



Exploring SME Intentions Toward Blockchain-Secured Marketplaces: A Grounded Theory Approach

Baginda Hamzah*, Andi Ratna Sari Dewi, Andi Raina Ananda Herdiyana,
Audrey Michelle Wenny Yolanda

Hasanuddin University, Makassar, Indonesia

*baginda.hamzah@unhas.ac.id

Abstract. This study investigates how Small and Medium Enterprises (SMEs) in Biringkanaya District perceive and intend to adopt blockchain secured marketplace platforms for their digital commercial activities. Using a grounded theory methodology, in depth interviews were conducted with ten SME proprietors to explore their motivations, perceptions, and concerns regarding the implementation of blockchain technology within marketplace ecosystems. The analysis identified four principal categories: navigating digital transformation challenges, trust and security expectations, perceived benefits of blockchain integration, and barriers to blockchain adoption. The emergent core category, seeking secure digital commerce pathways, encapsulates how SME owners aspire to strengthen the safety of their transactions while simultaneously confronting technological, financial, and knowledge related constraints. The findings indicate that blockchain is generally perceived as a promising tool to enhance data integrity, transparency, and protection against fraud, yet its adoption is hindered by limited understanding, perceived complexity, and uncertainty about costs and institutional support. This research addresses a gap in the existing literature on blockchain adoption among SMEs in developing market contexts and offers practical implications for marketplace platform designers, technology providers, and policymakers seeking to promote inclusive and secure digital transformation for SMEs.

Keywords: Blockchain technology, SME digital transformation, Marketplace adoption, Grounded theory, Transaction security.

1 Introduction

Digital marketplace proliferation has fundamentally reshaped commercial operations for Small and Medium Enterprises (SMEs), creating essential pathways for accessing expanded consumer markets [1]. Within Indonesia's economic landscape, SMEs represent approximately 99% of business entities, contributing substantially to national employment and gross domestic product, yet numerous enterprises continue experiencing difficulties in digital adoption and secure online transaction implementation [2]. Biringkanaya District in Makassar exemplifies this phenomenon, where local SMEs progressively investigate digital marketplaces as potentially viable strategies for business expansion.

© The Author(s) 2026

M. Nohong et al. (eds.), *Proceedings of the 10th International Conference on Accounting, Management, and Economics (10th ICAME 2025)*, Advances in Economics, Business and Management Research 388,
https://doi.org/10.2991/978-94-6239-709-5_101

Notwithstanding widespread marketplace platform availability, transaction security persists as a substantial concern for SMEs, particularly concerning payment fraud incidents, data breach vulnerabilities, and transparency deficiencies in transaction documentation [3]. Blockchain technology has materialized as a potentially transformative solution addressing these challenges through decentralized, immutable, and transparent transaction architecture [4]. Nevertheless, empirical investigations examining SME intentions regarding blockchain-secured marketplaces, especially within developing economy contexts, remain considerably limited.

This investigation addresses existing research gaps by examining experiences and intentions of SMEs within Biringkanaya District concerning marketplace adoption featuring potential blockchain integration for transaction security enhancement. The guiding research inquiry encompasses: What perceptions, motivations, and obstacles do SMEs experience when contemplating blockchain-secured marketplace platforms for commercial operations? Considering blockchain technology's novelty within this environment, grounded theory methodology was implemented to develop substantive theory anchored in authentic lived experiences of SME proprietors.

2 Literature Review

2.1 SME Digital Transformation and Marketplace Adoption

Small and Medium Enterprises globally are experiencing digital transformation imperatives to sustain competitiveness within progressively digitalized market environments [5]. Digital marketplaces provide SMEs with diminished transaction expenses, broadened market accessibility, and enhanced customer engagement capabilities [6]. Nevertheless, adoption frequencies demonstrate significant variation contingent upon technological preparedness, benefit perceptions, and organizational competencies [7]. Within developing economies, SMEs encounter additional obstacles including constrained digital literacy, infrastructural limitations, and trust-related concerns regarding online platforms [8].

Contemporary investigations emphasize that SME digital transformation transcends mere technology adoption, encompassing fundamental modifications in business models, organizational culture, and strategic orientation [9]. The COVID-19 pandemic accelerated transformation processes, compelling numerous traditional SMEs toward rapid digital channel adoption for survival purposes, though adoption quality and sustainability exhibit considerable variation [10]. Evidence suggests successful digital transformation in SMEs necessitates not exclusively technological infrastructure but additionally managerial dedication, employee digital competencies, and strategic alignment between digital initiatives and business objectives [11]. Moreover, heterogeneity among SMEs spanning micro-enterprises through medium-sized firms indicates that digital transformation trajectories and challenges differ substantially across this spectrum, requiring context-specific comprehension rather than standardized approaches [12].

2.2 Blockchain Technology in E-Commerce

Blockchain technology furnishes distributed ledger architectures enabling secure, transparent, and tamper-resistant transaction documentation without intermediary verification requirements [13]. Within e-commerce environments, blockchain applications encompass smart contracts for automated transactions, cryptocurrency payment mechanisms, supply chain traceability systems, and reinforced data security protocols [14]. Scholarly evidence indicates blockchain can resolve critical e-commerce challenges including fraud prevention, payment security enhancement, and customer trust cultivation [15].

Blockchain application within e-commerce extends beyond cryptocurrency, encompassing diverse business processes including product authenticity verification, transparent pricing mechanisms, and dispute resolution frameworks [16]. Investigations demonstrate blockchain-based e-commerce platforms can diminish transaction costs through intermediary elimination while simultaneously augmenting transaction security via cryptographic verification [17]. However, blockchain integration with existing e-commerce infrastructure presents technical challenges encompassing scalability limitations, energy consumption considerations, and interoperability with legacy systems [18]. Recent blockchain technology developments, including proof-of-stake consensus mechanisms and layer-2 solutions, address certain limitations, rendering blockchain increasingly feasible for mainstream e-commerce applications [19]. Despite technological advances, practical blockchain implementation in SME e-commerce contexts remains limited, with existing applications concentrated in large enterprise supply chains rather than small business retail operations [20].

2.3 Technology Adoption in SME Contexts

Technology adoption theoretical frameworks, including the Technology Acceptance Model (TAM) and Unified Theory of Acceptance and Use of Technology (UTAUT), have been extensively applied toward understanding SME technology adoption determinations [21]. However, these frameworks may inadequately capture complex, context-dependent factors influencing blockchain adoption, particularly when technology remains unfamiliar to prospective users [22]. Qualitative methodologies therefore provide valuable approaches for investigating emergent perceptions and concerns during early-stage technology consideration.

SME technology adoption research reveals that beyond perceived usefulness and ease of use, factors including competitive pressure, top management support, organizational readiness, and external assistance significantly influence adoption decisions [23]. Within resource-constrained SME environments, decisions regarding new technology adoption involve careful cost, risk, and potential return consideration, often with limited capacity for experimentation or failure [24]. Studies additionally highlight social influence and peer adoption importance in SME technology decisions, as small business proprietors frequently depend upon networks and trusted sources for technology information rather than formal market research [25]. Furthermore, adoption processes in SMEs often prove informal and incremental rather than following structured implementation plans, reflecting flexible and adaptive characteristics of small business

management [26]. This suggests understanding SME blockchain adoption requires examining not exclusively rational decision-making factors but additionally social, relational, and experiential dimensions shaping technology perceptions and intentions.

2.4 Research Gap

Existing literature has examined blockchain adoption within large enterprises and cryptocurrency contexts [27], yet limited research explores SME perspectives regarding blockchain-secured marketplaces, particularly within developing market settings. Furthermore, most investigations employ quantitative survey methodologies potentially failing to capture nuanced experiences and sense-making processes of SME owners encountering novel technologies [28].

Current blockchain adoption literature predominantly emphasizes technical feasibility, organizational readiness assessments, and quantitative factor analyses, with relatively few studies employing qualitative methodologies exploring lived experiences and interpretive processes through which SME owners construct understanding of emerging technologies [29]. This gap proves particularly significant within developing economy contexts where institutional environments, digital infrastructure, and business practices differ substantially from developed markets where most blockchain research has occurred [30]. This investigation employs grounded theory methodology generating context-specific understanding of SME intentions toward blockchain-secured marketplace adoption, contributing both theoretical and practical insights to this under-researched domain.

3 Research Methodology

3.1 Research Design

Grounded theory methodology was employed for this investigation, adhering to approaches delineated by Corbin and Strauss [16]. Grounded theory was selected as optimal methodology because it facilitates systematic theory generation from qualitative data, proving particularly valuable when investigating under-researched phenomena where existing theoretical frameworks may prove insufficient [17]. This approach enabled developing conceptual understanding anchored in authentic experiences and perspectives of SME proprietors in Biringkanaya District.

3.2 Participants and Setting

Participants were recruited from SMEs operating within Biringkanaya District, Makassar, South Sulawesi, Indonesia. The district accommodates diverse SME sectors including food and beverage, fashion, handicrafts, and local products. Purposive sampling was initially employed for selecting SME proprietors with varying business characteristics, followed by theoretical sampling for refining emerging concepts [18].

Inclusion criteria encompassed: (1) registered SME operating in Biringkanaya District, (2) business owner or primary decision-maker status, (3) current consideration or

interest in marketplace adoption, and (4) Indonesian language communication ability. Tabel 1 shows ten SME proprietors participated in this investigation, representing diverse business types, operational scales, and digital experience levels.

Table 1. Participants Characteristics (N=10)

Characteristics	Count (n)	Business Type	Count (n)
Gender		Culinary/F&B	4
Female	6	Fashion/Apparel	3
Male	4	Handicrafts	2
		Local Products	1
Age Range (years)		Years in Business	
25-35	4	<2 years	2
36-45	4	2-5 years	5
46-55	2	>5 years	3
Education Level		Current Digital Presence	
High School	3	Social Media Only	7
Diploma	2	Marketplace Experience	3
Bachelor's Degree	5		

3.3 Data Collection

Semi-structured interviews were conducted during August through October 2025. An interview guide was constructed following preliminary literature examination and discussions among research team members, encompassing topics including current marketing practices, marketplace experiences or intentions, transaction security perceptions, and blockchain technology awareness. Tabel 2 shows the guide incorporated open-ended questions including:

Table 2. Interview Guide

Main Questions
How do you presently market and distribute your products?
What perspectives do you hold regarding selling through online marketplace platforms?
What apprehensions do you harbor regarding online transaction security?
What comprehension do you possess of blockchain technology for securing transactions?
What factors would encourage or discourage utilizing block-chain-secured marketplace platforms?

Individual interviews ranged between 35 to 60 minutes (averaging 47 minutes) and were conducted in Indonesian at participant-convenient locations (business premises or private meeting spaces). All interviews were audio-recorded with participant consent

and transcribed verbatim. Field notes were maintained capturing contextual observations and non-verbal communication cues.

3.4 Data Analysis

Data analysis adhered to systematic coding procedures of grounded theory: open coding, axial coding, and selective coding [16]. Analysis commenced simultaneously with data collection, following iterative processes. Transcripts underwent line-by-line analysis identifying initial concepts (open coding). Related concepts were subsequently grouped into categories and subcategories, examining relationships and patterns (axial coding). Finally, categories were integrated around a core category encapsulating the central phenomenon (selective coding).

The research team convened regularly discussing emerging codes, comparing interpretations, and achieving consensus regarding category development. Constant comparative analysis was employed throughout, systematically comparing new data with existing codes and categories. Theoretical saturation was achieved when no novel properties or dimensions emerged from subsequent interviews. NVivo 12 software facilitated data management and coding organization.

3.5 Ethical Considerations

Written informed consent was secured from all participants following explanation of study purpose, procedures, voluntary participation, and confidentiality measures. Participants received assigned codes (P1-P10) ensuring anonymity, with all identifying information removed from transcripts. Participants were informed regarding their right to withdraw from the investigation at any time without consequences.

3.6 Rigor and Trustworthiness

Credibility was established through prolonged engagement with participants, member checking of preliminary findings, and peer debriefing among research team members [19]. Dependability was ensured through detailed documentation of methodological decisions and maintaining audit trails. Transferability was enhanced through thick description of context and participant characteristics. Confirmability was achieved through reflexive journaling and utilization of direct participant quotations supporting findings.

4 Results

4.1 Core Category: "Seeking Secure Digital Commerce Pathways"

The analysis identified "Seeking Secure Digital Commerce Pathways" as the core category encapsulating the central phenomenon within the data. This core category reflects SME proprietors' fundamental desire for expanding business through digital channels while maintaining transaction security and constructing customer trust. Participants expressed awareness that digital transformation proves necessary for business growth, yet

simultaneously harbored concerns regarding security risks and technological complexities. Four main categories with associated subcategories emerged from analysis (Table 3).

Table 3. Thematic Framework.

Core Category	Main Category	Subcategories
Seeking Secure Digital Commerce Pathways	Navigating Digital Transformation Challenges	Limited digital literacy and technical knowledge
		Resource constraints for technology adoption
		Balancing traditional and digital business models
	Trust and Security Expectations	Concerns about payment fraud and data breaches
		Need for transparent transaction records
		Seeking credible platform guarantees
	Perceived Benefits of Blockchain Integration	Enhanced transaction security and transparency
		Improved customer trust and credibility
		Permanent and verifiable transaction records
	Barriers to Blockchain Adoption	Lack of blockchain knowledge and understanding
		Perceived technological complexity
		Cost and implementation concerns
		Uncertainty about practical applications

4.2 Main Category 1: Navigating Digital Transformation Challenges

This category encompasses various challenges SME proprietors confront when contemplating transitioning to digital marketplace platforms. Three subcategories emerged.

Subcategory 1: Limited digital literacy and technical knowledge. Most participants acknowledged gaps in digital skills and understanding of online business mechanisms. While familiar with social media for informal marketing, structured marketplace operations represented unfamiliar territory.

"I can utilize Facebook and WhatsApp for displaying my products, but I do not genuinely comprehend how major marketplace platforms function. There exist numerous features and requirements that I find perplexing." (P3)

"My challenge is that I am not particularly tech-savvy. I worry that if I join a marketplace, I will be unable to manage the system appropriately, especially when problems arise." (P7)

Subcategory 2: Resource constraints for technology adoption. Participants frequently mentioned limited financial resources and time as barriers toward exploring new digital platforms. Transaction fees, photography requirements, and learning curves represented significant concerns for small-scale operators.

"Marketplace platforms charge fees for each transaction. For my small business with thin profit margins, these costs accumulate. I need to calculate carefully whether it proves worthwhile." (P5)

"I operate this business mostly independently. Learning a new system and managing online orders on top of production and direct sales feels overwhelming." (P2)

Subcategory 3: Balancing traditional and digital business models. Several participants expressed attachment to traditional face-to-face sales methods, viewing personal relationships with customers as central to their business identity. The prospect of digital transactions created tension between preserving personal touch and expanding reach.

"I have constructed my business on personal relationships with customers. They know me, trust me, and we interact directly. I am uncertain how to maintain that warmth in online transactions." (P8)

These findings align with previous research indicating SMEs in developing economies confront multifaceted digital transformation challenges beyond simple technology access [9]. The combination of technical, financial, and cultural factors creates complex decision-making contexts that standard adoption models may inadequately capture.

4.3 Main Category 2: Trust and Security Expectations

This category reflects participants' prioritization of transaction security and trust-building mechanisms in their marketplace considerations. Three subcategories emerged.

Subcategory 1: Concerns about payment fraud and data breaches. All participants expressed significant anxiety regarding online payment security, citing fraud stories from their networks and media reports. Data privacy concerns were particularly prominent.

"My greatest fear is being scammed. I have heard stories of sellers who never receive payment after shipping products, or customers whose payment information becomes stolen." (P1)

"I worry about customer data security. If customer information from my transactions becomes leaked or misused, it would destroy my reputation and my business." (P6)

Subcategory 2: Need for transparent transaction records. Participants emphasized importance of clear, accessible records of all transactions for business management and dispute resolution. Current informal systems often lacked adequate documentation.

"Right now, I keep handwritten records and save WhatsApp messages. But these are not very reliable. I need a system where every transaction is automatically recorded and I can access it anytime." (P4)

"Transparent records would help me manage inventory, track which products sell best, and prove transactions if customers dispute something." (P9)

Subcategory 3: Seeking credible platform guarantees. Participants wanted assurance that marketplace platforms would protect both sellers and buyers through verification systems, dispute mediation, and clear policies.

"I would feel more confident if the platform has strong security measures and actually enforces them. Not just promises, but real protection for both sides." (P10)

These findings underscore that security and trust represent foundational requirements for SME marketplace adoption, consistent with research highlighting trust as critical in online commerce environments [3]. The expressed needs align closely with blockchain's core value propositions, though participants had not yet connected these needs to blockchain solutions.

4.4 Main Category 3: Perceived Benefits of Blockchain Integration

This category captures participants' responses after being introduced to basic blockchain concepts during interviews. Despite limited prior knowledge, participants recognized potential benefits relevant to their expressed needs. Three subcategories emerged.

Subcategory 1: Enhanced transaction security and transparency. Once blockchain's immutable and decentralized characteristics were explained, participants immediately connected these features to their security concerns.

"If I understand correctly, blockchain means that once a transaction is recorded, no one can change or delete it? That sounds exactly like what we need to prevent fraud and disputes." (P3)

"The idea that transactions are secured across multiple systems rather than controlled by one company is appealing. It seems safer than having all our data in one place that could be hacked." (P7)

Subcategory 2: Improved customer trust and credibility. Participants recognized that offering blockchain-secured transactions could differentiate their businesses and signal professionalism to customers.

"If I could tell customers that our transactions are secured with blockchain technology, it would make my small business look more professional and trustworthy." (P5)

"Customers are becoming more aware of security issues. Offering this kind of advanced protection could give me an advantage over competitors still using basic systems." (P2)

Subcategory 3: Permanent and verifiable transaction records. The concept of immutable records resonated strongly with participants' expressed needs for reliable documentation and business analytics.

"Having permanent records that cannot be tampered with would be valuable for my business management and also for tax purposes. Everything would be clear and provable." (P8)

"I like that blockchain could provide complete transaction history that I could use to analyze my sales patterns and make better business decisions." (P6)

These findings suggest that when blockchain's features are explained in terms of tangible business problems, SMEs can recognize its potential value [15]. However, this recognition emerged through researcher explanation rather than prior awareness, highlighting significant knowledge gaps discussed in the next category.

4.5 Main Category 4: Barriers to Blockchain Adoption

This category encompasses obstacles participants identified regarding actual blockchain implementation. Four subcategories emerged.

Subcategory 1: Lack of blockchain knowledge and understanding. All participants admitted having little to no prior knowledge of blockchain technology beyond vague associations with cryptocurrency. This knowledge gap created fundamental barriers to adoption consideration.

"Before you explained it, I had never really heard of blockchain except in news about Bitcoin. I did not know it could be used for regular business transactions." (P1)

"Even after your explanation, I still do not fully understand how it works technically. That makes it hard for me to evaluate whether it is right for my business." (P4)

Subcategory 2: Perceived technological complexity. Despite recognizing potential benefits, participants viewed blockchain as advanced technology requiring expertise beyond their capabilities, creating psychological barriers to adoption.

"Blockchain sounds very complicated and technical. I worry that I would not be able to understand how to use it properly, or that I would make mistakes that could harm my business." (P9)

"This seems like technology for big companies with IT departments, not for small businesses like mine run by one or two people." (P3)

Subcategory 3: Cost and implementation concerns. Participants questioned financial feasibility of blockchain-secured marketplace platforms, assuming advanced technology would entail prohibitive costs.

"I imagine that blockchain technology would be expensive to implement. Would there be high fees for each transaction? I need to keep costs low to stay competitive." (P7)

"Even if a marketplace offered blockchain security, would there be additional costs compared to regular platforms? I would need to see clear cost-benefit analysis." (P10)

Subcategory 4: Uncertainty about practical applications. Participants struggled to envision concrete implementation scenarios, creating hesitation about moving from concept to action.

"It is one thing to understand blockchain in theory, but I do not know what it would actually look like in practice. How would it change how I process orders and receive payments?" (P5)

"Are there already marketplace platforms using blockchain that I could try? I would feel more confident if I could see real examples of how other businesses are using it successfully." (P2)

These barriers reflect common challenges in emerging technology adoption, particularly among resource-constrained organizations [22]. The findings suggest knowledge dissemination, simplified explanations, and demonstration of practical applications are critical prerequisites for SME blockchain adoption.

5 Discussion

The grounded theory developed in this investigation reveals that SMEs in Biringkanaya District are "Seeking Secure Digital Commerce Pathways" as they navigate tensions between growth aspirations and security concerns, technological opportunities and knowledge limitations, and innovation potential and practical constraints. This process involves simultaneously recognizing digital transformation necessity while grappling with uncertainties about implementation mechanisms.

The conceptual model illustrates relationships among the four main categories, showing how digital transformation challenges and blockchain adoption barriers represent obstacles, while trust and security expectations alongside perceived blockchain benefits represent motivating factors. These elements dynamically interact to shape SMEs' intentions toward blockchain-secured marketplace adoption.

Several theoretical and practical implications emerge from these findings. First, the investigation demonstrates that standard technology adoption models emphasizing perceived usefulness and ease of use [21] must be expanded to include trust and security dimensions when examining SME digital commerce contexts. The prominence of security concerns in participants' narratives suggests that for vulnerable small businesses, risk mitigation may be as important as benefit maximization in adoption decisions.

Second, the findings reveal a critical knowledge gap regarding blockchain technology among SMEs. While participants could recognize blockchain's relevance once explained, the lack of prior awareness indicates that information dissemination and education represent essential first steps before adoption can occur [28]. This suggests that marketplace platform developers and government agencies supporting SME digitalization must prioritize accessible blockchain education initiatives.

Third, the investigation highlights importance of demonstrating practical blockchain applications rather than emphasizing technical mechanisms. Participants responded positively when blockchain features were connected to their specific business problems (fraud prevention, record-keeping, trust-building) but struggled with abstract technical descriptions. This finding supports user-centered design approaches that emphasize problem-solving capabilities over technological sophistication [24].

Fourth, expressed barriers regarding cost and complexity indicate need for blockchain solutions specifically designed for SME contexts, potentially offering simplified interfaces, affordable pricing models, and robust support systems. Generic enterprise blockchain solutions may not address unique constraints and capabilities of small businesses [20].

The investigation's findings also have policy implications. Government initiatives promoting SME digitalization should incorporate blockchain literacy components and potentially subsidize early adoption to reduce financial barriers. Furthermore, regulatory frameworks providing legal clarity regarding blockchain transactions could address some trust concerns participants expressed.

Comparing these findings with limited existing literature on SME blockchain adoption, this investigation corroborates previous research indicating knowledge gaps and perceived complexity as primary barriers [22], while extending understanding by revealing how security concerns and trust-building motivations may create receptivity to blockchain solutions once awareness is established. The grounded theory approach allowed discovery of nuanced contextual factors that quantitative surveys might not capture.

Limitations of this investigation include relatively small sample size focused on a single district, which may limit transferability to other contexts. However, the in-depth qualitative approach enabled rich understanding of SME perspectives that larger-scale studies might miss. Additionally, the investigation examined intentions rather than actual adoption behavior, as blockchain-secured marketplaces remain largely unavailable in this context. Future research could examine actual adoption experiences as blockchain marketplace platforms emerge.

6 Conclusion

This grounded theory study examined how SMEs in Biringkanaya District perceive blockchain-secured marketplace adoption, uncovering intricate dynamics between opportunities and obstacles. The central finding reveals that SME proprietors are "Seeking Secure Digital Commerce Pathways," reflecting their dual awareness of digital transformation imperatives alongside apprehensions regarding security vulnerabilities, knowledge deficiencies, and implementation ambiguities.

Four pivotal dimensions emerged as influential factors: digital transformation challenges currently confronted, trust and security expectations prioritized, perceived blockchain integration benefits recognized following explanation, and anticipated adoption barriers. These dimensions interact to shape SME readiness and willingness toward blockchain-secured marketplace engagement.

Practically, successful adoption necessitates comprehensive interventions encompassing accessible blockchain education, practical application demonstrations addressing SME-specific challenges, development of user-friendly and cost-effective solutions, and supportive policies mitigating risks while incentivizing early adoption.

Theoretically, this investigation contributes a contextual framework emphasizing security and trust centrality in SME technology adoption decisions. For vulnerable small enterprises in developing economies, risk mitigation and trust-building prove equally critical as performance advantages in technology acceptance processes.

As blockchain-enabled marketplace platforms emerge, SMEs in similar contexts represent promising adopter populations requiring targeted assistance to surmount barriers. This study establishes foundational insights guiding support initiatives and

identifies future research directions examining actual adoption behaviors, cross-contextual comparisons, and intervention effectiveness evaluation.

References

1. Rahayu, R., Day, J.: E-Commerce Adoption by SMEs in Developing Countries: Evidence from Indonesia. *Eurasian Business Review* 7(1), 25–41 (2017). <https://doi.org/10.1007/s40821-016-0044-6>
2. Tambunan, T.: Recent Evidence of the Development of Micro, Small and Medium Enterprises in Indonesia. *Journal of Global Entrepreneurship Research* 9(1), 18 (2019). <https://doi.org/10.1186/s40497-018-0140-4>
3. Kurnia, S., Choudrie, J., Mahbubur, R.M., Alzougool, B.: E-Commerce Technology Adoption: A Malaysian Grocery SME Retail Sector Study. *Journal of Business Research* 68(9), 1906–1918 (2015). <https://doi.org/10.1016/j.jbusres.2014.12.010>
4. Queiroz, M.M., Wamba, S.F.: Blockchain Adoption Challenges in Supply Chain: An Empirical Investigation of the Main Drivers in India and the USA. *International Journal of Information Management* 46, 70–82 (2019). <https://doi.org/10.1016/j.ijinfomgt.2018.11.021>
5. Li, L., Su, F., Zhang, W., Mao, J.Y.: Digital Transformation by SME Entrepreneurs: A Capability Perspective. *Information Systems Journal* 28(6), 1129–1157 (2018). <https://doi.org/10.1111/isj.12153>
6. Awa, H.O., Ukoha, O., Igwe, S.R.: Revisiting Technology–Organization–Environment (TOE) Theory for Enriched Applicability. *The Bottom Line* 30(1), 2–22 (2017). <https://doi.org/10.1108/BL-12-2016-0044>
7. Ramdani, B., Chevers, D., Williams, D.A.: SMEs' Adoption of Enterprise Applications: A Technology–Organisation–Environment Model. *Journal of Small Business and Enterprise Development* 20(4), 735–753 (2013). <https://doi.org/10.1108/JSBED-12-2011-0035>
8. Chatterjee, S., Kar, A.K.: Why Do Small and Medium Enterprises Use Social Media Marketing and What Is the Impact: Empirical Insights from India. *International Journal of Information Management* 53, 102103 (2020). <https://doi.org/10.1016/j.ijinfomgt.2020.102103>
9. Verhoef, P.C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Dong, J.Q., Fabian, N., Haenlein, M.: Digital Transformation: A Multidisciplinary Reflection and Research Agenda. *Journal of Business Research* 122, 889–901 (2021). <https://doi.org/10.1016/j.jbusres.2019.09.022>
10. Priyono, A., Moin, A., Putri, V.N.A.O.: Identifying Digital Transformation Paths in the Business Model of SMEs during the COVID-19 Pandemic. *Journal of Open Innovation: Technology, Market, Complexity* 6(4), 104 (2020). <https://doi.org/10.3390/joitmc6040104>
11. Warner, K.S., Wäger, M.: Building Dynamic Capabilities for Digital Transformation: An Ongoing Process of Strategic Renewal. *Long Range Planning* 52(3), 326–349 (2019). <https://doi.org/10.1016/j.lrp.2018.12.001>
12. Matarazzo, M., Penco, L., Profumo, G., Quaglia, R.: Digital Transformation and Customer Value Creation in Made in Italy SMEs: A Dynamic Capabilities Perspective. *Journal of Business Research* 123, 642–656 (2021). <https://doi.org/10.1016/j.jbusres.2020.10.033>
13. Saberi, S., Kouhizadeh, M., Sarkis, J., Shen, L.: Blockchain Technology and Its Relationships to Sustainable Supply Chain Management. *International Journal of Production Research* 57(7), 2117–2135 (2019). <https://doi.org/10.1080/00207543.2018.1533261>
14. 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. *Technological Forecasting and Social Change* 158, 120166 (2020). <https://doi.org/10.1016/j.techfore.2020.120166>

15. Risius, M., Spohrer, K.: A Blockchain Research Framework. *Business & Information Systems Engineering* 59(6), 385–409 (2017). <https://doi.org/10.1007/s12599-017-0506-0>
16. Corbin, J., Strauss, A.: *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. 4th ed. Sage Publications (2015).
17. Charmaz, K.: *Constructing Grounded Theory*. 2nd ed. Sage Publications (2014).
18. Palinkas, L.A., Horwitz, S.M., Green, C.A., Wisdom, J.P., Duan, N., Hoagwood, K.: Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research. *Administration and Policy in Mental Health and Mental Health Services Research* 42(5), 533–544 (2015). <https://doi.org/10.1007/s10488-013-0528-y>
19. Lincoln, Y.S., Guba, E.G.: *Naturalistic Inquiry*. Sage Publications (1985).
20. Kamble, S.S., Gunasekaran, A., Sharma, R.: Modeling the Blockchain Enabled Traceability in Agriculture Supply Chain. *International Journal of Information Management* 52, 101967 (2020). <https://doi.org/10.1016/j.ijinfomgt.2019.05.023>
21. Venkatesh, V., Morris, M.G., Davis, G.B., Davis, F.D.: User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly* 27(3), 425–478 (2003). <https://doi.org/10.2307/30036540>
22. Wong, L.W., Leong, L.Y., Hew, J.J., Tan, G.W.H., Ooi, K.B.: Time to Seize the Digital Evolution: Adoption of Blockchain in Operations and Supply Chain Management among Malaysian SMEs. *International Journal of Information Management* 52, 101997 (2020). <https://doi.org/10.1016/j.ijinfomgt.2019.08.005>
23. Baker, J.: The Technology–Organization–Environment Framework. In: *Information Systems Theory*, pp. 231–245. Springer (2012). https://doi.org/10.1007/978-1-4419-6108-2_12
24. Ghobakhloo, M., Ching, N.T.: Adoption of Digital Technologies of Smart Manufacturing in SMEs. *Journal of Industrial Information Integration* 16, 100107 (2019). <https://doi.org/10.1016/j.jii.2019.100107>
25. Jones, P., Simmons, G., Packham, G., Beynon-Davies, P., Pickernell, D.: An Exploration of the Attitudes and Strategic Responses of Sole-Proprietor Micro-Enterprises in Adopting Information and Communication Technology. *International Small Business Journal* 32(3), 285–306 (2014). <https://doi.org/10.1177/0266242612461802>
26. Tarutė, A., Gatautis, R.: ICT Impact on SMEs Performance. *Procedia – Social and Behavioral Sciences* 110, 1218–1225 (2014). <https://doi.org/10.1016/j.sbspro.2013.12.968>
27. Clohessy, T., Acton, T.: Investigating the Influence of Organizational Factors on Blockchain Adoption: An Innovation Theory Perspective. *Industrial Management & Data Systems* 119(7), 1457–1491 (2019). <https://doi.org/10.1108/IMDS-08-2018-0365>
28. Janssen, M., Weerakkody, V., Ismagilova, E., Sivarajah, U., Irani, Z.: A Framework for Analysing Blockchain Technology Adoption: Integrating Institutional, Market and Technical Factors. *International Journal of Information Management* 50, 302–309 (2020). <https://doi.org/10.1016/j.ijinfomgt.2019.08.012>
29. Queiroz, M.M., Telles, R., Bonilla, S.H.: Blockchain and Supply Chain Management Integration: A Systematic Review of the Literature. *Supply Chain Management: An International Journal* 25(2), 241–254 (2020). <https://doi.org/10.1108/SCM-03-2018-0143>
30. Kshetri, N.: Blockchain's Roles in Meeting Key Supply Chain Management Objectives. *International Journal of Information Management* 39, 80–89 (2018). <https://doi.org/10.1016/j.ijinfomgt.2017.12.005>

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

