

The Influence of Digital Leadership on Organizational Performance in Jakarta

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Abstract

Digital technology's transformative influence in business is undeniable, reshaping strategies and operations. Embracing this change goes beyond tech adoption it requires aligning culture, structure, and people with the evolving landscape. Digital leadership is crucial in navigating this realm, impacting job motivation, innovation, and overall performance. However, the relationship between digital leadership, employee performance, and digital culture is complex and context-dependent. The study aims to investigate the impact of digital leadership on organizational performance, with digital culture, digital technology, and digital marketing as intervening variables concerning sustainability and organizational performance in Jakarta. It uses a quantitative approach to analyze the numerical relationship between the variables. Utilizing a Purposive Sampling design, the Partial Least Square (PLS) approach will be employed for study analysis, with assistance from the SMARTPLS 4.0 application. Digital culture, marketing, and technology are all has significant influence by digital leadership. Higher digital leadership positively correlates with increased digital culture, marketing, and technology, while lower digital leadership negatively affects these aspects. Digital culture significantly influences organizational performance. Meanwhile, digital marketing shows a positive influence on performance but lacks significance. Digital technology positively and significantly affects organizational performance. Prioritize the enhancement of digital leadership to advance digital culture, marketing strategies, and technological implementation within organizations. Examine how digital culture contributes to organizational performance, emphasizing a culture fostering innovation, adaptability, and collaboration.

Keyword: Digital leadership; Digital culture; Digital technology; Digital marketing; Organizational performance

1. Introduction

The impact of digital transformation in today's rapidly evolving business environment is undeniable. Recent breakthroughs in digital technology have ushered in a new era, fundamentally reshaping traditional business strategies and processes. These changes will have a significant impact on organizations around the world, forcing them to adapt and update their resources to gain a competitive advantage in the digital age.

Digital technologies, including artificial intelligence, blockchain technology, cloud computing, big data, edge computing, 5G, etc., are driving economic and industrial revolutions, while redefining the way organizations manage and operate. Implementing digital transformation is more than simply adopting advanced technology. It encompasses efforts to realign corporate culture, people, structures, and operations to the rapidly changing digital environment. By 2022, a significant number of businesses aim to stay competitive by leveraging technological advances, exercising digital leadership, and transitioning to public cloud platforms.

Digital leadership has emerged as a key element in navigating this new digital landscape. Organizations in Jakarta and beyond are recognizing the need for a new type of digital leadership to overcome the complexities of the digital age. Digital leadership is a combination of transformational leadership and technical capabilities, integrating digital and cultural competencies to drive change and harness the potential of digital technology. With the rapid pace of change in modern digital culture, the role of IT in reshaping organizational strategies cannot be underestimated.

Research shows that digital leadership plays a crucial role in strengthening organizational capabilities. It has a positive impact on work motivation, drives innovative work behavior, and influences a range of performance outcomes, including business model innovation and digital maturity. Digital leadership also significantly affects organizational performance both directly and indirectly. However, the relationship between digital leadership and employee performance remains elusive. Some studies show no direct effect. The impact of digital leadership on organizational performance is multifaceted, context-dependent, and requires further research.

Simultaneously, the concept of digital culture is gaining traction. It encompasses new values, practices, and expectations in a networked society, driving innovation and creating new knowledge, products, and services. Several studies have shown that while digital culture may not directly impact employee performance, it significantly influences corporate culture, especially when senior management is involved. Technology-driven digital transformation requires recruiting employees with digital skills to drive organizational change. Adopting a digital mindset is no longer an option but a strategic imperative for investment and profitability. Leaders play a crucial role in this process, from selecting and equipping employees to influencing their digital culture and capabilities.

To address the existing research gaps, this study focuses on the Jakarta context and aims to explore the interaction between digital leadership, digital culture, employee digital capabilities and their overall impact on organizational performance. The research questions guiding this study are as follows.

Research question:

RQ1: What is the impact of digital leadership on organizational sustainability performance in Jakarta?

RQ2: What is the role of digital culture in digital leadership and operations in organizational sustainability?

RQ3: What role does employee digital competence play in the relationship between digital leadership and sustainable organizational performance?

By addressing these questions, this research seeks to explore the complex dynamics of digital leadership, digital culture, digital technology and digital marketing as well as the overall impact on organizational performance. The structure of the study includes research context and motivation, theoretical framework and hypotheses, research model and methods, empirical results, concluding discussion, and highlighting limitations and options for future research.

2. Literature Review

2.1 Digital Leadership

A strategic strategy known as "digital leadership" makes use of an organization's digital resources to accomplish commercial objectives. This involves leveraging technology to assist businesses in better meeting the demands of their clients and evolving industry standards. The modern economic and social revolution includes digitalization, and the introduction of new digital technology raises the complexity even further. The new leadership issues that emerge with the digitalization and digital transformation of businesses are referred to by terms like "digital leadership" or "leadership in the digital age." arrangement. According to El Sawy (2020), digital leadership is acting appropriately to help businesses and business ecosystems achieve strategic digital success. A key role in the evolution of digital culture is played by leaders. Building diversified and dispersed relationships is a prerequisite for leaders (Cortellazzo et al, 2019). Organizations must adopt and change their business strategies through digital leadership in order to survive in the new digital era (Araujo, 2021). Digital leaders make the most of and improve their company's digital assets in order to accomplish business objectives and promote successful digital business transformation. Puliwarna et al. (2023) list data-driven decision making, technological strategy, digital transformation, innovation, and soft and hard skills as examples of digital leadership indicators. virtual. A crucial element of digital transformation is digital leadership, which entails leveraging digital resources to accomplish organizational objectives. Digital leaders that are successful know how to bring people together, start long-lasting change, and enhance business outcomes through the use of technology.

2.2 Digital Technology

According to Tulinayo et al. (2018), "digital technologies" encompass a broad spectrum of tools, services, applications, and hardware that use different kinds of software and hardware to enable services or activities using electronic methods for information creation, processing, storing, transmitting, and displaying. Robots, mobile phones, digital television, radio, computers, and more are examples of these technology. Numerous elements, such as the technology itself, the accessibility of resources, the degree of leadership support, and the degree of digital competency exhibited by educators and students, have been discovered to impact the integration of digital technologies in education (Timotheou, 2023). The phrase "digital technology use" refers to a broad range of tools, services, and application scenarios. It's critical to realize that using digital technology is not a one-size-fits-all proposition and that its various manifestations might have disparate impacts on wellbeing (Dienlin, 2020). Digital technology indicators, according to Ribeiro et al. (2023), include total technology market transactions, digital technology integration, synthetic indicators to assess digital maturity, and components used to quantify various facets of the digital economy. When using digital technology, one must take a nuanced approach that takes into account its various applications and consequences, as well as the importance of risk and protective factors and the social environment in which it is employed. Understanding the variables that influence the impact of digital technologies is necessary for their integration in a variety of areas, including education.

2.3 Digital Culture

An organization's "digital culture" is a collection of practices and behaviors for maximizing the potential of emerging technology with the goal of boosting competitiveness and productivity. According to Bucco et al. (2023), "digital culture" refers to a mindset that aims to maximize the potential of new technologies by transforming organizational or commercial paradigms in order to generate value for stakeholders, including customers, employees, and shareholders. According to Ochoa et al. in Busco et al. at (2023), digital culture in an organization is a collection of practices and behaviors to fully utilize new technologies with the goal of changing organizational or commercial models to generate value for shareholders, consumers, and staff. The culture of digital society can be comprehended through models and theoretical frameworks, and the use of data in digital culture can be clarified through critical viewpoints. As society becomes more and more computerized and digital, norms, values, and anticipated behaviors are expressed through digital culture (Sadiku et al. 2017). The various ways that individuals use digital media and technologies in their daily lives is known as "digital culture." Digital advancements and their effects on culture give rise to the novel and intricate idea of "digital culture." According to Uzelac (2010), there is a convergence of technology and culture that is changing how we work, communicate, and learn. Leal (2023) identifies indicators that include the advancement of values such as closeness, commitment, generosity, loyalty.

2.4 Digital Marketing

The use of digital technologies, such as social media, mobile devices, and the internet, to develop and deliver value to clients is known as digital marketing." (2019, Langan). According to Desai and Vidyapeeth (2019), digital marketing refers to the promotion of goods and services through the use of digital technology, primarily the Internet but also mobile devices, display ads, and other digital media. The promotion of products and services through digital technologies, primarily the internet but also mobile devices, display ads, and other digital media, is known as digital marketing (Ritz, 2019). Product promotion via digital media that is online is known as digital marketing. In order to structure direct exchanges in which the customer feels identified, digital marketing uses digital media (López, 2019). The promotion of companies and products using digital channels, such as the internet, mobile devices, social media, search engines, and other digital platforms, is known as digital marketing. It entails promoting to customers via digital channels like text, multimedia, and email. In today fiercely competitive environment, digital marketing is the most effective kind of advertising. It has expanded business opportunities and enhanced marketing tactics over the years. Indicators according to (Liesander & Dharmayanti, 2017), namely: 1) Cost, 2) Incentive Programs, 3) Site Design, 4) Location Design, 5) Interactive.

2.5 Organizational Performance

The level to which an organization successfully puts itself on the business market with some financial, human, and informational resources is referred to as organizational performance. In the short, medium, or long term, an individual's performance can have a good or negative impact on the overall success of the business (Coñtu, 2020). Organizational performance can generally be attributed to a number of elements, including social, cultural, and cross-cultural impacts, organizational structures, and conflict (Sinnaiah et al. 2023). The ability of an organization to achieve its objectives via the effective and efficient use of its resources is known as organizational performance. Performance is comparable to a program or activity's well-known 3Es (economy, efficiency, and effectiveness) (Akpaprep, 2019). According to Inthavong (2023), an organization's performance can be assessed based on how well it uses its resources to maximize efficiency without sacrificing quality.

When a business outperforms its rivals over an extended period of time, both financially and non-financially, it is considered high performing. A number of factors or metrics have been linked to organizational performance in earlier research. Tulungen (2022) lists the following additional factors: productivity, quality, efficiency, effectiveness, customer satisfaction, and staff satisfaction. By implementing digital transformation and employing digital technology as a survival tactic in the face of rapid technological advancements, businesses must enhance their digital competencies in order to fulfill market demands.

2.6 The Effect of Digital Leadership on Digital Culture

The literature study continuously highlights the important role that digital leadership plays in developing a strong digital culture inside companies. Fatima and Masood's (2023) study highlights

the importance of effective digital leadership in fostering information sharing and innovation capability, which are essential for open innovation and gaining a competitive advantage in the market. Similarly, research by Shin, Mollah, and Choi (2022) demonstrates that digital leadership improves organizational performance both directly and indirectly by fostering a digital culture and developing people's digital skills. The aforementioned results underscore the crucial function of digital leadership in fostering an environment that stimulates creativity, dissemination of knowledge, and technological competence among staff members.

2.7 The Effect of Digital Leadership on Digital Marketing

The strong influence of digital leadership on digital marketing is supported by the combined results of multiple studies. Yao et al.'s (2023) research clarifies how digital leadership—more especially, digital strategic consensus—benefits digital transformation. Digital marketing has a major impact on Tanzania's banking sector's success, as demonstrated by Fute and Lyimo's (2019) research. Comparably, Raoofi's (2012) research discovers that e-marketing is crucial in regulating the connection between market orientation and corporate success in Iranian enterprises. These results highlight how crucial digital leadership is to the development and implementation of digital marketing strategies as well as the ensuing success of businesses.

2.8 The Effect of Digital Leadership on Digital

Studies repeatedly show that digital leadership has a significant impact on digital technologies. According to Fatima and Masood's (2023) research, digital leadership can facilitate knowledge sharing, which in turn can lead to open innovation. Furthermore, Shen et al. (2022) demonstrate how organizational culture and strategic orientation function as mediators to enhance the favorable impact of digital leadership on exploratory innovation. Furthermore, through the mediation of ESG management, Kim et al.'s (2023) research highlights the beneficial effects of digital leadership on organizational innovation and sustainability. The significance of digital leadership in propelling technical innovation and sustainability in enterprises is shown by these studies.

2.9 The Effect of Digital Culture on Organizational Performance

The hypothesis that digital culture has a major impact on organizational performance is continuously supported by the literature. According to Pradana, Silvianita, Syarifuddin, and Renaldi's research from 2022, enhancing digital strategy and performance requires a strong digital organizational culture. The relationship between digital technology and company performance is further highlighted by Martinez-Caro, Cegarra-Navarro, and Alfonso-Ruiz (2020) as having a mediating role played by digital organizational culture. The aforementioned results underscore the significance of cultivating a culture that is focused on digital technologies in order to fully utilize their potential and improve the overall performance of a business.

2.10 The Effect of Digital Marketing on Organizational Performance

The body of research supports the noteworthy enhancement of organizational performance that digital marketing brings. According to a 2020 study by Islami and Wahyuni, digital marketing has a major impact on perceived quality and intellectual capital in Micro, Small, and Medium-Sized Enterprises, which in turn affects organizational performance. Through mediating factors like marketing capability and company size, Jung and Shegai (2022) show that innovation in digital marketing has a considerable impact on business performance. The study conducted by Fadoi and Boudabbous (2023) highlights the noteworthy benefits of digital marketing practices on organizational performance. It also highlights the importance of digital strategies in augmenting the overall success of organizations.

2.11 The Effect of Digital Technology on Organizational Performance

The literature evaluation constantly highlights the significant influence of digital technology on the performance of organizations. According to Masoud and Basahel's (2023) research, IT innovation and customer experience can greatly improve a company's success through digital transformation. A study conducted in 2022 by Chouaibi, Festa, Quaglia, and Rossi highlighted the transformative power of digital efforts by finding a favorable correlation between organizational performance and digital transformation. This idea is further supported by Heredia, Castillo-Vergara, Geldes, Carbajal Gamarra, Flores, and Heredia (2022), who demonstrate the beneficial impact of digital skills on business performance, which is mediated by technological capabilities.

2.12 Digital Marketing as a Mediator between Digital Leadership and Organizational Performance

Numerous studies confirm that through digital marketing, digital leadership enhances organizational performance. The benefits of digital leadership on organizational performance and innovative capacity are emphasized by Asif and Akhtar (2021). Similar to this, Li and Liu stress in Fatima (2023) how digital leadership fosters knowledge exchange and creativity for open innovation. According to Jung and Shegai's study from 2022, innovation in digital marketing has a beneficial impact on business performance by expanding audience reach and improving consumer engagement.

2.13 Digital Culture as a Mediator between Digital Leadership and Organizational Performance

The research continuously demonstrates how digital culture functions as a mediator between organizational performance and digital leadership. The mediating function of innovation capability between digital leadership and organizational performance is highlighted by Al-Husban et al. (2022). According to Puliwarna et al. (2023), there is a positive correlation between digital leadership and organizational performance. The relationship between digital competence and organizational success is mediated by digital culture. The significance of digital culture in enhancing the influence of digital leadership on organizational performance is shown by these studies.

3. Material and Method

3.1 Design Study

The study aims to investigate the impact of Digital Leadership on Organizational Performance, with Digital Culture, Digital Technology, and Digital Marketing as Intervening Variables concerning Sustainability and Organizational Performance in Jakarta. It uses a quantitative approach to analyze the numerical relationship between the variables.

The objects under scrutiny encompass Digital Leadership, Organizational Performance involving Digital Culture, Digital Technology, and Digital Marketing as Intervening Variables.

1. Primary Data: Involves data directly collected from respondents through questionnaires. It's the initial data recorded and collected by the researcher.

2. Secondary Data: Comprises sources like textbooks, journals, or electronic reference articles that do not directly provide data to the collector but serve as supplementary resources.

3.1.1 Population

The study encompasses a population from the Jakarta area. The recommended sample size estimation, utilizing Maximum Likelihood estimation, suggests a minimum of 100 respondents based on the rule of thumb (for every observed variable in the model, there are five responders).

3.1.2 Sample

Employing Nonprobability Sampling with a Purposive Sampling design, the research selects participants based on specific criteria. Criteria include private employees, government employees, and members of organizations in the Jakarta area.

3.2 Data Analysis

To carry out research analysis using a quantitative approach and applying a Purposive Sampling design with the Partial Least Square (PLS) and SMARTPLS 4.0 analysis methods. Because PLS can manage models with a large number of variables and intervening factors, it is selected. which aligns well with the complexities inherent in this study's causal modeling and relationships, also known as path analysis. Unlike traditional methods, PLS does not demand strict assumptions regarding data distribution, allowing it to accommodate various types of data, regardless of their normality or sample size. This non-parametric approach enables prediction by estimating latent variable values, focusing on the connection between constructs while minimizing residual variances in both latent and indicator variables. The three primary phases of the PLS analysis method are hypothesis testing, inner model analysis, and outside model analysis. (Ulum et al. 2008).

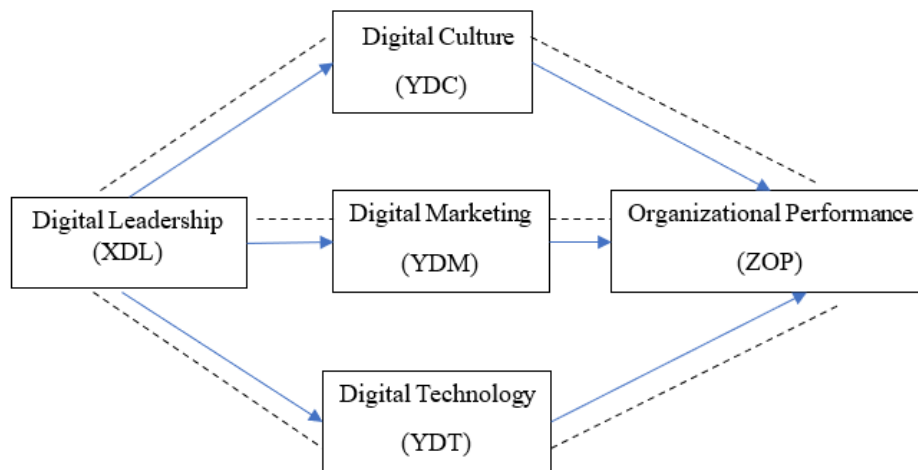


Figure 1. Research Model

4. Result

4.3 Testing the Measurement Model

4.3.1 Validity Test Results

In accordance with Effendi & Singarimbun (1995) recommended minimum number of questionnaire trials, the validity test for the research instrument included 30 respondents who were sampled from the study population. With a degree of freedom (df) = n-2 and a significance level of 5%, the test computed the r-value against the r-table using SmartPLS 4.0. According to Ghozali (2011), an indicator was regarded genuine if its estimated r-value above the r-table value, which was set at 0.361 for 30 respondents. If not, it was ruled invalid. Table provides an overview of the findings from the validity test conducted on variables processed with SmartPLS 4.0.

Table 1. Outer Loading

	XDL	YDC	YDM	YDT	ZOP
XDL2	0.801				
XDL3	0.732				
XDL4	0.845				
YDC2		0.889			
YDC1		0.922			
YDC3		0.858			
YDM1			0.916		
YDM4			0.877		
YDM5			0.863		
YDT1				0.789	
YDT3				0.765	

YDT4				0.844	
PDO1					0.851
ZOP2					0.915
ZOP4					0.820

The validity test outcomes for the variables related to digital leadership, digital technology, digital culture, digital marketing, and organizational performance exhibit r-count values lower than the designated r-table value (0.361), signifying the validity of these indicators. All tested variables meet the specified criteria and are considered valid, warranting their utilization for subsequent analyses. The study model can handle complex variable connections even with smaller data sample sizes (30-100 samples) and non-parametric assumptions since it uses the Partial Least Square (PLS) approach, which is supported by SmartPLS 4.0 software. The measurement model encompassing validity and reliability tests, determination coefficient modeling, and path coefficients for the equation model are presented in the following figure.

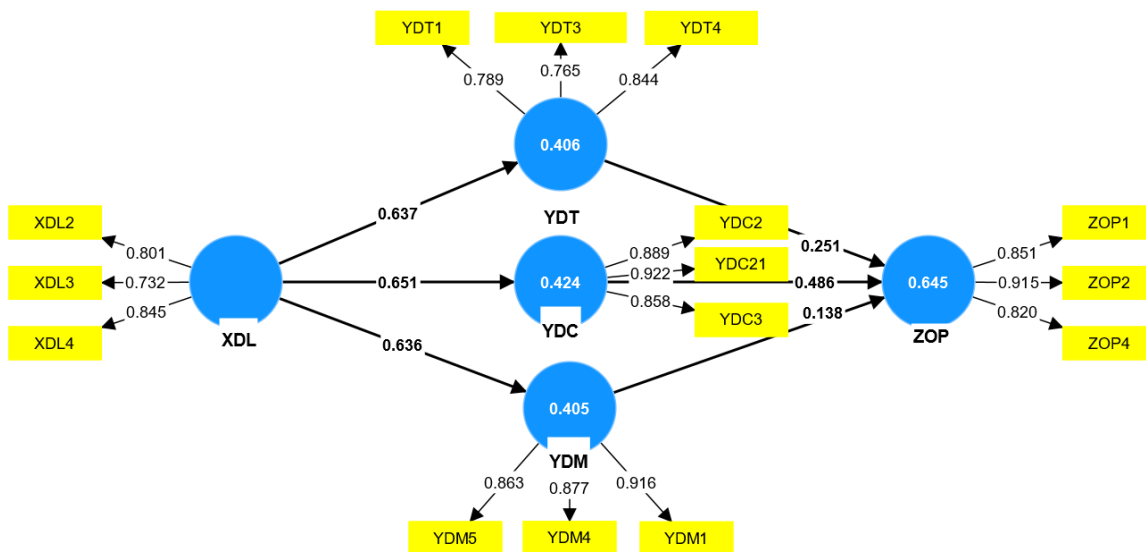


Figure 2. Loading Factor

4.3.2. Reliability Test Results

Determining a measurement device's consistency is the goal of reliability testing. Multiple item scales' internal consistency dependability is assessed using Cronchbach's Alpha testing, where a value of greater than 0.70 is required. If the reliability value of Composite Reliability is consistently higher than the Cronchbach's Alpha value, as follows, reliability evaluation can also be done by monitoring Composite Reliability, a statistical technique for testing the genuine value of variables.

When both the composite reliability rating and the Cronback's alpha value are more than 0.07, a variable is deemed reliable. The following table displays the reliability test results:

Table 2. Construct Reliability dan Validity

	Cronbach's Alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
XDL	0.706	0.713	0.836	0.631
YDC	0.869	0.875	0.920	0.792
YDM	0.862	0.864	0.916	0.784
YDT	0.719	0.726	0.842	0.640
ZOP	0.828	0.836	0.897	0.744

demonstrates that the composite reliability and Cronbach's alpha values of all research variables are more than 0.70. It follows that the indicators employed for this research variable are considered trustworthy. In the interim, utilize the average variance extracted (AVE) value with a limit value over 0.50 to test validity. All of the variables in the table have AVE values more than 0.50, as can be observed. This could be read as a declaration of the validity of all variables and indicators.

4.3.3 Discriminant Correlation Test

To determine if a construct and other constructs are correlated, the discriminant correlation test is used. A good degree of validity can be inferred from each construct if its square root of the average value of the AVE is higher than the correlation value between it and the other constructs in the model.

Table 3. Discriminant Validity Value

	XDL	YDC	YDM	YDT	ZOP
XDL					
YDC	0.824				
YDM	0.809	0.893			
YDT	0.900	0.889	0.891		
ZOP	0.748	0.901	0.811	0.895	

By comparing the initial AVE values, we can determine that each of these values is greater than the correlation between the other variables. This leads us to the conclusion that all of the study's latent variables have strong structural integrity and unique analytical validity.

4.3.4. Structural Model Testing

In deterministic testing, such as analysis of variation (R²), the coefficient of determination can be found in the following table to indicate the degree to which an independent variable influences a dependent variable:

Table 4. R-Square Value

	R-Square	R-Square Adjusted
YDC	0.424	0.418
YDM	0.405	0.399
YDT	0.406	0.400
ZOP	0.645	0.634

The variables can be determined by looking at the above table Digital Culture, Digital Marketing, Digital Technology can explain 63.4% of Organizational Performance variability and the rest is explained in research outside this research. It can be seen that the influence of digital culture is interpreted as 42.4%, digital marketing with a magnitude of 40.5%, and digital technology with a magnitude of 64.5% with an influence of 40.6% and independent of this investigation, additional factors impacted the remaining.

4.4. Bootstrapping Test

4.4.1 Analisis Direct Effect

Table 5. Direct Effects

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
XDL -> YDC	0.651	0.648	0.077	8.471	0.000
XDL -> YDM	0.636	0.637	0.071	8.914	0.000
XDL -> YDT	0.637	0.639	0.069	9.176	0.000
YDC -> ZOP	0.486	0.483	0.131	3.712	0.000
YDM -> ZOP	0.138	0.145	0.146	0.945	0.344
YDT -> ZOP	0.251	0.248	0.092	2.724	0.006

4.4.1.1 Hypothesis Testing 1

According to the provided table, the original sample value is 0.651 with a t-statistic of 8.471. This outcome is considered significant because it exceeds 1.96, and the associated p-value is 0.000, indicating a value smaller than 0.05, demonstrating a significant influence. In light of the positive direction of the relationship, an increase in the digital leadership variable, with other variables held constant, leads to an increase in the digital culture value. This positive direction suggests a positive effect of digital leadership on digital culture. Therefore, based on the test results, it can be concluded that the first hypothesis is accepted.

4.4.1.2 Hypothesis Testing 2

From the table, the original sample registers at 0.636 with a t-statistic of 8.914. This is considered a significant t-statistic as it exceeds 1.96, and the associated p-value is 0.000, indicating a value smaller than 0.05, signifying a significant influence. With a positive direction, an increase

in the digital leadership variable, keeping other variables constant, results in an increase in the digital marketing value. This positive direction suggests that digital leadership positively affects digital marketing. Consequently, based on the test results, it can be concluded that the second hypothesis is accepted.

4.4.1.3 Hypothesis Testing 3

The original sample value is 0.637 with a t-statistic of 9.176 as shown in the table. This result is considered a significant t-statistic as it surpasses 1.96, and the associated p-value is 0.000, indicating a value smaller than 0.05, signifying a significant influence. With a positive direction, an increase in the digital leadership variable, while keeping other variables constant, leads to an increase in the digital technology value. This positive direction suggests that digital leadership positively influences digital technology. Thus, based on the test results, it can be concluded that the third hypothesis is accepted.

4.4.1.4 Hypothesis Testing 4

According to the table, the original sample value is 0.486 with a t-statistic of 3.712. This result is considered significant as it exceeds 1.96, and the associated p-value is 0.000, indicating a value smaller than 0.05, suggesting a significant influence. With a positive value, an increase in the digital culture variable while keeping other variables constant leads to an increase in the organizational performance value. This positive direction suggests a positive effect of digital culture on organizational performance. Therefore, based on the test results, it can be concluded that the fourth hypothesis is accepted.

4.4.1.5 Hypothesis Testing 5

As per the table, the original sample value is 0.486 with a t-statistic of 0.945. This result is deemed as not significant since it is below 1.96, and the associated p-value is 0.344, indicating a value greater than 0.05, signifying an insignificant influence. With a positive direction, an increase in the digital marketing variable while keeping other variables constant results in an increased organizational performance value. This positive direction suggests an insignificant effect of digital marketing on organizational performance. Hence, based on the test results, it can be concluded that the fifth hypothesis is rejected.

4.4.1.6 Hypothesis Testing 6

According to the table, the original sample value is 0.251 with a t-statistic of 2.724. This outcome is considered a significant t-statistic as it exceeds 1.96, and the associated p-value is 0.006, indicating a value smaller than 0.05, signifying a significant influence. With a positive direction, an increase in the digital technology variable while other variables remain constant leads to an increase in the organizational performance value. This positive direction suggests a positive effect of digital technology on organizational performance. Therefore, based on the test results, it can be concluded that the sixth hypothesis is accepted.

4.4.2 Analysis Indirect Effect

Table 6. Specific Indirect Effects

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
XDL -> YDM -> ZOP	0.088	0.091	0.093	0.943	0.346
XDL -> YDC -> ZOP	0.316	0.316	0.104	3.057	0.002
XDL -> YDT -> ZOP	0.160	0.157	0.060	2.687	0.007

4.4.2.1 Hypothesis Testing 7

As per the provided table, the original sample value is 0.088 with a t-statistic of 0.943. This outcome is not deemed significant since the t-statistic is below 1.96, and the associated p-value is 0.346, indicating a value greater than 0.05, signifying an insignificant influence. With a positive direction, an increase in the digital leadership variable through digital marketing, while other variables remain constant, leads to an increase in the organizational performance value. This positive direction suggests that the impact of digital leadership through digital marketing on organizational performance is insignificant. Therefore, based on the test results, it can be concluded that the seventh hypothesis is rejected.

4.4.2.2. Hypothesis Testing 8

According to the table, the original sample value is 0.316 with a t-statistic of 3.057. This outcome is considered a significant t-statistic as it exceeds 1.96, and the associated p-value is 0.002, indicating a value smaller than 0.05, suggesting a significant influence. With a positive direction, an increase in the digital leadership variable through digital culture, while other variables remain constant, leads to an increase in the organizational performance value. This positive direction suggests that digital leadership through digital culture has a positive effect on organizational performance. Therefore, based on the test results, it can be concluded that the eighth hypothesis is accepted.

4.4.2.3 C. Hypothesis Testing 9

As depicted in the table, the original sample value is 0.160 with a t-statistic of 2.687. This outcome is considered a significant t-statistic as it exceeds 1.96, and the associated p-value is 0.007, indicating a value smaller than 0.05, signifying a significant influence. With a positive direction, an increase in the digital leadership variable through digital technology while other variables remain constant leads to an increase in the organizational performance value. This positive direction suggests that digital leadership through digital technology has a positive effect

on organizational performance. Therefore, based on the test results, it can be concluded that the ninth hypothesis is accepted.

5. Discussion

5.1 The Influence of Digital Leadership on Digital Culture

The study found that digital leadership has a big impact on Jakarta's digital culture. Digital leadership helps organizations by encouraging innovation, open collaboration, and information sharing, which in turn affects employee skills and ultimately corporate performance. The present findings are consistent with other research conducted by Quixy (2023), Fatima and Masood (2023), and Shin, Mollah, and Choi (2022) that shown the beneficial influence of digital leadership on cyberculture.

5.2 The Influence of Digital Leadership on Digital Marketing

Digital leadership positively affects digital marketing in Jakarta, according to the research findings. Enhancing information exchange and creativity through strategic digital leadership advances corporate objectives and digital marketing. This finding supports previous research on the positive impact of digital leadership on digital marketing by Yao et al. (2023), Fute and Lyimo (2019), and Raoofi (2012).

5.3 The Influence of Digital Leadership on Digital Technology

The study confirmed that digital leadership in Jakarta has a favorable impact on digital technology. Effective digital leadership fosters the creativity and knowledge sharing necessary for open innovation as businesses traverse the digital era, supporting organizational innovation as well as sustainability. This result aligns with earlier research by Shen et al. (2022), Kim et al. (2023), and Fatima and Masood (2023) showing the positive influence of digital leadership on digital technology.

5.4 The Influence of Digital Culture on Organizational Performance

The investigation showed how digital culture in Jakarta has a big impact on organizational performance. An interdisciplinary strategy that takes into account the different facets of digital culture improves organizational performance, demonstrating the importance of digital culture in amplifying the impact of digital technology on business performance. The results are consistent with research by Martínez-Caro et al. (2020) and Pradana et al. (2022) showing the beneficial effects of digital culture on organizational performance.

5.5 The Effect of Digital Marketing on Organizational Performance

The study's discovery of minimal benefits from digital marketing for Jakarta organizations, despite initial expectations, prompts a closer examination of potential reasons behind this observation. While digital marketing offers avenues for innovation, information exchange, and customer engagement, its limited impact on organizational performance suggests nuanced challenges within

the Jakarta business landscape. This could stem from factors like market saturation, misalignment with strategic objectives, or ineffective implementation strategies. These findings underscore the need for businesses to reassess their digital marketing approaches, ensuring they align with local contexts and organizational goals. Additionally, it emphasizes the importance of ongoing evaluation and adaptation to address evolving market dynamics and optimize the effectiveness of digital marketing initiatives. This was in contrast to other studies that found a considerable impact of digital marketing on performance, such as those conducted by Fadoi and Boudabbous (2023) and Jung and Shegai (2022).

5.6 The Influence of Digital Technology on Organizational Performance

The study provided proof that digital technology has a big impact on Jakartan organizations' performance. Corporate performance is positively impacted by technology adaptations such as digital transformation, corporate culture, customer experience, and IT innovation. Consistent with earlier research by Heredia et al. (2022), Masoud and Basahel (2023), and Chouaibi et al. (2022), this study highlights the significant influence of digital technology on the performance of organizations.

5.7 Digital marketing positively mediates the relationship between Digital Leadership and Organizational Performance

The findings indicating a minimal mediation of digital marketing on the relationship between digital leadership and organizational performance in Jakarta highlight intriguing dynamics within the local business environment. Despite digital marketing's potential to enhance consumer interaction and broaden market reach, its limited impact on organizational performance suggests underlying complexities. Possible factors contributing to this insignificance could include a lack of strategic alignment between digital marketing efforts and overarching business objectives, ineffective targeting or messaging strategies, or challenges in measuring and attributing the impact of digital marketing activities accurately. These findings underscore the importance for Jakarta-based organizations to critically evaluate their digital marketing strategies, ensuring they are closely integrated with broader organizational goals and tailored to local market conditions. Moreover, it emphasizes the need for continuous refinement and adaptation of digital marketing approaches to maximize their effectiveness in driving organizational performance amidst the unique challenges of the Jakarta business landscape.

5.8 Digital Culture positively mediates the relationship between Digital Leadership and Organizational Performance

According to the study, digital leadership in Jakarta has a favorable impact on organizational performance through digital culture. Organizational transformation is accelerated by a digital culture that is led by digital leadership and promotes change acceptance. This is consistent with other study showing the beneficial association between digital leadership and organizational

performance through digital culture, as shown by Al-Husban et al. (2022), Pradana et al. (2022), and Puliwarna et al. (2023).

5.9 Digital Technology positively mediates the relationship between Digital Leadership and Organizational Performance

According to the research, digital leadership in Jakarta has a major impact on organizational effectiveness when it comes to digital technology. Good leadership supports the use of technology to further corporate objectives, highlighting the significance of change and technology management for enhanced organizational effectiveness. This is consistent with earlier research showing the beneficial association between digital leadership and organizational performance through digital technology, as reported by Fatima and Masood (2023), Ly (2023), and Al-Husban et al. (2021).

6. Conclusion, Implication, and Recommendation

6.1 Conclusion

Digital culture, marketing, and technology are all greatly enhanced by digital leadership. Increased digital culture, marketing, and technology are positively correlated with higher levels of digital leadership, whereas lower levels of digital leadership have a negative impact on these factors.

Organizational success is greatly impacted by digital culture. Digital marketing, on the other hand, has a marginally significant but beneficial impact on performance. Organizational performance is positively and profoundly impacted by digital technology.

6.2 Implications

Leadership significantly influences digital change, necessitating strategies that support digital culture and technology usage for organizational growth. While essential, the study indicates that digital marketing's impact on organizational performance is not significant, urging organizations to explore other areas for performance improvement. Both digital culture and technology significantly affect organizational performance, urging organizations to integrate these aspects effectively for optimal performance.

This study emphasizes how crucial it is to implement sensible digital strategies and how crucial leadership is in facilitating organizational change. The next steps for organizations involve developing a robust digital culture and integrating relevant technologies to achieve desired outcomes.

6.3 Recommendations

Prioritize the enhancement of digital leadership to advance digital culture, marketing strategies, and technological implementation within organizations. Examine how digital culture contributes to organizational performance, emphasizing a culture fostering innovation, adaptability, and collaboration. Integrate relevant digital technologies within operations to enhance

efficiency and achieve organizational goals. To grasp its importance, reexamine the connection between digital marketing and organizational effectiveness.

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