

# Enhancing Trust and Sustainable Value in Quick Commerce (Q-Commerce) via Blockchain-Enabled Data Transparency

Saad Alaklabi<sup>1</sup><sup>1</sup> Information Systems Department, College of Computing and Information Technology, Shaqua University  
Corresponding author: Email: Salaklabi@su.edu.sa

**ABSTRACT** Q-Commerce is an example of the changing landscape of electronic commerce with the ultra-rapid on demand delivery of consumer products. Fulfilling the needs of the consumer for speed and convenience, it raises critical issues of customer trust and value on the data to be used for the right purpose. The purpose of this study is to examine how users perceive blockchain-enabled data transparency and its potential ability to build trust and sustainable value in the Q-Commerce operating environment. This study is based on socio-technical systems theory in combination with the Value-Based Adoption Model and develops a conceptual framework focusing on user perception in Q-Commerce platforms, where transparency acts as a driver of trust and sustainable value. This study used survey data collected from 160 Q-Commerce users in Saudi Arabia. Structural Equation Modeling (SEM) was employed to test the proposed model. The findings indicate that trust and perceived sustainable value are positively influenced by perceived blockchain-enabled transparency. Overall, trust, sustainable value, and transparency positively influence continued use. This study positions Q-Commerce transparency in a novel and unique manner from a theoretical perspective and provides a framework for practitioners and policymakers for developing trust in new digital-commerce systems.

**Index Terms:** Blockchain, Quick Commerce, Data Transparency, Trust in Digital Platforms, Sustainable Value, Behavioral Intention, Digital Retail, Emerging Markets

## I. INTRODUCTION

The development of digital environments has prompted the creation of new services that prioritize immediacy, ease of use, and hyperlocal responsiveness based on new platforms. Within this landscape, Quick Commerce (Q-Commerce) has emerged as a leading solution in the digital economy by enabling the delivery of a perishable consumer good in less than 30 minutes. This delivery model relies on logistical coordination via algorithms, the gig economy, and seamless user interfaces. Although operational efficiency has been a defining feature of Q-Commerce, it also introduces critical issues pertaining to the IS architecture, trust, and the sustaining governance of the platform. More specifically, Q-Commerce's opacity surrounding data, algorithms, and attribution of responsibility raises important IS issues that need to be addressed [1], [2].

Trust and transparency in data sharing have become key priorities in designing digital platforms, especially where the service provided lacks user visibility and control. In the

context of Q-Commerce, customers often do not understand what data is collected and how it is processed, how orders are allocated, or what accountability frameworks are in place (if any) when a service is not provided. This lack of information breeds user distrust and reduces the perceived value of the platform. This concern is present in the Information Systems (IS) literature that examines digital platform socio-technical configurations [3]; the IS environments' embedded institutionalization of trust [4]; and the issues of ethics and transparency in data-driven systems [5].

At the same time, the digital sustainability discourse has also widened to both include and transcend the basic environmental issues to concerns about fair and equitable treatment of labor; data stewardship; user rights; and the welfare of users [6]. The immutable, auditable, and decentralized verifiable nature of blockchain technology offers an opportunity to reconceptualize innovation in trust frameworks for platform commerce. While blockchain technology has been increasingly adopted in supply chain and financial systems, its potential to enhance service-level

transparency and trust in Q-Commerce systems, especially in developing digital economies, has been overlooked [7].

This study analyzes the perceived impact of blockchain-enabled data transparency, conceptualized as a socio-technical affordance, on trust, sustainable value, and the behavioral intentions of users of Q-Commerce platforms. Using the socio-technical systems (STS) theory alongside the Value-Based Adoption Model (VAM), this study analyzes user perceptions and the behavioral consequences of blockchain-related transparency affordances. Using data from a quantitative survey of 160 Q-Commerce users in Saudi Arabia, this study employs Partial Least Squares Structural Equation Modeling (PLS-SEM) to empirically test the proposed model.

The study presents multiple contributions to the domain of IS. First, this study defines blockchain-enabled transparency as a socio-technical construct important for building trust in high-velocity services. Second, this study extends the VAM framework by conceptualizing transparency as a precursor to perceived value in data-centric service platforms. Third, this study contextualizes the understanding of trust, technology adoption, and sustainable engagement by providing insights from a nascent digital economy.

## II. LITERATURE REVIEW

In digital commerce, transparency has been established as a key component of user trust and decision-making. Previous research shows that users trust a service and platform more when information about services and transactions is presented in an understandable and verifiable manner. However, in Q-Commerce where the time of transactions is very short and delivery is third party/outsourced, traditional order confirmation, tracking, and other transparency mechanisms offer users little reassurance. In developing countries, the digital skepticism, combined with the absence of regulation and oversight, poses a serious challenge to user confidence.

Moreover, transparency greatly affects users' perception of sustainable value. Evaluations of quality, ethics, and long-term reliability for a platform are positive when they provide consistent, accessible, and verifiable service data [16]. This is especially true for Q-Commerce, which has a rapid operational pace, narrow time windows for decision making, and requires almost immediate user trust [17]. Thus, transparency mechanisms in blockchain build both immediate trust and long-term sustainable value perception.

Considering the burgeoning interest in the integration of blockchain across various industries, there is a lack of relevant studies regarding its demonstration as a user-facing trust mechanism in Q-Commerce platforms. The majority of studies have analyzed blockchain primarily from a logistical

or financial standpoint, neglecting its user psychology and behavioral perspective [9, 18]. To fulfill this gap, the current study aims to address the question of how transparency, mediated through blockchain, affects platform trust and perceived sustainable value, the two antecedents to behavioral intention. This study provides a unique perspective to the field of digital commerce by integrating system design features with psychological and behavioral responses at the individual level.

## III. THEORETICAL MODEL AND HYPOTHESIS DEVELOPMENT

Building trust in digital service ecosystems around the blockchain requires the data in the service ecosystem to be transparent. This is most evident in environments where user interactions are physically proximate or engage in in-person transactions. Users tend to trust a service more when the service provides a record of a transaction that is unalterable, and can be verified independently by the user [19], [20], [21]. In the case of Q-Commerce, where the delivery time is minimal, and the service is not accountable in real time, providing transparent and verifiable data can foster trust, at least in the absence of a physical service provider. Based on this reasoning, we propose the following hypothesis:

H1: Perceived blockchain-enabled transparency in Q-Commerce platforms positively enhances user trust.

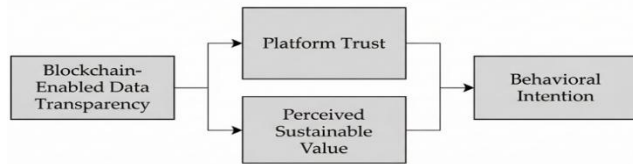
The service literature provides several examples where trust and value are positively related. Users tend to have higher ratings of the platform when they feel the service process was fair, and they were not obstructed in the access to the service [23], [24]. This is especially true when the service is provided in real time and the user can see the process unimpeded. In Q-Commerce, the balancing act between blockchain mechanisms and data transparency creates a condition where users can feel a more positive and sustainable value. Thus, we propose:

H2: Perceived blockchain-enabled data transparency positively impacts perceived sustainable value in Q-Commerce platforms.

Trust has been recognized as one of the most important factors influencing behavioral intention in online settings. If users find a platform to be trustworthy, they are likely to use it more frequently, refer it to others, and use other services offered by the platform. This is particularly the case in developing online markets, where users are likely to be more concerned about issues such as online fraud and inconsistent services. This leads to the following hypothesis:

H3: Trust in a platform positively affects behavioral intention to use Q-Commerce platforms.

One other such confirmed antecedent of the continuity of value is perceived sustainable value. Users are more likely to remain loyal to a platform when they perceive sustained value derived from consistent service quality and ethical governance mechanisms.



#### IV. METHODOLOGY

This study focuses on the empirical analysis of the proposed conceptual model. It considers a quantitative, cross-sectional approach, consistent with the prevailing methodologies found in both the information systems and digital platforms related research domains. It attempts to evaluate the influence of the data transparency, enabled by blockchain, on user trust, perceived sustainable value, and the behavioral intention on Q-Commerce platforms within a continually transforming digital economy, with a specific focus on Saudi Arabia.

The data gathering process involved a structured questionnaire that the respondents have filled on their own. This study adopted measurement scales from previously validated frameworks that have been widely used in the literature on trust and technology adoption to ensure reliability and conceptual alignment [33]. The constructs of blockchain-enabled data transparency, platform trust, perceived sustainable value, and behavioral intention, to name a few, were evaluated with the use of a multi-item measure. The scale used was a five-point Likert scale ranging from “strongly disagree” to “strongly agree”. The survey was subjected to a preliminary pilot study with a few selected users of Q-Commerce to gauge its content and contextual clarity. The feedback from this exercise helped in making minor adjustments in the language used, which served to improve the clarity and the understanding of the items without impacting their theoretical meaning.

In the present study, blockchain-enabled transparency is treated as a perceptual construct grounded in the socio-technical context of Q-Commerce platforms. The analysis does not assume the confirmed implementation of blockchain within the selected services. Rather, respondents were asked to evaluate transparency-related features commonly linked to blockchain logic, such as immutability, traceability, and independent verification. The measurement items therefore capture users’ perceptions of transparency

affordances instead of verifying a specific technical deployment.

A total of 160 Q-Commerce users from Saudi Arabia formed the sample and were specifically chosen using purposive sampling. To enhance the accuracy of the responses, users of rapid delivery applications such as HungerStation, Jahez, and Keta were chosen. In order to verify eligibility, respondents were asked if they had used any of the mentioned platforms in the last three months. During the four weeks of data collection, the researchers utilized online methods in order to communicate with a digitally informed and active population. The sample also coincided with the requirements of Partial Least Squares Structural Equation Modeling (PLS-SEM), which is suitable for theory-building.

Ethical guidelines were strictly followed throughout the study. The review board of the institution was contacted prior to the study where the participants also provided informed consent. To ensure the privacy of the participants, the researchers provided an anonymous survey and the data was used for academic purposes only. In addition to the primary constructs, demographic factors such as age, education, and gender were included in the study so that the researchers could analyze the data at each User level.

Before performing hypothesis testing, the dataset underwent thorough scrutiny to check for completeness and identify outliers and anomalies in the data distributions. The dataset showed no absence of data and no severe violations of normality. SmartPLS 4.0 was used for data analysis. Measurement model construct reliability was evaluated through the composite reliability score, and convergent validity was measured with the Average Variance Extracted (AVE) metric. Discriminant validity was evaluated using the HTMT. This was done following the most recent guidelines in structural equation modeling (SEM) [34]. After validation of the measurement model was deemed satisfactory, the structural model was evaluated to analyze the proposed hypotheses. The routed parameters were bootstrapped to 5,000 to analyze the significance of the path coefficients to ensure the robustness of the estimates and the validity of the findings.

The analysis was conducted using SmartPLS 4.0 (4.0.9) structural equation modeling (SEM) for 160 users from Q-Commerce platforms in Saudi Arabia. The structural model's  $R^2$  for platform trust was 0.62, perceived sustainable value was 0.58, and behavioral intention was 0.54. These results indicated the model was satisfactory and can explain the variances to the target dependent constructs.

Results from pathway analysis illustrate positive relationships in all four predicted pathways ( $p < 0.05$ ), confirming our hypotheses. Firstly, perceived blockchain-

enabled data transparency positively impacted trust in the platform ( $\beta = 0.34$ ,  $p = 0.004$ ) and perceived sustainable value ( $\beta = 0.29$ ,  $p = 0.013$ ). Also, trust in the platform was positively related to behavioral intention ( $\beta = 0.38$ ,  $p = 0.001$ ), and perceived sustainable value positively influenced behavioral intention ( $\beta = 0.32$ ,  $p = 0.007$ ). These results underscore the significance of transparency, both from a technological and psychological perspective, in encouraging the adoption and persistent use of Q-Commerce platforms.

TABLE 1. STRUCTURAL MODEL RESULTS AND HYPOTHESIS TESTING

Hypothesis	Path Relationship	$\beta$	p-value
H1	Perceived Blockchain Transparency → Platform Trust	0.34	0.004
H2	Perceived Blockchain Transparency → Sustainable Value	0.29	0.013
H3	Platform Trust → Behavioral Intention	0.38	0.001
H4	Sustainable Value → Behavioral Intention	0.32	0.007

TABLE 2. DEMOGRAPHIC PROFILE OF RESPONDENTS

Demographic Variable	Percentage (%)
Male	54.4%
Female	45.6%
Age 18–24	18.1%
Age 25–34	47.5%
Age 35–44	26.3%
Age 45 and above	8.1%
High School	11.3%
Bachelor’s Degree	64.4%
Postgraduate	24.3%

These findings support the study’s conceptual framework, particularly the enhancement of trust and perceived value through the transparency mechanism of blockchain. The impact on behavioral intentions confirms that, especially in rapidly changing environments like Saudi Arabia, users will be encouraged to persist in using Q-Commerce platforms with added transparency and accountability in service processes.

## V. DISCUSSION

The results of this study both reinforce and expand the understanding of the impact of data transparency through blockchain technology on trust and perceived value in Q-Commerce platforms. The confirmation of the first hypothesis illustrates that when users are provided with access to records of the transactions that are verifiable and resistant to modification, their trust in the platform’s reliability and fairness increases. This is particularly applicable to Saudi Arabia in the digital transformation that is taking place, and where users are still likely to be encountering the absence of supporting institutions or weak enforcement of regulations. The transparency provided by blockchain technology, in this

case, serves to compensate for the users’ high confidence and expectation of integrity and accountability in the service processes; this has been noted in other similar studies.

The study approaches blockchain-enabled transparency as a perceived socio-technical condition within the examined platforms. Accordingly, the findings should be interpreted as reflecting users’ judgments about transparency expectations and associated system characteristics, rather than evaluations of a confirmed blockchain infrastructure. This distinction is important because it clarifies that what is being measured is the user’s belief in transparency mechanisms and their behavioral implications, not the technical architecture itself.

The second hypothesis suggests that perceived transparency is an important factor in the user perception of value as a sustainable construct. Although Q-Commerce is normally focused on speed and convenience, this study demonstrates an important departure towards consumer demand that considers fairness, traceability, and reliability as long-term ethical constructs [18], [36], [37]. Assessments of equitable value are supported by the real-time and immutable data capabilities of blockchain technology. The study indicates that the perception of transparency, in the case of the demographic attributes of gender and level of education, is differentiated. Educated women participants were relatively more positive towards sustainable attributes, suggesting that this is an area that demonstrates a complexity in the trust/value continuum that is worthy of more refined research.

The role of digital innovation as an enabler of both trust and perceived value is, in this case, of a dual nature. The combination of real-time data, distributed ledger technology, and automated systems demonstrates superior functionality while simultaneously providing a symbolic representation of reliability and control [8], [38]. This is consistent with the models of theory, which seek to explain the relationship between technology and user perception, where transparency and a focus on the user are primary determinants in the propensity to trust and engage with the system.

The findings further confirm the importance of trust as the main driver of behavioral intention in relation to the use of digital platforms. Trust serves as both a rational and an emotional driver of the commitment of the users and the willingness to try more services, which is more evident to the users with a moderate to high level of engagement. This suggests that trust is not a one-time deposit, but rather an investment that is built over time as users engage in recurrent interactions that are consistent and sufficiently clear. The same can be said of the perceived sustainable value and behavioral intention, which indicates that, to an increasing extent, users are motivated by ethical, sustainable, and long-term factors rather than only by the immediate factors.

The gender analysis showed that male users were more confident about the reliability of the platforms, while the

female users were more concerned about the fairness and integrity of data use. The respondents holding a postgraduate degree demonstrated more of an evaluative attitude concerning the use of data and accountability of the platform, which indicates that the design of the platform and the methods of communication to the users must be adapted to specific segments of users.

This study confirms that the transparency offered by the use of blockchain is not just a practical improvement, but a trust-building tool in digital services that operate at accelerated speeds. It addresses the paradox associated with decentralized technologies and digital markets in Saudi Arabia, where service sophistication is high while expectations regarding ethical standards are equally high. It provides both an empirical and theoretical answer to the question posed by the researcher.

Although the analysis concentrates on Q-Commerce platforms, some implications may reasonably extend to other digital service settings such as ride-sharing and task-based platforms. In these environments, transparency surrounding pricing logic, allocation systems, and evaluation processes similarly plays a role in shaping trust. However, Q-Commerce is characterized by compressed timeframes and heightened delivery urgency, which intensify uncertainty. By contrast, ride-sharing and gig-based services often involve repeated user interactions that can partially compensate for limited transparency. For this reason, the relative influence of blockchain-enabled transparency may differ depending on service dynamics and institutional maturity.

## VI. CONCLUSION

This study examined blockchain-enabled data transparency and its impact on user trust, perceived sustainable value, and behavioral intention in Q-Commerce platforms in Saudi Arabia. Framing transparency as a behavioral construct, rather than a peripheral technical enhancement, advances a user-centric perspective on digital infrastructures and their ability to reduce trust gaps in fast and contactless service settings.

Theoretically, the results recontextualize blockchain technology from a simple back-end ledger to a trust-building socio-technical system. Using socio-technical systems theory and the Value-based Adoption Model (VAM), the proposed and validated model demonstrates that blockchain-based transparency mechanisms improve trust in the platform and sustainable value, critical determinants of ongoing user retention.

Guiding Q-Commerce service designers and platform architects, as well as policymakers, from a practical viewpoint, the study lists specific design elements. Incorporating user-facing transparency tools like order tracking, service confirmation records, and delivery logs that users can't modify and can't be modified would increase users' trust and

satisfaction. Such features enhance transparency and demonstrate the organization's commitment to fairness and accountability. In developing economies, where digital trust frameworks are developing, such design elements may act as structural substitutes for institutional trust, facilitating a wider and deeper use of the service.

Despite the study's contributions, certain shortcomings must be acknowledged. The study also relies on perception-based measures of blockchain-enabled transparency. While this approach is appropriate for examining user-level responses, it does not verify the actual technical configuration of the platforms. Future research may therefore benefit from empirical investigations of implemented blockchain systems or experimental designs that compare perceived and actual transparency conditions. Since the study is cross-sectional, the analysis cannot demonstrate causation, while the focus on one geographical area, Saudi Arabia, results in limited generalizability. Different dimensions of demographics, such as trust and value perception in relation to gender and education, also require more attention. Future research is encouraged to adopt cross-temporal and cross-cultural methods to address the intricacies of user behavior in different contexts and over time.

In addition to the present findings, subsequent studies may examine other potential functions of blockchain, such as smart contracts, decentralized identity systems, and tokenized governance, as trust-enabling components of digital commerce. Additionally, the incorporation of qualitative or mixed-methods approaches could provide more understanding of the ways in which users perceive and emotionally react to transparency triggers during real-time interactions on the platform. This would enhance the understanding of the theory and practice of the potential role of blockchain in the development of ethical, resilient, and user-centered service ecosystems.

## ACKNOWLEDGMENT

The author would like to thank the Deanship of Scientific Research at Shaqra University for supporting this work.

## REFERENCES

- [1] C. Lahusen, M. Maggetti, and M. Slavkovik, "Trust, trustworthiness and AI governance," *Scientific Reports*, vol. 14, no. 1, p. 20752, Sep. 2024, doi: 10.1038/s41598-024-71761-0.
- [2] J. Schwaeke, C. Gerlich, H. L. Nguyen, D. K. Kanbach, and J. Gast, "Artificial intelligence (AI) for good? Enabling organizational change towards sustainability," *Review of Managerial Science*, Jan. 2025, doi: 10.1007/s11846-025-00840-x.
- [3] H. A. Rahman, A. Karunakaran, and L. Cameron, "Taming Platform Power: Taking Accountability into Account in the Management of Platforms," *Academy of Management Annals*, vol. 18, no. 1, p. 251, Jan. 2024, doi: 10.5465/annals.2022.0090.
- [4] B. Basu, M. P. Sebastian, and A. K. Kar, "What Affects User Experience of Shared Mobility Services? Insights from Integrating Signaling Theory and Value Framework," *Information Systems Frontiers*, Nov. 2024, doi: 10.1007/s10796-024-10556-0.

- [5] L. Mirghaderi, M. Sziron, and E. Hildt, "Ethics and Transparency Issues in Digital Platforms: An Overview," *AI*, vol. 4, no. 4, p. 831, Sep. 2023, doi: 10.3390/ai4040042.
- [6] I. O. Pappas, P. Mikalef, Y. K. Dwivedi, L. Jaccheri, and J. Krogstie, "Responsible Digital Transformation for a Sustainable Society," *Information Systems Frontiers*, vol. 25, no. 3, p. 945, May 2023, doi: 10.1007/s10796-023-10406-5.
- [7] H. Treiblmaier and C. Sillaber, "The impact of blockchain on e-commerce: A framework for salient research topics," *Electronic Commerce Research and Applications*, vol. 48, p. 101054, Apr. 2021, doi: 10.1016/j.elerap.2021.101054.
- [8] T. D. Oesterreich, E. Anton, F. M. Hettler, and F. Teuteberg, "What drives individuals' trusting intention in digital platforms? An exploratory meta-analysis," *Management Review Quarterly*, vol. 75, no. 4, p. 3615, Nov. 2024, doi: 10.1007/s11301-024-00477-2.
- [9] M. Rapezzi, G. Pizzi, and G. L. Marzocchi, "What you see is what you get: the impact of blockchain technology transparency on consumers," *Marketing Letters*, Mar. 2024, doi: 10.1007/s11002-024-09723-9.
- [10] S. K. Zim, M. M. Hridoy, Md. M. Hossain, S. A. Soiti, and A. Riadi, "Adapting under pressure: Consumer decision-making in times of economic uncertainty and digital transformation," *Finance & Accounting Research Journal*, vol. 7, no. 7, p. 305, Aug. 2025, doi: 10.51594/farj.v7i7.1992.
- [11] A. Akther, A. Arobee, A. A. Adnan, O. Auyon, A. J. Islam, and F. Akter, "Blockchain As a Platform For Artificial Intelligence (AI) Transparency," 2025, doi: 10.48550/ARXIV.2503.08699.
- [12] M. Marković, N. Jacobs, K. M. Dryja, P. Edwards, and N. J. C. Strachan, "Integrating Internet of Things, Provenance, and Blockchain to Enhance Trust in Last Mile Food Deliveries," *Frontiers in Sustainable Food Systems*, vol. 4, Nov. 2020, doi: 10.3389/fsufs.2020.563424.
- [13] K. L. Nadime, J. Benhra, R. Benabbou, and S. Moutassim, "Automating Attended Home Deliveries with Smart Contracts: A Blockchain-based Solution for E-commerce Logistics," *E3S Web of Conferences*, vol. 469, p. 26, Jan. 2023, doi: 10.1051/e3sconf/202346900026.
- [14] N. Singh, R. Misra, W. Quan, A. Radić, S.-M. Lee, and H. Han, "An analysis of consumer's trusting beliefs towards the use of e-commerce platforms," *Humanities and Social Sciences Communications*, vol. 11, no. 1, Jul. 2024, doi: 10.1057/s41599-024-03395-6.
- [15] Y. Duan and Q. Zhu, "Blockchain empowerment: enhancing consumer trust and outreach through supply chain transparency," *International Journal of Production Research*, vol. 63, no. 14, p. 5358, Dec. 2024, doi: 10.1080/00207543.2024.2434951.
- [16] M. Wu, J. Gao, N. Hayat, S. Long, Q. Yang, and A. A. Mamun, "Modelling the significance of food delivery service quality on customer satisfaction and reuse intention," *PLoS ONE*, vol. 19, no. 2, Feb. 2024, doi: 10.1371/journal.pone.0293914.
- [17] A. Setiyono, C. Chandrawatisma, R. H. S. Fanandi, and P. Heriyati, "Antecedents of E-Loyalty as Research for the Quick Commerce Industry," *Interdisciplinary Social Studies*, vol. 2, no. 8, p. 2287, May 2023, doi: 10.55324/iss.v2i8.456.
- [18] J. Y. Jiang, W. Elmaghaby, and K. Moon, "An Empirical Study of Blockchain-Driven Transparency in a Consumer Marketplace," *SSRN Electronic Journal*, Jan. 2023, doi: 10.2139/ssrn.4560414.
- [19] A. T. Polcumpally, K. K. Pandey, A. Kumar, and A. Samadhiya, "Blockchain governance and trust: A multi-sector thematic systematic review and exploration of future research directions," *Heliyon*, vol. 10, no. 12, Jun. 2024, doi: 10.1016/j.heliyon.2024.e32975.
- [20] M. Luca, "Designing Online Marketplaces: Trust and Reputation Mechanisms," *Innovation Policy and the Economy*, vol. 17, p. 77, Jan. 2017, doi: 10.1086/688845.
- [21] P. A. Pavlou and D. Gefen, "Building Effective Online Marketplaces with Institution-Based Trust," *Information Systems Research*, vol. 15, no. 1, p. 37, Mar. 2004, doi: 10.1287/isre.1040.0015.
- [22] S. Rijal and F. Saranani, "The Role of Blockchain Technology in Increasing Economic Transparency and Public Trust," *Technology and Society Perspectives (TACIT)*, vol. 1, no. 2, p. 56, Oct. 2023, doi: 10.61100/tacit.v1i2.51.
- [23] Y. Li, X. Deng, X. Hu, and L. Jing, "The Effects of E-Commerce Recommendation System Transparency on Consumer Trust: Exploring Parallel Multiple Mediators and a Moderator," *Journal of theoretical and applied electronic commerce research*, vol. 19, no. 4, p. 2630, Oct. 2024, doi: 10.3390/jtaer19040126.
- [24] J. Mejia and C. Parker, "When Transparency Fails: Bias and Financial Incentives in Ridesharing Platforms," *Management Science*, vol. 67, no. 1, p. 166, May 2020, doi: 10.1287/mnsc.2019.3525.
- [25] M. Hina, A. K. M. N. Islam, and A. Dhir, "Blockchain for sustainable consumption: an affordance and consumer value-based view," *Internet Research*, vol. 34, no. 7, p. 215, Oct. 2024, doi: 10.1108/intr-07-2023-0523.
- [26] T. M. Tan and S. Saraniemi, "Trust in blockchain-enabled exchanges: Future directions in blockchain marketing," *Journal of the Academy of Marketing Science*, vol. 51, no. 4, p. 914, Jul. 2022, doi: 10.1007/s11747-022-00889-0.
- [27] A. Alkhalifah, "Exploring Trust Formation and Antecedents in Social Commerce," *Frontiers in Psychology*, vol. 12, p. 789863, Jan. 2022, doi: 10.3389/fpsyg.2021.789863.
- [28] J. Wang, X. Shen, X. Huang, and Y. Liu, "Influencing Factors of the Continuous Usage Intention of Consumers of Online Food Delivery Platform Based on an Information System Success Model," *Frontiers in Psychology*, vol. 12, Aug. 2021, doi: 10.3389/fpsyg.2021.716796.
- [29] J. Mou, D. Shin, and J. Cohen, "Trust and risk in consumer acceptance of e-services," *Electronic Commerce Research*, vol. 17, no. 2, p. 255, Nov. 2015, doi: 10.1007/s10660-015-9205-4.
- [30] J. C. Serrano and C. Molina, "What leads users to recommend, not just use? Unpacking service quality, labor perceptions, and conscious consumer choice in food delivery apps," *Frontiers in Sociology*, vol. 10, p. 1666695, Oct. 2025, doi: 10.3389/fsoc.2025.1666695.
- [31] M. C. Ballandies, V. Holzwarth, B. Sunderland, E. Pournaras, and J. vom Brocke, "Advancing Customer Feedback Systems with Blockchain," *Business & Information Systems Engineering*, vol. 67, no. 4, p. 449, Jun. 2024, doi: 10.1007/s12599-024-00873-8.
- [32] N. Kshetri, "Blockchain and the Economics of Customer Satisfaction," *IT Professional*, vol. 21, no. 1, p. 93, Jan. 2019, doi: 10.1109/mitp.2018.2881299.
- [33] Y. K. Dwivedi, E. Ismagilova, P. Sarker, A. Jeyaraj, Y. Jadir, and L. Hughes, "A Meta-Analytic Structural Equation Model for Understanding Social Commerce Adoption," *Information Systems Frontiers*, vol. 25, no. 4, p. 1421, Jul. 2021, doi: 10.1007/s10796-021-10172-2.
- [34] Y. W. Chen, L. Pan, F. Lu, D. Sun, C. Liao, and M. Na, "Psychological detachment in Chinese higher education: a multitheoretical model of academic stress, cultural pressure, and coping resources," *Frontiers in Psychology*, vol. 16, Oct. 2025, doi: 10.3389/fpsyg.2025.1647184.
- [35] K. Hayat, Q. Zhang, M. J. Sousa, M. Husnain, and K. Shahzad, "Blockchain-powered drone deliveries: Embedded governance mechanisms for reducing uncertainty and enhancing consumer behavioral intentions," *Technological Forecasting and Social Change*, vol. 221, p. 124357, Sep. 2025, doi: 10.1016/j.techfore.2025.124357.
- [36] B. Tolegenov, K. Rafif, M. Rafi, R. Herawati, A. Abdullah, and L. T. Sari, "Digital Transparency and Consumer Awareness: Digital Platforms for Educating Consumers about Product Origins and Sustainability," *Al-Muzara ah*, vol. 12, no. 2, p. 277, Dec. 2024, doi: 10.29244/jam.12.2.277-287.
- [37] M. Hina and A. K. M. N. Islam, "Blockchain-based e-Commerce Platforms and Sustainable Products: How Transparency Influences Consumer Willingness to Pay a High Price?," in *Proceedings of the ... Annual Hawaii International Conference on System Sciences/Proceedings of the Annual Hawaii International Conference on System Sciences*, Jan. 2025, doi: 10.24251/hicss.2025.668.
- [38] J. Kim and K. Yum, "Enhancing Continuous Usage Intention in E-Commerce Marketplace Platforms: The Effects of Service Quality, Customer Satisfaction, and Trust," *Applied Sciences*, vol. 14, no. 17, p. 7617, Aug. 2024, doi: 10.3390/app14177617.



**Saad Alaklabi** received the B.Sc. degree in computer science from King Abdulaziz University, Jeddah, Saudi Arabia, in 2010, the M.Sc. degree in information technology from the University of Newcastle, Newcastle, Australia, in 2012, and the Ph.D. degree in information systems from the University of Technology Sydney (UTS), Sydney, Australia, in 2022. His research interests focus on digital trust, blockchain applications, educational technologies, and socio-technical systems in emerging markets.

He is currently an Assistant Professor of Information Systems with the College of Computing & IT, Shaqra University, Saudi Arabia. He is also the Vice Dean of the Deanship of E-Learning and Digital Transformation for E-Learning. He has published multiple peer-reviewed papers in indexed journals and international conferences. He led the adoption of the Blackboard Ultra platform across Shaqra University recognized as the first Saudi university to implement the platform earning acknowledgment from Blackboard Inc. for innovative practices. His professional experience spans teaching, administrative leadership, and digital transformation in higher education.

