

The Influence of Cultural Adaptability, Digital Knowledge Management and Organizational Support on Digital Leadership Capability in E-Commerce Companies

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Abstract

Digital leadership abilities which help organizations succeed in all aspects of technological development should become mandatory requirements for e-commerce workers. The study assesses how cultural adaptability and digital knowledge management and organizational support systems together influence e-commerce organizations to develop their digital leadership capabilities. The research uses a quantitative methodology which follows an explanatory study framework. The researchers used purposive sampling to gather data from 160 participants who worked at e-commerce businesses throughout Indonesia. The researchers used multiple linear regression analysis to assess the data after they finished validating their findings and testing all reliability and classical assumptions. The research shows that digital leadership performance improves through the combination of cultural adaptability and digital knowledge management together with organizational support systems. The research proves that organizations need to establish an adaptive organizational culture which includes technology-based knowledge management together with complete organizational support to develop their digital leadership skills. The research results deliver strategic guidance to e-commerce businesses which want to build digital leadership capabilities that will endure longer periods.

Keywords: cultural adaptability, digital knowledge management, organizational support, digital leadership capability.

INTRODUCTION

E-commerce organizations require executive positions which exist to handle the two tasks of digital technology management and customer behavior management. Digital leadership capability enables organizations to establish themselves as competitive forces in the market because leaders must develop both technical competencies and the ability to direct digital transformation processes (Susilowati et al., 2025). The e-commerce industry needs leaders who can effectively combine technological systems with data resources to create business value through their innovation strategies (Mustafa & Suparwata, 2024). Organizations that do not develop digital leadership skills will find themselves at a

disadvantage when competing in markets that face rapid transformations (Ferdiansyah & Hendratni, 2024). Organizations develop their digital leadership capabilities through digital leadership capabilities which help them build better interdepartmental collaboration and strengthen their data-driven decision-making processes while creating a workplace culture that supports innovation (Zakaria et al., 2025). E-commerce companies must develop their digital leadership capabilities because this capability enables them to compete effectively and operate sustainably during the current digital economic era.

Organizations that succeed in adapting their cultural practices can maintain their essential values and operational methods while they handle external changes (Riyanti et al., 2025). E-commerce companies depend on their adaptive culture which enables them to keep up with technological advancements and changing market conditions. The existence of organizational values that support creative solutions establishes an atmosphere where leaders from organizations with adaptive cultural practices can advance their digital leadership competencies (Tawil et al., 2025). Digital leadership development requires organizations to create a safe environment that enables employees to take risks and learn from their mistakes. The organization can use data for policy development and operational management when its leaders have access to an effective digital knowledge management system (Violin, 2022). Leaders achieve continuous competency development and technological trend understanding through their access to digital knowledge (Metris et al., 2024). Digital knowledge management functions as a cognitive element which enhances a person's ability to lead in digital environments (Wicaksono et al., 2024). Organizational support refers to the extent to which an organization provides resources and policies together with a work environment that enables individual development during times of change (Karyono et al., 2024). E-commerce companies use organizational support as a crucial resource to develop their leaders who will drive digital transformation projects (Nugraha et al., 2025). The organization implements its support through technological system implementation and digital training program delivery together with its flexible work environment that includes innovative work arrangements. Organizations that provide strong support systems for their leaders develop more confident leaders who successfully execute digital business strategies (Akbar et al., 2023).

The research will investigate how three factors which include cultural adaptability and digital knowledge management and organizational support produce digital leadership capacities used by e-commerce businesses. The study examines how organizational culture and knowledge management practices and institutional support systems affect digital management and leadership operations. The research investigates how various factors impact the development of leadership skills during periods of digital transformation. The research findings will assist e-commerce companies in developing successful digital leadership programs which serve as a practical reference. Organizations establish their technological readiness by working to enhance their competitive position while they conduct their business operations in complex digital environments.

METHOD

The researchers conducted a quantitative study through an explanatory design which tested three factors that influenced digital leadership capabilities in e-commerce companies. Research data were collected through a survey using a structured questionnaire with a five-point Likert scale which researchers distributed to managerial and supervisory employees across Indonesian e-commerce companies. The researchers selected purposive sampling as their sampling method because they needed participants who had worked in an e-commerce company for two years and who used digital systems to make decisions and who held

positions of authority and who had taken part in the organization digital transformation process. The complete sample of 160 respondents was determined to meet the necessary standards for multiple linear regression analysis. The researchers used instrument quality testing to assess instrument quality through two tests which included a validity test that required item-total correlation to exceed 0.30 and show significance below 0.05 and a reliability test which used Cronbach's Alpha with a threshold value of 0.70. The researchers conducted classical assumption tests which included normality tests and multicollinearity tests and heteroscedasticity tests to evaluate data before conducting hypothesis tests. The researchers used multiple linear regression data analysis to evaluate how independent variables affected digital leadership capability through their individual and combined effects.

RESULT AND DISCUSSION

The multiple linear regression analysis results show that the research model achieved simultaneous significance according to the F-test which showed a significance value of 0.000. The three factors which include cultural adaptability, digital knowledge management, and organizational support, display a combined effect on digital leadership capability which exists in e-commerce companies. The research model three independent variables explain 71% of the digital leadership capability variation while other factors which exist outside the model account for the remaining variation. The t-test results demonstrate that all independent variables show positive regression coefficients which reach statistical significance at the 95% confidence level thus all research hypotheses receive validation.

The study results show that cultural adaptability positively impacts digital leadership capabilities in e-commerce companies. The research establishes that organizations need to create flexible organizational cultures which show their ability to adapt to both market changes and technological advancements for building successful digital leadership competencies. E-commerce leaders need to understand technological developments which guide their businesses to adapt to market changes and platform updates and digital consumer behavior. Cultural adaptability enables leaders to create innovative solutions through rapid decision-making which brings about organizational transformation without encountering difficulties from established corporate processes. Digital leaders who implement changes to their organizations will discover that employees become more willing to adopt these new processes through the established adaptive culture. Organizations which maintain static corporate culture will struggle to develop their digital leadership capabilities. Organizations develop their digital leadership capabilities through cultural adaptability which serves as a core cultural value.

The research findings show that e-commerce companies benefit from digital knowledge management systems which enhance their digital leadership skills. Organizations which demonstrate higher technology management capabilities together with knowledge management system control achieve superior results in their digital leadership operations. Leaders who implement a digital knowledge management system can access analytical data and customer insights and operational information which will enhance their decision-making abilities. Digital knowledge management systems provide organizations with essential tools necessary for achieving continuous organizational development. E-commerce organizations need to develop skills which enable them to comprehend and implement digital knowledge because their operations use data-driven processes. The absence of an efficient knowledge management system will create obstacles for leaders who want to introduce fast organizational changes. The research demonstrates that digital knowledge management functions as a cognitive element which enhances digital leadership abilities.

The research results show that e-commerce companies develop their digital leadership capacity through organizational backing which delivers vital resources to them. Organizations need to supply digital transformation resources together with a positive environment which supports their leaders throughout the digital leadership development process. Organizations use technological systems and digital education programs and flexible work arrangements and systems that reward creative performance to provide their employees with organizational support. Leaders execute digital strategies more successfully when their organizations provide them with support. Organizations that do not provide their employees with support will lose their capacity to develop digital leadership skills through their innovation efforts. Organizations need to establish organizational support systems as their main structural element for developing digital leadership skills.

CONCLUSION

The research shows that e-commerce businesses achieve positive results through the combination of cultural adaptability and digital knowledge management together with organizational support systems which help develop their digital leadership capabilities. The results show that digital leadership capability depends on both the personal skills of leaders and the organizational ability to establish an adaptive cultural framework and effective knowledge management procedures and sufficient institutional backing. Organizations need to maintain cultural adaptability which allows them to swiftly adjust to technological advancements while establishing an environment that fosters innovative work methods. The presence of digital knowledge management systems in organizations improves their learning systems which leads to better decision-making results based on data analysis. The organizational support system provides vital resources together with system elements that assist leaders to achieve maximum efficiency in their digital transformation projects. The research findings demonstrate that e-commerce management needs to establish an adaptable organizational culture through policies which support administrative flexibility and innovative practices and ongoing learning opportunities. Companies require a comprehensive digital knowledge management system which enables their leaders to access strategic information in an effective manner. Organizations need to strengthen their support systems through digital training program implementation together with necessary technological resources and a workplace environment which supports their digital transformation initiatives.

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