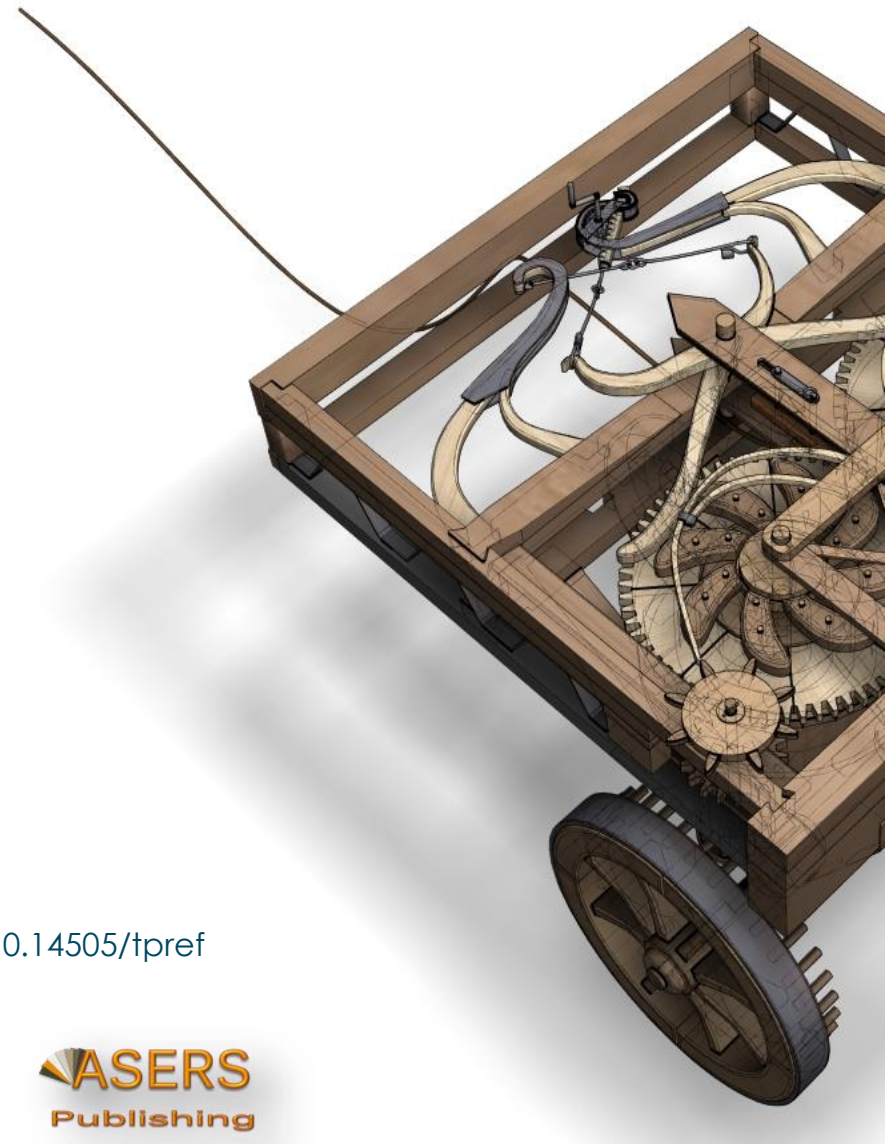
Theoretical and Practical Research in Economic Fields



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Theoretical and Practical Research in Economic Fields

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Impact of Blockchain Adoption, Regulatory Environment, and Institutional Investor Participation on FinTech Innovation

Ahmad Abdel Rahim ALMESTAREHI
Department of Financial Technology
Faculty of Economics and Business Administrative Sciences
Zarqa University, Jordan
ORCID: 0009-0000-3296-4021
aalmestarehi@zu.edu.jo

Hassan Ali AL-ABABNEH
Department of Electronic Marketing and Social Media
Faculty of Economics and Business Administrative Sciences
Zarqa University, Jordan
ORCID: 0000-0003-1136-8911, Researcher ID: E-8754-2019
hassan_ababneh@zu.edu.jo

Eyad Mohammad MALKAW
Department of Finance and Banking Science,
Faculty of Administrative and Financial Sciences
Irbid National University, Jordan
ORCID: 0009-0009-9660-3140
eyad63jo@yahoo.com

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Abstract: This study investigates how blockchain integration, regulatory policies, and the participation of institutional investors impact fintech innovation in Jordanian fintech companies. A descriptive analytical approach was used to evaluate and summarize the effects of these factors on innovation in the sector. An electronic survey was conducted among 125 administrative personnel working in Jordan's fintech industry. The results indicate a strong presence of blockchain adoption, involvement of institutional investors, and overall fintech innovation in these companies. However, the regulatory landscape in Jordan's fintech sector was found to be moderate. Furthermore, the analysis reveals that both blockchain integration and the regulatory framework significantly influence fintech innovation, with a significance level of 0.05. In light of these findings, the study suggests the creation of strategies to promote blockchain adoption, aiming to enhance efficiency and innovation in the industry.

Keywords: blockchain; fintech; innovation; regulatory environment; investor.

JEL Classification: G20; G17; G18; G30; G38; C01.

Introduction

We go on to benefit from technology in a host of practical ways, thanks to researchers in diverse fields who are making new innovations more efficient, more effective, and more secure. A good example is network technology that gave rise to the Internet by allowing people to share information across time and space. Blockchain tech is relatively new but presents a wealth of opportunities in many domains. Within finance, blockchain is considered to improve financial management and encourages innovation in fintech (Rahim *et al.* 2024). Blockchain technology presents an innovative digital solution for ensuring data integrity by creating a unique data structure through a secure, immutable, and fault-tolerant distributed ledger (Chen, 2024). This technology utilizes encrypted blocks that store transactions and digital events in a sequential order. The fundamental characteristics of blockchain—

immutability, transparency, security, and traceability - position it as a powerful tool for ensuring data integrity, preventing unauthorized alterations, and fostering trust in business and financial transactions. Additionally, Kaur *et al.* (2024) highlighted that blockchain can enhance collaboration among supply chain participants, promoting more efficient cash flow management. Serving as a secure, trustless digital ledger, blockchain stores transactions in an irreversible and transparent manner, making alterations impossible without the consent of the entire network. This removes the necessity for intermediaries, lowering transaction costs, reducing errors, and minimizing the risks of human mistakes or delays. Meanwhile, the concept of the regulatory environment has gained considerable focus from businesses and institutions, as it includes external factors that directly influence an organization's performance, operations, and resources. These external influences can have a substantial impact on organizational outcomes and effectiveness, as highlighted by Al-Tamimi (2021). According to Claudia (2024), Organizations vary in terms of the environment in which they operate. Some organizations face a stable environment with only minor changes in external forces, while others are dominated by a dynamic and active environment. Additionally, the business environment can also influence the emergence of new competitors. It is important to note that the regulatory environment includes all elements outside the organization's boundaries, and these elements may affect the organization as a whole or parts of it.

The regulatory environment typically refers to a specific set of characteristics that shape the work environment within an organization, influencing how individuals perceive and interact with their surroundings and their roles within the organization. These features affect or affect their motivations and behaviours (Bouabidah & Zamouly, 2024). In addition, many researchers and studies have focused on the subject of institutional investors. As Chen & Ganti (2024) explained, pooled investments are organizations that manage investments conducted by individuals or other entities. They usually transact large amounts of financial assets such as stocks, bonds, and other securitized instruments on behalf of their members, executing large trades on the demand of their stakeholders. Institutional investors are favored more than retail investors, as they help by providing crucial information in the price discovery process, mostly via deeper insights into valuations and deeper analyses. Moreover, the fact that they can execute transactions on a vast scale, backed by substantial purchasing power, allows them to have a much greater impact on financial markets in comparison with individual investors (Papaioannou & Karagozoglu, 2017). All of these issues we've discussed have the potential to impact FinTech Innovation. The swift expansion of financial technology (FinTech) has recently attracted considerable focus within the financial industry (Chen *et al.* 2019). Experts widely recognize the transformative potential of FinTech in reshaping financial services by lowering transaction costs, increasing convenience, and enhancing security. Traditionally, FinTech involves the application of technology to efficiently process vast amounts of private or market data, thereby driving the creation, improvement, and evolution of financial products, services, and business models. The term "FinTech" merges "Finance" and "Technology," symbolizing a new era where these two domains intersect to foster innovation in financial institutions (Jain, 2024). As such, this study seeks to examine the impact of blockchain adoption, regulatory frameworks, and institutional investor involvement on the development of FinTech.

The novelty of this article lies in the integrated approach to studying the impact of three key factors - blockchain, regulatory environment and participation of institutional investors - on the development of innovations in the field of financial technologies (fintech). The authors explore the interaction between technological innovations and regulatory mechanisms that create new opportunities for the development of financial services, ensuring greater transparency, security and accessibility for users.

Particular attention is paid to the role of institutional investors, who, through their investments, contribute to the scaling of blockchain solutions in the real sector. The impact of blockchain technology regulation on the formation of innovations in financial markets, as well as the prospects for adapting new technologies in the conditions of globalized financial systems, is also considered. The article provides new insights into the mechanisms of interaction of these factors and their impact on the formation of financial innovations.

Problem Statement

The rapid expansion of FinTech can be attributed to several factors, including advancements in blockchain technology, the regulatory environment, and the involvement of institutional investors. Blockchain has considerable potential to improve transparency, security, and efficiency within financial markets. However, the broader focus of this study is on how blockchain integration within existing financial systems influences its practical value and innovation. Additionally, regulatory frameworks governing blockchain and FinTech will play a crucial role in determining the opportunities and challenges related to compliance, scalability, and market adoption. The involvement of institutional investors, with their substantial resources and development capabilities,

is also vital for supporting and driving the growth of FinTech innovation. However, the way these interconnected factors jointly impact the speed and direction of innovation in the FinTech sector remains not fully understood. This research aims to explore how blockchain adoption, regulatory policies, and institutional investor engagement interact to either promote or hinder innovation in FinTech. This leads me to the following two sub-questions related with:

- How widely is (Blockchain technology) implemented by (Fintechs in Jordan)?
- These are the level of the regulatory environment (Fintech companies in Jordan)
- How significant is institutional investors' participation at (Fintech companies in Jordan)?
- To what degree does (Identify the level of FinTech innovation at (Fintech companies in Jordan)?
- Does blockchain adoption, regulatory environment, and institutional investor participation have a statistically significant impact on fintech innovation (Fintech companies in Jordan)? To what extent is blockchain adopted at (Fintech companies in Jordan)?

As such, this study provides valuable scientific insight into the link between blockchain adoption, the regulatory environment, and institutional investor participation in FinTech innovation. This research adds to the body of literature by examining in detail how these factors affect the emergence of financial technology in the financial sector with a specific focus on Saudi Arabia. The paper, which looks at the effect of these features on FinTech innovation, contributes to the increasing amount of literature on how institution forces and emergent tech are shaping transformation in financial services. Moreover, practically, this research is useful for policymakers, financial institutions, and businesses seeking to adopt innovations based on blockchain technology and institutional investment. Example 2 References to the Regulatory Dynamics of Blockchain Technology: By understanding the regulatory dynamics in addition to the role of institutional investors in Saudi companies, more effective strategies for integrating blockchain into financial services can be determined. Moreover, it provides valuable insights for decision-makers to cultivate a conducive atmosphere for FinTech development and to address active regulatory issues. The findings could also help Saudi companies become more competitive and better equipped to navigate global financial headwinds. In order to achieve this aim, the study aims to explore how blockchain adoption, the regulatory landscape, and the involvement of institutional investors impact the degree of innovation in the fintech sector. To support this primary objective, the following sub-objectives are outlined:

- The level of blockchain adoption at (Fintech companies in Jordan)
- Determine the regulatory environment level: (Fintech companies in Jordan)
- To what extent do institutional investors engage at (Fintech firms in Jordan)
- Assess the degree of adoption of FinTech innovation (Fintech companies in Jordan).
- Assessing the effect of (block chain) adaptation, regulation atmosphere, and institutions investors' involvement on the fintech innovation at (Jordan Fintech firms). Identify the extent of blockchain adoption at (Fintech companies in Jordan).

1. Literature Review

Bhatnagar *et al.* (2024) will demonstrate how Customer Value Theory (CVT) and Protection Motivation Theory (PMT) can shed light on the key factors that influence customer experience, electronic trust, and the intention to recommend, while examining the relationship between perceived risk and the adoption of digital currencies. Methods: An online cross-sectional survey was conducted with 414 participants from India using purposive sampling. The relationships between the variables were analyzed through partial least squares structural equation modelling. The findings revealed that functional value, emotional value, and social value positively impacted customer experience, while perceived severity, perceived vulnerability, response efficacy, and self-efficacy positively influenced electronic trust. Results: A direct relationship between electronic trust and both customer experience and the intention to adopt digital currency was found. The study concluded that digital currencies driven by value could increase their adoption rates. Meanwhile, Khatwani *et al.* (2023) examined technological innovations within the global Banking, Financial Services, and Insurance (BFSI) sector, emphasizing both the advantages and challenges organizations face. The study mostly relied on secondary data sources YouTube channels and other social media platforms to present an overview of the state of technology and its promise. The first takeaway from the report showed that digital transformation is on the rise, and banks are speeding up their strategic updating in light of the latest innovations. The study predicts positive outcomes for the AI sector in the coming years, highlighting the increasing adoption of AI software by banking companies to lower costs, automate basic functions, and improve service quality, all through the use of personalized data Khan, S *et al.* (2025). Employing the theory of planned behavior (TPB), Ramachandran & Stella (2022) explored the

intentions of Generation Z postgraduate students have toward cryptocurrency investment, on the basis of perceived benefits vs. perceived barriers. Data from 480 respondents were collected using a structured questionnaire on a five-point Likert scale and then analysed with Smart PLS 3 along with structural equation modelling. It was also established that the intention to adopt cryptocurrency in distance education was positively influenced by attitude, awareness, and perceived behavioral control, whereas subjective norms have no impact. Kumari & Devi (2022) Alzahrani *et al.* (2023) examined the FinTech and blockchain applications of financing digital banking and financial services. Their literature review indicated that these technologies are revolutionizing the banking and finance industry and have a significant impact on the digitalization trends that are changing and updating digital banking services.

Rabbani *et al.* (2020) and Wijayanti *et al.* (2025) systematically reviewed Islamic financial technology, reviewing a total of 133 papers. They analysed the opportunities and challenges for Islamic financial institutions to adopt FinTech, with specific emphasis on Shari'ah compliance for cryptocurrency and blockchain. The authors conclude that Islamic FinTech needs to be perceived as a partner for the Islamic financial institutions as a tool for enhancing efficiency, transparency, and customer satisfaction. According to Ramzy (2024), Blockchain technology is composed of three primary types:

- Public Blockchain: A permission-less accessed distributed database. The data is public, and anyone can read it, help to verify transactions, and write new blocks.
- Private Blockchain: A database similar to the public blockchain, except access is limited to a set of authorized nodes run by one or several organizations that, in fact, control the network and the authority of validation of the blocks. Only authorized users are able to add data and perform transactions.
- Hybrid Blockchain: It can be considered as a mixture of public and private blockchain. Controlled by a network of sanctioned validators, it provides privacy, control, speed, and lower costs, and is well-suited for major financial institutions.

In contrast, Shahnaz *et al.* Emphasizing the need for encrypted data chains securely connected to blocks, (2019) illuminated the unique properties of blockchain technology. This technology works by utilizing a decentralized framework that allows information to be spread out across numerous nodes. In addition to that, every shared data has the collective ownership which makes the system more transparent and secure at the same time. What are Blockchains are batches of transactions that are hashed giving them security and that are maintained by peer-to-peer networks. Blockchain leverages P2P (peer-to-peer) distributed and decentralized consensus algorithms, immutability, and encryption. These features make the blockchain a unique technology with great promise in a number of fields (Shahnaz *et al.* 2019). Being in Financial domain, Blockchain Technology Theoretically is really providing the competitive edge that the Banking Industry have long Varied to solve out the pressures of the Digital Age. The technology is highly transparent to process due to its distributed nature, impressively eliminating the manual verification and authorization requirements (Khamis, 2023). Furthermore, Blockchain technology is a fundamental component behind the emergence of financial technologies, as it has been the basis for the emergence of digital currency (Bitcoin), which is the first financial technology. Some identified advantages of its use include (Mahna, 2023):

- Public Blockchain: A distributed database that requires no permission to access. Anyone can view information, participate in validating transactions, and add new blocks.
- Private Blockchain: A database similar to the public blockchain, but access is restricted and requires authorization from a central entity. Only authorized users can add data and conduct transactions.
- Hybrid Blockchain: Combines features of both public and private blockchains. Managed by a group of authorized validators, it offers privacy, control, speed, and lower costs, making it ideal for large financial institutions.

On the other hand, Shahnaz *et al.* (2019) highlighted blockchain's distinct characteristics, emphasizing its reliance on encrypted data chains securely connected to blocks. This technology operates through a decentralized framework, enabling information to be distributed across multiple nodes. Additionally, each piece of shared data maintains collective ownership, ensuring transparency and security within the system. Blockchains store groups of transactions, which are hashed for security, and are governed by decentralized peer-to-peer networks. Blockchain utilizes a distributed peer-to-peer (P2P) network, decentralized consensus algorithms, immutability, and encryption. These characteristics have made blockchain a distinctive technology, attracting significant interest across various fields (Shahnaz *et al.* 2019). In the Financial field, Blockchain technology, by its design, offers inherent benefits that the banking industry has been seeking to address the challenges and pressures arising from the digital age. The distributed nature of this technology brings a high level of transparency in processing, thereby reducing the need for manual verification and authorization (Khamis, 2023). In addition,

Blockchain technology is the key factor behind the existence of financial technologies, as it has been relied upon since the creation of digital currency (Bitcoin), which is the first financial technology. Its use offers several benefits, including (Mahna, 2023):

- The elimination of the need for intermediaries or central authorities to manage payments and transfers.
- High security due to the difficulty of hacking it.
- Prevention of double-spending, ensuring that the same balance cannot be spent more than once.

In general, blockchain technology is essential to financial technology as it offers a decentralized and secure framework for handling digital transactions. It eliminates the need for intermediaries, ensuring faster and cost-effective transfers. Its inherent security features, such as encryption and immutability, make it resistant to fraud and double-spending, fostering trust in digital financial systems. The regulatory environment encompasses all institutions and forces surrounding an organization that directly influence its performance, operations, and resources. The impact can be observed by tracking changes in the organization's performance and their consequences, which are influenced by the surrounding forces and institutions. Every organization has its own environment (Al-Tamimi, 2024). The active and dynamic environment Some organizations are located in a stable environment where they do not change much external forces, while others are active and dynamic environment (Bryce, 2024) The business environment may also influence the presence of new competitors. The regulatory environment in general comprises all external elements beyond the organizational boundaries that can affect the organization holistically or some aspect of it. The regulatory environment includes all of the institutions and forces that are external to an organization and may affect its performance, operations or resources. Changes to the surrounding forces and institutions are those the organization's performance and consequences are influenced by - follow their development to understand the impact. The environment that the organization operates in varies (Al-Tamimi, 2024). Bryce (2024) states about some organizations functioning in a stable environment with no change in external forces and others operating in a trendy and active environment. New competitors might also be influenced by the business environment. Regulatory environment refers to the totality of factors outside the organization that influence its functioning, either entirely or collectively.

The regulatory environment has many features, the foremost of which is defining the environment in a specific framework. This means that whatever resides inside indies of the organization is within the antigenic or strategics and exogenies of studying the organization's environment (Clarity Guides & Documentation, 2024).

Besides, the regulatory environment is also one of the features that are prone to environmental impacts. An organization cannot function separately from its environment, which it affects and is affected by. This engagement degrees, as well as adverse effects on the organization levels (Al-Tamimi, 2024) and decides the performance.

The regulatory environment can influence environmental variables; however, changes within an organization are difficult to control. Unlike physical changes such as temperature, gravity, or chemical reactions, which can be managed and directed, the organization's work environment is governed by social and economic factors. These factors are hard to fully control, although some can be predicted and partially managed (Zou & Wang, 2024).

Hence, the regulatory environment in financial technology consists of external institutions and forces that shape the performance, operations, and resources of fintech companies. These forces, such as legal, economic, and technological factors, significantly influence the industry's growth and competitiveness. While some regulatory changes can be anticipated or partially controlled, others are challenging to manage due to their dynamic nature. The primary motivation for investment is to build wealth and generate profits from available capital. Instead of letting this money remain idle, it can be effectively utilized in a way that increases its value and multiplies it. Jin *et al.* (2024) define an institutional investor as an organization or company that collects funds from various sources, such as individual investors or other entities, and invests them in various market securities on their behalf. In essence, these investors pool capital from others to engage in the buying and selling of financial instruments such as stocks, bonds, currencies, and contracts. Chen and Ganti (2024) highlighted that institutional investors are entities that acquire, trade, and oversee various financial instruments, such as stocks and bonds, for the benefit of their clients, customers, or stakeholders. These investors operate on behalf of others and include six key categories: endowment funds, commercial banks, mutual funds, hedge funds, pension funds, and insurance companies. Institutional investors face fewer protective regulations compared to individual investors, as they are presumed to possess greater expertise and are better equipped to protect their interests.

Furthermore, Friel *et al.* (2024) noted that institutional investors are organizations that aggregate funds from multiple sources to invest in and trade securities. There are five main types:

- Mutual Funds: Investment vehicles that gather funds from multiple investors to create a diversified portfolio of securities
- Hedge Funds: Investment partnerships where pooled funds from members are managed by a general partner and invested in a range of securities, with limited partners providing capital.
- Insurance Companies: Large institutional investors that collect premiums from policyholders and invest these funds in various securities, with the returns used to settle claims.
- Endowment Funds: Funds established by organizations like universities or hospitals to support their specific missions and activities.
- Pension Funds: Investment funds contributed to by both employers and employees, designed to invest in securities for the purpose of funding retirement benefits.

However, institutional investors hold considerable influence in financial markets, as they execute large transactions that significantly affect supply and demand dynamics of securities. Their actions impact security prices, and many individuals attempt to mimic their strategies in hopes of achieving similar success, though investment experts generally advise against this (Wei *et al.* 2024). Institutional investors play a crucial role in managing and investing funds from diverse sources to generate returns. These investors, including mutual funds, hedge funds, insurance companies, endowment funds, and pension funds, pool capital to buy and sell a wide range of securities. Unlike individual investors, institutional investors face fewer regulatory constraints due to their expertise, allowing them to make larger investments and better manage risks Wijayanti, *et al.* (2025). Fintech, a term derived from the combination of "financial" and "technology," refers to innovative technologies that aim to enhance and streamline financial services. At its core, fintech seeks to help businesses, entrepreneurs, and individuals manage their financial activities, processes, and overall financial health more effectively. It leverages advanced software and algorithms implemented on computers and mobile devices to achieve these goals (Kagan, 2024). Samuvel & Pradeep (2022) explain that traditional financial institutions are increasingly facing competition from non-bank financial players and shadow banking systems. The advent of fintech has further intensified this competition by allowing startups, major tech companies, and digital-first banks (also known as neo banks or challenger banks) to join the financial services industry. Fintech startups are making significant strides across various sectors, including payments and money transfers, lending, corporate financial management, crowdfunding, institutional financial technology, trading, insurance, wealth management, personal finance management, and digital banking. Navaretti *et al.* (2018) argued that fintech companies are not likely to replace traditional banks but rather exist alongside them, either collaborating or evolving into similar entities. One key factor is that fintech lenders face limitations in providing liquidity, as they lack access to central bank funding, unlike traditional banks. Additionally, their inability to perform maturity transformation further restricts their liquidity services. Several instances have occurred where online lending platforms have allowed mismatched maturities, with lenders able to withdraw their funds faster than borrowers can repay their loans Shah, (2025). Generally, FinTech refers to innovations that automate and enhance the delivery of financial services. Initially focused on improving the backend systems of traditional banks, FinTech has evolved to offer consumer-facing services, covering sectors like payments, lending, insurance, and cryptocurrency development. Although FinTech companies face challenges such as limited liquidity and inability to access central bank funds, they continue to coexist with traditional financial institutions, often collaborating or evolving into similar entities while reshaping the financial services landscape.

2. Materials and Methods

The study employs a descriptive approach to outline and analyze the key variables: Blockchain, Regulatory Environment, Institutional Investor Participation, and FinTech Innovation. In addition, the study adopts an analytical approach to study the impact of impact of Blockchain Adoption, Regulatory Environment, and Institutional Investor Participation on FinTech Innovation. The study is considered as an applied study targeting Fintech companies in Jordan

2.1 Research Methodology

The study population consists of Administrative staff at Fintech companies in Jordan. After extensive search, the researcher found that the only bank in Jordan that relies on financial technology is the Bank Al Etihad, and several financial companies. The study tool was distributed to these institutions electronically, and (125) questionnaires were retrieved that could be processed statistically.

Table 1. Gender

Gender	Frequency	Percent
Male	73	58.4
Female	52	41.6
Total	125	100.0

Source: Statistical analysis outputs Shah, (2025)

Table 1 illustrates that the majority of the study sample were male, comprising 58.4% of the participants, while females represented 41.6% of the sample.

Table 2. Age

Age	Frequency	Percent
18-25 years old	7	5.6
26-40 years old	21	16.8
41-60 years old	83	66.4
61 years old and above	14	11.2
Total	**125**	**100.0**

Source: Statistical analysis outputs Wijayanti *et al.* (2025)

Table 2 shows that 66.4% of the sample are aged between 41 and 60 years, while 16.8% fall within the 26 to 40 years age group. Additionally, 11.2% of the sample are 61 years or older, and the smallest proportion, 5.6%, belongs to the 18 to 25 years age group.

Table 3. Experience

Age	Frequency	Percent
1 - 5 years	8	6.4
6 - 10 years	39	31.2
11 - 15 years	50	40.0
16 - 20 years	21	16.8
More than 20 years	7	5.6
Total	**125**	**100.0**

Source: Statistical analysis outputs Shah, (2025)

Table 3 shows that 40% of the sample have 11 to 15 years of experience, while 31.2% have 6 to 10 years of experience. Additionally, 16.8% of the sample have 16 to 20 years of experience, and 6.4% have 1 to 5 years of experience. The smallest proportion, 5.6%, have more than 20 years of experience.

2.1 Data Collection Sources

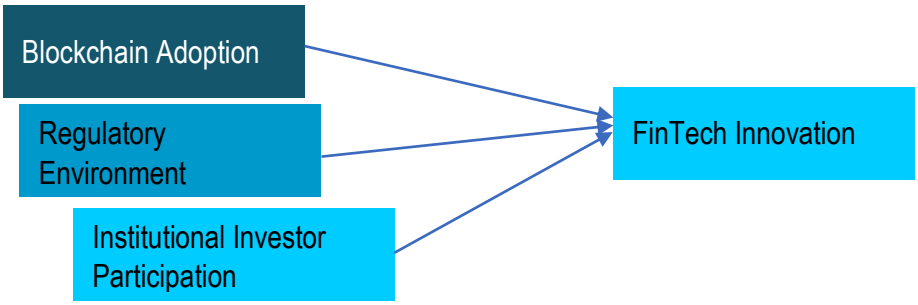
Two sources will be utilized to gather data for this study:

- Secondary Sources: This will involve desk research, using references, books, and relevant literature.
- Primary Sources: Data will be collected directly from the study sample through the application of the study tool.

Hypothesis:

H1: Blockchain Adoption has a statistically significant impact on FinTech Innovation at fintech companies in Jordan, at the 0.05 significance level.

Figure 1. Study Model



Source: compiled by the author based on the data Wijayanti *et al.* (2025)

3. Application Functionality

The study will utilize existing literature to develop a questionnaire for gathering primary data. The questionnaire will be structured into the following sections:

Section I: This section will collect demographic information about the study sample, including variables such as gender, age, and educational qualification.

Section II: This section will contain items related to the study variables: Blockchain, Regulatory Environment, Institutional Investor Participation, and FinTech Innovation in fintech companies in Jordan.

The responses will be categorized using a five-point Likert scale with the following options: (Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree).

The study will employ two types of validity tests:

Face Validity: The face validity of the questionnaire will be verified by presenting it to a group of experts and specialists from universities. Their feedback will focus on the tool's suitability for collecting data relevant to the study, its clarity, coherence, consistency, and alignment with the study's variables. Any suggestions or feedback will be incorporated into the tool.

Reliability: To verify the reliability and consistency of the study tool, Cronbach's alpha will be applied to evaluate the internal consistency and reliability of the measurement instrument. The results of this analysis are presented in Table 4.

Table 4. Internal coherence consistency coefficients (Cronbach's Alpha)

Variables	Number of	Variables
Blockchain Adoption	6	76.1%
Regulatory Environment	6	79.7%
Institutional Investor Participation	6	81.6%
FinTech Innovation	6	76%
All Variables	**24**	**79.6%**

Source: Statistical analysis outputs Shah, (2025)

The table shows that the coefficients for all study variables exceeded 60%, indicating strong internal consistency among the items within each variable. This supports the reliability and validity of the questionnaire in accurately measuring the intended constructs. For data analysis, drawing conclusions, and testing the study hypothesis, descriptive statistical methods were utilized using SPSS. These methods include:

- Frequencies and Percentages
- Arithmetic Means and Standard Deviations
- Regression Analysis

4. Research Results

The study sample results were analysed based on the study dimensions. Means and standard deviations were calculated, and the study hypotheses were tested using regression analysis through the SPSS software to derive the following findings: First, Blockchain Adoption:

To assess Blockchain Adoption at fintech companies in Jordan, means and standard deviations were calculated. The results are presented in Table 5.

Table 5. Means and Std. Deviation of Blockchain Adoption

Statement	Mean	Std. Deviation	Rate
Blockchain technology adoption has significantly enhanced the efficiency of financial transactions in my organization.	4.184	0.745	High
The integration of blockchain has reduced operational costs in FinTech services.	3.976	0.884	High
Blockchain adoption has improved data security and transparency in financial operations.	4.080	0.819	High
The complexity of blockchain technology poses challenges to its widespread adoption in FinTech.	4.104	0.801	High
Blockchain adoption has facilitated the development of innovative financial products and services.	4.016	0.861	High
My organization is actively investing in blockchain related technologies to stay competitive in the FinTech sector.	3.872	0.933	High
Average	**4.039**		**High**

Source: Statistical analysis outputs Wijayanti *et al.* (2025)

Table 5 presents the attitudes of the sample towards the questionnaire statements regarding Blockchain Adoption at fintech companies in Jordan. The average mean was 4.039, indicating a high level of appreciation. The means for the Blockchain Adoption items ranged from 3.872 to 4.184, reflecting a high degree of appreciation for all statements. The statement with the highest level of appreciation was paragraph (1), which stated, “Blockchain technology adoption has significantly enhanced the efficiency of financial transactions in my organization,” with a mean of 4.184 and a standard deviation of 0.745, reflecting a high level of appreciation. On the other hand, paragraph (6), which stated, “My organization is actively investing in blockchain-related technologies to stay competitive in the FinTech sector,” received the lowest level of appreciation, with a mean of 3.872 and a standard deviation of 0.933. However, it still indicates a high level of appreciation.

Second, Regulatory Environment:

To evaluate the Regulatory Environment in fintech companies in Jordan, means and standard deviations were calculated. The results are presented in Table 6.

Table 6. Means and Std. Deviation of Regulatory Environment

Statement	Mean	Std. Deviation	Rate
The current regulatory framework in my region supports innovation in the FinTech industry.	3.688	0.787	High
Regulatory uncertainty poses a significant challenge to the adoption of blockchain technology.	3.640	0.865	Moderate
The introduction of clear and flexible regulations could accelerate FinTech innovation.	3.568	0.874	Moderate
Compliance with regulations increases operational costs for FinTech companies.	3.520	0.955	Moderate
Collaboration between regulators and FinTech companies fosters innovation in financial services.	3.528	0.921	Moderate
My organization has faced challenges in aligning with regulatory requirements for new technologies like blockchain.	3.584	0.900	Moderate
Average	**3.588**		Moderate

Source: Statistical analysis outputs Shah, (2025)

Table 6 It presents the attitudes of the sample towards the questionnaire statements concerning the Regulatory Environment at fintech companies in Jordan, with an average mean of 3.588, indicating a moderate level of appreciation. The means for the Regulatory Environment items ranged from 3.520 to 3.688, reflecting a range from moderate to high degrees of appreciation. The statement with the highest level of appreciation was paragraph (7), which stated, "The current regulatory framework in my region supports innovation in the FinTech industry," with a mean of 3.688 and a standard deviation of 0.787, reflecting a high level of appreciation. In

contrast, paragraph (10), which stated, "Compliance with regulations increases operational costs for FinTech companies," had the lowest level of appreciation, with a mean of 3.520 and a standard deviation of 0.955, indicating a moderate level of appreciation. Third, Institutional Investor Participation:

To assess Institutional Investor Participation at fintech companies in Jordan, means and standard deviations were calculated. The results are presented in Table 7.

Table 7. The means and standard deviations for Institutional Investor Participation at fintech companies in Jordan. The results provide insights into the level of participation and engagement of institutional investors in the fintech sector.

Statement	Mean	Std. Deviation	Rate
Institutional investors play a key role in driving innovation in the FinTech industry.	3.648	0.775	Moderate
The involvement of institutional investors has increased funding for blockchain-based projects.	3.672	0.791	High
Institutional investors prioritize regulatory compliance when funding FinTech innovations.	3.760	0.723	High
Institutional investors' risk-averse nature can hinder the adoption of disruptive technologies like blockchain.	3.760	0.902	High
The participation of institutional investors enhances trust and credibility in FinTech innovations.	3.800	0.718	High
My organization has experienced growth due to institutional investor participation in blockchain initiatives.	3.752	0.779	High
Average	**3.732**		High

Source: Statistical analysis outputs Shah, (2025)

Table 7 displays the sample's attitudes toward the questionnaire statements regarding Institutional Investor Participation in fintech companies in Jordan, with an average mean of 3.732, reflecting a high level of appreciation. The means for the items on Institutional Investor Participation ranged from 3.648 to 3.800, indicating a mix of moderate to high levels of appreciation. The statement with the highest appreciation was paragraph (17), which stated, "The participation of institutional investors enhances trust and credibility in FinTech innovations," with a mean of 3.800 and a standard deviation of 0.718, suggesting a strong level of approval. On the other hand, paragraph (13), which stated, "Institutional investors play a key role in driving innovation in the FinTech industry," received the lowest appreciation, with a mean of 3.648 and a standard deviation of 0.775, indicating a moderate level of approval. Fourth, FinTech Innovation:

To assess FinTech Innovation at fintech companies in Jordan, means and standard deviations were calculated. The results are shown in Table 8.

Table 8. The means and standard deviations for FinTech Innovation at fintech companies in Jordan. The results offer insights into the extent of innovation within the sector, highlighting the degree of advancement and development in fintech-related technologies and practices.

Statement	Mean	Std. Deviation	Rate
Blockchain adoption has accelerated the pace of innovation in my organization's FinTech services.	4.184	0.745	Moderate
A supportive regulatory environment is essential for fostering innovation in FinTech.	3.984	0.871	High
Institutional investor participation has enabled my organization to implement cutting-edge FinTech solutions	4.080	0.819	High
My organization has developed new financial products due to advancements in blockchain technology.	4.112	0.785	High
Collaboration among technology providers, regulators, and institutional investors is crucial for FinTech innovation.	4.024	0.847	High
The overall adoption of blockchain, regulatory clarity, and institutional investment has positively impacted FinTech innovation in my sector.	3.864	0.936	High
Average	**4.041**		High

Source: Statistical analysis outputs Shah, (2025)

Table 8 presents the attitudes of the sample towards the questionnaire statements regarding FinTech Innovation at fintech companies in Jordan, with an average mean of 4.041, indicating a high level of appreciation. The means for the FinTech Innovation items ranged from 3.864 to 4.184, reflecting a consistently high degree of appreciation for all statements. The statement with the highest level of appreciation was paragraph (19), which stated, "Blockchain adoption has accelerated the pace of innovation in my organization's FinTech services," with a mean of 4.184 and a standard deviation of 0.745, indicating a high level of appreciation. On the other hand, paragraph (24), which stated, "The overall adoption of blockchain, regulatory clarity, and institutional investment has positively impacted FinTech innovation in my sector," had the lowest level of appreciation, with a mean of 3.864 and a standard deviation of 0.936, still reflecting a high level of appreciation.

Hypotheses Test:

The following section tests the study hypothesis:

H1: Blockchain Adoption has a statistically significant impact on FinTech Innovation at fintech companies in Jordan at the 0.05 significance level.To test this hypothesis, regression analysis was conducted to determine whether Blockchain Adoption has a statistically significant effect on FinTech Innovation at fintech companies in Jordan, using a significance level of 0.05. (Details of the model summary will follow here, typically including R-values, R-squared, F-statistics, and significance levels to assess the relationship and significance.)

Table 9. Model Summary main hypothesis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.534	0.286	0.280	0.53247

Source: compiled by the author

a. Predictors: (Constant), Blockchain_Adoption

Table 9 shows The regression coefficient between the independent variable (Blockchain Adoption) and the dependent variable (FinTech Innovation) is 0.534. This coefficient reflects the strength and direction of the relationship between the two variables. The coefficient of determination (R^2) is 0.286, indicating that approximately 28.6% of the variation in the dependent variable (FinTech Innovation) can be explained by the independent variable (Blockchain Adoption).

Table 10. ANOVAa independent variable on FinTech Innovation

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	13.943	1	13.943	49.176	0.000
Residual	34.874	123	0.284		
Total	48.816	124			

Source: compiled by the author

a. Dependent Variable: FinTech

b. Predictors: (Constant), Blockchain_Adoption

Table 10 shows the Analysis of Variance (ANOVA), which is used to evaluate the explanatory power of the independent variable, Blockchain Adoption, on the dependent variable, FinTech Innovation. The F-statistic value was 49.176, with a p-value of 0.00. Since the p-value is smaller than the significance threshold of 0.05, it indicates that the model is statistically significant.

Interpretation:

F-statistic (49.176): This value reflects the overall fit of the regression model. A higher F-value suggests that the model accounts for a significant amount of the variation in the dependent variable.

p-value (0.00): As the p-value is below 0.05, we can conclude that there is a statistically significant relationship between Blockchain Adoption and FinTech Innovation. This implies that Blockchain Adoption has a notable effect on FinTech Innovation.

Therefore, we reject the null hypothesis (H0), which posits no relationship, and accept the alternative hypothesis (H1):

H1: Blockchain Adoption has a statistically significant impact on FinTech Innovation at fintech companies in Jordan at the 0.05 significance level.

Testing the Next Hypothesis:

The subsequent hypothesis to be tested is:

H1: The Regulatory Environment has a statistically significant impact on FinTech Innovation at fintech companies in Jordan at the 0.05 significance level.

Similar to the prior analysis, regression analysis will be conducted to examine if the Regulatory Environment has a statistically significant effect on FinTech Innovation. The significance level for this hypothesis will also be set at 0.05.

After performing the regression analysis, we will follow the same steps:

Check the F-statistic and its p-value to assess whether the model is statistically significant.

Review the coefficient values for the Regulatory Environment to evaluate its impact on FinTech Innovation.

Table 11. Model Summary main hypothesis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.356	0.127	0.119	0.58876

a. Predictors: (Constant), Regulatory_Environment

Source: Statistical analysis outputs Wijayanti *et al.* (2025)

Table 11 The regression analysis shows the coefficient for the independent variable, Regulatory Environment, and its effect on the dependent variable, FinTech Innovation. The regression coefficient is 0.356, indicating a positive relationship between the Regulatory Environment and FinTech Innovation. The coefficient of determination (R^2) is 0.127, suggesting that 12.7% of the variance in FinTech Innovation can be explained by the Regulatory Environment. This implies that while the Regulatory Environment does influence FinTech Innovation, there are other factors not captured in the model that also contribute to the variation in FinTech Innovation.

Table 12. ANOVAa independent variable on FinTech Innovation

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	6.180	1	6.180	17.829	0.000
Residual	Residual	42.636	123	0.347	
Total	Total	48.816	124		

a. Dependent Variable: FinTech

b. Predictors: (Constant), Regulatory_Environment

Source: Statistical analysis outputs Wijayanti *et al.* (2025)

Table 12 The Analysis of Variance (ANOVA) results for the Regulatory Environment and its effect on FinTech Innovation show an F-statistic value of 17.829, with a p-value of 0.00. Since the p-value is less than the significance level of 0.05, we can conclude that there is a statistically significant impact of the Regulatory Environment on FinTech Innovation at the 0.05 significance level.

Interpretation:

F-value = 17.829: The F-statistic tests whether the regression model as a whole is a good fit for the data. In this case, the high F-value suggests that the model significantly explains the relationship between Regulatory Environment and FinTech Innovation.

p-value = 0.00: Since the p-value is less than 0.05, we reject the null hypothesis (H_0) and accept the alternative hypothesis (H_1), which states that there is a statistically significant impact of Regulatory Environment on FinTech Innovation at the 0.05 significance level.

Thus, Regulatory Environment has a statistically significant impact on FinTech Innovation in FinTech companies in Jordan.

Table 13. Model Summary main hypothesis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.291	0.085	0.077	0.60264

a. Predictors: (Constant), Investor

Source: Statistical analysis outputs Wijayanti *et al.* (2025)

Table 13 displays the regression coefficients for the relationship between Institutional Investor Participation (independent variable) and FinTech Innovation (dependent variable). The coefficient value is 0.291, indicating a positive relationship between the two variables. The coefficient of determination (R^2) is 0.085, meaning that 8.5% of the variation in FinTech Innovation can be attributed to Institutional Investor Participation.

Table 14. ANOVAa independent variable on FinTech Innovation

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	4.145	1	4.145	11.414	0.001
Residual	44.671	123	0.363		
Total	48.816	124			

a. Dependent Variable: FinTech
b. Predictors: (Constant), Investor
Source: compiled by the author

The analysis of variance (ANOVA) in Table 14 tests the explanatory model of Institutional Investor Participation (independent variable) on FinTech Innovation (dependent variable). The results are as follows:

F-Statistic = 11.414: he R^2 value measures the overall fit of the regression model, indicating how well the independent variable explains the variance in the dependent variable.

p-value = 0.001: Since the p-value is lower than the significance level of 0.05, we can conclude that the regression model is statistically significant.

5. Discussions

Impact well on fintech innovation; however, its growth over time will be relevant to impact most blockchain technologies. As an innovative force in the financial sector, blockchain technology presents the potential to deliver exceptional levels of transparency, security, and efficiency for financial transactions. After that, Blockchain is capable of creating decentralized financial systems (DeFi), which can create a great change in the delivery of traditional financial services, increasing accessibility for users across the globe. But, it does come with its hurdles, including technical difficulties, scalability concerns, and legal and regulatory challenges. Blockchain technologies are new to the financial sector, thus appropriate regulation needs to be provided for guaranteeing security and transparency of operations. But across different countries, the legal environment is not the same, posing challenges for fintech companies with international reach. Are, why there is no such regulation in places so once upon it comes to such matter startup needs to understand the process and for which they are and provide all the details regarding the ongoing, so now we are going to discuss what happens in a/or b, so now we are going to talk about a/ or b. However, blockchain and cryptocurrencies still lack a clear regulation covering some parts of the world that limits the scope for their significant use. Contrarily, progressive laws related to these issues, like in Switzerland or Singapore, attract innovation and are the reason for a boom with fintech ventures in certain areas. It works on the basis of outputs of experimental studies regarding the relationships between innovation and regulation. Legislative efforts to develop a transparent legal environment for the use of blockchain and cryptocurrencies will greatly accelerate the development of fintech services. Less regulation of markets often means companies face less restrictions on product and service development – leading to faster innovation. But not having one international legal framework creates challenges for multinational firms looking to operate in multiple markets. In this regard, in the context of international organizations, harmonization of legislation can facilitate the joint work of the entities involved in the implementation of blockchain technologies. Another important factor in the development is the participation of institutional investors in fintech innovation. In contrast to individual investors, institutional investors can provide the sizeable financial resources needed for scaling and developing technologies. Investment firms, financial institutions and banks have the necessary resources and funds to support these fintech companies in creating solutions to the banking world like innovations and implement them as well. On the flip side, however, institutional backers may buck the trend and prefer more stable, traditional projects with lower risk, perhaps stifling the progressive development of more ambitious concepts. And they run the risk of being overly centralized, too much at risk of capital concentration in a few big players. Small and Medium-sized Startups cannot compete with the scale and scope of Big tech and that could reduce the competitiveness and innovative flexibility of fintech industry. Institutional investors can dictate terms as well; this may shape the course of product development in fintech and cause these companies to concentrate on projects that produce immediate profits as opposed to long-term innovation. Therefore, the blockchain adoption, the

regulatory environment, and the participation of institutional investors, can all be considered interdependent factors contributing to fintech innovation. While the advent of blockchain technologies creates huge potential for development of new financial products, the successful implementation of this potential is impossible without proper regulation and financial backing from large-scale investors. The aim ability of fintech market to stimulate sustainable growth and continuous competition are also achieved through a balanced market regulation which can be sustainable to ensure a streamline good players in the market.

Conclusions and Further Research

The study results showed that the level of appreciation of Blockchain Adoption was high; meaning that the level of Blockchain Adoption at Fintech companies was high in Jordan. The study, therefore, recommended respectively the following based on the results:

- Explore blockchain opportunities: Identify ways blockchain can increase efficiency and innovation
- Supportive Regulation: Design agile regulatory structures to strike a balance between innovation and security.
- Engage Institutional Investors: Raise awareness to bolster investment in blockchain-powered FinTech.
- Engage Stakeholders: Build coalitions among regulators, firms, and investors.
- Pushing sustainable FinTech innovation through research on blockchain

Blockchain Technology Adopting to Improve Financial Transactions Efficiency in Fintech Journal: Blockchain Technology Adopting to Improve Read More. The results indicate that Blockchain technology adoption has a significant impact on improving the effectiveness of financial transactions through the use of Fintech Jordan companies. Moreover, the result indicates that Fintech Firms in Jordan are investing in blockchain technologies to remain competitive in the financial technology industry. By conversely, the research found a moderate level of appreciation of Regulatory Environment which meant that the level of Regulatory Environment at Fintech companies in Jordan was moderate. The findings showed the current regulatory landscape in the area fosters innovations in the FinTech sector. Furthermore, the study indicates that ensuring compliance with regulations does not raise costs of operation for FinTech companies. The study also found that the level of Institutional Investor Participation in the fintech companies in Jordan was high, indicating a high degree of appreciation for the subject. The findings indicated that the involvement of institutional investors strengthens trust and credibility in FinTech and Innovare. In contrast, this study did not find a significant implication that Institutional investors plays a crucial role in the growth of Fintech innovation. Nonetheless, the study found a high level of appreciation for FinTech Innovation; (Hanan, 2020) proposed that Jordanian Fintech companies were high in terms of level of FinTech Innovation. It has been found in the results that the conceptualization of Blockchain has increased the work pace of the organization toward the innovation of its FinTech services. Furthermore, the research discovered the various aspects of blockchain adoption, regulatory evolution, and institutional investment have a positive influence on FinTech innovation among Fintech firms in Jordan. However, there is a statistically significant impact at 0.05 significance level of Blockchain Adoption on FinTech Innovation at Fintech retails in Jordan, according to the study hypotheses testing results. The findings also revealed that the effect of Regulatory Environment on FinTech Innovation at Fintech companies in Jordan is statistically significant at the 0.05 significance level. Also there is a statistically significant effect of Institutional Investor Participation on Finance Technology Innovation at level of 0.05 on Finance Technology Innovation at Fintech companies in Jordan.

Credit Authorship Contribution Statement

The authors equally contributed to the present research, at all stages from the formulation of the problem to the final findings and solutions.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Declaration of Use of Generative AI and AI-Assisted Technologies

The authors declare that they have used/not used generative AI and AI-assisted technologies during the preparation of this work.

References

[1] Al-Ababneh, H. A., Alkhudierat, N. A., Al-Shaikh, M. S., Zawaideh, F. H., Alhosban, A., & Mugableh, M. I. (2025). Artificial intelligence in marketing to promote renewable energy. In E3S Web of Conferences (Vol. 614, p. 01013). EDP Sciences.

[2] Al-Ababneh, H. A., Alkhudierat, N. A., Barhoush, F. M. S., Almajali, A. H., Ibragimkhalilova, T., & Mugableh, M. I. (2025). Using blockchain and digital marketing to build trust in green projects. In *E3S Web of Conferences* (Vol. 614, p. 01016). EDP Sciences.

[3] Almusajin, F., AlDhmour, F., & Bugawa, A. (2023). Factors affecting intention to use blockchain technology in health records in Saudi Arabia: A case study of the Eastern Province. *GJAT*, 13(2): 1-28.

[4] Al-Tamimi, G. (2021). The concept of regulatory environment. Mawdoo3. https://mawdoo3.com/

[5] Banna, H., & Rana, M. S. (2023). Fostering economic prosperity through fintech-driven banking expansion and financial inclusion: Strategies and innovations. Reference Module in Social Sciences.

[6] Bhatnagr, P., Rajesh, A., & Misra, R. (2024). The impact of fintech innovations on digital currency adoption: A blockchain-based study in India. *International Journal of Accounting & Information Management*, 1(1).

[7] Bouabidah, L., & Zamouly, R. (2024). *The regulatory environment and its impact on professional efficiency: A field study.* Ma thesis, University of Tebessa, Algeria.

[8] Bryce, S. (2024). What is an organizational environment? - Definition & theory. Study.com. https://study.com/

[9] Cai, C. W. (2018). Disruption of financial intermediation by FinTech: A review on crowdfunding and blockchain. *Accounting & Finance*, 58(4): 965-992.

[10] Chen, J., & Ganti, A. (2024). Institutional investor: Who they are and how they invest. Investopedia. https://www.investopedia.com/

[11] Chen, M. A., Wu, Q., & Yang, B. (2019). How valuable is FinTech innovation? *The Review of Financial Studies*, 32(5): 2062-2106.

[12] Chen, Y. (2024). How blockchain adoption affects supply chain sustainability in the fashion industry: A systematic review and case studies. *International Transactions in Operational Research*, 31(6): 3592-3620.

[13] Fernandez-Vazquez, S., Rosillo, R., De La Fuente, D., & Priore, P. (2019). Blockchain in FinTech: A mapping study. *Sustainability*, 11(22), 6366.

[14] Friel, S., Schram, A., Frank, N., Arthur, M., Townsend, B., & Gajurel, H. (2024). Financialisation: A 21st century commercial determinant of health equity. *The Lancet Public Health*, 9(9): e705-e708.

[15] Jain, N. (2024). What is fintech innovation? Definition, innovations in fintech and how valuable is fintech innovation. Ideascale. https://ideascale.com/

[16] Kagan, J. (2024). Financial technology (Fintech): Its uses and impact on our lives. Investopedia. https://www.investopedia.com/

[17] Kaur, J., Kumar, S., Narkhede, B. E., Dabić, M., Rathore, A. P. S., & Joshi, R. (2024). Barriers to blockchain adoption for supply chain finance: The case of Indian SMEs. *Electronic Commerce Research*, 24(1): 303-340.

[18] Khamis, T. M. (2023). The impact of adopting blockchain technology on the quality of digital banking services: An applied study on commercial banks in Egypt. *Scientific Journal of Business Research and Studies*, 37(4): 437-521.

[19] Khan, S., Ullah, A., Liu, Y., Kashif, M. (2025). Examining the blockchain and green innovation technologies on sustainability (ESG): the moderating role of global financial integration. *Journal of Sustainable Finance & Investment*, *15*(1): 145-181. DOI: https://doi.org/10.1080/20430795.2024.2441204

[20] Khatwani, R., Mishra, M., Bedarkar, M., Nair, K., & Mistry, J. (2023). Impact of blockchain on financial technology innovation in the banking, financial services, and insurance (BFSI) sector. *Journal of Statistics Applications and Probability*, 12(1): 181-189.

[21] Kumari, A., & Devi, N. C. (2022). The impact of FinTech and blockchain technologies on banking and financial services. *Technology Innovation Management Review*, 12(2): 1-11.

[22] Mahna, S. (2023). What is blockchain technology and how does it relate to cryptocurrencies? Mawdoo3. https://mawdoo3.com/

[23] Marstein, K. E. H. (2019). *Improve auditing and privacy of electronic health records by using blockchain technology.* Ma thesis, The University of Bergen, Norway.

[24] Navaretti, G. B., Calzolari, G., Mansilla-Fernandez, J. M., & Pozzolo, A. F. (2018). Fintech and banking. Friends or foes? Friends or foes.

[25] Papaioannou, G. J., & Karagozoglu, A. K. (2017). The mechanics of the issuance process: Institutional versus retail investors. Underwriting Services and the New Issues Market.

[26] Rabbani, M. R., Khan, S., & Thalassinos, E. I. (2020). FinTech, blockchain, and Islamic finance: An extensive literature review. *International Journal of Economics and Business Administration*, 8(2): 65-86.

[27] Rahim, M. J., Islam, M. J., Nath, S. D., Rahim, M. I. I., & Yeasir, A. (2024). Blockchain adoption in sustainable supply chains: Opportunities, challenges, and sustainability impacts across sectors. *Annals of Human Resource Management Research*, 4(2): 153-180.

[28] Ramachandran, T., & Stella, M. (2022). Behavioural intention towards cryptocurrency adoption among students: A fintech innovation. *Journal of Positive School Psychology*, 1(1): 5046-5053.

[29] Ramzy, T. A. (2024). The impact of block chains on the objectives and components of cost accounting: Applied study. *Journal of Financial and Business Studies*, 1(2): 414-433.

[30] Samuvel, D. K., & Pradeep, A. (2022). A study on the impact of fintech on the banking industry. *International Journal of Advanced Research in Science, Communication and Technology*, 2(1): 78-83.

[31] Shah, M. A. (2025). The Impact of FinTech on Entrepreneurial Intentions Among Young Indian Entrepreneurs Using Crowdfunding, Blockchain, and Mobile Payments. In *Models, Strategies, and Tools for Competitive SMEs,* 325-340. DOI: https://doi.org/10.4018/979-8-3693-4046-2.ch015

[32] Steward, W. (2024). What is an organizational environment? - Definition & theory. Study.com. https://study.com/

[33] Wei, L., & Chengshu, W. (2024). Company ESG performance and institutional investor ownership preferences. *Business Ethics, the Environment & Responsibility*, 33(3): 287-307.

[34] Wijayanti, H. T., & Sriyanto, S. (2025). Exploring the Impact of Fintech Innovation on Financial Stability and Regulation: A Qualitative Study. *Golden Ratio of Finance Management*, 5(1): 21-33. DOI:https://doi.org/10.52970/grfm.v5i1.423

[35] Zhang, T., Jia, F., & Chen, L. (2024). Blockchain adoption in supply chains: Implications for sustainability. *Production Planning & Control*, 1-24.

[36] Zou, Y., & Wang, M. (2024). Does environmental regulation improve energy transition performance in China? *Environmental Impact Assessment Review*, 104(1), 107335.

[37] Clarity Guides & Documentation. (2024). What is a regulated environment. Data Apex. https://www.dataapex.com/

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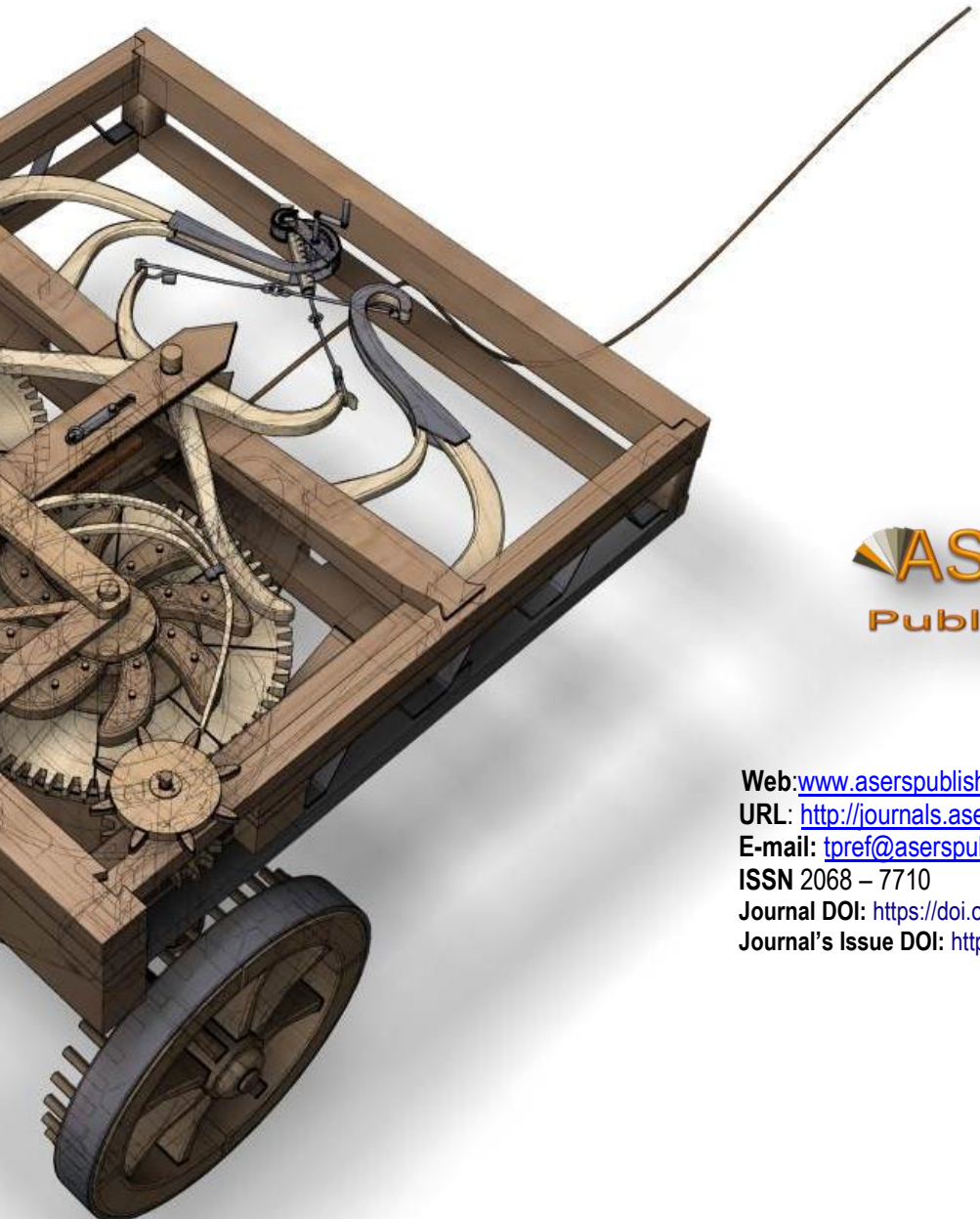

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