Int. j. adv. multidisc. res. stud. 2025; 5(4):541-548

Received: 01-06-2025
Accepted: 11-07-2025

International Journal of Advanced Multidisciplinary Research and Studies

ISSN: 2583-049X

Strategic Adoption of Blockchain in Business Models: Drivers and Barriers - A Systematic Review

Teo Rong Xuan
Stanford Center on China's Economy and Institutions (SSCEI), Stanford University, Stanford, CA 94305, USA

Corresponding Author: **Teo Rong Xuan**

Abstract
Blockchain technology has changed the way businesses work by making transactions decentralized, open, and safe. Blockchain's strategic use could lead to more efficiency, lower costs, and more trust, but integrating it into current business models is still difficult because of a number of technological, organizational, and regulatory issues. The goal of this systematic review is to look at the main factors that make it easier or harder for different industries to adopt blockchain. Following PRISMA rules, a thorough search was done in key databases like Scopus, Web of Science, IEEE Xplore, and Google Scholar for articles published between 2017 and 2024. There were originally 812 entries found, however only 76 studies were included after filtering and checking for eligibility. The results show that technological maturity, clear regulations, pressure from stakeholders, and perceived benefits are all important factors that drive change. On the other hand, lack of interoperability, high implementation costs, legal uncertainty, and reluctance to change are all substantial obstacles. This review helps us comprehend blockchain adoption from a strategic point of view, which has real-world effects on industry executives and politicians. In the end, the paper talks about what future research should focus on and why integrated frameworks are needed to make it easier for businesses to use blockchain as they change.

Keywords: Blockchain, Drivers and Barriers, PRISMA Rules

1. Introduction

Blockchain technology has become a major factor behind digital transformation in several industries in the last few years. Blockchain was first thought of as the technology that would support Bitcoin in 2008. Since then, it has grown much beyond its original purpose of being a platform for cryptocurrencies. Its decentralized, distributed ledger design changes the way enterprises handle transactions, data sharing, and digital trust both inside and outside of their own walls. Blockchain is a strategic opportunity for firms to change their existing business models and find new ways to create value as they look for new ways to improve operational efficiency, security, and transparency [1, 2]. At its essence, blockchain is a database that can't be changed, is open to everyone, and is decentralized. This lets many people do business and work together without the need for middlemen. Transactions that are recorded on a blockchain can't be changed and can be checked, which cuts down on fraud, makes it easier to trace things, and builds confidence in systems with many stakeholders [3]. These capabilities have made it popular in fields including finance, supply chain, healthcare, real estate, energy, and government services, where sharing data securely and making transactions that people can trust are very important [4].

But using blockchain strategically means more than just putting new technologies into use. It requires a complete change in the way the organization is set up, how decisions are made, and how it interacts with its stakeholders [5]. Companies that want to use blockchain need to rethink how they offer value, how they interact with customers, and how they make money. For instance, blockchain has changed the roles of suppliers and retailers by making it possible to see where things come from and how they get to the shelf. Smart contracts are automating trust-based transactions in finance, which means that people don't need to use middlemen like notaries or escrow agents [6].

Even while blockchain has the ability to change a lot of things, it hasn't been widely used yet. Many companies have a hard time using blockchain in their business models because it is technically difficult, there is not enough legislative certainty, it costs a lot to execute, there are privacy concerns, and people are resistant to change. Adoption is also made harder by

organizational inertia, old IT systems, and a lack of internal expertise. Integration into business networks with many parties is even harder because there are no globally accepted standards and blockchain systems don't operate with each other [7]. So, it's very important to look at the reasons and obstacles to blockchain adoption from a strategic point of view. Many people say that technological benefits like security and transparency are important, but organizational preparation, leadership support, and stakeholder alignment are also very important. On the other hand, challenges to adoption are often not merely technical; they can include deeper institutional, legal, and cultural issues. For example, businesses that deal in areas where the laws about blockchain are uncertain or changing may be cautious to put money into the technology. In the same way, employees and managers who don't know much about decentralized technologies may not want to change how things are done and how power is structured [8]. A number of studies have tried to map out the landscape of blockchain adoption by looking at certain industries or technology problems. There isn't a systematic synthesis that connects theory and practice, though, especially from a strategic management point of view. Many assessments only look at technical architectures or single case studies and don't look at the bigger picture of how adoption is affected by organizational and environmental factors. This is a big gap in research since strategic decisions on how to integrate blockchain need to take into account the organization's strengths and weaknesses, its place in the market, the dynamics of the ecosystem, and the long-term value it can create [9]. This systematic review tries to fill this vacuum by thoroughly examining the current research on how businesses use blockchain, with an emphasis on the strategic factors that help and hurt adoption. It takes a multi-disciplinary approach, using ideas from fields including economics, information systems, technology management, and organizational studies. The review uses well-known theoretical frameworks as the Technology-Organization-Environment (TOE) model, the Diffusion of Innovation (DOI) theory, and the Unified Theory of Acceptance and Use of Technology (UTAUT) to organize and make sense of the results. This review investigatestrends and themes across different sectors and regions by putting together results from more than 70 peer-reviewed research that were published between 2017 and 2024. It looks at how different types of businesses, from small startups to big multinational firms, think about adopting blockchain in terms of strategy. The importance of external forces (like customer demand, regulatory requirements, and competitive actions) and internal capabilities (like digital readiness, leadership vision, and corporate culture) in determining adoption decisions is given special focus.

There are three goals for this review:

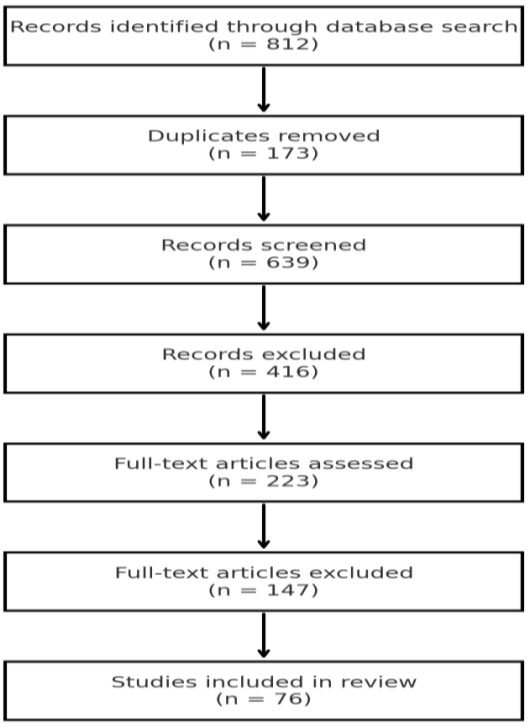
- To find and group the main reasons why businesses are using blockchain technology in their day-to-day operations and long-term plans.
- To look at the problems that make it hard for organizations to use and deploy blockchain.
- To give useful advice and point out research opportunities for scholars, business leaders, and policymakers who want to speed up the use of blockchain.

The results of this review have substantial consequences. For people who work in the industry, they stress the need for cross-functional collaboration, strategy alignment, and incremental implementation methodologies. The results show policy makers how important it is to have clear rules, encourage new ideas, and work together across borders. The study gives academics a plan for future research into how blockchain can change business models.

2. Methodology

2.1 Search Strategy:

This systematic review followed the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) standards to make sure that the methods were sound. PRISMA gives you a methodical way to find, choose, and critically evaluate relevant literature. This is especially helpful when you need to combine information from different domains, like blockchain technology and strategic management. The protocol used in this review was meant to make sure that the research process was open, repeatable, and fair. The assessment started by coming up with specific research questions about how to strategically use blockchain in business models, with an emphasis on finding its drivers and barriers. A whole search strategy was built employing these queries, specified keywords, and Boolean operators to find peer-reviewed studies that were relevant. The criteria for including and excluding research were designed so that only those that directly looked at how blockchain is used in business or organizational settings were included. We only considered works that were published in peer-reviewed journals and conference proceedings between 2017 and 2024. This is because this is the time when the most scholarly work on enterprise blockchain adoption was done.



The review went through several stages of screening. It started with screening the title and abstract, then moved on to full-text assessment to see if the article was eligible. We got rid of duplicate entries and only kept publications that were relevant to the research topic, had empirical or conceptual analysis, and had full text available in English.

After the screening process, data were systematically pulled from the chosen studies using a standardized data extraction form that included details like the year of publication, the industry focus, the geographical scope, the type of blockchain application, the research method, and the drivers or barriers that were found. This organized method made it possible to combine themes and compare results from different studies and sectors [10-15].

In general, using a strong review protocol based on PRISMA guidelines helped make sure that the insights we got were both thorough and based on analysis. This gives us a solid foundation for understanding the strategic factors that come into play when businesses of all types adopt blockchain.

R1	What are the primary **drivers** of blockchain adoption in business models?
R2	What are the key **barriers** hindering its adoption?
R3	How can organizations strategically overcome these barriers?

2.2 Search Strategy, and Screening Process:

This systematic review aims to elucidate the strategic drivers and challenges affecting blockchain adoption across several company types. Three principal research questions were established to direct this inquiry: What are the primary factors that facilitate the strategic implementation of blockchain technology in business settings? What are the primary obstacles that impede its acceptance and integration into current business models? How can enterprises surmount these obstacles to effectively leverage blockchain's potential? This research seeks to elucidate the enablers and barriers of blockchain adoption from strategic, organizational, and technological viewpoints. A systematic and reproducible search approach was utilized to address these questions thoroughly. Academic literature pertinent to the study was obtained from four principal scientific databases: Scopus, Web of Science, IEEE Xplore, and Google Scholar. These platforms were selected for their comprehensive access to peer-reviewed journals, conference proceedings, and high-caliber research studies pertaining to corporate innovation and new technologies. The search was confined to publications published from 2017 to 2024 to encompass the latest trends and advancements in blockchain use [16-27]. A combination of Boolean operators and meticulously chosen phrases was employed, including "blockchain adoption," "business models," "blockchain drivers," "blockchain barriers," "strategic technology adoption," "enterprise blockchain," and "blockchain implementation." The search procedure was iterative and optimized to guarantee both comprehensiveness and pertinence. Articles were included if they were composed in English, underwent peer review, and explicitly addressed the strategic integration of blockchain inside organizational or corporate contexts. Research concentrating exclusively on technical or algorithmic dimensions of blockchain, devoid of any discourse on corporate strategy or organizational implications, was omitted. A three-phase screening process was conducted in accordance with PRISMA criteria following the retrieval of the initial dataset including 812 publications. In the initial phase, duplicate entries (n = 173) were eliminated utilizing citation management software. A total of 639 articles were subjected to title and abstract screening to exclude studies irrelevant to blockchain business applications, leading to the elimination of 416 papers. In the second phase, the complete texts of 223 articles were meticulously examined for eligibility according to established inclusion criteria. This entailed evaluating whether the research provided empirical, theoretical, or conceptual insights into the drivers and barriers of blockchain adoption in a commercial or strategic setting. Articles were removed if they were opinion articles, editorials, or lacked methodological rigor. In total, 76 rigorous research were chosen for incorporation into the final synthesis. The chosen studies underwent data extraction and thematic analysis to discern repeating themes, facilitating factors, and limitations in blockchain adoption across many sectors, including finance, healthcare, supply chains, and energy.

2.3 Data Extraction and Synthesis

A structured data extraction approach was utilized to systematically assess the chosen studies. A tailored data extraction form was created utilizing Microsoft Excel to systematically gather pertinent information from all included articles. Each study was meticulously examined to identify essential criteria such the publishing year, geographical setting, industry or sector of application, research methodology, blockchain use case, and clearly articulated motivations and hurdles to adoption. Particular emphasis was placed on the theoretical frameworks utilized, including the Technology-Organization-Environment (TOE) model and the Diffusion of Innovation (DOI) theory, as relevant. Subsequent to data extraction, a thematic synthesis methodology was employed to classify and analyze the findings. The data were initially categorized according to prevalent themes and phrases pertaining to adoption facilitators (e.g., transparency, cost reduction, competitive advantage) and obstacles (e.g., regulatory uncertainty, scaling challenges, lack of interoperability). The codes were further grouped into overarching categories corresponding to the research questions and academic frameworks. Cross-tabulations were conducted to analyze the variation of drivers and barriers by sector and geography. Regulatory hurdles were more widespread in studies from emerging nations, while technological complexity was a predominant issue in developed markets. Quantitative frequency analysis identified the most often reported drivers and impediments across studies, whereas qualitative content analysis contextualized these elements inside unique business model modifications. Narrative synthesis approaches were employed when feasible to explain complex or conflicting findings, enabling reviewers to examine nuanced interdependencies between organizational characteristics and technology readiness. This intricate synthesis provided a thorough and equitable assessment of the material and facilitated the creation of a cohesive framework for comprehending the dynamics of blockchain adoption in business models [28].

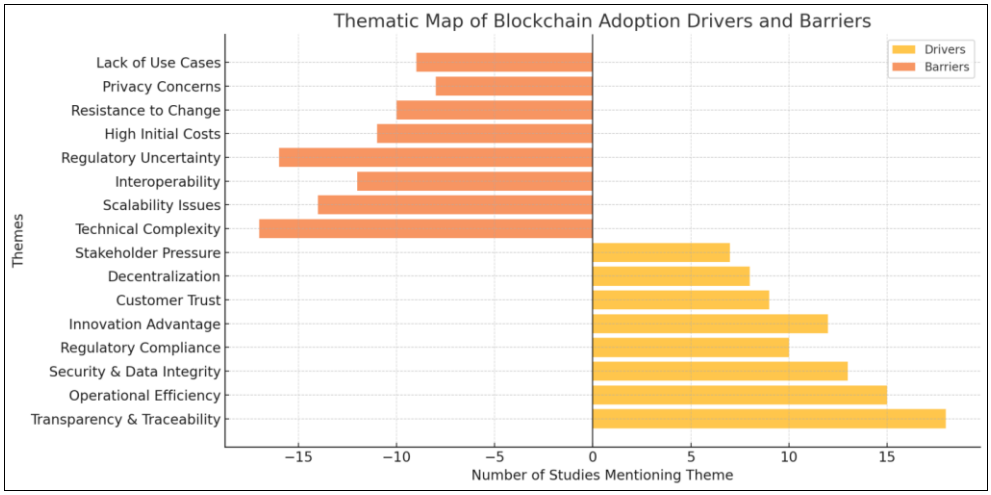


Fig 1: Here is the thematic map illustrating the frequency of drivers (right side) and barriers (left side) to blockchain adoption, based on the thematic synthesis of reviewed studies

3. Theoretical Background

3.1 Blockchain in Business Models:

Blockchain technology is changing the way businesses work by giving them new methods to create, deliver, and capture value. Blockchain works on the concepts of a distributed ledger, which means that it is decentralized, data cannot be changed, and there is transparency among all parties involved. These traits *make* it possible for people to do business with each other without having to go through a middleman [22]. Banks, auditors, and clearing houses are examples of centralized authority that traditional business models use to check, record, and confirm transactions. Blockchain changes this model by allowing peer-to-peer interactions, automating smart contracts, and tokenizing assets. All of these things lower costs, make things more efficient, and encourage new ideas. For example, supply chains use blockchain to keep track of things in real time and make sure they come from the right place. Financial services use it to make cross-border payments safe and quick [29].

Blockchain also brings about decentralized business models, such as:

- DAOs, or Decentralized Autonomous Organizations
- Decentralized Finance (DeFi)
- Economies built on tokens

These models give users and stakeholders the capacity to co-govern platforms, vote on choices, and share in revenues. This moves authority from centralized groups to communities.

Table 1: Blockchain Features Enabling Business Model Innovation [30-34]

Blockchain Feature	Impact on Business Models
Decentralization	Eliminates central authorities, enabling P2P transactions
Immutability	Ensures tamper-proof records for trust and auditability
Transparency	Enhances visibility in supply chains and customer trust
Smart Contracts	Automates workflows and reduces manual overhead
Tokenization	Creates new revenue streams via asset digitization
Distributed Ledger	Synchronizes real-time data across all participants

3.2 Technology Adoption Theories Relevant to Blockchain:

To understand how blockchain is being used strategically, you need to use the right technology adoption frameworks. The Technology-Organization-Environment (TOE) framework, the Diffusion of Innovation (DOI) theory, and the Unified Theory of Acceptance and Use of Technology (UTAUT) are three ideas that are often utilized in this field. Each one gives you a methodical way to look at how internal and external factors affect adoption [35].

The TOE framework says that three main circumstances affect adoption:

- Technological (for example, relative advantage and complexity),
- Organizational factors, such the size of the company and the support of management,
- Environmental factors, such competition and rules.

Rogers came up with the DOI theory, which looks at five characteristics of innovations—relative benefit, compatibility, complexity, trialability, and observability—that affect how people or organizations embrace new technology over time. The UTAUT model focuses on user-level aspects like performance expectancy, effort expectancy, social influence, and conditions that make things easier. Originally created for IT tools, UTAUT is now being used more and more in organizational blockchain studies to look at how people and groups adopt new technologies.

Table 2: Summary of Technology Adoption Theories Applied to Blockchain [36-38]

Theory	Key Constructs	Relevance to Blockchain
TOE Framework	Technological, Organizational, Environmental	Assesses external and internal readiness for blockchain implementation
Diffusion of Innovation (DOI)	Relative advantage, Compatibility, Complexity, Trialability, Observability	Explains how perceived characteristics influence adoption rates
UTAUT	Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions	Focuses on individual/user perspectives in adoption decisions

4. Results

The systematic study looked at 76 research that looked at how different businesses may strategically use blockchain. The Finance and Supply Chain industries together make up more than half of all publications, which shows that they are the leaders in trying out and using blockchain.

4.1 Industry-Wise Distribution of Blockchain Adoption Studies:

The 76 studies that were chosen showed that different businesses use blockchain technology in very different ways. Finance and Supply Chain Management are the two areas that use it the most. The Finance industry has the most studies, with 22 (29%) looking at smart contracts, cross-border payments, and decentralized finance (DeFi) as examples. Blockchain is the most popular technology because it makes transactions safer, speeds up settlements, and cuts out middlemen in financial institutions [39]. The Supply Chain industry came in second with 17 studies (22%). Here, blockchain is commonly used to make records that can't be changed, which helps with fraud prevention, traceability, and inventory accuracy. It makes everything clear from beginning to end, which is important for making sure quality and getting materials in an ethical way [40]. Healthcare was the third most studied field, with 10 studies (13%) showing that more people are interested in utilizing blockchain to safely share patient data, keep track of clinical trials, and verify the validity of drugs. The Real Estate industry has 7 research (9%) and demonstrated uses mainly in land registration, ownership tokenization, and automated contract execution. These might greatly lower fraud and transaction costs [41]. The Energy sector is looking into blockchain for microgrid energy trading, managing renewable certificates, and peer-to-peer energy distribution, but there are fewer studies (6 or 8%). Finally, 14 research (18%) looked at different areas, including as government services, education, and voting systems. This shows how blockchain is becoming more useful for things like digital identity verification and decentralized credential systems [42]. The pie chart below shows how different industries are ready for technology and how they need to be more cost-effective, more open with their data, or follow the rules.

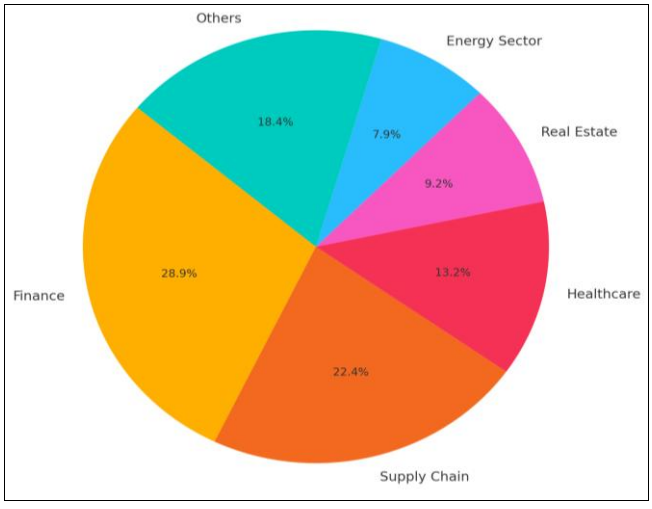


Fig 2: Industry-Wise Distribution Of Blockchain Adoption Studies

4.2 Regional Distribution of Studies:

Most of the published research on blockchain adoption comes from North America, Europe, and Asia-Pacific, which are all regions that are known for being technologically advanced and open to new ideas. North America has the most studies, with 24 (32%), mostly from the US and Canada. This is because the US and Canada have mature financial markets, regulatory experimentation (like blockchain sandboxes), and venture capital funding that have led to a lot of research into how blockchain can be used in finance, real estate, and healthcare. Institutions including the SEC, FDA, and big banks have started pilot initiatives and partnerships between businesses and schools that support this leadership [43]. Europe is next with 21 studies (28%), which shows that they are very focused on policy-driven blockchain innovation. The European Union has set up regulatory frameworks like the General Data Protection Regulation (GDPR) and the EU Blockchain Observatory to encourage cooperation between countries in making supply chains more transparent, keeping track of sustainability, and providing government services. European businesses are especially interested in using blockchain to meet ESG (Environmental, Social, and Governance) standards and track the origins of goods [44]. The Asia-Pacific area had 18 studies (24%), which shows that countries like China, Singapore, South Korea, and India are quickly adopting new technologies. These countries have used blockchain in sectors including logistics, e-governance, and smart cities. Both research and real-world use have been sped up by government backing in the shape of national blockchain agendas and investments in smart infrastructure [45]. There were 8 research from Latin America (11%), mostly about making land ownership more open, including more people in the financial system, and fighting corruption. People see blockchain as a way to solve problems with trust, fake documents, and not having enough banks. Brazil and Colombia are testing blockchain-based land records and digital identities [46]. Finally, the Middle East and Africa region had some interest, although it was small, with only 5 studies (7%). The UAE and South Africa are leading the way in the region when it comes to using blockchain for public services, health records, and making trade easier. However, wider use is still hampered by deficiencies in infrastructure and unclear rules [47]. This difference between regions shows that the adoption of blockchain is tightly linked to digital readiness, economic growth, regulatory support, and trust in institutions. As developing economies improve their digital ecosystems, they are likely to be more involved in blockchain research [48].

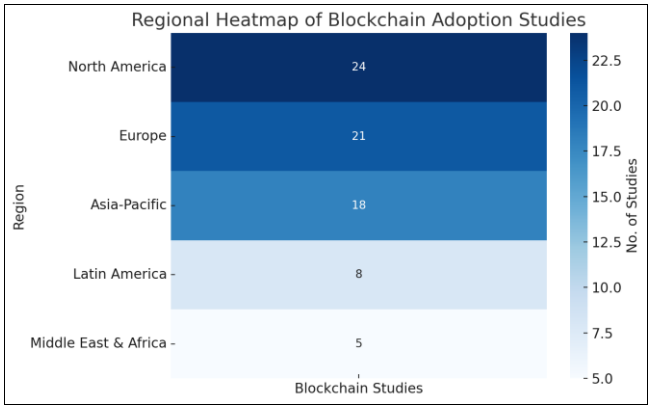
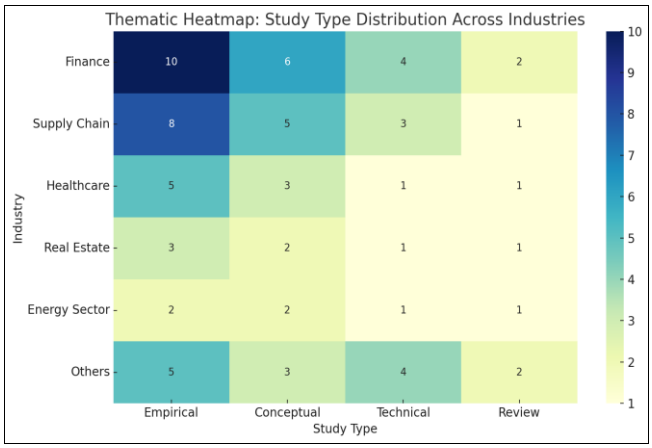


Fig 3: Regional heatmap illustrating the concentration of blockchain adoption studies

4.3 Study Type and Research Methods:

The literature that was evaluated included a wide range of study kinds and methods, which shows how multidisciplinary blockchain research is. There were 76 studies in total, and 33 of them were empirical, meaning they included case studies, surveys, and interviews. The main focus of these real-world studies was on how blockchain was employed in industries including finance, supply chain, and healthcare. For instance, a number of case studies looked at blockchain-based logistics platforms or decentralized healthcare records systems, which gave useful information on problems and aspects that lead to success [49]. 21 studies came up with ideas for how to use blockchain in the real world. These remarks stressed how important it is for blockchain capabilities and organizational structures to be in sync with one other. Theoretical frameworks including the Technology-Organization-Environment (TOE) framework, the Diffusion of Innovation (DOI) theory, and Institutional Theory were often employed to help develop these models. These kinds of conceptual studies are important tools for helping both public and private sector organizations figure out how to use blockchain technology [1-21]. There were 14 papers that looked at technical implementation studies. They looked at things like how to make prototypes, how to test their performance, and how to design the architecture of blockchain-based systems. These comprised mock-ups of smart contracts, consensus methods, and protocols for interoperability. Even though these studies were more common in engineering and computer science, they were very important for figuring out how to make things work, how to make them bigger, and how to keep them safe in real life [20-41]. Finally, the last analysis contained eight review papers. These works combined previous research trends, taxonomies, and changes in specialized sectors. They were especially useful for finding gaps in knowledge, new use cases, and suggesting standardized evaluation metrics for using blockchain in different fields.



5. Discussions

This systematic review's results give a well-rounded picture of how businesses might strategically use blockchain in their strategies. One of the most important things to note is that adoption varies per sector, depending on things like operational needs, regulatory contexts, and technology preparedness. For example, in finance, people are using blockchain more and more because they want to make transactions without having to trust anyone, stop fraud, and save money by using automation and smart contracts. The supply chain sector, on the other hand, puts a high value on traceability and provenance monitoring. These are important for keeping products honest and open across multi-tiered logistical networks [50]. The review also emphasizes how important organizational competencies are for the successful use of blockchain. Companies that had a robust IT infrastructure, management who were committed to the project, and a culture that was receptive to new ideas were more likely to report good results. This fits with what other studies have said about digital transformation: it's not just about integrating new technology; it's also about aligning the organization and managing change. A lot of research has shown that pilot initiatives and cooperation between different industries can help people feel more confident about adopting new ideas and show that they work. Another important point is how important it is for rules to be clear. In places like Europe and North America, where data protection laws (like GDPR) and financial rules are well-known, blockchain projects can need more structured direction. On the other hand, in emerging economies or places where the law is unclear, blockchain adoption typically slows down because people are afraid of breaking the law or having legal problems in the future. This shows how important it is to have policy frameworks that find a balance between innovation and governance. The study found that one of the main problems is that blockchain systems don't work well together. This fragmentation makes it harder for more people to use it, especially in fields like healthcare and supply chains that depend on collaboration between organizations. Concerns regarding data privacy, especially with public blockchains, also make people less likely to use them in fields that deal with sensitive information. Several research suggested that hybrid blockchain models, which mix public and private networks, could be a way to solve this problem. Also, cost-related issues are still a big reason why people don't want to do business, especially small and medium-sized businesses (SMEs). The initial costs of infrastructure, experienced workers, and change management can be too high for some businesses, and many are dubious of the return on investment (ROI). However, several of the longitudinal studies in this analysis show that blockchain systems can save a lot of money and improve performance over time once they are up and running. The theme heatmap and sector-wise analysis also show where there are gaps in the literature. A lot of research right now is focused on finance and supply chains, but there are still a lot of areas that haven't been studied enough, such energy, education, and real estate, even though they might be greatly affected by blockchain. Also, the fact that there aren't many review papers or longitudinal empirical studies shows that we need more research that builds on what we already know and looks at how things change over time.

6. Conclusions

This systematic review looked at how businesses might strategically use blockchain technology in their business models, focusing on the main factors that help and hurt this across different industries. The results show that blockchain has a lot of promise to change how businesses work by making them more decentralized, open, and automated. However, its widespread use is still being held back by a number of organizational, technological, and regulatory issues.

The necessity for secure transactions, fraud protection, and traceability has made industries like finance and supply chain management leaders in using blockchain. On the other hand, industries like healthcare, real estate, and energy are slowly looking into the possibilities of blockchain, but not as quickly. For blockchain to work, it needs more than just technology that is ready. It also needs support from leaders, involvement from stakeholders, and clear rules. Improved data security, operational efficiency, and customer trust were some of the most important drivers that were found. These things fit with organizations' long-term aims of lowering costs, making things more clear, and encouraging new ideas. The evaluation did, however, point out ongoing problems like problems with interoperability, high costs of implementation, legal uncertainty, and resistance to change inside organizations. These problems show how important it is for businesses, legislators, and technology suppliers to work together to develop standardized frameworks and regulatory sandboxes.

The report also stresses that blockchain adoption should be done in a planned way, starting with pilot initiatives, moving on to educating stakeholders, and ending with full integration that is in line with the company's main goals. Conceptual and empirical research are still changing, but there are still gaps, especially in businesses that haven't been studied enough and in long-term studies on blockchain's long-term effects. In conclusion, blockchain has the power to change modern business models in a big way. However, its use must be carefully planned and carried out in a methodical way. To get the most out of blockchain's potential to make business ecosystems more open, efficient, and trustworthy, future research should focus on sector-specific frameworks, cross-industry interoperability solutions, and strong regulatory rules.

7. References

1. Agrawal TK, Sharma A, Kumar V. Blockchain-based secured a traceability system for textile and clothing supply chain. In Artificial intelligence for the fashion industry in the big data era. Springer, Singapore, 2018, 197-208.
2. Baharmand H, Maghsoudi A, Coppi G. Exploring the application of blockchain to humanitarian supply chains: insights from Humanitarian Supply Blockchain pilot project. Int J Oper Prod Manag, 2021. Doi: https://doi.org/10.1108/IJOPM-12-2020-0884
3. Bechtsis D, Tsolakis N, Iakovou E, Vlachos D. Data-driven secure, resilient and sustainable supply chains: gaps, opportunities, and a new generalized data sharing and data monetisation framework. Int J Prod Res, 2021. Doi: https://doi.org/10.1080/00207543.2021.1957506
4. Büyüközkan G, Göçer F. Digital Supply Chain: Literature review and a proposed framework for future research. Comput Ind 97, 2018.
5. Caldarelli G, Zardini A, Rossignoli C. Blockchain adoption in the fashion sustainable supply chain: Pragmatically addressing barriers. J Org Change Manag, 2021.
6. Caniato F, Caridi M, Castelli CM, Golini R. A contingency approach for SC strategy in the Italian luxury industry: Do consolidated models fit? Int J Prod Econ. 2009; 120(1):176-189.
7. Casey M, Wong P. Global supply chains are about to get better, thanks to blockchain. Harv Bus Rev 13, 2017.
8. Choi TM. Supply chain financing using blockchain: impacts on supply chains selling fashionable products. Ann Oper. Res, 2020, 1-23.
9. Rogerson M, Parry GC. Blockchain: Case studies in food supply chain visibility. Supply Chain Manag Int J. 2020; 25(5).
10. Sharma M, Joshi S, Luthra S, Kumar A. Managing disruptions and risks amidst COVID-19 outbreaks: role of blockchain technology in developing resilient food supply chains. Oper Manag Res, 2021, 1-14.
11. Treiblmaier H. The impact of the blockchain on the supply chain: A theory-based research framework and a call for action. Supply Chain Manag Int J, 2018.
12. Van Hoek R. Exploring blockchain implementation in the supply chain. Int J Oper Prod Manag, 2019.
13. Voss C, Tsikriktsis N, Frohlich M. Case research in operations management. Int J Oper Prod Manag. 2002; 22(2):195-219.
14. Xiong Y, Lam HK, Kumar A, Ngai EW, Xiu C, Wang X. The mitigating role of blockchain-enabled supply chains during the COVID-19 pandemic. Int J Oper Prod Manag, 2021.
15. Agrawal TK, Kumar V, Pal R, Wang L, Chen Y. Blockchain-based framework for supply chain traceability: A case example of textile and clothing industry. Comput Ind Eng. 2021;154.
16. Bamakan SM, Moghaddam SG, Manshadi SD. Blockchain-enabled pharmaceutical cold chain: Applications, key challenges, and future trends. J Clean Prod. 2021; 302.
17. Bullón Pérez JJ, Queiruga-Dios A, Gayoso Martínez V, Martín Del Rey Á. Traceability of ready-to-wear clothing through blockchain technology. Sustainability. 2020; 12.
18. Chen Y, Ding S, Xu Z, Zheng H, Yang S. Blockchain-based medical records secure storage and medical service framework. J Med Syst. 2019; 43.
19. Hastig GM, Sodhi MS. Blockchain for supply chain traceability: Business requirements and critical success factors. Prod Oper Manag. 2020; 29.
20. Katsikouli P, Wilde AS, Dragoni N, Høgh-Jensen H. On the benefits and challenges of blockchains for managing food supply chains. J Sci Food Agric. 2021; 101.
21. Kouhizadeh M, Saberi S, Sarkis J. Blockchain technology and the sustainable supply chain: Theoretically exploring adoption barriers. Int J Prod Econ. 2021; 231.
22. Kshetri N. 1 Blockchain's roles in meeting key supply chain management objectives. Int J Inf Manag. 2018; 39.
23. Moretto A, Macchion L, Lion A, Caniato F, Danese P, Vinelli A. Designing a roadmap towards a sustainable supply chain: A focus on the fashion industry. J Clean Prod. 2018; 193.
24. Pólvora A, Nascimento S, Lourenço JS, Scapolo F. Blockchain for industrial transformations: A forward-looking approach with multi-stakeholder engagement for policy advice. Technol Forecast Soc Chang. 2020; 157.
25. Queiroz MM, Wamba SF. Blockchain adoption challenges in the supply chain: An empirical investigation of the main drivers in India and the USA.

Int J Inf Manage. 2019; 46.
26. Savelyev A. Contract law 2.0:'smart'contracts as the beginning of the end of classic contract law. Inf Commun Technol Law. 2017; 26.
27. Sun S, Wang X. Promoting traceability for food supply chain with certification. J Clean Prod. 2019; 217.
28. Wang Y, Singgih M, Wang J, Rit M. Making sense of blockchain technology: How will it transform supply chains? Int J Prod Econ. 2019; 211.
29. Adel H, Younis RAA. Interplay among blockchain technology adoption strategy, e-supply chain management diffusion, entrepreneurial orientation and human resources information system in banking. Int J Emerg Mark, 2021.
30. Ahluwalia S, Mahto RV, Guerrero M. Blockchain technology and start-up financing: A transaction cost economics perspective. Technol Forecast Soc Change. 2020; 151.
31. Ahmetoglu S, Che Cob Z, Ali NA. A Systematic review of internet of things adoption in organizations: taxonomy, benefits, challenges and critical factors. Appl Sci. 2022; 12.
32. Ajwani-Ramchandani R, Figueira S, Oliveira RT, Jha S, Ramchandani A, Schuricht L. Towards a circular economy for packaging waste by using new technologies: The case of large multinationals in emerging economies. J Clean Prod. 2021; 281.
33. Aketch S, Mwambia F, Baimwera B. Effects of blockchain technology on performance of financial markets in Kenya. J Int Financial Manag Account. 2021; 6.
34. Alazab M, Alhyari S, Awajan A, Abdallah AB. Blockchain technology in supply chain management: an empirical study of the factors affecting user adoption/acceptance. Clust Comput. 2021; 24.
35. Albayati H, Kim SK, Rho JJ. Accepting financial transactions using blockchain technology and cryptocurrency: A customer perspective approach. Technol Soc. 2020; 62.
36. Ali O, Ally M, Dwivedi Y. The state of play of blockchain technology in the financial services sector: A systematic literature review. Int J Inf Manag. 2020; 54.
37. AlShamsi M, Al-Emran M, Shaalan K. A systematic review on blockchain adoption. Appl Sci. 2022; 12.
38. Alzahrani AI, Al-Samarraie H, Eldenfria A, Dodoo JE, Alalwan N. Users' intention to continue using mhealth services: A DEMATEL approach during the COVID-19 Pandemic. Technol Soc. 2022; 68.
39. Antal C, Cioara T, Anghel I, Antal M, Salomie I. Distributed ledger technology review and decentralized applications development guidelines. Future Internet. 2021; 13.
40. Arpaci I, Yardimci YC, Ozkan S, Turetken O. Organizational adoption of information technologies: A literature review. Int J eBusiness eGovernment Stud. 2012; 4.
41. Bellucci M, Bianchi DC, Manetti G. Blockchain in accounting practice and research: Systematic literature review. Meditari Account Res. 2022; 30.
42. Benatia I, Laouar MR, Bendjenna H, Eom SB. Implementing a cloud-based decision support system in a private cloud: the infrastructure and the deployment process. Int J Decis Support Syst Technol. 2016; 8.
43. Biswas S, Pamucar D. A modified EDAS model for comparison of mobile wallet service providers in India. Financ Innov. 2023; 9.
44. Butt TA, Iqbal R, Salah K, Aloqaily M, Jararweh Y. Privacy management in social internet of vehicles: Review, challenges and blockchain based solutions. IEEE Access. 2019; 7.
45. Chang V, Baudier P, Zhang H, Xu Q, Zhang J, Arami M. How blockchain can impact financial services—the overview, challenges and recommendations from expert interviewees. Technol Forecast Soc Change. 2020; 158.
46. Chen Y, Bellavitis C. Blockchain disruption and decentralized finance: the rise of decentralized business models. J Bus Ventur Insights. 2020; 13.
47. Chod J, Trichakis N, Tsoukalas G, Aspegren HM, Weber M. On the financing benefits of supply chain transparency and blockchain adoption. Manag Sci. 2020; 66.
48. Clohessy T, Acton T. Investigating the influence of organizational factors on blockchain adoption: an innovation theory perspective. Ind Manag Data Syst. 2019; 119.
49. Coita DC, Abrudan MM, Matei MC. Effects of the blockchain technology on human resources and marketing: An exploratory study. In: Kavoura A, Kefallonitis E, Giovanis A, editors. Strategic innovative marketing and tourism. Cham: Springer, 2019.
50. Fang F, Ventre C, Basios M, Kanthan L, Martinez-Rego D, Wu F, *et al*. Cryptocurrency trading: A comprehensive survey. Financ Innov. 2022; 8.