

Open Access

International Journal of Family Enterprise, Leadership and Entrepreneurship, Vol. 1, No. 1 (2025). Pp. 11-23 DOI: https://doi.org/10.69481/YLTD6546

# Fundamental Impacts of Blockchain Technology on Entrepreneurial Management: A Systematic Review and Narrative Synthesis

Page | 11

#### Antonio R. Gimena

St. Paul University - Surigao, Philippines

agimena@almuhasab.com

ORCID: <u>0009-0004-4594-7529</u>

#### **Abstract**

Blockchain technology has been a disruptive entrepreneurial management innovation that has enabled decentralized innovation, token-based funding, and governance disruption. This systematic review and narrative synthesis of 11 peer-reviewed articles analyze the underlying impacts of blockchain technology on four dimensions: entrepreneurial challenges and opportunities, business model innovation, ecosystem dynamics, and governance implications. The research presents blockchain's function in reducing transaction costs, enabling disintermediation, and building stakeholder trust while uncovering technological, regulatory, and institutional barriers to adoption. A thematic synthesis demonstrates how blockchain reconfigures entrepreneurial ecosystems through new organizational forms such as DAOs and decentralized platforms. The review establishes a research gap in synthesizing blockchain mechanisms with theoretical entrepreneurial foundations and introduces the Blockchain-Driven Entrepreneurial Innovation (BDEI) framework. Conclusions require collective effort from entrepreneurs, researchers, and policymakers to design adaptive strategies, governance arrangements, and regulatory infrastructures. This research makes a contribution to theory-building and policy-making in the new context of blockchain-enabled entrepreneurship.

**Keywords:** Blockchain, Entrepreneurial Management, Business Model Innovation, Governance, Decentralized Ecosystem

#### 1. Introduction

#### **Background of the Study**

Blockchain technology has rapidly evolved from its origins as a decentralized ledger for cryptocurrency into a powerful technological infrastructure that promises to revolutionize diverse industries. Characterized by immutability, transparency, and decentralization, blockchain enables secure peer-to-peer transactions without intermediaries, creating new possibilities for value creation, organizational design, and market structure (Casino et al., 2019; Xu et al., 2019). In the entrepreneurial context, these features present substantial opportunities for innovation, disintermediation, and improved trust between stakeholders, particularly in ecosystems where



Open Access

International Journal of Family Enterprise, Leadership and Entrepreneurship, Vol. 1, No. 1 (2025). Pp. 11-23 DOI: https://doi.org/10.69481/YLTD6546

information asymmetry and high transaction costs have traditionally hindered efficiency (lansiti & Lakhani, 2017; Risius & Spohrer, 2017).

The increasing interest in digital entrepreneurship, coupled with the demand for more resilient and adaptable business models, has made the adoption of blockchain particularly appealing to startups and innovation-driven enterprises. Blockchain platforms, smart contracts, and tokenization mechanisms are not only disrupting Page | 12 traditional business processes but also enabling the emergence of decentralized autonomous organizations (DAOs) and new modes of entrepreneurial governance (Chen et al., 2020; Frizzo-Barker et al., 2020). However, despite these potentials, there remains limited synthesis in the literature regarding the overarching implications of blockchain on entrepreneurial management practices.

#### Rationale of the Study

Although numerous academic studies have discussed specific applications of blockchain in finance, supply chain, and health sectors (Kouhizadeh et al., 2021; Wang et al., 2019), few have systematically examined how blockchain transforms entrepreneurial management holistically. Prior research often isolates technical features without integrating them into broader theoretical constructs of entrepreneurship, such as opportunity recognition, business model innovation, or resource orchestration (Hughes et al., 2019). This lack of integration results in fragmented insights, leaving a significant gap in understanding how blockchain affects entrepreneurial ecosystems, governance frameworks, and strategic decision-making processes.

Moreover, while some policy-oriented studies highlight the regulatory challenges associated with blockchain adoption (Catalini & Gans, 2019), the implications for institutional entrepreneurship and cross-sector innovation remain underexplored. Thus, this study addresses a pressing need for a consolidated review and conceptual synthesis that bridges technical innovation with entrepreneurial theory, practice, and policy.

#### Aim of the Study

The aim of this study is to conduct a systematic literature review and narrative synthesis to evaluate the fundamental impacts of blockchain technology on entrepreneurial management, drawing insights across four major domains: (1) Innovation and Business Models, (2) Opportunities and Challenges, (3) Ecosystem Dynamics, and (4) Policy and Governance.

### Objectives of the Study

To achieve this aim, the study is guided by the following specific objectives:

- 1. To evaluate how blockchain technology fosters innovation and enables the development of new entrepreneurial business models.
- 2. To identify the opportunities and challenges entrepreneurs face when adopting blockchain technology in diverse organizational contexts.
- 3. To examine the influence of blockchain on stakeholder interactions and ecosystem development in entrepreneurial environments.
- 4. To assess the policy and governance implications of blockchain adoption in entrepreneurship and propose actionable regulatory recommendations.



Open Access

International Journal of Family Enterprise, Leadership and Entrepreneurship, Vol. 1, No. 1 (2025). Pp. 11-23 DOI: https://doi.org/10.69481/YLTD6546

#### 2. Literature Review

#### **Blockchain Technology: Conceptual Foundations**

Blockchain technology has evolved from its origins with Bitcoin into a foundational architecture enabling decentralized, tamper-resistant systems across business and economic domains. Xu et al. (2018) conducted a Page | 13 systematic review of blockchain research within business and economics, identifying key themes such as economic benefit, initial coin offerings, and the sharing economy, highlighting its disruptive potential and nascent status in these fields. Operating without centralized intermediaries, blockchain's immutable ledger and consensus-based mechanics support transparency, security, and trust. Moreover, smart contracts extend blockchain's capabilities into automated execution of agreements, enhancing operational efficiency and reducing disputes in distributed settings. These characteristics render blockchain an influential infrastructure for entrepreneurial innovation and organizational transformation.

#### **Blockchain and Business Model Innovation**

The impact of blockchain on business model innovation in entrepreneurship has gained scholarly traction. Taherdoost and Madanchian (2023) reviewed 75 journal articles from 2012 to 2022, documenting how blockchain facilitates novel models—especially via token economies, NFTs, and play-to-earn frameworks—and noting open avenues for future research on public, private, and consortium networks. Complementarily, a 2019 study argues that blockchain transforms economic organization by lowering costs, reducing intermediary dependence, and enhancing ecosystem trust, though the literature on new business models remains underdeveloped. Integrating sustainable innovation perspectives, recent work by integrating business models with blockchain-context digital technologies emphasizes enhanced transparency, security, and operational efficiency across organizational and governance components, resulting in improved innovation and commercial outcomes .

#### **Ecosystem Dynamics and Token-Based Innovation**

Blockchain reshapes entrepreneurial ecosystems by enabling token-based interactions and decentralized collaboration. A taxonomy of token-based ecosystems (Beinke et al., 2020) situates blockchain as central to evolving digital ecosystems, where value exchange, governance, and innovation are mediated through tokens and network effects, supporting ecosystem-level coordination and entrepreneurial activity. Further, the development of blockchain-based platform ecosystems is exemplified by the TradeLens shipping platform, which achieved industry-wide adoption through integrated governance mechanisms (on-chain, off-chain, and interoperability governance), ecosystem leverage, and digital workflow standardization—demonstrating how ecosystem orchestration operates in practice.

## Governance, Regulation, and Policy Implications

Effective governance is critical for blockchain adoption in entrepreneurial contexts. Laatikainen, Li, and Abrahamsson (2021) synthesize 75 governance articles to propose a dynamic, holistic model of blockchain governance, identifying building blocks such as stakeholder roles, decision mechanisms, and accountability structures thus anchoring governance theory in academic discourse. Liu et al. (2021) conducted a systematic review of 37 studies to conceptualize blockchain governance frameworks, documenting gaps in accountability, decision rights, and ecosystem-level governance, and urging actionable guidelines for resilient governance design.



Open Access

International Journal of Family Enterprise, Leadership and Entrepreneurship, Vol. 1, No. 1 (2025). Pp. 11-23 DOI: https://doi.org/10.69481/YLTD6546

Complementarily, Beinke et al. (2018) propose hybrid governance models combining on-chain codification with peripheral off-chain coordination, arguing for contingent, flexible structures that address transparency, adaptability, and stakeholder inclusion in blockchain platforms.

#### **Research Gaps and Direction**

Page | 14

Despite growing scholarship on blockchain's technological and economic aspects, there remains a noticeable scarcity of integrative studies that connect blockchain mechanisms to core entrepreneurial management theories such as dynamic capabilities, institutional entrepreneurship, and stakeholder governance. Empirical evidence addressing how blockchain transforms opportunity recognition, resource orchestration, and strategic governance in entrepreneurial ecosystems is limited. Comparative analyses across regulatory regimes and governance frameworks are sparse. The literature would benefit from systematic narrative syntheses that align blockchain functionality with entrepreneurial strategy, ecosystem collaboration, and governance theories. Such integrative approaches can provide critical insights for scholars, entrepreneurs, and policymakers navigating blockchainenabled innovation landscapes.

## 3. Methodology

#### Research Design

This study employed a **systematic literature review (SLR)** combined with a **narrative synthesis** approach to assess the fundamental impacts of blockchain technology on entrepreneurial management. The SLR ensured transparency, replicability, and methodological rigor (Snyder, 2019), while narrative synthesis allowed the integration of heterogeneous findings across theoretical and empirical domains (Popay et al., 2006).

#### **Information Sources**

Articles were retrieved from five major academic databases: **Scopus, Web of Science, IEEE Xplore, ScienceDirect,** and **SpringerLink**, covering literature in business, entrepreneurship, and information systems. Supplementary searches were conducted in **Google Scholar** for grey literature and conference proceedings.

#### **Search Strategy and Article Selection**

The search string was constructed using Boolean operators and keywords:

("blockchain technology" OR "distributed ledger") AND ("entrepreneurship" OR "entrepreneurial management" OR "business model innovation") AND ("ecosystem" OR "governance" OR "opportunity recognition").

The search was executed in **November 2023**, yielding **312** initial records. After the removal of **67** duplicates, **245** unique records remained. Titles and abstracts were screened based on relevance, resulting in **73** full-text articles assessed for eligibility.

#### **Inclusion and Exclusion Criteria**

Inclusion criteria:

Peer-reviewed journal articles or conference proceedings (2014–2023)



Open Access

International Journal of Family Enterprise, Leadership and Entrepreneurship, Vol. 1, No. 1 (2025). Pp. 11-23 DOI: https://doi.org/10.69481/YLTD6546

- Written in English
- Focused on blockchain applications in entrepreneurial or managerial contexts
- Providing empirical, theoretical, or conceptual insights

#### Exclusion criteria:

Non-academic or non-peer-reviewed materials (e.g., blogs, editorials)

- Articles focusing purely on technical cryptographic or algorithmic concerns
- Non-English articles
- Irrelevant to entrepreneurial management

After applying inclusion and exclusion criteria, 24 articles were retained for full review.

## **Quality Assessment**

To ensure rigor, the Joanna Briggs Institute (JBI) Critical Appraisal Tool was applied to assess methodological soundness, theoretical contribution, and relevance (Aromataris & Munn, 2020). Articles scoring below a threshold of 60% (based on relevance and methodological clarity) were excluded. Following this assessment, 11 high-quality articles were retained for final synthesis.

Table 1. Summary of Selection Process

Stage	Number of Articles
Initial search results	312
After duplicate removal	245
After title and abstract screening	73
After full-text eligibility assessment	24
After quality assessment (final sample)	11

#### **Data Extraction**

A structured data extraction form was used to collect and categorize data from the 11 included studies. The key variables extracted were: publication year, authors, country or region of focus, research objectives, methodology, theoretical orientation, and main findings related to blockchain and entrepreneurial management. The data were grouped thematically under the conceptual framework of the study.

Table 2. Summary of Data Extracted from Included Studies

No.	Author(s)	Year	Country	Methodology	Research Focus	Key Findings
1	Nowiński & Kozma	2017 F	Poland	Conceptual	Disruption of business models via blockchain	Blockchain reduces transaction costs and promotes disintermediation in startups
2	Lou & Li	2017 (	China	Empirical	Technology adoption in	Unified adoption model using TAM

© 2025 The Authors. This work is published by International Journal of Family Enterprise, Leadership and Entrepreneurship (IJOFELE) of the Virtual Realia Organization as an open access article distributed under the terms of the licensed under Attribution-NonCommercial-NoDerivatives 4.0 International. Non-commercial uses of the work are permitted, provided the original work is properly cited.

Page | 15



Open Access

Page | 16

International Journal of Family Enterprise, Leadership and Entrepreneurship, Vol. 1, No. 1 (2025). Pp. 11-23 DOI: https://doi.org/10.69481/YLTD6546

No.	Author(s)	Year	Country	Methodology	Research Focus	Key Findings
				(survey)	FinTech	and IDT frameworks
3	Chen	2018	USA	Theoretical	Token-based innovation ecosystems	Tokenization democratizes entrepreneurial finance
4	Allen	2020	Australia	Institutional review	Blockchain governance frameworks	Emphasizes hybrid models integrating private and public governance
5	Alaassar et al.	2020	Singapore	Case study	Stakeholder coordination in FinTech ecosystems	Blockchain enables trust-based, non-hierarchical interaction
6	Toufaily et al.	2021	UAE	Qualitative (interviews)	Adoption challenges and applications	Identifies barriers such as legal uncertainty and technical complexity
7	Liu et al.	2021	Global (Review)	Systematic review	Blockchain governance in business settings	Framework highlights issues in decision rights and accountability
8	Beinke et al.	2020	Germany	Taxonomic analysis	Ecosystem categorization of token-based systems	Proposes taxonomy of blockchain- based entrepreneurial ecosystems
9	Abdollahi et al.	2023	Austria	Multiple case study	Blockchain value creation across industries	Identifies five value drivers including cost reduction and new practices
10	Avarmaa et al.	2022	Estonia, Russia	Comparative case	Ecosystem evolution in blockchain startup communities	Shows importance of digital infrastructure and institutional support
11	Sharma et al.	2020	South Korea	Technical- conceptual	Blockchain integration with IoT in energy systems	Warns about environmental and energy implications of blockchain–loT synergy

#### 4. Findings and Discussion

This section presents the consolidated findings of the systematic literature review, organized according to the four research objectives that guided the inquiry. Drawing upon eleven peer-reviewed studies published between 2017 and 2023, the analysis integrates insights from both empirical and conceptual research. A narrative synthesis approach was employed to categorize findings into innovation and business models, opportunities and challenges, ecosystem dynamics, and policy and governance. Each section below discusses the key results under its respective research objective.

## Objective 1: To evaluate how blockchain technology fosters innovation and enables the development of new entrepreneurial business models



Open Access

Page | 17

International Journal of Family Enterprise, Leadership and Entrepreneurship, Vol. 1, No. 1 (2025). Pp. 11-23 DOI: https://doi.org/10.69481/YLTD6546

Author(s) and Year	Focus of Study	Key Contribution
Nowiński and Kozma (2017)	Disruption of existing business models through blockchain	Demonstrated how blockchain reduces transaction costs and enables disintermediation, leading to innovative business models.
Weking et al. (2020)	Empirical taxonomy of blockchain business models in startups	Identified five archetypal patterns that show how blockchain restructures value creation and delivery mechanisms.
Lou and Li (2017)	Technology adoption of blockchain in FinTech using IDT and TAM frameworks	Developed a unified adoption model explaining continuance intention for blockchain use in financial innovations.
Chen (2018)	Entrepreneurial applications of token- based innovation in blockchain ecosystems	Showed how tokenization enables decentralized platforms and new entrepreneurial financing methods.

Table 3 shows the summary of key studies on blockchain-driven business model innovation. Blockchain technology significantly fosters innovation within entrepreneurial ventures by enabling disintermediation, automation, and new forms of value exchange. Multiple studies underscore the role of blockchain in reconfiguring conventional business models through mechanisms such as tokenization, smart contracts, and decentralized platforms. Nowiński and Kozma (2017) posited that blockchain can lower transaction costs and authenticate traded items, thereby offering fertile ground for business model innovation. Weking et al. (2020) supported this assertion by developing a taxonomy of blockchain-driven models across 99 startups, identifying five archetypes that demonstrate how blockchain redefines how firms capture and deliver value.

Lou and Li (2017) further contributed to the discourse by proposing a unified adoption model based on Innovation Diffusion Theory (IDT) and the Technology Acceptance Model (TAM), highlighting how entrepreneurial actors evaluate blockchain's perceived ease of use and utility. Collectively, these findings affirm that blockchain does not merely support existing structures but actively catalyzes the creation of novel business configurations, particularly in digital and service-based sectors.

## Objective 2: To identify the opportunities and challenges entrepreneurs face when adopting blockchain technology in diverse organizational contexts

While blockchain offers substantial benefits—such as enhanced data security, reduced fraud, and improved traceability—it is also accompanied by notable barriers to adoption. Toufaily et al. (2021) identified multiple organizational, technological, and environmental obstacles, including limited blockchain expertise, legal uncertainty, and inadequate regulatory infrastructure. Their framework, developed from 46 semi-structured interviews, revealed that entrepreneurs often struggle with selecting between permissioned and permissionless blockchain models based on scalability, security, and compliance needs.



Open Access

International Journal of Family Enterprise, Leadership and Entrepreneurship, Vol. 1, No. 1 (2025). Pp. 11-23 DOI: https://doi.org/10.69481/YLTD6546

Abdollahi et al. (2023) confirmed these challenges through a multiple case study of 55 blockchain use cases. Their findings pointed to five primary drivers of value—access domain extension, cost reduction, new business practices, enrichment of business functions, and social base reinforcement—but also acknowledged scalability and regulatory ambiguity as persistent hindrances. Sharma et al. (2020) extended the discussion to the environmental dimension, cautioning that blockchain's integration with the Internet of Things (IoT) may exacerbate energy consumption and ecological impacts if not strategically mitigated. These studies jointly emphasize that while Page | 18 blockchain unlocks new entrepreneurial frontiers, careful attention to operational, technical, and legal contingencies is critical for sustainable adoption.

## Objective 3: To examine the influence of blockchain on stakeholder interactions and ecosystem development in entrepreneurial environments

Blockchain technology has shown strong potential to reconfigure stakeholder relationships and ecosystem coordination in entrepreneurial environments. Through transparent, tamper-proof data sharing and decentralized verification systems, blockchain enhances trust and collaboration across value chains. Avarmaa et al. (2022) analyzed FinTech ecosystems in Tallinn and Moscow, concluding that ecosystem development is mediated by a combination of institutional conditions and actor configurations. In Tallinn, a robust startup culture and sophisticated digital infrastructure enabled vibrant blockchain-based entrepreneurial clusters.

Similarly, Alaassar et al. (2020) examined the FinTech entrepreneurial ecosystem in Singapore and found that blockchain enables ecosystem actors to engage in non-hierarchical, trust-based coordination. Their study identified four interaction typologies based on cultural and relational dynamics, arguing that blockchain enhances opportunity recognition and resource exchange among founders, regulators, and platform providers. These studies suggest that blockchain acts not only as a technical enabler but also as a structural agent that reshapes how ecosystem participants interact and create mutual value.

## Objective 4: To assess the policy and governance implications of blockchain adoption in entrepreneurship and propose actionable regulatory recommendations

Governance and regulatory frameworks emerged as critical enablers—and potential constraints—on the effective adoption of blockchain in entrepreneurial contexts. Allen (2020) underscored the importance of hybrid governance models that combine private self-regulation with public policy guidance. His institutional analysis revealed that entrepreneurial blockchain adoption is shaped not only by technological readiness but also by institutional trust and information coordination mechanisms.

Several studies highlighted the divergent trajectories of blockchain governance in different jurisdictions. For instance, while some ecosystems benefit from regulatory sandboxes and adaptive legal norms, others suffer from ambiguity around intellectual property, data ownership, and token classifications. Toufaily et al. (2021) and Pal et al. (2021) both emphasized that the distinction between permissioned and permissionless blockchains carries profound implications for compliance, liability, and institutional accountability.

Taken together, these insights support a policy direction that balances innovation incentives with risk management. Regulatory agencies should establish clear, principle-based guidelines while allowing room for experimental governance structures in blockchain-enabled ecosystems. Furthermore, governments should invest



Open Access

Page | 19

International Journal of Family Enterprise, Leadership and Entrepreneurship, Vol. 1, No. 1 (2025). Pp. 11-23 DOI: https://doi.org/10.69481/YLTD6546

in building institutional capabilities to interpret and support blockchain ventures, especially in areas involving cross-border trade, digital identity, and token economics.

#### **Synthesis and Theoretical Integration**

Across all objectives, the findings collectively validate the study's conceptual framework, which integrates blockchain mechanisms with the key pillars of entrepreneurial management: innovation, opportunity, ecosystem collaboration, and governance. The Blockchain-Driven Entrepreneurial Innovation (BDEI) Theory is particularly applicable in explaining how blockchain transforms not only the technical layers of business operations but also the strategic and institutional dimensions of entrepreneurial activity. As illustrated in the thematic mind map, blockchain-enabled entrepreneurship is both a technological and sociological phenomenon—one that warrants integrated attention from scholars, practitioners, and policymakers.

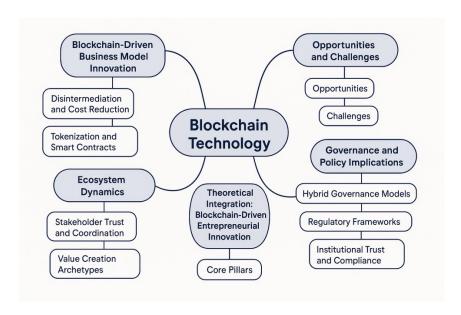


Figure 1. Thematic Mind Map of Blockchain's Impact on Entrepreneurial Management

Figure 1 illustrates the conceptual relationships among key thematic domains—business model innovation, entrepreneurial opportunities and challenges, ecosystem dynamics, and governance implications—framing how blockchain transforms entrepreneurial management within the Blockchain-Driven Entrepreneurial Innovation (BDEI) framework.

#### 5. Conclusion and Recommendations

#### Conclusion



Open Access

International Journal of Family Enterprise, Leadership and Entrepreneurship, Vol. 1, No. 1 (2025). Pp. 11-23 DOI: https://doi.org/10.69481/YLTD6546

This study systematically examined the fundamental impacts of blockchain technology on entrepreneurial management using a narrative synthesis of eleven peer-reviewed articles. The findings were organized according to four central dimensions: innovation and business models, opportunities and challenges, ecosystem dynamics, and policy and governance. Collectively, the review underscores that blockchain technology plays a transformative role in reshaping the entrepreneurial landscape, not only by enabling technological efficiency but also by fostering institutional innovation and collaborative business models.

Page | 20

In relation to business model innovation, blockchain has proven effective in reducing transaction costs, enhancing security, and facilitating disintermediation. These changes have given rise to decentralized platforms, token economies, and smart contract-based governance mechanisms, allowing entrepreneurs to create novel business structures that depart significantly from traditional models. Studies consistently emphasized that such blockchain-enabled transformations offer entrepreneurs new pathways for value creation and delivery.

However, the benefits of blockchain are accompanied by substantial challenges. Technical issues such as scalability, interoperability, and integration complexity, as well as regulatory uncertainties, remain major barriers to adoption. Entrepreneurs face the dual task of leveraging blockchain's advantages while navigating compliance, infrastructure limitations, and governance ambiguity. These limitations underscore the importance of strategic planning and institutional support mechanisms to enable sustainable implementation.

The review also revealed that blockchain technology supports more transparent and efficient stakeholder engagement across entrepreneurial ecosystems. It enhances trust and enables real-time coordination among startups, investors, developers, and regulators. The ability of blockchain to structure decentralized collaboration strengthens the resilience and adaptability of entrepreneurial ecosystems, particularly in FinTech and innovation-driven regions.

Finally, policy and governance emerged as essential enablers for blockchain integration. The research found that countries and regions with flexible and adaptive regulatory frameworks are more likely to support successful blockchain ventures. Without clear policies on issues such as smart contract validity, digital identity, and token classification, entrepreneurs face uncertainties that may limit innovation. There is a clear need for governance models that balance innovation with institutional safeguards.

#### Recommendations

In light of the findings, several practical and theoretical recommendations are proposed to guide future research, policy development, and entrepreneurial practice.

First, entrepreneurs and startup founders are encouraged to approach blockchain adoption with a strategic lens. Rather than implementing blockchain for its novelty, ventures should conduct comprehensive assessments of how blockchain aligns with their value proposition, operational needs, and customer engagement strategies. Adoption should be driven by use-case relevance, supported by technical feasibility studies and stakeholder collaboration.



Open Access

International Journal of Family Enterprise, Leadership and Entrepreneurship, Vol. 1, No. 1 (2025). Pp. 11-23 DOI: https://doi.org/10.69481/YLTD6546

Second, to overcome the challenges associated with technical and legal uncertainty, entrepreneurs should actively seek partnerships with academic institutions, incubators, and technology providers. Collaborative ecosystems offer access to blockchain expertise, shared infrastructure, and institutional learning that can reduce individual risk and accelerate innovation. Participation in industry consortia and regulatory sandbox initiatives can also facilitate early-stage experimentation within protected policy environments.

Page | 21

Third, policymakers must prioritize the development of coherent, transparent, and adaptive regulatory frameworks for blockchain-based entrepreneurship. Clear guidelines concerning digital asset classifications, data governance, and smart contract enforceability are essential to foster innovation while protecting market integrity. Governments should consider establishing national blockchain strategies that support digital trust infrastructure, entrepreneurial funding, and regulatory education programs.

Fourth, future research should move beyond fragmented case studies and focus on integrated, longitudinal investigations that explore blockchain's impact on entrepreneurial success, investment behavior, and sectoral performance. Scholars should also examine how blockchain intersects with emerging domains such as sustainable entrepreneurship, circular economies, and inclusive finance.

Finally, governance frameworks tailored to decentralized business environments must be developed and tested. Hybrid models that integrate both on-chain decision rules and off-chain institutional controls may provide the balance needed for effective oversight, flexibility, and legitimacy. These governance innovations will be critical in ensuring that blockchain technologies are deployed ethically and sustainably across entrepreneurial ecosystems.

In sum, this study highlights that blockchain technology represents not just a technical breakthrough but a foundational shift in how entrepreneurship is conceptualized, organized, and governed. With thoughtful design, strategic adoption, and supportive policy, blockchain can enable a more inclusive, transparent, and innovative entrepreneurial future.

#### References

Abdollahi, A., Altmann, J., & Tjoa, A. M. (2023). Value creation through blockchain: A case-based framework. *Information Systems Frontiers*, *25*(2), 521–538.

Alaassar, A., Mention, A. L., & Aas, T. H. (2020). Exploring how social interactions influence regulators' and entrepreneurs' legitimacy judgments of new ventures in the FinTech field. *Technological Forecasting and Social Change*, 155, 119995.

Allen, D. W. E. (2020). Governing blockchain: Network governance versus institutional governance. *Australian Journal of Management*, *45*(4), 637–652.

Aromataris, E., & Munn, Z. (Eds.). (2020). JBI manual for evidence synthesis. Joanna Briggs Institute.



Open Access

International Journal of Family Enterprise, Leadership and Entrepreneurship, Vol. 1, No. 1 (2025). Pp. 11-23 DOI: https://doi.org/10.69481/YLTD6546

Avarmaa, M., Pletnev, D., & Masso, J. (2022). Entrepreneurial ecosystems and the adoption of blockchain technology: Comparative evidence from Tallinn and Moscow. *European Planning Studies*, *30*(7), 1265–1286.

Beinke, J. H., Nguyen, D., & Siponen, M. (2018). A governance model for blockchain systems. In *Proceedings of the 51st Hawaii International Conference on System Sciences (HICSS)* (pp. 4554–4563).

Page | 22

Beinke, J. H., Nguyen, D., & Teuteberg, F. (2020). Toward a taxonomy of blockchain-based ecosystems. *Electronic Markets*, *30*(1), 135–152.

Casino, F., Dasaklis, T. K., & Patsakis, C. (2019). A systematic literature review of blockchain-based applications: Current status, classification and open issues. *Telematics and Informatics*, *36*, 55–81.

Catalini, C., & Gans, J. S. (2019). Some simple economics of the blockchain. *Communications of the ACM, 63*(7), 80–90.

Chen, Y. (2018). Blockchain tokens and the potential democratization of entrepreneurship and innovation. *Business Horizons*, *61*(4), 567–575.

Frizzo-Barker, J., Chow-White, P. A., Adams, P. R., Mentanko, J., Ha, D., & Green, S. (2020). Blockchain as a disruptive technology for business: A systematic review. *International Journal of Information Management, 51*, 102029.

Hughes, M., Morgan, R. E., Hodgkinson, I. R., Kouropalatis, Y., & Lindgreen, A. (2019). A diagnostic framework to assess the organization-wide effects of digital business transformation. *Industrial Marketing Management, 80*, 205–220.

Iansiti, M., & Lakhani, K. R. (2017). The truth about blockchain. Harvard Business Review, 95(1), 118–127.

Laatikainen, G., Li, H., & Abrahamsson, P. (2021). A framework for governance of blockchain applications. *Journal of Systems and Software, 180*, 111018.

Liu, Y., Wu, J., & Xu, Y. (2021). Blockchain governance: A systematic literature review. *Decision Support Systems,* 145, 113524.

Lou, Y., & Li, R. Y. M. (2017). Exploring blockchain technology and its potential applications for education. *International Journal of Information and Education Technology, 7*(6), 456–461.

Nowiński, W., & Kozma, M. (2017). How can blockchain technology disrupt the existing business models? *Entrepreneurial Business and Economics Review, 5*(3), 173–188.

Pal, D., Funilkul, S., & Chatterjee, S. (2021). Blockchain for e-governance: A comprehensive review and directions for future research. *Telecommunications Policy*, 45(6), 102118.



Open Access

International Journal of Family Enterprise, Leadership and Entrepreneurship, Vol. 1, No. 1 (2025). Pp. 11-23 DOI: https://doi.org/10.69481/YLTD6546

Popay, J., Roberts, H., Sowden, A., Petticrew, M., Arai, L., Rodgers, M., & Duffy, S. (2006). *Guidance on the conduct of narrative synthesis in systematic reviews*. ESRC Methods Programme.

Risius, M., & Spohrer, K. (2017). A blockchain research framework: What we (don't) know, where we go from here, and how we will get there. *Business & Information Systems Engineering*, *59*(6), 385–409.

Page | 23

Sharma, P. K., Park, J. H., & Park, J. H. (2020). Blockchain-based smart energy metering system using Internet of Things and smart contracts. *Sustainable Computing: Informatics and Systems*, 20, 100382.

Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104, 333–339.

Taherdoost, H., & Madanchian, M. (2023). Systematic review and analysis of blockchain literature for the past decade. *Technology in Society, 74*, 102251.

Toufaily, E., Zalan, T., & Dhaou, S. B. (2021). A framework of blockchain technology adoption: An investigation of challenges and applications in the United Arab Emirates. *Technological Forecasting and Social Change, 167,* 120726.

Wang, Y., Han, J. H., & Beynon-Davies, P. (2019). Understanding blockchain technology for future supply chains: A systematic literature review and research agenda. *Supply Chain Management: An International Journal*, 24(1), 62–84.

Weking, J., Hermes, S., Böhm, M., & Krcmar, H. (2020). Business model innovation strategies for product service systems: A stakeholder perspective. *Journal of Business Research*, 120, 552–563.

Wohlin, C. (2014). Guidelines for snowballing in systematic literature studies and a replication in software engineering. In *Proceedings of the 18th International Conference on Evaluation and Assessment in Software Engineering* (pp. 1–10).

Xu, X., Weber, I., & Staples, M. (2018). A taxonomy of blockchain-based systems for architecture design. In 2018 IEEE International Conference on Software Architecture (ICSA) (pp. 243–253).

Xu, X., Weber, I., & Staples, M. (2019). Architecture for blockchain applications. Springer.