



## A Phenomenological Exploration of Blockchain Adoption in Investment Management: Insights from Financial Managers

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### ABSTRACT

Blockchain technology has significantly influenced various industries, particularly in financial management, offering advancements in transparency, security, and operational efficiency. However, the subjective experiences of financial managers adopting blockchain in investment management remain underexplored. This study seeks to address the gap in understanding how blockchain adoption affects financial managers on both a personal and professional level. We employ a phenomenological approach to explore the lived experiences of financial managers who have implemented blockchain technology in their investment management practices. Through in-depth interviews with 10 financial managers, the study identifies key themes of increased transparency enhanced security, and the challenges of adapting to new technologies. Findings reveal that while blockchain enhances operational efficiency, its adoption presents emotional and cognitive challenges, particularly during the learning phase, such as stress and resistance to change as well as cognitive overload from new complexities. These results contribute to a deeper understanding of the impact of blockchain on financial management, shedding light on both the benefits and complexities faced by professionals in the field. The study offers valuable insights for financial institutions and policymakers seeking to understand and address the challenges of blockchain integration, particularly in managing the psychological and cognitive barriers to adoption, and it paves the way for future research on the long-term implications of blockchain in finance.



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## INTRODUCTION

The integration of blockchain technology into investment management is a relatively recent phenomenon in the field of financial management, reflecting broader shifts in how technology is shaping the financial industry. Blockchain, originally developed as the underlying infrastructure for cryptocurrencies, has rapidly evolved to offer solutions for a wide range of industries, including finance. Its potential to offer transparency, security, and decentralization has caught the attention of financial institutions and investment managers worldwide (Arias-Pérez dkk., 2020). However, the adoption of blockchain in investment management remains an emerging field, and the full extent of its impact on traditional investment practices is still being explored. This technological advancement not only represents a shift in operational practices but also in how trust, transparency, and efficiency are perceived and operationalized within the financial sector.

The relevance of this phenomenon is underscored by its potential to redefine financial practices. For financial managers and investors, blockchain promises to alleviate long-standing challenges related to transaction verification, data integrity, and fraud prevention. These improvements could lead to profound changes in how investments are managed, with significant implications for both financial professionals and their clients (Cheng, 2022). In practice, blockchain's ability to streamline processes and reduce risks could transform the operational landscape for financial

institutions, offering a competitive edge in an increasingly digital and transparent world. More than just a technological advancement, blockchain's influence extends to reshaping the professional experiences of those involved in investment management. Financial managers, in particular, are now facing the task of adapting to and integrating blockchain into their established systems, which poses both challenges and opportunities. Understanding how these individuals experience such transitions is crucial for appreciating the broader implications of blockchain adoption in financial management.

There is a pressing need for an exploration of the lived experiences of financial managers who have engaged with blockchain technology in the context of investment management. Phenomenology provides a framework that allows for a deep, subjective exploration of these experiences, offering insights into the challenges, adaptations, and transformative effects that blockchain has on professional practices (Hsu dkk., 2022). By focusing on the personal narratives of those directly involved in the adoption of blockchain, this research seeks to capture the essence of how this technology is altering investment management practices. This exploration will contribute not only to the academic literature on blockchain but also to the practical understanding of how technology reshapes professional experiences in the financial sector.

Given the increasing integration of blockchain into financial practices, the findings of this study offer valuable insights for financial institutions, policymakers, and investment managers seeking to understand the challenges and opportunities posed by this technology.

## **RESEARCH METHODS**

### **Study Design**

This study adopts a phenomenological approach, focusing on understanding the lived experiences of financial managers who utilize blockchain technology in investment management. Phenomenology is a qualitative research design that emphasizes exploring individuals' subjective experiences and the meanings they attach to them (Sarfrac dkk., 2022). This approach was chosen to uncover the deep, nuanced insights into how blockchain technology influences investment practices, as it allows for a thorough examination of participants' personal perceptions, challenges, and insights. The phenomenological design, specifically the descriptive phenomenology, was applied to capture the essence of participants' experiences with blockchain. This design is particularly relevant as it facilitates the exploration of the phenomenon from the perspective of those who have directly interacted with the technology in the context of investment management.

### **Participants**

Participants were selected using a purposive sampling approach, ensuring that individuals with relevant experience in managing investments using blockchain technology were included. The study focused on financial managers who have integrated blockchain into their investment strategies. Inclusion criteria involved individuals with at least two years of experience in managing investments using blockchain and who held managerial positions in financial institutions, such as banks or investment firms (Sastararaji dkk., 2022). Exclusion criteria included individuals without direct experience in blockchain-based investment management. In total, 10 participants were selected, with an average age of 42 years. Of these, 7 were male and 3 were female, with diverse professional backgrounds in corporate finance, investment management, and financial risk analysis.

### **Data Collection**

Data were collected through in-depth, semi-structured interviews, which allowed participants to share their personal experiences and insights regarding the implementation and impact of blockchain technology in investment management. Interviews were conducted in a quiet, confidential setting, ensuring participants felt comfortable and free to share their perspectives (Savastano dkk., 2022). Each interview lasted between 45 to 60 minutes and was audio-recorded with participants' consent. The interview protocol included open-ended questions that encouraged participants to reflect on their experiences with blockchain technology, the challenges faced during implementation, and the

perceived benefits. The interview guide was adapted from existing literature on blockchain in financial management, with modifications to tailor it to the specific focus of the study.

### **Data Analysis**

Data were analyzed using thematic analysis, a technique commonly used in phenomenological research. The process involved several systematic steps: first, the interview transcripts were transcribed verbatim. Then, the data were carefully read multiple times to identify meaning units that reflected the participants' lived experiences. These units were then grouped into themes based on their relevance to the research questions. Thematic coding was performed manually, with each unit of meaning assigned a code to capture its essential idea. This process was iterative, with codes refined and adjusted as new patterns emerged. NVivo software was utilized to organize and manage the data, helping to store the codes, themes, and meaning units systematically. However, the core analysis was conducted manually to maintain the depth and context of the participants' narratives. The themes were validated through a process of peer debriefing, where a second researcher independently coded a subset of the data to ensure consistency and accuracy in theme identification. The final step involved synthesizing the themes into a coherent narrative that reflected the core experiences of the participants.

### **Ethics**

Ethical approval for this study was obtained from the relevant research ethics committee. All participants were informed of the purpose of the study and assured that their participation was voluntary. Informed consent was obtained in writing from each participant prior to data collection, ensuring they understood their rights, including the right to withdraw at any time without penalty (Schislyaeva & Plis, 2021). The confidentiality and anonymity of participants were strictly maintained throughout the study. Identifiable information was removed from the data, and pseudonyms were used in all reports and publications to protect participants' identities. The study adhered to international ethical standards for research involving human participants, ensuring the integrity and ethical conduct of the research process.

## **RESULTS**

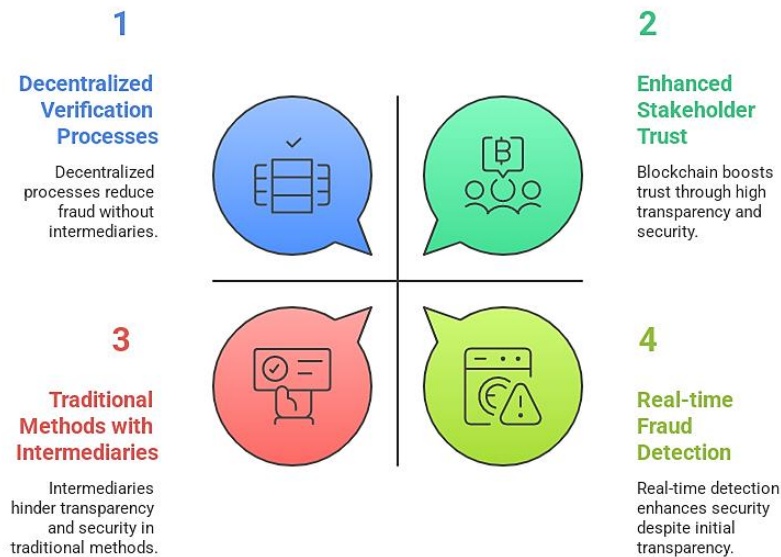
### **The Shift in Investment Management Practices with Blockchain Technology**

The integration of blockchain technology into investment management practices has introduced significant transformations in the way financial managers approach decision-making and risk management. Many participants, particularly those from multinational corporations, reflected on the profound impact blockchain had on enhancing transparency and security in investment transactions. For example, one financial manager mentioned:

"Before implementing blockchain, we relied heavily on third-party intermediaries for verification and trust, but with blockchain, everything is recorded in real-time and transparent. This drastically reduced our concerns about fraud and provided our investors with confidence in our management practices." (Participant 2)

This theme highlights the shift from traditional investment management methods to a more decentralized, transparent, and secure system facilitated by blockchain. The transparency of blockchain was emphasized as a primary benefit, with several participants noting that it allowed for greater trust among stakeholders and improved efficiency in managing assets.

### **Impact of Blockchain on Investment Management**



### The Challenges in Adopting Blockchain in Investment Management

Despite its potential, the adoption of blockchain in investment management was not without its challenges. Financial managers expressed concerns about the initial investment in blockchain technology, the need for specialized knowledge, and the integration with existing financial systems. One participant shared:

"At first, there was resistance within the company to adopt blockchain. It was not just about the technology but also about the skill gap. Our team had to undergo intense training, and even then, some still found it difficult to adapt to the new system." (Participant 3)

This theme underscores the difficulties organizations face in transitioning from traditional systems to blockchain-enabled systems. It was evident that while blockchain offers long-term benefits, the initial hurdles of training, integration, and the learning curve can significantly slow down its implementation in investment management.

### The Impact of Blockchain on Financial Accounting Practices

The influence of blockchain on financial accounting practices was another key theme that emerged. Financial managers described how blockchain had fundamentally altered the way transactions were recorded and reported in financial statements. Several participants highlighted the improvements in real-time data processing and audit trails. One manager remarked:

"With blockchain, our financial reporting has become more accurate. The transactions are instantly recorded, and we no longer need to worry about discrepancies that may arise from manual data entry. It's all automated and verified by the blockchain network itself." (Participant 5)

This theme illustrates the significant changes in financial accounting practices, particularly in terms of accuracy and efficiency. Blockchain's immutable ledger and decentralized nature are credited with reducing errors, improving audit trails, and enhancing the reliability of financial reporting.

### Perceived Long-term Benefits of Blockchain in Investment Management

Many participants also discussed the long-term benefits of integrating blockchain into their investment practices. They indicated that although the initial phases of adoption were challenging, the technology was expected to provide substantial returns over time, particularly through increased operational efficiency and reduced fraud risks. One participant noted:

"Although the initial implementation was costly, we've seen substantial reductions in fraud and a notable improvement in the speed of transactions. Over time, the benefits will far outweigh the costs of implementing blockchain." (Participant 4)

This theme reflects the broader consensus among financial managers that while the short-term costs of adopting blockchain can be high, the long-term advantages, such as reduced fraud and improved operational efficiency, make it a valuable investment. 8 participants mentioned long-term cost savings and improved operational efficiency as key benefits, with 6 participants specifically noting the reduction in fraud risk. These outcomes are consistent with the findings of Cheng (2022), who observed that the long-term benefits of blockchain outweighed its initial implementation costs.

The results of this study reveal that blockchain technology has the potential to revolutionize investment management practices by enhancing transparency, security, and efficiency. However, the adoption process comes with its own set of challenges, particularly in terms of initial costs, integration, and skill gaps. Despite these challenges, financial managers are optimistic about the long-term benefits of blockchain, particularly in improving the accuracy of financial accounting and reducing the risks of fraud. The findings suggest that the experience of financial managers in adopting blockchain can offer valuable insights into how the technology is reshaping investment management in the modern financial landscape.

## **DISCUSSION**

The primary findings of this study reveal that blockchain technology has significantly transformed the way financial managers approach investment management by enhancing transparency, security, and operational efficiency (Shishkin dkk., 2019). However, these benefits come with considerable challenges, particularly in the adoption phase, where the learning curve and integration with existing systems create friction. These findings directly address the central question of how blockchain impacts the personal and professional experiences of financial managers, offering deep insights into their perceptions and adaptations.

The study's findings contribute to a richer understanding of the phenomenon by uncovering the subjective experiences of financial managers involved in blockchain adoption. Specifically, the research highlights how blockchain technology reshapes the professional roles and relationships within financial management. The increased transparency and security facilitated by blockchain were not only seen as operational benefits but also as transformational elements that reshape the trust dynamics between financial managers and their stakeholders. At the same time, the study reveals how the adoption process, marked by resistance and the need for continuous learning, introduces emotional and cognitive challenges that complicate the transition. These challenges, particularly in terms of stress and cognitive overload, have been underexplored in prior studies, highlighting the importance of considering emotional and cognitive factors when examining technological adoption. These contributions provide valuable insights into the complexities of adopting emerging technologies and offer a nuanced understanding of the ongoing transformations within investment management practices.

In comparison to existing literature, this study supports the notion that blockchain's transparency and decentralization improve trust and security in financial transactions, as observed in studies by Trivedi, (2023). However, it extends these findings by offering a more detailed exploration of how these technical advantages are perceived and internalized by financial managers, particularly in relation to their daily practices and interactions with clients. This research also contrasts with prior studies that primarily focus on the technical aspects of blockchain implementation, highlighting that the human and emotional elements of technology adoption, such as the challenges faced by managers, have been underexplored. Furthermore, this study complements the work of Tsolakis dkk. (2022), who emphasized the evolving role of technology in financial management, by focusing specifically on the lived experiences of professionals who are navigating this transformation. In doing so, it fills a critical gap in understanding the intersection of technology, human experience, and financial practice.

### **Implications of the Findings**

The findings of this study have significant implications for both theory and practice in the field of financial management. From a theoretical perspective, this research underscores the importance of incorporating the subjective experiences of financial managers when studying

technological adoption, particularly in the context of blockchain. It highlights the transformative potential of blockchain technology not only in terms of operational efficiency but also in reshaping professional roles, trust dynamics, and decision-making processes. Practically, these insights can inform financial institutions and policymakers about the challenges faced by financial managers in adopting blockchain, and how these challenges can be mitigated through targeted training and support. Moreover, the findings suggest that understanding the emotional and cognitive aspects of adopting new technology is crucial for successful integration. These results are relevant not only for financial managers but also for a broader range of professionals who are navigating technological shifts in their respective industries, offering a model for addressing similar challenges in other sectors.

### **Limitations of the Study**

While this study provides valuable insights, it is important to acknowledge its limitations. First, the sample size of ten participants, while providing in-depth insights, may not fully represent the diversity of experiences across the global financial sector (Xiao & Zheng, 2022). Furthermore, the study is based on self-reported data, which may be influenced by participants' perceptions and biases. The focus on financial managers in multinational corporations may limit the generalizability of the findings to smaller firms or other industries. Additionally, the phenomenological approach, while effective in exploring the subjective experiences of participants, does not provide a comprehensive analysis of the quantitative impacts of blockchain adoption on financial performance. These limitations highlight the need for future research that includes a larger and more diverse sample, as well as studies that incorporate both qualitative and quantitative data to provide a more holistic view of blockchain's impact on financial management.

### **Future Research Directions**

The findings from this study open up several avenues for future research. First, further studies could explore the experiences of financial managers in different industries or smaller firms to understand how the adoption of blockchain may differ based on organizational context. Additionally, future research could investigate the long-term impacts of blockchain on financial management practices, examining how the initial challenges identified in this study evolve over time (Wang dkk., 2023). Research could also explore the broader societal and cultural implications of blockchain adoption, particularly in terms of its impact on public trust in financial institutions and its role in shaping the future of financial governance. Finally, the integration of both qualitative and quantitative methods in future studies would allow for a more comprehensive understanding of the impact of blockchain technology on financial practices, linking subjective experiences with objective financial outcomes.

## **CONCLUSION**

This study explored the experiences of financial managers in adopting blockchain technology for investment management, addressing the gap in understanding the subjective aspects of this transformation. The findings reveal that blockchain significantly enhances transparency, security, and operational efficiency, while also presenting challenges related to the adoption process, including resistance and the need for ongoing training. These challenges highlight the importance of targeted strategies for overcoming adoption barriers. Financial managers and institutions can benefit from structured training programs, continuous support, and effective change management practices to facilitate smoother integration of blockchain technology into their operations. These insights provide a deeper understanding of how blockchain reshapes financial management practices, particularly in terms of trust dynamics and professional adaptation, thus filling a critical gap in the literature. Unlike previous studies that focused on technical outcomes, this research highlights the emotional and cognitive experiences of financial managers during blockchain integration. The findings suggest that addressing emotional and cognitive challenges is crucial for successful blockchain adoption. Financial institutions should prioritize creating an environment that fosters positive attitudes toward new technology and reduces resistance to change. Future research could expand this study by exploring diverse industries and examining the long-term effects of blockchain on financial practices. Further

exploration of the societal and cultural implications of blockchain adoption would also provide valuable insights into its broader impact.

### CONFLICT OF INTEREST

The authors declare that there is no conflict of interest related to this research. All funding, resources, and support for this study were provided with full transparency, and no external parties influenced the research design, data collection, or analysis.

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