. Additionally, the first exploration of blockchain technology concepts by Nakamoto (2008) established the background, knowledge, and comprehension that would be built upon by subsequent diagrams that were designed to demonstrate their decentralized operation, along with insights related to its security mechanisms. But transforming these theoretical advantages into fintech products and services has been hindered by operational inefficiencies, cultural inertia, and other external factors, including the burden of regulatory compliance. This argument underscores the fact that the value of blockchain is dependent not only on the agility of organizations but also on the environment in which they operate, rationalising why internal and external relationships within Jordan's digital wallet ecosystem are being explored in this study.

3. Hypothesis Development

3.1. Organizational Agility and Fintech Development

In a fast-changing business environment, organizational agility is a significant factor in technology acceptance. Agile firms are known to be responsive to change, receptive to innovation, and flexible in their organizational structures to address new challenges. They are more capable of matching resources, processes, and strategies to enable new financial technologies when these companies embark on fintech development. If the organization is agile, then fintech integration is not reactive, but proactive, leading to better and quicker decision-making, adaptability, and a competitive edge for the business. On this basis, the following hypothesis is formulated:
H1: Organizational Agility has a significant positive effect on Fintech Development.

3.2. Perceived Benefits and Fintech Development

There is a higher probability of securing investment and utilizing fintech solutions in moments when the estimated advantages are vivid and significant. Such benefits include increased efficiency, reduced costs, better customer experiences, and more innovation. Stakeholders receive proof that fintech tools deliver solid value, raising organizational goodwill and confidence regarding digitalization. The perception of benefits is a psychological influence that motivates and reduces resistance to change, facilitating implementation. On this basis, the following hypothesis is formulated:
H2: Perceived Benefits have a significant positive effect on Fintech Development.

3.3. Technological Readiness and Fintech Development

Technological readiness reflects an organization's infrastructure, IT capabilities, and preparedness to support digital initiatives. It includes both technical capacity and the availability of resources necessary for deploying fintech applications. Although having the right technology in place is foundational, its presence alone does not guarantee successful fintech implementation unless paired with strategic direction and cultural alignment. On this basis, he following hypothesis is formulated:
H3: Technological Readiness has a significant positive effect on Fintech Development.

3.4. User acceptance and Fintech Development

User acceptance is essential to successfully using and implementing any technological tool. In a fintech environment, this means that employees, customers, and system users must be willing to adopt a new tool, trust in some not-intuitively understood technology, and incorporate it into their workflows. Enhanced user acceptance streamlines the transition process and shortens the learning curve, contributing positively to system utilization. It is no secret that communicating, educating, and engaging are all ways organizations can foster acceptance, and they are also some of the best ways organizations can hasten more meaningful fintech developments. Based on this, we can propose the following hypothesis.
H4: User Acceptance has a significant positive effect on Fintech Development.

3.5. Organizational Agility Mediates The Role of User Acceptance and Fintech Development

If being agile as an organization is complemented by strong user adoption, the conditions for success in fintech are highly favorable. Agile organizations can create new ways of working based on user feedback and offer the support users need to succeed. Consequently, more agile development and shorter lead times in adaptation would appear necessary in a climate of ever-shifting fintech turf. Hence, the potent combination of agility and user adoption can enhance the fintech outcome. Based on this, the following hypothesis is introduced.
H5: Organizational Agility positively moderates the relationship between User Acceptance and Fintech Development.

3.6. Organizational Agility Mediates The Role of Perceived Benefits and Fintech Development

Perceived usefulness substantially affects fintech adoption, but the effect is contingent upon an enterprise's flexibility. Highly agile firms may react differently to perceived benefits, perhaps favoring other strategic goals or quickly reinvesting resources. There is, of course, a potential for confounding perceived benefits and agile responsiveness to generate diminishing returns in fintech outcomes. This interplay merits further investigation, especially in high-velocity markets. Based on this, the following hypothesis is proposed. :
H6: Organizational Agility moderates the relationship between Perceived Benefits and Fintech Development.

3.7. Organizational Agility Mediates the Role of Technological Readiness and Fintech Development

Technological readiness and organizational agility are crucial to digital innovation. Readiness involves making the tools and infrastructure available; agility is concerned with quickly mobilizing those resources and ensuring they are deployed strategically. Nevertheless, in the absence of a powerful interaction between these two factors, readiness potentially remains underexploited. Agile institutions prepared for the tech play can turn potential into performance, particularly in challenging fintech environments.. On this basis, the following
H7: Organizational Agility moderates the relationship between Technological Readiness and Fintech Development.
A conceptual research model for this study is depicted in Figure 1. The framework combines the adoption of blockchain technology with the main drivers of fintech (growth), that is, technological readiness, user trust, and perceived usefulness, and highlights the mediating effect of organizational agility. Each proposed path represents relationships extended from the literature explaining how internal capabilities produce fintech outcomes. This model lays the theoretical foundation of the subsequent testing of structure through PLS-SEM.

4. Research Methodology

This study employs a mixed-methods research approach, combining quantitative and qualitative methods, to analyze the influence of blockchain adoption on fintech development, moderated by organizational agility. The research aims at professionals or experts of the e-commerce industry, specifically those of the digital wallet industry in Jordan, to assess the existing status of blockchain applications and their expected consequences. Structured questionnaires were used to collect quantitative data from IT managers, developers, and business strategists with some knowledge of blockchain systems(Atieh et al., 2024). Concurrently, qualitative findings were collected through semi-structured interviews with senior management at the digital wallet. The structural relationship between key constructs such as technological readiness, perceived benefits, User acceptance, and organizational agility towards fintech development was modeled using Structural Equation Modeling (Sharabati et al., 2024). This procedure provides a flexible way of investigating the effects of blockchain adoption and organizational conditions on innovation outcomes. The use of both primary and secondary data provides an extended perspective of the objective impacts and subjective impacts on blockchain-enabled change in the financial service industry.

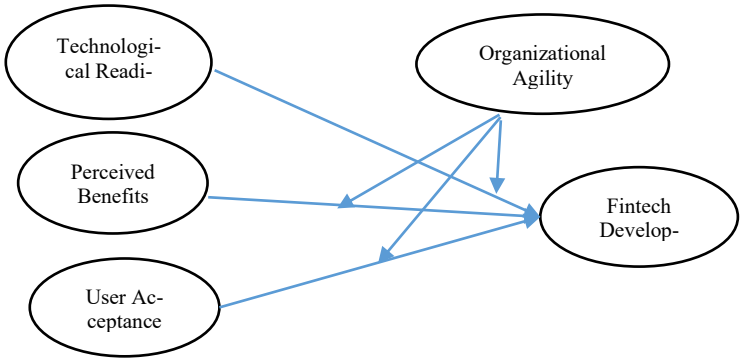

Fig. 1: Conceptual Research Model.

5. Data Analysis

The measurement model extracted from Smart-PLS 4 analysis is shown in Figure 2. The model displays the indicators for each observed latent construct, along with the factor loadings and paths between variables. We can see that the latent constructs of technological readiness, user acceptance, perceived benefits, organizational agility, and fintech development were measured using well-established and reliable scales. The measurement model, in this sense, enables testing structural hypotheses, as similar constructs are both conceptually different and empirically measurable. Statistical analysis: Data were analyzed using Smart-PLS 4, a popular package for PLS-SEM, which is particularly suitable for complex models that include mediation and moderation effects. The present method is beneficial when applied to small or moderate sample sizes or non-normally distributed data, as in emerging technology studies. The research was developed in two main stages: the first focused on the direct links between the adoption of blockchain and the core determinants of fintech development; the second investigated the conditional role of organizational agility in these relationships. Through integrating interaction effects, this study showed that high organizational agility reinforces the link between adopting blockchain and higher fintech performance. This corpus is further used to examine how Jordanian FinTech firms, including digital wallets, can leverage internal agility to drive digital transformation through blockchain.

Table 1: Factor Loadings

Constructs	Items	Factor loadings	Cronbach's Alpha	C.R.	(AVE)
	FD1	0.766			
	FD2	0.776			
Fintech Development	FD3	0.71	0.844	0.889	0.617
	FD4	0.83			
	FD5	0.839			
	OA1	0.802			
	OA2	0.755			
Organizational Agility	OA3	0.764	0.825	0.877	0.589
	OA4	0.715			
	OA5	0.797			
	TR1	0.534			
	TR2	0.709			
	TR3	0.712			
Technological Readiness	TR4	0.81	0.822	0.866	0.522
	TR5	0.773			
	TR6	0.764			
	UA1	0.756			
	UA2	0.837			
User Acceptance	UA3	0.793	0.876	0.91	0.67
	UA4	0.844			
	UA5	0.756			
	PB1	0.752			
	PB2	0.768			
Perceived Benefits	PB3	0.764	0.826	0.877	0.589
	PB4	0.793			
	PB5	0.758			

The instruments employed- Fintech Development, Firm's Agility, Technical Preparedness, User's Acceptance, and Perceived Benefit- have good psychometric characteristics regarding factor loadings, omegas, and validity coefficients. Every component comprises several items related to high factor loadings, meaning they are well related to each other and their latent underlying factor. The Fintech Development items loaded between 0.71 and 0.839, which suggested they were strongly associated with the construct. The item loadings for Organizational Agility (0.715 to 0.802) and User Acceptance (0.758 to 0.844) also fell within acceptable limits. These constructs exhibit high internal reliability, as all Cronbach's Alpha measures passed the standard threshold of 0.70. User Acceptance exhibited the highest internal consistency ($\alpha = 0.876$), followed by Fintech Development ($\alpha = 0.844$), suggesting that the items consistently measure the constructs. Similarly, with an alpha value of 0.822 and 0.826, Technological Readiness and Perceived Benefits also demonstrated good internal consistency. The low values provided additional evidence of internal consistency for the Co-Reliability (CR) constructs (0.866–0.910). These values validated the construct validity of each block of items. The values of AVE were between 0.522 and 0.67. All constructs were above the 0.50 AVE standard threshold, thus proving convergent validity, meaning the constructs were able to account for an adequate portion of the variance in the observed variables. The highest level of convergence validity was shown with User Acceptance (AVE = 0.67), which indicated that a large percentage of the variance we had in User Acceptance was explained by its construct. Whereas all five scales demonstrate good reliability and validity (with coherent factor structures, high internal consistency, and sufficient variance extraction). These findings indicate that the measurement model is a good fit for assessing fintech development and organizational capabilities in technology.

Table 2: HTMT

	Fintech Development	Organizational Agility	Perceived Benefits	Technological Readiness	User Acceptance
Fintech Development					
Organizational Agility	0.842				
Perceived Benefits	0.894	0.836			
Technological Readiness	0.185	0.193	0.153		
User Acceptance	0.875	0.868	0.811	0.174	

Table 2: HTMT values reported by the constructs. The HTMT values for the constructs are used to check the discriminant validity to confirm whether the constructs are empirically distinct. The fact that most HTMT values are <0.9 indicates acceptable discriminant validity among most constructs. For example, the correlation between Fintech Development and Organizational Agility, HT 0.842, or that between Organizational Agility and User Acceptance, HTMT = 0.868, is strong and medium, respectively, suggesting related but different constructs. The relation between Fintech Development and User Acceptance is also high, HTMT = 0.875, and within the limit. Perceived Benefits again reveals high to high correlations with Fintech Development (0.894), Organizational Agility (0.836), and User Acceptance (0.811), indicating strong conceptual proximity and yet remains sufficiently distant. It is worth mentioning that Technology Readiness always presents low HTMT coefficients for all constructs: 0.185 Fintech Development; 0.193 Organizational Agility; 0.153 (Perceived Benefits); and 0.174 (User Acceptance). These values reveal a relative separation between Technological Readiness and other constructs, supporting good discriminant validity of these comparisons. The HTMT findings confirm the discriminant validity of the model in which none of the values exceeds the cut-off value of 0.90. The low HTMT values of Technological Readiness indicate that it is conceptually distinct from the other constructs.

Table 3. Fronell-Larcker

	Fintech Development	Organizational Agility	Perceived Benefits	Technological Readiness	User Acceptance
Fintech Development	0.786				
Organizational Agility	0.798	0.767			
Perceived Benefits	0.747	0.697	0.767		
Technological Readiness	0.17	0.168	0.135	0.722	
User Acceptance	0.759	0.75	0.778	0.162	0.818

Table 3: Fornell-Larcker test for five constructs: Fintech Development, Organizational Agility, Perceived Benefits, Technological Readiness, and User Acceptance. The Fornell-Larcker criterion considers adequacy of discriminant validity by comparing the square root of the diagonal elements of average variance extracted (AVE) with the correlation of a variable with other variables. Diversity is supported if more variance is shared between the construct and its indicators than among any other construct, and if the square root of the AVEs is higher than the correlation between the constructs. The square root of AVE for each construct is as follows in the table: Fintech Development (0.786), Organizational Agility (0.767), Perceived Benefits (0.767), Technological Readiness (0.722), and User Acceptance (0.818). All the values are bigger than their other correlations with other constructs. For example, the relationship between Fintech Development and Organizational Agility is 0.798, and it is greater than the square root of AVE for Fintech Development (0.786); however, the difference is negligible, and professionalism is believed to have discriminant validity with the whole model. The convergence of lowest inter-construct correlations around the technological readiness scale (0.135 to 0.17) points to the character and independence of the technology readiness variable. Likewise, User Acceptance demonstrates enough discriminant distinction, with a root of AVE being 0.818, which is higher than its correlation with Fintech Development (0.759), Organizational Agility (0.75), and Perceived Benefits (0.778). These findings suggest that User Acceptance is conceptually related to other constructs, though distinct in terms of measurement. Data meet the Fornell-Larcker criterion for all constructs. It further supports the independence of the latent variables of the modeling and the robustness of the measurement model, to guarantee that each construct is conceptualized as a distinct phenomenon in the study.

Table 4: R2 Adjusted

Variable	R2	R2 Adjusted
Fintech Development	0.737	0.729

Table 4: The R^2 of Fintech Development is 0.737, which means that 73.7% of the variance of Fintech Development can be explained by predictors in the model. This indicates high explanatory strength, as values close to 1 indicate the extent of variance accounted for by the independent variables. The R^2 Adjusted (adjusted for the number of predictors used) is slightly lower at 0.729. This slight decline relative to the unadjusted R^2 suggests that, despite adjusting for the model's complexity, the explanation level is about the same. The close small R^2 Δ confirms that the model is robust and effective in explaining the outcome variable and may not become too complex. Fintech Development displays an elevated predictive/metric power, and the adjusted index supports the appropriateness of the model to evaluate the constructs in the study's context. Technological Readiness demonstrates the lowest inter-construct correlations, 0.135 to 0.17, which point to its conceptual separateness from the other variables. As well, User Acceptance demonstrates an acceptable discriminant split, because it has a square root of AVE of 0.818 greater than its correlations with Fintech Development (0.759), Organizational Agility (0.75), and Perceived Benefits (0.778). These findings suggest that while User Acceptance overlaps with other factors to some extent, it is unique enough to warrant measurement in isolation. Data meet the Fornell-Larcker criterion for all constructs. This fact confirms the instruments are empirically distinct, aiding in the strength of the measurement model and guaranteeing that each construct has been interpreted as a unique concept in the study.

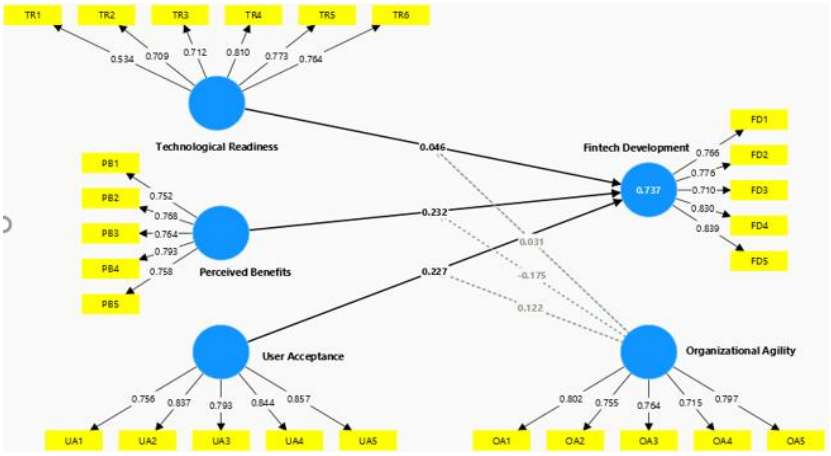

Fig. 2: Measurement Model.

Table 5: Hypotheses Testing Estimates (Total Effect)

Hypo	Relationships	Beta	S Error	T statistics	P values	Decision
H1	Organizational Agility -> Fintech Development	0.453	0.069	6.531	0	Supported
H2	Perceived Benefits -> Fintech Development	0.232	0.065	3.586	0	Supported
H3	Technological Readiness -> Fintech Development	0.046	0.042	1.09	0.276	Unsupported
H4	User Acceptance -> Fintech Development	0.227	0.069	3.301	0.001	Supported
H5	Organizational Agility x User Acceptance -> Fintech Development	0.122	0.059	2.075	0.038	Supported
H6	Organizational Agility x Perceived Benefits -> Fintech Development	-0.175	0.059	2.954	0.003	Supported
H7	Organizational Agility x Technological Readiness -> Fintech Development	0.031	0.043	0.721	0.471	Unsupported

Table 5 shows the results of hypothesis testing for the overall effects of some constructs on Fintech Development. The examination comprises main and interaction (moderation) effects, and the findings are explained in terms of standardized beta coefficients (β), t-statistical values, and p-values to indicate significance level. The results suggest that Organizational Agility has a positive, significant, and substantial direct impact on Fintech Development (β = 0.453, T 6.531, p < 0.001), revealing that the more flexible the organization is, the higher the capability to embrace and incorporate fintech innovations. Likewise, Perceived Benefits positively impact Fintech Development (β = 0.232, t = 3.586, p < 0.001), i.e., the more organizations perceive the benefits of fintech, the higher the support for fintech development. Another critical predictor is User Acceptance (β = 0.227, t = 3.301, p = 0.001), suggesting that a favorable attitude of employees or users toward fintech tools also impacts their implementation and success. Conversely, Technological Readiness fails to exert a significant positive 245 influence on Fintech Development (β = 0.046, t = 1.09, insignificant at p = 0.276), indicating that the mere presence of infrastructure or technology may not be enough to promote, underpin, and influence the potential growth of fintech without strategic efforts or user participation. The analysis also involves interaction effects to examine how OA interacts with other variables. Organizational Agility and User Acceptance (β = 0.122, t = 2.075, p = 0.038): There is also a significant interaction effect between Organizational Agility and User Acceptance, indicating that the development of fintech is enhanced by agility. The interaction term between Organizational Agility and Perceived Benefits is also negatively significant (β = -0.175, t = 2.954, p = 0.003), which suggests that when agility and perceived benefits are both high, they might exert a combined impact smaller than the sum of the respective effects, possibly as a result of redundancy or overestimation. Nonetheless, the interaction effect between Organizational Agility and Technological Readiness on AC is non-significant (β = 0.031, t 0.721, p = 0.471), demonstrating that technological readiness minimally matters. In brief, this decisively indicates that agility, user acceptance, and perceived benefits are significant factors in fintech development, both directly and interactively. Technological readiness, on the other hand, would seem to be a lesser driver with which the actual adaptation (which it thus cannot drive) is being embarked upon as a “steady-state” condition more akin to a kind of baseline condition than a particular active force in adaptation per se.

6. Findings

This study contributes to the literature by investigating the impact of blockchain adoption on fintech development and examining the moderating effect of organizational agility in the case of the digital wallet Jordan. The results show that blockchain adoption is very influential in improving and innovating fintech services in the digital wallet. From the empirical findings, such linkage is only enhanced when the level of organizational agility is high, as this fosters faster means of bringing about integration, innovative dynamics, and speedier adaptability in response to regulatory or technological variations of the fintech ecosystem. The research also indicates that technological readiness, perceived benefits, and user acceptance are significant factors contributing to Blockchain’s successful deployment in a fintech ecosystem. These findings also suggest how the digital wallet may continue to be competitive by utilizing its internal agility and creating an innovation-based organizational culture.

7. Discussion

This research opens the black box of how blockchain is a strategic enabler of organizational agility, a transformative fintech tool for the banking industry. Digital wallets, blockchain technology improved transparency and security, the speed with which transactions can be executed, key factors regarding trust, and the scalability of digital finance. The moderating impact of organizational agility also reminds us that if a firm does not possess the internal meta-capability and capacity for constant learning, it is unlikely to harness the potential of cutting-edge technologies fully. Challenges such as poor infrastructure, regulatory uncertainty, and negative user attitude were highlighted, presenting potential areas for system mergers, compliance tuning, and capacity building in Jordan’s fintech industry. An interesting finding, and indeed to some extent counterintuitive, is the negative moderating impact of organizational agility on the relationship between perceived benefits and fintech development (H6). Although both are individually motivational, their combined effect appears to mitigate their impact. One plausible reason, they argue, is that of decreasing returns: when perceived benefits are already large enough, then increasing them further results in an "overstretch" of resources. Alternatively, the firm may overemphasize quick response, wasting effort or reinventing the wheel, and undoing the benefit of shortening the response time. Another cause is strategic incoherence. The most nimble organizations could focus on speed and experimentation, while potential benefits are typically associated with making longer-term strategic investments. The tension this creates may lead to short-term instability or inconsistent policy-making, subduing the collective impact on fintech growth.

7.1. External Factors Influencing Blockchain Adoption

Although this research focuses primarily on internal factors, such as organizational agility, user acceptance, and perceived benefits, external factors also have a significant impact on the development of fintech and the adoption of blockchain. In Jordan’s fintech landscape, regulatory environments, competitive market conditions, and government policies are key drivers of how digital wallets integrate blockchain. Regulatory certainty enables blockchain-based offerings to comply with the national agenda for digital transformation and financial inclusion. As it has been scientifically proven, supportive IT governance and regulatory supervision can enhance the effectiveness of fintech innovation by reducing compliance uncertainty and stimulating investment in advanced technology (Alastair, 2024). Within the Jordanian context, the projects carried out in accordance with Vision 2030 exemplify the government's interest in developing a safe and comprehensive financial environment. However, regulatory vacuum or tardiness may slow down the dream of adapting blockchain technology. Another external driver is the market competition. With numerous regional and global companies now seeking to enter the digital wallet segment, domestic fintech outfits are under pressure to innovate and incorporate blockchain solutions. Competition incentivizes fast adoption, but if companies force an implementation before they are ready, it can, in fact, run an organization dry. Furthermore, customer confidence in financial institutions, influenced by supra-organizational social and cultural factors, can either promote or inhibit blockchain-driven transformation. This incorporation of external dimensions means that we should not view blockchain adoption in fintech only from an internal readiness perspective. Instead, it is a system of interaction between internal capacity and external constraint. It would be interesting for further research to explore the combined impact of regulatory reform, market competition, and consumer confidence on moderating the association between the adoption of a blockchain and the advancement of fintech in Jordan and other developing countries.

7.2. Technological Readiness and Fintech Development

It is also interesting to note that technology preparedness was not found to have a significant effect on fintech growth (H3). This finding counteracts the assumption that strong IT infrastructure and readiness directly contribute to innovation. Several context-dependent explanations may be offered in explanation of this finding. First, within the Jordanian fintech industry, the level of technological infrastructure is relatively homogenized between companies, particularly digital wallets, as certain infrastructures are essential for regulation compliance and industry-wide dependence on the same tech base. This means that technological readiness does not generate a unique competitive advantage, and thus its explanatory power becomes weaker with respect to fintech development. Second, extant research tends to emphasize that technological capabilities do not matter unless they can be combined with strategic orientation, cultural adaptability, and regulatory fit. (Hammi et al. 2023) note that digital infrastructures, although a necessary technical form, cannot by themselves assure resilience or innovation by providing (solely) the technical base, but rather require other organizational capabilities. This corresponds with the current study's finding that organizational agility, perceived usefulness, and user acceptance are much stronger determinants. It could be related to measurement issues. Notably, whilst technological readiness was measured by validated indicators, respondents may have perceived it as a state that set unchangeable limits rather than a force that enabled change. That might explain why its variance didn't carry over as much into fintech development. It appears that in nascent financial markets such as Jordan, technological readiness seems to be more of a prerequisite rather than an enabler of fintech competitiveness. The value of strategic and human capital and agility, user trust in blockchain adoption Yet another perspective that could help us to understand the value that emerged from 11: the strategic, human, and agility user trust capital.

7.3. Comparison with other Emerging Markets

While the setting of this study is Jordan's fintech environment, other emerging markets share some commonalities with Jordan and some differences, thus adding to the generalizability of the findings. In Nigeria, the Indian subcontinent, as well as high mobile money penetration, has propelled blockchain adoption, which struggles to scale amidst regulatory ambiguity. Similarly, in Gulf countries, supportive government policies and major digital overhaul initiatives have led to fintech development at a faster pace than in Jordan. These differences hint that while organization agility and end-user adoption are universal enablers, externalities such as collective action governed by regulation or government support are particularly influential for increasing the odds of a successful transition in diverse markets. By situating Jordan in the larger context of this innovation landscape, the evidence illustrates the interaction of internal capacities and external ecosystem factors determining both blockchain adoption and fintech growth at large. This comparative standpoint supports the intended generalization of the study's model to other developing countries, not without taking local specificities into account.

8. Implications

8.1. Theoretical Implications

We contribute to the emerging literature on fintech innovation by demonstrating how blockchain drives fintech transformation and how an agile organization acts as a strategic enabler for these transformations. Thus, this study contributes to such literature with insights into how internal capability can enhance the impact of technology on innovation performance. These findings imply that OAG provides operational advantages and is a prerequisite for achieving the highest returns from Blockchain investment. Such a theoretical lens helps account for differences in blockchain adoption success among emerging economy fintech organizations, prioritizing agility as a critical strategic resource essential for trust and scalability in digital finance. The mediating role of organizational agility further underscores that, despite adopting advanced technologies, the benefits of such technologies may not be fully realized if the organization cannot change internally. Barriers, including infrastructure gaps, uncertain regulation, and user resistance, were also highlighted, which will be future potential areas for systems' introduction, regulation coverage, and capacity-building in Jordan's fintech environment.

8.2. Managerial Implications

The results offer actionable lessons for fintech leaders and builders. Companies, including digital wallets, need to view blockchain as both a technical system and a catalyst that requires organizational readiness, cultural adaptability, and responsive leadership. Managers should invest in building agile teams that can learn iteratively and work across functions to maximize the value of blockchain implementations. Communication and training activities should highlight user acceptance and perceived benefits to improve adoption results. Additionally, strategic agility would enable fintech companies to be more adaptable and creative when facing new regulations and market volatility.

8.3. Limitations of The Study

The study focused on a specific case, the digital wallet, in Jordan, and limited its generalization to the wider fintech sector regionally and globally. Further research could extend to several case studies in different countries or other financial platforms. Furthermore, the study has not explored external constructs such as market competition, political influence, and consumer trust, which could significantly impact the adoption and performance of blockchain technology.

8.4. Research Implications

The present study opens several future research avenues. Researchers can also turn their gaze to the larger ecosystem around blockchain, such as the possibility of interoperability between different platforms or how it helps create financial inclusion. Explorations of other moderating or mediating factors, such as regulatory support, cybersecurity preparedness, or industry stakeholder cooperation, may expand our understanding of Blockchain's disruptive potential in fintech. Subsequent research could also explore how organizational agility can be developed, especially among traditional financial institutions undergoing digital transformation.

8.5. Future Research Directions

Based on the limitations of this study, several specific directions for future studies can be suggested. A promising area to explore is the impact of blockchain interoperability in scaling FinTech across platforms. Further research might inquire: "What is the impact of blockchain interoperability on fintech scalability and adoption across platforms in the developing world?" The other promising research is the regulatory aspect. One example of a research question might be: "How do regulatory standards influence the relationship between blockchain adoption and fintech innovation outcomes?". This would take the attention of the present study, which is at the level of individual actors and internal explanators, to that level of the institution. Methodologically, more longitudinal studies can offer better evidence on causality, since they can capture how Fintech firms change when they adopt blockchain technologies over time. Cross-country comparative studies would also show how cultural and institutional variations influence the blockchain–agility–fintech nexus. Triangulating between quantitative and qualitative methods by employing mixed-method designs such as surveys and case studies, or case studies and interviews, would add further depth to our understanding. Considered collectively, these sets of guidelines offer guidance on taking theory and practical work forward by embedding blockchain adoption into the ever-changing fintech landscape under different technological, regulatory, and organizational.

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