





Examines The Impact of Digital Supply Chain Management on Channel Marketing Effectiveness to Increase Consumer Purchase Intention: A Study of Exploring the Role of Blockchain Technology as a Mediator

Rashid Ali*¹ | Muhammad Kaleem Khan² | Faheem Khan³ | Muhammad Ali⁴

*Assistant Professor, Faculty of Management Sciences, ILMA University, Karachi, Pakistan 

Ph.D. Scholar, MS., Faculty of Engineering, Sciences, Technology & Management Ziauddin University, Karachi, Pakistan 

MS Student, Faculty of Management Sciences, ILMA University, Karachi, Pakistan 

Ph.D. Scholar, MS., Faculty of Engineering, Sciences, Technology & Management Ziauddin University, Karachi, Pakistan 

ABSTRACT

Background of the Study: The objective of the current research study was to examine the mediating role of blockchain technology in the field of digital supply chain management regarding channel marketing to increase consumer purchase intention in significant superstores such as Intiaz Supermarket, Metro Super Store, Naheed Super Store, Chase Value Super Store, Chase Up, Chase Value, CSD Super Store, Bin Hashim, Diamond Super Market, SPAR Supermarket and Hyperstar in the city of Karachi. In distribution channel marketing, knowledge sharing is always considered a challenging and valuable factor in supermarkets.

Methodology: The current research study includes blockchain technology as the mediating role to better knowledge about product availability, time-saving, inventory management, customer satisfaction, and sharing information to improve digital supply chain management practices. Digital supply chain management has revolutionized how businesses interact with suppliers, distributors, and customers.

Result: This study examines the impact of digital supply chain management on distribution marketing, focusing on the mediating role of blockchain technology in improving knowledge sharing for supply chain management. Because supply chain management integrates with different stakeholders and organizations, it faces challenges with the critical factor of privacy as well as ownership when sharing knowledge and inventories with individuals and firms.

Conclusion: The current research study incorporates blockchain technology as a mediator to improving knowledge-sharing practices in supply chain management. The findings reveal that digital supply chain management positively influences distribution marketing, enhancing efficiency, cost reduction, and customer satisfaction.

ARTICLE HISTORY

Received May 2024

Accepted June 2024

Published June 2024

KEYWORDS

Digital supply chain management, blockchain technology, channel marketing, consumer purchase intention, life satisfaction, well-being.

Introduction

Islamic Religiosity encompasses various beliefs, practices, and attitudes central to every Muslim's life (Shamsuddin, 1992). It includes the adherence to belief and rituals, pursuit of knowledge, expression of faith and many other aspects (Khraim, 2010). As a comprehensive way of living, Islam guides all Muslims and gives them a sense of purpose and meaning in life (Hood et al., 2009). One important aspect of Islamic Religiosity that has recently become the focus of attention is their connection with well-

being and life satisfaction (Bergan & McConatha, 2001).

*Correspondence Author: Rashid Ali

Email: rashid.ali@indus.edu.pk

To cite this article: Ali R, Khan MK, Khan F, Ali M. (2024). Examines The Impact of Digital Supply Chain Management on Channel Marketing Effectiveness to Increase Consumer Purchase Intention: A Study of Exploring the Role of Blockchain Technology as a Mediator. *Archives of Management and Social Sciences*, 1(2), 38–54. Allied Nexus Publisher.

Licensing: Creative Commons Attribution-Non-Commercial 4.0 International (CC BY-NC 4.0)

Publisher: Allied Nexus Publisher

Life satisfaction, often considered an indicator of well-being, evaluates one's life and the degree to which they feel fulfilled and are content (Diener & Clifton, 2002). It encompasses physical health, relationships, financial stability and overall happiness (Sabatier et al., 2011). Blockchain technology is one of the essential approaches in distribution channels to provide significant importance in distribution channels to maintain transaction data records, sales data records, inventory records, and customer data on the basis of permanent and retrieved data for decision-making (Horton, 2020). In the prior research study, the significance of blockchain technology is that it benefits peer-to-peer networking and the approach of a decentralised database function. The research study suggested that blockchain technology gives several vital advantages and provides a good approach to transparent working conditions with functions of data security and transparency regarding transaction approach (Gawas et al., 2021). In today's competitive business environment, significant supply chain management become complex due to highly innovative technology and new supplier needs.

With the advent of digital technologies, traditional supply chain management practices are being revolutionised, improving Efficiency, Transparency, and collaboration throughout the supply chain. One such technology that has gained considerable attention in recent years is Blockchain (De, 2020). Thus, it evaluates the consequences of digital supply chain management on distribution marketing focusing on the moderating function of the blockchain technology to amplify the importance and significance of supply chain management (Philsoophian et al., 2021). Supply chain management is a strategic tool and a business procedure, which comprises more links and integrating of activities such as purchasing, procurement, manufacturing, inventory, and distributing. Originally, supply chain management was done manually by the use of papers, and it was characterized by a lot of problems, such as inefficiencies, delays and lack of an overall view of the processes and/or problem areas in the supply chain. But the revolution of the digital world has made way for refreshing changes in managing the supply chain as explained by Basu in 2023. Therefore, the aspect of the digital supply chain management as well as advanced technologies including but not limited to the cloud technology of computing, the Internet of Everything (IoT), artificial intelligence (AI), and Blockchain to boost interconnectivity, advanced automation, and real-time data exchange and analysis. These technologies allow organisations to better control the supply chain, monitor the products and assets, and optimise the data obtained for the efficiency of distribution marketing (Ozmen & Bora, 2023). Specifically, new and innovative concept of business such as digital supply chain management (DSCM) is defined as a potential model for enhancing operational performance, cutting expenses and enhancing the level of satisfaction among clients (Queiroz et al., 2022). Earlier, research scholars have reasoned that the field of marketing has slowly transitioned to becoming customer-oriented business management concepts and distribution marketing is a key component. Distribution marketing strategies ensure that there is ease in the distribution of goods and services from the producers to the end consumers, meet the customers' needs and contribute to the achievement of organisational goals. The seamless integration of digital supply chain management practices with distribution marketing can enhance customer experiences, improve product availability, and increase market competitiveness (Kijima, 2018). So, the mediating analysis, this study aims to investigate how implementing blockchain technology within digital supply chain management can

influence the effectiveness of knowledge sharing in distribution marketing. By examining the mediating role of Blockchain, we seek to understand how this technology can enhance information exchange, collaboration, and decision-making in supply chain management, ultimately leading to improved distribution marketing outcomes (Yontar, 2023). So, The increasing adoption of digital supply chain management practices, coupled with the integration of blockchain technology, has the potential to revolutionise distribution marketing.

Problem Statement

Blockchain has gained significant attention in recent years, and it can potentially transform knowledge sharing and effective supply chain management practices (Basu, 2023). Prior research studies suggested blockchain technology has the most significant role in all industries, such as manufacturing and services. The past research study examines the effects of Blockchain and the new innovative and brilliant inventory system on the performance of the supply chain in the retail industry in the UAE. Results suggested that blockchain technology in the retail sector is vital in terms of real-time needs and improved efficiency of the retail industry (Edward, 2021). The findings suggested that blockchain technology has a significant positive impact on supply chain management performance, with smart inventory having mediating effects. Therefore, the current research study focuses on assessing the impact of digital supply chain management on channel marketing effectiveness with the effects of blockchain technology as a mediator in the industry of retail superstores in Pakistan.

However, despite the growing interest in blockchain technology, it is necessary to investigate its impact on digital supply chain management and distribution marketing. While some studies have explored the benefits of Blockchain in enhancing traceability, Transparency, and Security within supply chains, the contributions of Blockchain coordination and knowledge sharing and its subsequent impact on distribution marketing still need to be explored (Lee, 2023). Therefore, the current research study aims to address this research gap by examining the impact of digital supply chain management on distribution marketing, specifically focusing on the mediating effects of blockchain technology in improving information sharing. By investigating the interplay between digital supply chain management, blockchain technology, and knowledge sharing, this research contributes valuable insights into the potential benefits and challenges associated with integrating Blockchain in supply chain management to increase organisational productivity.

While implementing digital supply chain management systems has shown substantial benefits, effective knowledge sharing across supply chain partners remains a critical challenge. Knowledge sharing is vital in enabling collaboration, fostering innovation, and driving operational excellence within supply chain networks. The lack of adequate knowledge-sharing mechanisms can hinder the achievement of desired distribution marketing outcomes (Peng, 2023). Blockchain technology, known for its decentralised and transparent nature, has gained significant attention recently. It can transform supply chain management by sharing a secure and efficient platform for complex information. However, the specific effects of blockchain technology with knowledge sharing for effective supply chain management

practices increase the significance of marketing distribution and organisational performance (Pal, 2022). The current research study results indicate a positive impact on organisational performance and also contribute to both academic and practical areas. Academically, it will expand the existing literature on digital supply chain management, distribution marketing, and blockchain technology by highlighting the effects of mediating the technology of Blockchain in improving channel marketing and supply chain performance. Practically, it will give organisations a deeper understanding of how Blockchain can enhance their supply chain processes, foster collaboration, and drive innovation in distribution marketing.

Research Questions

The current research study has the most significant questions as explained in the following:

1. What are the key components and benefits of digital supply chain management?
2. How does distribution marketing contribute to supply chain management success?
3. In what ways does the technology of Blockchain facilitate information sharing for effective supply chain management practices?
4. To what extent does the technology of Blockchain mediate the relationship between digital supply chain management and channel distribution?
5. What is the importance of contributing the findings' theoretical and practical implications for organisations aiming to enhance distribution marketing through digital supply chain management and blockchain technology?
6. What is the relationship between digital supply chain management and distribution marketing?
7. How does implementing digital supply chain management impact knowledge share in supply chain management?
8. What are the critical components of digital supply chain management that contribute to improved distribution marketing?
9. How does blockchain technology mediate the effects of digital supply chain management on information sharing in an effective manner supply chain management?
10. What challenges and barriers are associated with implementing blockchain technology in digital supply chain management for improved knowledge sharing?
11. What are the significance, importance, benefits, and disadvantages of utilising blockchain technology in digital supply chain management for knowledge-sharing purposes?
12. How does knowledge sharing facilitated by blockchain technology in digital supply chain management impact the overall efficiency and effectiveness of the supply chain?
13. How can organisations integrate blockchain technology into their digital supply chain management processes to enhance knowledge sharing?
14. What are the implications of the findings on the effects of digital supply chain management and blockchain technology on information sharing for supply chain management practitioners and researchers?

The Objectives of the Research Study

The current research study's objective was to investigate the effects of digital supply chain

management on distribution marketing, focusing on the effects of mediating the technology of Blockchain in improving information and coordination among supply chain stakeholders. The specific research objectives are as follows:

1. To explore the key components and benefits of digital supply chain management.
2. To examine the importance of distribution marketing in supply chain management.
3. Investigating the effect of block technology provides a better way of gathering information for effective supply chain management practices.
4. To analyse the mediating effect of blockchain technology on the relationship between digital supply chain management and distribution marketing.
5. To provide theoretical and practical insights into the implications of the findings for organisations seeking to leverage digital supply chain management and blockchain technology for enhanced distribution marketing outcomes.
6. To investigate the impact of digital supply chain management on distribution marketing in the context of knowledge sharing for supply chain management.
7. To examine the mediating effects of blockchain technology as a mediator in the relationship between digital supply chain management and knowledge sharing in supply chain management.
8. To assess the effectiveness of digital supply chain management practices in enhancing knowledge sharing among supply chain stakeholders.
9. To find the key factors that influence the successful implementation of digital supply chain management for improved information sharing in enhancing the performance of supply chain management practices.
10. To explore the challenges and barriers organisations face in adopting and implementing digital supply chain management and blockchain technology for knowledge sharing in supply chain management.
11. To propose recommendations and strategies for organisations to leverage digital supply chain management and the technology of Blockchain inadequate information sharing to increase the performance of supply chain management practices.
12. To contribute to the existing literature on digital supply chain management, the technology of Blockchain and information sharing in effective supply chain management by providing empirical evidence and theoretical insights.
13. To provide practical implications for businesses and supply chain professionals on the potential benefits of digital supply chain management and blockchain technology in improving knowledge sharing for supply chain management.
14. To better understand the relationship between digital supply chain management, blockchain technology, and distribution marketing and their impact on overall supply chain performance.
15. To offer a framework for future research and exploration of additional factors and variables that may influence the impact of digital supply chain management and technology of Blockchain on knowledge sharing and distribution marketing in supply chain management.

Scope of the Research Study

Thus, the scope of the current research study is restricted to the following topic: "The Impact of Digital Supply Chain Management on Distribution Marketing with the Mediating Analysis of Blockchain Technology in the Improvement of Knowledge Sharing for Supply Chain Management." This study aims to investigate the relationship between distribution marketing, digital supply chain management, and the ways in which blockchain technology can mediate ineffective supply chain management practices by improving information sharing. So, current research examines how implementing digital supply chain management practices affects distribution marketing strategies. It explores the extent to which digital technologies, such as Blockchain, facilitate knowledge sharing within the supply chain and its subsequent impact on improving overall supply chain management. The current research focuses on the impact of digital supply chain management on distribution marketing with a specific emphasis on the effect of the mediating of blockchain technology in improving knowledge sharing. The study will primarily rely on empirical data from relevant literature, surveys, and interviews. However, the current research study has limitations. Therefore, the generalizability of the results may be limited due to the research's specific industry context or geographical scope. Secondly, the study's reliance on self-reported data may introduce biases or subjectivity. Finally, the dynamic nature of technology and market trends may impact the long-term validity of the findings.

Significance of the Study

The significance of the research study has several reasons. Firstly, it contributes to the growing literature on digital supply chain management by examining its impact on distribution marketing. The findings will provide valuable insights into how digitalisation influences marketing strategies within supply chains. Furthermore, this research extends the understanding of blockchain technology in supply chain management. Organisations can better understand how to influence technology to enhance collaboration and improve distribution marketing outcomes by investigating its role in facilitating knowledge sharing. Finally, this study has practical implications for organisations operating in various industries. The insights derived from this research will assist decision-makers in formulating strategies to optimise their supply chain operations, enhance knowledge sharing among partners, and ultimately improve distribution marketing effectiveness.

Literature Review

Digital Supply Chain Management and Chanel Marketing

Digital supply chain management integrated with channels marketing and the channels marketing integrated with digital supply chain management, because channels marketing has the critical factor as the intra organisational relationships and also inter-organisational relationships, this concept provides the theoretical contribution and the empirically to increase organisational performance (Fotiadis et al., 2022). The operations of the supply chain management, such as the logistics functions, purchasing, distributions, pricing, qualities, availability, time-saving, and varieties, facilitate customers and effectively enhance the productivity of channel marketing. In the distribution channels, the technology of blockchain tra, transactions, inventory management, sales data, and customer data is used for decision-making and

addressing future concerns (Hald & Kinra, 2019). Past research studies suggested that blockchain technology has become a relatively easy method, accessible data records, and easy to verify. This approach increased overall supply chain management performance efficiency with better delivery time and customer needs (Chen et al., 2022).

Marketing Channels

According to prior research, marketing creates value for the customer by making products to meet the customer's needs. In contrast, marketing channels are based on critical factors such as manufacturers and intermediates, including agents, retailers, distributors, end users, customers or consumers, and business customers. Thus, the marketing channels include different activities to deliver the goods from production to final consumers with the streamless process (Kirchberger et al., 2020).

Blockchain Technology

The technology of Blockchain refers to the distributed system of the database, which is used for sharing data and securing the data in the form of a cryptography base of the significance mechanism with no single entity or control. Data is an important asset for industries in saving records and transactions (Casey and Wong, 2017). Blockchain data coding and encryption enhances information sharing's efficiency, transparency, and trustworthiness (Misra, 2018). According to Halb and Kinra (2019), blockchain refers to the open dissemination of ledge systems in which transactions are documented for future reference.

Social Capital Theory

Social Capital Theory focuses on the social relationships, networks, and trust among individuals and organisations. Social capital is crucial in facilitating knowledge sharing within the context of the supply chain. By establishing strong social ties and fostering trust among supply chain partners, organisations can create an environment conducive to knowledge sharing. Blockchain technology, with its decentralised and transparent nature, has the potential to enhance social capital by providing a trusted platform for information sharing and collaboration (Muliadi et al., 2022).

Supply Chain Performance

The prior research study suggested that supply chain performance strongly depends upon the technology of Blockchain and smart inventory (Sohel & Bin Osman, 2018). The advancement of blockchain technology allows retailers to manage inventive data, customer data, sales data, backup data, and transactions data, and also retrieve data verified and reduce errors.

Research Model Overview

Based on the literature review and the findings of this study, a research model has been developed to illustrate the relationships between the key variables. The research model depicts the impact of digital supply chain management on distribution marketing, mediated by blockchain technology's role in improving knowledge sharing within the supply chain (Jum'a, 2023). This model provides a visual

representation of the theoretical framework guiding this study.

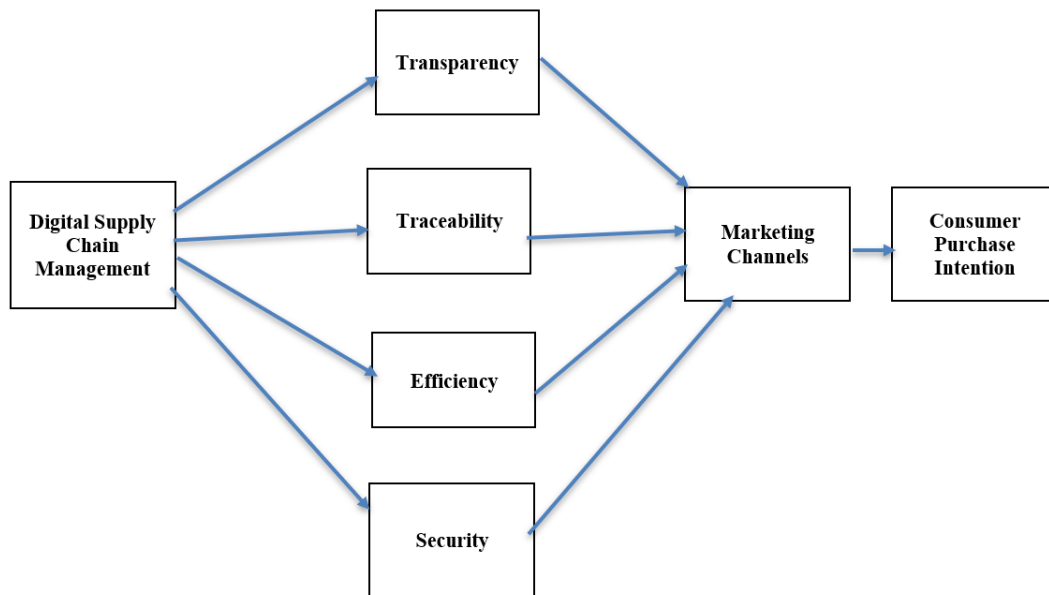


Figure 01: Propose Conceptual Research Model Digital Supply Chain Management

Hypotheses Developed

- H1: Digital Supply Chain Management has a positive impact on Transparency
- H2: Digital Supply Chain Management has a positive impact on Traceability
- H3: Digital Supply Chain Management has a positive impact on Efficiency
- H4: Digital Supply Chain Management has a positive impact on Security
- H5: Marketing channels mediate the relationship between Transparency and Consumer Purchase Intention
- H6: Marketing channels mediate the relationship between Traceability and Consumer Purchase Intention
- H7: Marketing channels mediate the relationship between Efficiency and Consumer Purchase Intention
- H8: Marketing channels mediate the relationship between Security and Consumer Purchase Intention
- H9: Transparency has a positive association with channel marketing
- H10: Traceability has a positive association with channel marketing
- H11: Efficiency has a positive association with channel marketing
- H12: Security has a positive association with channel marketing
- H13: Marketing channels have a positive impact on Consumer Purchase Intention

Methodology

Research Design

Research design is the planned model of getting acquainted with the study, consideration of the

literature, data gathering, sample selection, and result assessment. In this current specific research study, the quantitative approach was used through the cross-sectional survey. While in the surveys, it is easier to enroll a large number of participants, making the analysis of relations and mediating effects possible.

Data Collection

Data for the current research study has been collected through a structured questionnaire regarding the selected respondents' shopping experience of retail superstores.

Sample and Sampling Technique

The research study used primary data, which is relevant to the study. All data of the sample for this study will consist of supply chain professionals and managers from various industries with experience and knowledge related to digital supply chain management and distribution marketing. One of the sampling methods that can be defined as the type of purposive sampling is where the researcher takes part in the selection of participants based on adopted characteristics or standards that would be helpful in the realizations of the assessment goals or objectives. Will be used to identify participant that will fit the inclusion criteria of the study. The sample size will be estimated taking into consideration the requirement of adequate statistical power to the analysis.

Data Analysis Techniques

The Smart PLS 4.0 uses data analysis, compatibility with the chosen analytical techniques, and the researcher's familiarity with the software. By employing a rigorous research design, collecting relevant data, and utilising appropriate analysis techniques, this study aims to provide valuable insights into the impact of digital supply chain management on distribution marketing, mediated by blockchain technology's role in knowledge sharing within the supply chain. The next chapter will present the data analysis and findings derived from the collected data.

Data collection procedure

The researcher first convinced the respondent that this study was only used for academic purposes, not commercial ones. The researcher physically attends to the respondents to fill out the questionnaire from selected restaurants. The questionnaire was filled out by the respondents personally for primary data collection.

Ethical consideration

To build trust with the respondent that their data will be confidential. There are some ethical considerations: First, permission should be taken when collecting the data, and the respondent should be guaranteed that their identity will be confidential.

Result

Validity and the Reliability Analysis

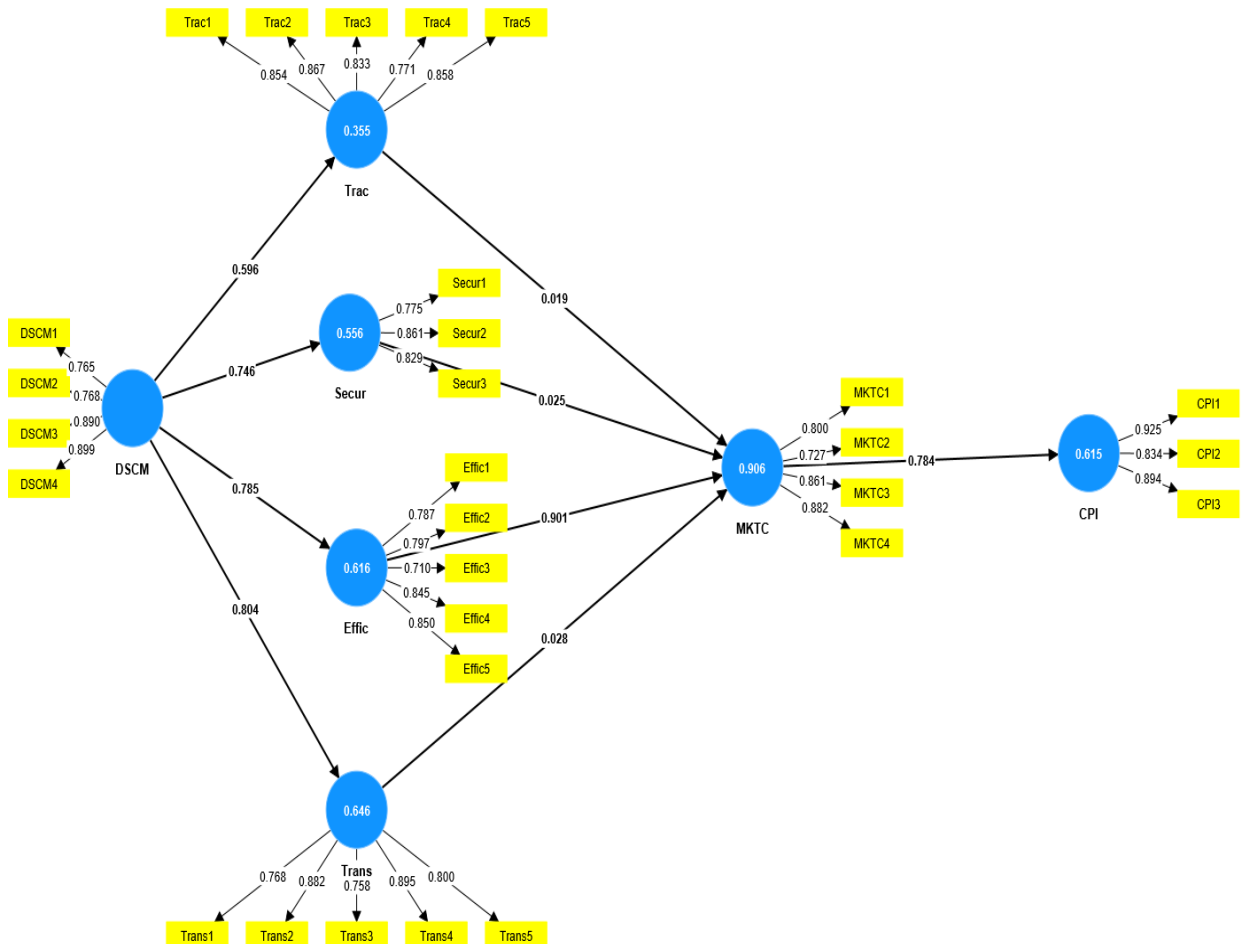
Cronbach's Alpha	N of Items
.919	29

Table 01: Reliability Statistics

In this context, the reliability is the extent of internal consistency of the items in the research study. Hence, all the items of the construct of the research study are equal to zero. 919 which is greater than 0.7 which confirms that the items have acceptable and good levels of internal consistency.

Assessments of Measurement Model

Concerning the convergent validity analysis, the following findings will be useful in analyzing the results; The loading factor or outer loading is greater than 0.7, and the Average Variance Extracted is more than 0.5. conclude that the convergent validity is declared.



Constructs	Cronbach's alpha	Composite reliability (rho_a)	Average variance extracted (AVE)
CPI	0.862	0.868	0.783
DSCM	0.850	0.859	0.693
Efficiency	0.858	0.863	0.639
MKTC	0.835	0.838	0.672
Security	0.761	0.774	0.676
Traceability	0.894	0.900	0.701
Transparency	0.880	0.888	0.677

Table 02: convergent validity analysis

The factor loading is utilized in the data analysis to access the 17 items' convergent validity together with the Average Variance Extracted. It also consists of the concept of composite reliability to obtain the results and confirm the accuracy of the collected data. Depending on the measurement model and examining the variances, the convergent validity contains the AVE and the composite reliability. Therefore, the research result indicates that the average variance extracted is more than 0.5 to confirm them. Thus the values of the composite reliability all exceeded 0.7 means the level confirmatory, and values higher than 0. Thus, the planned 8 would be deemed reasonable.

Discriminant Validity

	CPI	DSCM	Efficiency	MKTC	Security	Trac	Trans
CPI	0.885						
DSCM	0.753	0.833					
Efficiency	0.855	0.785	0.799				
MKTC	0.784	0.739	0.951	0.820			
Security	0.625	0.746	0.686	0.676	0.822		
Traceability	0.550	0.596	0.612	0.605	0.651	0.837	
Transparency	0.701	0.804	0.751	0.736	0.729	0.666	0.823

Table 03: Fornell-Larcker criterion

The Fornell-Larcker criterion is considered as one of the most used approaches in the assessment of discriminant validity in measurement models. Based on this criterion, the square root of the average of the variances accessed by a construct should exceed the correlation between the construct in focus and any other construct. We obtained the results for each construct regarding composite reliability (CR), the square root of the AVE (in bold) and the correlations between the constructs (off-diagonal).

Assessment of Structural Model

Through the structural model assessment, the four independent variables, one independent variable, and the one mediating variable are incorporated into the research study conceptual model. Thus, the hypotheses are analysed through the Bootstrapping test in the Smart Partial least square methods, version 4.

Relationship	T statistics	P values	Decisions
DSCM -> Transparency	38.138	0.000	Supported
DSCM -> Traceability	13.056	0.000	Supported
DSCM -> Efficiency	29.448	0.000	Supported
DSCM -> Security	23.438	0.000	Supported
Trans -> MKTC	0.894	0.372	Not Supported
Trac -> MKTC	0.718	0.473	Not Supported
Efficiency-> MKTC	28.556	0.000	Supported
Security -> MKTC	0.825	0.409	Not Supported
MKTC -> CPI	31.491	0.000	Supported

Table 04: Path Coefficient and Hypotheses Analysis

H1: Digital Supply Chain Management has a positive impact on transparency

The results of the probability value 0.000, which is less than 0.05, explain that digital supply chain management positively and significantly impacts transparency; thus, the conclusion is that digital supply chain management is associated with transparency. Thus, hypothesis H1 is accepted.

H2: Digital Supply Chain Management has a positive impact on traceability

The hypothesis that digital supply chain management has a positive association with traceability is accepted based on the results of the p-value=0.000, which is less than 0.05. Thus, it was concluded that digital supply chain management is significantly and positively associated with traceability.

H3: Digital Supply Chain Management has a positive impact on efficiency

Based on the p-value=0.000, which is less than 0.05, it is explained that digital supply chain management is significantly and positively associated with efficiency. Thus, digital supply chain management is essential in increasing efficiency in retail superstores.

H4: Digital Supply Chain Management has a positive impact on Security

The value of the probability=0.000, which is less than 0.05; thus, these results explain that digital supply chain management positively impacts Security.

H9: Transparency has a positive association with channel marketing

Based on the p-value=0.372, which is greater than 0.05, transparency has not been associated with channel marketing in the retail super store and hypothesis H9 is not accepted or not supported.

H10: Traceability has a positive association with channel marketing

Results indicate the p-value=0.473, which is greater than 0.05, thus concluding that the traceability has not been significantly associated with channel marketing.

H11: Efficiency has a positive association with channel marketing

The results of the p-value=0.000, which is less than 0.05, thus conclude that efficiency is positively

and significantly associated with channel marketing. Therefore, the hypothesis H11 is supported based on the results.

H12: Security has a positive association with channel marketing

The result indicates that Security is not significantly associated with channel marketing because the p-value=0.409 is greater than 0.05. thus, the hypothesis H12, not supported.

Relationship	T statistics	P values	Decisions
Transparency -> MKTC -> CPI	0.894	0.371	Not Supported
Traceability -> MKTC -> CPI	0.721	0.471	Not Supported
Efficiency -> MKTC -> CPI	19.456	0.000	Supported
Security-> MKTC -> CPI	0.827	0.408	Not Supported

Table 05: Mediating Effects of the Results

H5: Marketing channels mediate the relationship between Transparency and Consumer Purchase Intention

The results indicate that the p-value= 0.371, which is greater than 0.05, thus causing marketing channels to mediate the relationship between transparency and consumer purchase intention. Thus, hypothesis H5 is not supported.

H6: Marketing channels mediate the relationship between Traceability and Consumer Purchase Intention

The results indicate that the p-value=0.471, which is greater than 0.05; thus, the hypothesis the marketing channel does not mediate the relationship between traceability and consumer purchase intention. Thus, hypothesis H6 is not supported.

H7: Marketing channels mediate the relationship between Efficiency and Consumer Purchase Intention

The results indicate that the probability values=0.000, which is less than 0.05, explains that the marketing channels have significantly mediated the relationship between efficiency and consumer purchase intention.

H8: Marketing channels mediate the relationship between Security and Consumer Purchase Intention

The hypothesis that marketing channels mediate the relationship between Security and consumer purchase intention is not supported due to the p-value=0.408, which is greater than 0.05.

Practical Implications

Through this research study, the results are essential in the retail sectors of Pakistan to increase consumer purchase intention, and they have many competitive advantages in making decisions with the help of advanced block technology in the supply chain management field. Thus, it is also essential for supply chain managers and channel marketing managers to analyse the factors of supply chain

management, such as traceability, Transparency, Security, authenticity and functionality of channel marketing. Furthermore, it is also significant and important for firms and organisations to develop long-term strategic decisions and implementation strategies to better customer needs and organisations' revenues. In channel marketing, there are many opportunities to take blockchain technology towards the competition as the technology's advantages in the field increase market shares. Thus, the manager's perspective needs to analyse the factors of digital supply chain management in product distribution, product availability, inventory management and the operations of digital supply chain management. The adoption of blockchain technology is significant.

Theoretical Implications

The current research study has contributed to the literature regarding the mediating role of blockchain technology with digital supply chain management to enhance the functionality of channel marketing. It provides the platform for scholars and researchers to explore the gaps of the study and expand the knowledge and better decision-making in the retail sectors to increase consumer purchase intention. Several important strengths are articulated in the context of the study. First, it responds to the timely and topical issue, thus emphasising digital supply chain management (DSCM) and the use of blockchain technology, which remains significant for contemporary industries. Therefore, the presented research is focused and coherent due to clear objectives and well-developed research questions. Also, the literature review is extensive and lays a firm theoretical framework by accomplishing a detailed analysis of the literature concerning DSCM and Blockchain.

Limitation and Future Research

The limitations of the current research study regarding the channels marketing to increase consumer purchase intentions with the mediating role of blockchain technology include the retail superstores. Thus, during the research study, the researchers faced different challenges in completing the research work to collect the data from the respondents. The further research study, the researchers more factors include the factors of the digital supply chain management to enhance productivity and efficiency, the channels marketing in the other industries of Pakistan. For this purpose, future research studies will explore the concept of digital supply chain management with the challenges of adopting the technology of Blockchain to increase consumer purchase intention and provide a better understanding of consumer attitudes and demands.

Author's Contribution:

Conception or Design: Sadaf Ibrar

Analysis or Interpretation of Data: Sadaf Ibrar

Manuscript Writing & Approval: Sadaf Ibrar

Acknowledgments:

We thanks to all the participants and colleagues for their contribution.

Disclosure Statement:

The authors report there are no competing interests to declare.

Funding:

N/A

References

1. Almekhled, B., & Petrie, H. (2023). UK Students' Concerns About Security and Privacy of Online Higher Education Digital Technologies in the Coronavirus Pandemic. Proceedings of the 15th International Conference on Computer Supported Education. <https://doi.org/10.5220/0011993500003470>
2. Basu, R. (2023). Digital revolution and e-supply chains. *Managing Global Supply Chains*, 202–222. <https://doi.org/10.4324/9781003341352-16>
3. Casey, M. and Wong, P. (2017), "Global supply chains are about to get better, thanks to blockchain", *Harvard Business Review*, 13.
4. Centobelli, P., Cerchione, R., Vecchio, P. D., Oropallo, E., & Secundo, G. (2022). Blockchain technology bridges trust, traceability and transparency in the circular supply chain. *Information & Management*, 59(7), 103508. <https://doi.org/10.1016/j.im.2021.103508>
5. Chen, Y. (2010). Research on Knowledge Sharing among Partners in the Supply Chain. 2010 International Conference on Management and Service Science. <https://doi.org/10.1109/icmss.2010.5576344>
6. Chen, Y., He, H., & Zheng, J. (2022). Research and design of medical data sharing and insurance automatic claim system based on blockchain technology. *BCP Business & Management*, 26, 1189–1195. <https://doi.org/10.54691/bcpbm.v26i.2084>
7. De Giovanni, P. (2020). Smart Contracts and Blockchain for Supply Chain Quality Management. *Dynamic Quality Models and Games in Digital Supply Chains*, 91–110. https://doi.org/10.1007/978-3-030-66537-1_5
8. Edward, Mondol. (2021). "The Impact of Block Chain and Smart Inventory System on Supply Chain Performance in Retail Industry
9. Fotiadis, T., Folinias, D., Vasileiou, K., & Konstantoglou, A. (2022). Elements of the marketing mix (price): Conceptual and integrated approach to supply chain management. *Marketing and the Customer Value Chain*, 46–92. <https://doi.org/10.4324/9780429684883-2>
10. Fu, L., & Su, J. (2022). Research on Blockchain-Based Strategic Management Innovation of Emergency Resource Supply Chain. Proceedings of the 1st International Conference on Public Management, Digital Economy and Internet Technology. <https://doi.org/10.5220/0011733500003607>
11. Gawas, M., Patil, H., & Govekar, S. S. (2021). An integrative approach for secure data sharing in vehicular edge computing using Blockchain. *Peer-to-Peer Networking and Applications*, 14(5), 2840–2857. <https://doi.org/10.1007/s12083-021-01107-4>
12. Hald, K.S. and Kinra, A. (2019) "How the blockchain enables and constrains supply chain performance", *International Journal of Physical Distribution & Logistics Management*, Vol. 49 No. 4, pp. 376-397.
13. Hanna, B., Xu, G., Wang, X., & Hossain, J. (2023). Blockchain-Based Energy Efficient Supply Chain Management. *Blockchain in Supply Chain Digital Transformation*, 195–218. <https://doi.org/10.1201/9781003256755-10>.

14. Horton, S. (2020). Review of “On the importance of snowpack stability, its frequency distribution, and avalanche size in assessing the avalanche danger level: a data-driven approach.” <https://doi.org/10.5194/tc-2020-42-rc1>
15. Jum’ a, L. (2023). The role of blockchain-enabled supply chain applications in improving supply chain performance: the case of Jordanian manufacturing sector. *Management Research Review*. <https://doi.org/10.1108/mrr-04-2022-0298>
16. Karyose, H., Astuti, W., & Ferdiansjah, A. (2017). Customer Loyalty: The Effect of Service Quality, Corporate Image, Customer Relationship Marketing and Customer Satisfaction as Intervening Variable-An Empirical Analysis of Bank Customers in Malang City. *Marketing and Branding Research*, 4(4), 336–347. <https://doi.org/10.33844/mbr.2017.60334>
17. Kijima, T. (2018). A Study on Supply Chain Integration in Retail: The Relationship between Supply Chain Strategy, Structure, Integration and Performance. *Journal of Marketing & Distribution*, 21(2), 47–62. https://doi.org/10.5844/jsmd.21.2_47
18. Kirchberger, M., Wouters, M., & Anderson, J. C. (2020). How Technology-Based Startups Can Use Customer Value Propositions to Gain Pilot Customers. *Journal of Business-to-Business Marketing*, 27(4), 353–374. <https://doi.org/10.1080/1051712x.2020.1831212>
19. Kok, C. L., & Palaniappan, K. (2023). A futuristic approach to decentralise and authenticate workplace safety records leveraging on Blockchain distributed ledger network. *Distributed Computing to Blockchain*, 425–431. <https://doi.org/10.1016/b978-0-323-96146-2.00002-4>
20. Lee, G. (2023). Blockchain for Product Traceability in the Supply Chain. *Blockchain in Supply Chain Digital Transformation*, 143–160. <https://doi.org/10.1201/9781003256755-7>
21. Mehairi, H. A. (2013). Empowering Knowledge Sharing Behaviours through Means Oriented vs. Goal Oriented Cultures: The Impact of Organizational Culture on Knowledge Sharing. 2013 10th International Conference on Information Technology: New Generations. <https://doi.org/10.1109/itng.2013.130>
22. Misra, P. (2018), “5 Ways Blockchain Technology Will Change the Way We Do Business” available at: <https://www.entrepreneur.com/article/309164> (accessed 1 July 2018).
23. Mitaire Tarurhor, E., & Osahon Osazevaru, H. (2021). Inventory management and customers` satisfaction in the public health sector in Delta State, Nigeria: marketing analysis. *Innovative Marketing*, 17(2), 69–78. [https://doi.org/10.21511/im.17\(2\).2021.07](https://doi.org/10.21511/im.17(2).2021.07)
24. Muliadi, M., Muhammadiyah, M., Amin, K. F., Kaharuddin, K., Junaidi, J., Pratiwi, B. I., & Fitriani, F. (2022). The information sharing among students on social media: the role of social capital and trust. *VINE Journal of Information and Knowledge Management Systems*. <https://doi.org/10.1108/vjikms-12-2021-0285>
25. Ozmen, E., & Bora, N. (2023). Blockchain, IoT, and Artificial Intelligence Technologies for Supply Chain Management: Bibliometric Analysis. *Blockchain, IoT, and AI Technologies for Supply Chain Management*, 19–41. <https://doi.org/10.1201/9781003264521-2>.

26. Pal, K. (2022). Information Sharing for Manufacturing Supply Chain Management Based on Blockchain Technology. *Research Anthology on Convergence of Blockchain, Internet of Things, and Security*, 349–365. <https://doi.org/10.4018/978-1-6684-7132-6.ch021>
27. Peng, S. (2023). Sharing economy and sustainable supply chain perspective: the role of the supply chain's environmental, economic and social pillars in customer intention and sustainable development. *Journal of Innovation & Knowledge*, 8(1), 100316. <https://doi.org/10.1016/j.jik.2023.100316>
28. Philsoophian, M., Akhavan, P., & Namvar, M. (2021). Blockchain technology's mediating role in improving knowledge sharing for supply chain management. *Management Decision*, 60(3), 784–805. <https://doi.org/10.1108/md-08-2020-1122>
29. Queiroz, M. M., & Wamba, S. F. (2022). Digital Supply Chain Capabilities. *Managing the Digital Transformation*, 39–46. <https://doi.org/10.1201/9781003226468-6>
30. Sarfaraz, A., Chakraborty, R. K., & Essam, D. L. (2023). The implications of blockchain-coordinated information sharing within a supply chain: A simulation study. *Blockchain: Research and Applications*, 4(1), 100110. <https://doi.org/10.1016/j.bcra.2022.100110>
31. Shokouhifar, M., & Ranjbarimesan, M. (2022). Multivariate time-series blood donation/demand forecasting for resilient supply chain management during the COVID-19 pandemic. *Cleaner Logistics and Supply Chain*, 5, 100078. <https://doi.org/10.1016/j.clscn.2022.100078>
32. Smith, K. J., & Dhillon, G. (2018). Supply Chain Virtualisation: Facilitating Agent Trust Utilising Blockchain Technology. *Revisiting Supply Chain Risk*, 299–311. https://doi.org/10.1007/978-3-030-03813-7_18
33. Sohel, S., & Bin Osman, A. (2018) "Impact of Supply Chain Drivers on Retail Supply Chain Performance," *The Journal of Social Sciences Research*, Academic Research Publishing Group, vol. 4(10), pages 176-183
34. Xiao, S., Chen, Y.-J., & Tang, C. S. (2021). Knowledge Sharing Among Smallholders in Developing Economies. *Springer Series in Supply Chain Management*, 199–227. https://doi.org/10.1007/978-3-030-81423-6_12
35. Yontar, E. (2023). The role of blockchain technology in the sustainability of supply chain management: Grey based dematel implementation. *Cleaner Logistics and Supply Chain*, 8, 100113. <https://doi.org/10.1016/j.clscn.2023.100113>