Research Paper

Digital Transformation's Impact on Organizational Performance: Exploring the Role of Digital Innovation and Customer Experience

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A R T I C L E   I N F O

A B S T R A C T

Fuelled by the relentless disruption of emerging digital technologies, businesses are pressured to adapt through digital transformation. However, research on digital transformation in the context of developing economies like Indonesia remains scarce, creating a gap in the knowledge. This study aims to bridge this gap by leveraging dynamic capabilities theory. It delves into how digital transformation in Indonesia's service sector unfolds to influence organizational performance, specifically exploring the potential roles of digital innovation and customer experience in this process. Analyzing survey data from a substantial sample of 122 service sectors and utilizing Partial Least Squares Structural Equation Modeling (PLS-SEM) for analysis, the study yields crucial findings. Empirical data collected from IT directors, managers, transformation officers, and employees with over a decade of work experience through a questionnaire reveals a clear link between digital transformation and improved organizational performance. Interestingly, the study also identifies digital innovation as a mediating factor, strengthening the positive effect of digital transformation on organizational performance. Furthermore, the research reaffirms the independent contribution of digital innovation to improved organizational performance.

1. INTRODUCTION

Due to swift advancement in digital technology, businesses are under immense pressure to adapt and thrive in a highly competitive environment (Warner & Wäger, 2019). Digital transformation emerged as a critical strategy for attaining this objective. By embracing digital tools across all aspects of operations, organizations can boost productivity, become more agile and competitive, and prioritize innovation and customer satisfaction (Vial, 2021). Digital transformation employs digital technologies like big data, cloud computing, social media, business analytics, and mobile platforms that reshape business models and how organizations operate (Veldhoven & Vanthienen, 2022). Indonesian President launched "Indonesia's Digital Vision 2045" in 2019, aiming to develop Indonesia's digital economy. In response, the government initiated a national acceleration program for digital transformation, creating a strategic roadmap for digitalization across sectors, including services, and fostering a digitally skilled workforce (Chen et al., 2023). According to the report by the World Bank (2023), the tertiary sector contributed to more than 50% of the global GDP. This figure shows its predominant position in the present-day economy, and it's expected to grow and remain the primary driver of global economic growth (Kupelian, 2020).

The digital economy demands a two-pronged approach to digital transformation; technical and strategic management (Wang et al., 2020). The service industries are leading the way in this wave of transformation because they provide intangible products/services that rely heavily on human interaction and require quick real-time responsiveness making them susceptible to digital disruption (Shehadeh et al., 2023) and must not only be aware of cutting-edge global digital technologies but also be adaptable enough to modify their business models in response (Wang et al., 2020). This adaptability extends to fostering a culture that embraces change and reevaluates business processes to seamlessly integrate these new technologies (Silva et al., 2016). Developing the necessary skills within the workforce is also crucial (Silva et al., 2016). Blockbuster's failure is a cautionary tale: businesses that don't adapt to technological and strategic shifts are doomed (Hess et al., 2016).

There's a significant gap in academic studies focusing on digital transformation in developing countries like Indonesia (Schneider & Kokshagina, 2021). Kharlamov & Parry (2021) stress the significance of a comprehensive study to comprehend how digital transformation affects organizational performance in diverse contexts and sectors. The specific ways in which digital transformation impacts the performance of organizations are critical,

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with digital innovation and customer experience emerging as key factors. These factors are crucial in service-oriented industries, where service delivery and customer satisfaction strongly impact a company's success.

While some studies in Indonesia, such as that by Susanti et al.(2023), have examined the effects of digital transformation on tangible businesses, and Aminah & Saksono(2021) focused on digital transformation in e-government, there remains a gap in research regarding the impact of digital transformation on service sectors in Indonesia. Masoud & Basahel (2023) explored this in Saudi Arabia, calling for similar studies in other countries. Thus, this study aims to respond to and address this gap by examining the impact of digital transformation on organizational performance, with a focus on the mediating role of digital innovation and customer experience in the context of Indonesia's service sectors.

This research unveils the intricate interplay between digital innovation, customer experience, and their influence on the success of digital transformation within Indonesia's service sector. Grounded in Dynamic Capabilities Theory, this study delves into how firms can strategically leverage digital technologies to cultivate and reconfigure their internal and external capabilities, ultimately strengthening the bridge between digital transformation and organizational performance. Business leaders and policymakers in Indonesia's service sector can gain a deeper understanding of how to harness the true potential of digital digitalization. Armed with these insights, they can craft targeted strategies that prioritize a seamless customer experience and strategically deploy innovative technologies. This, in turn, can propel performance, solidify a competitive edge, and foster economic growth through job creation and enhanced service delivery. Theoretically, this research contributes to the evolving body of knowledge surrounding digital transformation by integrating the concepts of digital innovation and customer experience within the framework of Dynamic Capabilities Theory. It expands our understanding of how these factors mediate digital transformation-performance links, ultimately enriching the discourse on organizational competitiveness in a digital age. A thriving service sector fosters economic well-being, creates jobs, and improves the overall customer experience for Indonesians. As the sector embarks on a rapid evolutionary trajectory, this research offers a roadmap for navigating the digital landscape and achieving long-term prosperity within this dynamic marketplace.

2. Literature Review

2.1 Digital capabilities enable digital transformation.

In a world constantly reshaped by digital disruption, this study argues that service sectors must cultivate dynamic capabilities to not just survive, but thrive (Hess et al., 2016). These dynamic capabilities, as first introduced by Teece et al. (1997) are the engine that propels businesses forward in a dynamic environment. They focus on strategically identifying and seizing new opportunities provided by digital technologies, while simultaneously shedding outdated resources and reconfiguring existing ones (Teece et al., 1997). This continuous adaptation allows businesses to maintain a competitive advantage in the face of constant changes. The concept of dynamic capabilities builds upon the resource-based view, which emphasizes firm-specific strengths for achieving a competitive edge (Carl & Fedor, 2016). Dynamic capabilities go beyond simply possessing resources; they focus on the ability to purposefully create, extend, or modify them (Helfat, et al., 2007).

Digital transformation, *"a fundamental change process"* driven by digital technology (Gong & Ribiere, 2021), requires a strategic overhaul of resources and capabilities to redefine an organization's value proposition. This is precisely where dynamic capabilities become crucial. Teece (2007) further breaks down dynamic capabilities into three key aspects: sensing opportunities and threats, seizing those opportunities, and reconfiguring resources. Sensing capabilities involve actively scanning the environment for new digital trends and customer needs(Teece, 2014). Strong digital sensing allows service sectors to anticipate and navigate the unexpected changes that digital transformation provides (Warner & a, 2019). Seizing capabilities involves addressing opportunities or possibilities through new digital products, processes, services, or a combination of all (Helfat et al., 2007). A firm's seizing capacity enables them to identify and capitalize on potential business opportunities by making necessary organizational changes (Yeow et al., 2018). According to Yeow et al.(2018), reconfiguring entails continuous transformation and renewal of organizational routines. To maintain profitable growth, firms must reconfigure their capabilities to adapt to changing environments and organizational structures (Helfat et al., 2007).

2.2 Constructs definitions and hypothesis development.

Table 1. Definition of constructs

Constructs	Definition
Digital transformation	Digital transformation is *"a fundamental change process, enabled by the innovative use of digital technologies accompanied by the strategic leverage of key resources and capabilities, aims to radically improve an entity (organization, business network, industry, or society), and redefine its value proposition for its stakeholders".*(Gong & Ribiere, 2021)*.* This concept is consistent with the definition provided by (Reis et al., 2018), which divided digital transformation into three categories: social perspective, technological perspective, and organizational perspective. The technological aspect refers to the utilization of innovative digital technologies. The organizational perspective involves adapting organizational processes or developing new business models in response to digital transformation. The social dimension of digital transformation encompasses its impact on various facets of human existence, such as enhancing the quality of customer experience.
Digital Innovation	Digital Innovation involves leveraging digital technology platforms such as IOT, data analytics, and AI to create and improve goods, processes, or business models within and across businesses or organizations(Fabio & Alexander, 2018)
Customer Experience	Customer experience is a multi-dimensional concept that encompasses a customer's thoughts, feelings, actions, and even social experiences throughout their journey with a business from the initial search for a product or service to after-sales interactions (Jain et al., 2017).
Organisational performance	Organizational performance is a measure of how an organization can achieve its set goals and objectives(Pillai, 2022). Organizational performance is assessed using a range of financial and non-financial metrics(Pillai, 2022)

2.2.1 Digital transformation and organizational performance.

Digital transformation has emerged as a powerful tool for organizations seeking to enhance their performance. Studies by Wang et al.(2021) demonstrate a clear link between digital transformation initiatives and improved organizational outcomes. This is achieved by integrating and leveraging digital technologies across all departments, leading to significant benefits such as cost reduction and increased efficiency (Vial, 2021). One key driver of performance improvement is the power of data (Noor & Sidiana, 2023; Tashliyev & Tirtoprojo, 2023). In the digital economy, data is a valuable asset. Digital transformation empowers businesses to utilize both internal and external data more effectively (Hanelt et al., 2021). By leveraging digital tools, organizations can gain deeper insights from their data, leading to improved decision-making and ultimately, enhanced performance. Existing research by Usai et al. (2021) support this notion, highlighting the positive impact of digital technology on organizational efficiency, particularly in the short term.

Beyond efficiency gains, digital transformation fosters the development of value-added activities within a company, as noted by North et al. (2020). This, in turn, increases the likelihood of improved overall firm performance. Furthermore, Matarazzo et al. (2021) emphasize the role of digital transformation in enabling flexible organizational structures and may enhance enterprise sales efficiency, engage in online and offline precision marketing, and tap into clients' individualized demands through in-depth analysis of structured and unstructured data. By adopting the latest digital technologies, businesses can adapt their functional departments to meet diverse business requirements. This shift from static to dynamic organizational structures allows them to react more quickly to emerging market trends and reduce operating expenses. "Informed by this literature, we posit the following hypothesis:

Hypothesis 1: Digital transformation is positively related to the performance of an organization.

2.2.2 Digital transformation and digital innovation

Organizations are increasingly turning to digital transformation to not only digitize their operations but also fundamentally alter their business models through innovative technology (Al-ayed et al., 2023). This transformation is fuelled by the emergence of powerful new digital tools and platforms that are revolutionizing how firms approach innovation (Nambisan et al., 2019). Research by Liu et al. (2024) confirm this positive impact, demonstrating that digital transformation, encompassing digital technologies, products, and digital platforms, significantly enhances

enterprise innovation performance. Similarly, Sun (2022) highlights the positive role of digital transformation in driving innovation within organizations.

Digital innovation, a crucial driver of performance improvement is fuelled by digital transformation (Khin & Ho, 2020). Firms that embrace digital technologies outperform those that don't, largely because these technologies foster digital innovation. Khin & Ho (2020) further emphasize the mediating role of digital innovation in the relationship between digital transformation and organizational performance. In other words, digital transformation creates the foundation for digital innovation, which ultimately translates to improved performance. Considering the reviewed literature, we propose the following hypothesizes:

Hypothesis 2: There's a positive relationship between digital transformation and digital innovation.

Hypothesis 3: Digital innovation mediates the positive impact of digital transformation on organizational performance.

2.2.3 Digital transformation and customer experience

Digital transformation has become a top priority for businesses seeking to optimize operations and stay ahead in a competitive market. However, research by Saunila et al. (2019) highlight a critical oversight: the often-neglected impact of digital transformation on customer experience. Prior studies have explored the relationship between digital transformation and customer relationships (Pousttchi et al., 2019). Sasmoko et al. (2019) delve deeper, emphasizing the positive influence of digital transformation on Customer experience, particularly in areas like customer sentiment and the use of smart technologies for improved understanding and adaptation. Research findings of (Huseynov, 2021) suggests that big data plays a crucial role in enhancing customer experience and informing better decision-making. For instance, Zhao et al. (2019) demonstrate how businesses can utilize big data to analyze online reviews and improve their digital word-of-mouth reputation. The retail sector provides another compelling evidence. Roy (2020) highlights how advanced technologies are shaping exceptional personalized services, ultimately leading to a more positive customer experience. The provided literature suggests a testable hypothesis.

Hypothesis 4: Digital transformation affects customer experience positively.

2.2.4   Customer experience and organizational performance

In today's digitally connected landscape, the competitive landscape extends far beyond product quality and pricing. Customer experience has become a critical factor influencing organizational performance. Research by Lin & Bennett (2014) demonstrate a clear positive link between customer feelings and their level of satisfaction. Furthermore, Lee & How (2019) highlight the significant impact of customer-related factors, such as satisfaction, on an organization's overall performance. This connection underscores the growing importance of Customer experience in the digital age. As Becker and Jaakkola (2020) emphasize, that customer experience has emerged as a crucial determinant of organizational success. By prioritizing customer feelings and satisfaction, businesses can unlock a powerful driver of performance in an increasingly competitive environment.

Hypothesis 5: Customer experience has a positive impact on organizational performance.

2.4.5 Digital Innovation and Organisational Performance

Digital innovation is rapidly transforming the business landscape, and its positive impact on organizational performance is undeniable. Research by Huang et al. (2023) confirm this, demonstrating that digital innovation can significantly improve the performance of an organization by boosting *labor productivity*, *reducing operating costs, and enhancing competitive advantage*. This finding aligns with the growing body of research by scholars like Chatterjee et al. (2020), who emphasize the pivotal role of digital innovation in today's competitive market. Khin & Ho, (2020) further highlight the increasing focus on understanding how digital innovation directly impacts firm performance. The benefits of digital innovation extend beyond just performance metrics. Åström et al. (2022) highlight the transformative power of digital innovation. It not only allows organizations to explore new opportunities but also empowers them to deliver greater value to their customers through the introduction of innovative products and services. Drawing on the evidence presented in the literature, we can hypothesize that:

Hypothesis 6: Digital innovation affects organizational performance positively.

Figure 1. Research Model
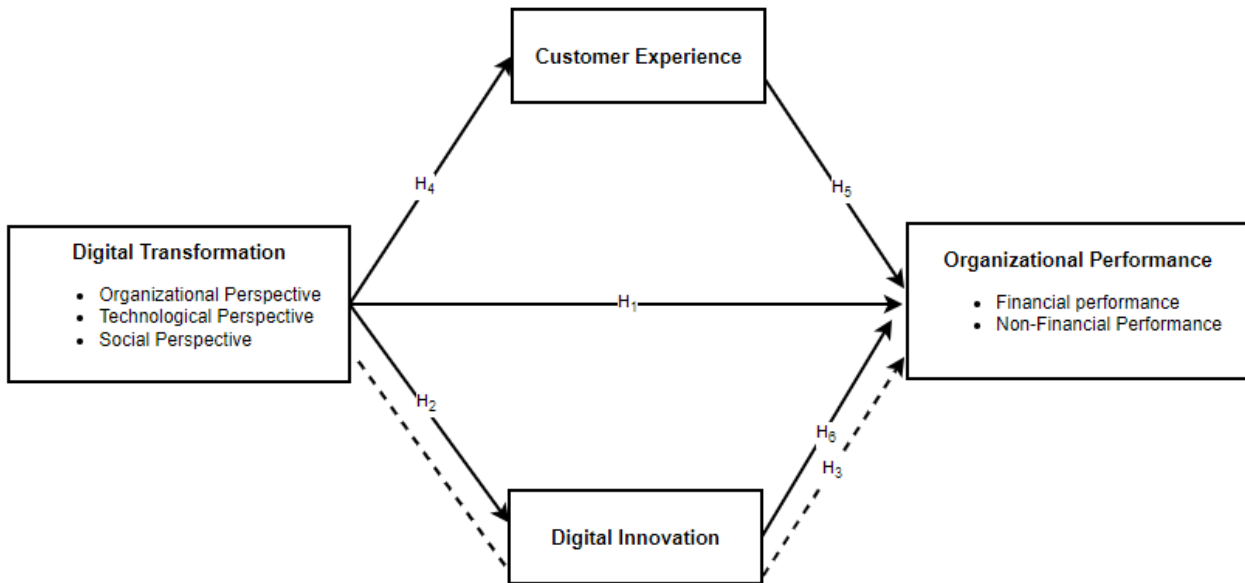
3. Methodology

This research employs a quantitative method to investigate the relationships between digital transformation, digital innovation, customer experience, and organizational performance within Indonesia's service sector. We utilize survey data to test the hypotheses formulated to achieve the research objectives and answer the research questions. The unit of analysis for this study is organizations within Indonesia's service sector and the criterion for choosing responding organizations is that they must be actively engaged in digital transformation efforts. We collected primary data from 122 organizations within Indonesia's service sector using an online survey. Indonesia's service sector presents a compelling research context for two key reasons. First, Indonesia is actively transitioning towards a digital economy, with a growing emphasis on leveraging digital technologies for economic growth. Second, the service sector plays a crucial role in Indonesia's GDP, and understanding how digital transformation can enhance performance within this sector is vital. Moreover, to gather data from relevant organizations within Indonesia's service sector, researchers employed a multi-pronged approach. Initial contact details were obtained by visiting the websites of various service sector companies. This was supplemented by on-site visits to some organizations. Through a combination of email outreach, phone calls, and in-person interactions, suitable respondents holding key decision-making roles were identified. An online survey link was then distributed to these individuals. The response rate for this survey was 53.04%, with 122 organizations participating out of the 230 contacted.

3.1 Profile of responding organization

SPSS Version 27 was used to analyze the respondents' profiles. Based on the data in Table 2, almost two-thirds (61.5%) of the respondents were male, with the remaining 38.5% female. In terms of position, the most common job title among respondents was Employees with over a decade of work experience (33.9%), followed by Manager (30.3%), IT Director (22.1%), and Transformation Officer (13.9%). Furthermore, 15% of the respondents came from the technological sector, educational sector (13.1%), finance (9.8%), entertainment (9%), tourism (7.4%), insurance (6.6%) and most of the respondents are from other service sectors (29.9%). Finally, 74.6% of the respondents had more than a decade of work experience, those with 5-10 years of experience made up 13.1%, and those with less than 5 years of experience made up 12.3%.

Table 2. Respondents' profile

	Frequency	Valid %	Cumulative %
Gender			
Female	47	38.5	38.5
Male	75	61.5	100
Position			
Employees	41	33.6	33.6
IT Directors	27	22.1	55.7
Managers	37	30.3	86.1
Transformation officers	17	13.9	100
Industry sector			
Education	16	13.1	13.1
Entertainment	11	9	22.1
Finance	12	9.8	32
Health	13	10.7	42.6
Insurance	8	6.6	49.2
Technology	19	15.6	92.6
Tourism	9	7.4	100
Others (within the service sector)	34	27.9	77.0
Work experience			
5-10 years	16	13.1	13.1
<5 years	15	12.3	25.4
>10 years	91	74.6	100

3.2 Measures

The survey questions in this study were designed based on existing research to ensure they accurately measured the concepts of interest. Researchers carefully selected these questions after testing them and confirming their reliability and validity to the model being built. The inspiration for the questions came from various sources: digital transformation drew from Al-ayed et al. (2023), digital innovation was based on indicators by Khin & Ho(2020), Customer experience dimensions adopted from Berghaus and Back (2016), and organizational performance dimensions from Khin and Ho (2020). All questions used a 7-point Likert scale ranging from "strongly disagree" to "strongly agree" allowing participants to indicate their level of disagreement/agreement with each statement.

Table 3. Construct measurement

Construct	Measures	Source
Digital transformation	Organizational perspective Technological perspective Social perspective	(Al-ayed et al., 2023),
Digital Innovation	Digital innovation	(Khin & Ho, 2020)
Customer Experience	Experience design Analytics	(Berghaus & Back, 2016)
Organizational performance	Financial metrics Non-financial metrics	(Khin & Ho, 2020)

4. Result

This study utilized IBM SPSS Statistics Version 29 for data screening and profiling of respondents. To examine the hypothesized relationships, the researchers employed SmartPLS 4, a software program well-suited for PLS-SEM. PLS-SEM is a statistical technique that thrives in social science research. It can handle complex models, small sample sizes, and non-normal data (Hair et al., 2019). Furthermore, PLS-SEM requires less stringent data assumptions and offers a user-friendly interface, making it more accessible for researchers (Hair et al., 2019).

4.1 Measurement Model

To ensure the measures accurately reflect the intended constructs, the researchers assessed both convergent and discriminant validity. Convergent validity examines whether the indicators for each construct converge and effectively capture the underlying concept they represent (Ghasemy & Teeroovengadum, 2020). Discriminant validity, on the other hand, verifies that the constructs are distinct from each other and not simply measuring the same thing under different labels (Hair et al., 2017).

Convergent validity was assessed using three criteria: item loadings, average variance extracted (AVE), and composite reliability (CR). Item loadings all exceeded 0.4, indicating a strong relationship between the items and the constructs they are supposed to measure. AVE values were all above 0.5, suggesting that the measures capture enough variance from the intended construct. CR values all exceeded 0.7, demonstrating that the measures are reliable in capturing the intended constructs (Cheung et al., 2023). the results suggest that the measures used in the study have good convergent validity. This means that they are effective in capturing the intended constructs.

Table 4. Construct reliability and validity

No	Construct	Factor Loading	AVE[a]	CR[b]
1	Digital transformation	0.716	0.732	0.916
		0.715		
		0.871		
		0.857		
		0.879		
		0.895		
		0.842		
		0.817		
2	Digital Innovation	0.886	0.748	0.899
		0.933		
		0.767		
3	Customer Experience	0.861	0.683	0.945
		0.785		
		0.876		
		0.896		
4	Organisational performance	0.885	0.744	0.936
		0.868		
		0.861		
		0.862		
		0.836		

The researchers checked to ensure their measures of different concepts were truly distinct. This was done by comparing correlations between factors (shown in Table 5) with a special measure called Average Variance Extracted (AVE). Ideally, the square root of AVE for each concept should be higher than its correlations with other concepts. Following this rule from Hamid et al. (2017), the analysis shows that the square root of AVE is indeed

higher for each concept compared to its correlations with others. This confirms that the measurement model has good discriminant validity.

Table 5. Discriminant Validity

	Customer Experience	Digital Innovation	Digital Transformation	Organisational Performance
Customer Experience	0.856			
Digital Innovation	0.638	0.865		
Digital Transformation	0.828	0.602	0.832	
Organisational Performance	0.780	0.667	0.827	0.796

4.2 Structural Model

Table 3 presents the findings of the research model, with 5 out of 6 hypotheses being supported. Firstly, supporting H1, the implementation of digital transformation significantly and positively influences organizational performance (β=0.541, p-value=0.000, t-value=2.951). Similarly, H2 is supported, indicating a positive and significant relationship between digital transformation and digital innovation (β = 0.602, p-value =0.000, t-value=11.483). Furthermore, H4 is supported, showing a strong and significant positive effect of digital transformation on customer experience (β=0.828, p-value=0.000, t-value=13.939). However, there is no significant positive effect of customer experience on organizational performance (β = 0.192, p-value=0.158, t-value=1.411), leading to the rejection of hypothesis 5. Lastly, the results of hypothesis 6 confirm the positive impact of digital innovation on organizational performance (β = 0.219, p-value=0.003, t-value=2.951).

Table 6. Results of Research Model

Hypothesis	Relationship	β	T-value	P-value	Decision
H1	DT -> OP	0.541	2.951	0.000	Supported
H2	DT -> DI	0.602	11.483	0.000	Supported
H4	DT - > CX	0.828	13.939	0.000	Supported
H5	CX -> OP	0.192	1.411	0.158	Not Supported
H6	DI - > OP	0.219	2.951	0.003	Supported

4.3 Mediating effect of digital innovation and customer experience

To test the significance of the mediating effect, the researchers used a bootstrapping procedure. The result showed that there is an indirect positive effect of digital transformation on organizational performance mediated by digital innovation (β = 0.142, p-value= 0.02, t-value=3.058) hence, H3 was accepted. However, our findings show no positive mediating effect of customer experience in the relationship between digital transformation and organizational performance.

Table 7. Results of Research Model (indirect effect)

Hypothesis	Relationship	β	T-value	P-value	Decision
H3	DT ->DT-> OP	0.142	3.058	0.002	Supported

5. Discussion and conclusion

This research aimed to examine the impact of digital transformation on organizational performance within the context of Indonesia's service sectors specifically focusing on the roles of digital innovation and customer experience. The research objectives and the research questions were answered by testing the research model. The research's findings offered empirical support for the conceptual model because all but one of the hypotheses were found to be true. As a result, this study answers research questions while achieving its goals. Overall, our findings are consistent with the dynamic capability theory, which can help the service industries to successfully implement digital transformation and benefit from it. In 2019, the government launched "Indonesia's Digital Vision 2045" to propel the country's digital economy (Chen et al., 2023). This vision spurred a nationwide program for digital transformation. The program involves detailed plans for digitalization across various service sectors. This includes fostering a workforce with advanced digital skills. As a result, service sectors in Indonesia are transitioning to digital

systems. For instance, Indonesian banks now offer mobile apps, allowing customers to conduct transactions from the comfort of their homes, bypassing physical branches, hence improving customer satisfaction. The researchers for this research believe that digital transformation initiated by the government is being implemented by service sectors in Indonesia and this is the main reason the hypotheses have been supported in the context of Indonesia's service sector.

To answer question 1, hypothesis 1 was tested. The results show the direct significant impact of digital transformation on organizational performance. Hence, H1 was supported and it's consistent with the findings of scholars such as Khin and Ho (2020) and Al-ayed et al. (2023). This study finding implies that service sectors that adopt digital transformation in their daily business operations are likely to achieve improved performance (both financial and non-financial performance). The reason for this is that digital transformation has the potential to enhance operational efficiency, improve customer satisfaction, and generate new sources of revenue.

To answer question 2, H2 was tested. Based on the results, there's a positive significant correlation between digital transformation and organizational performance. Our findings align with the research of scholars such as Khin and Ho (2020). This finding signifies that service sectors that embrace digital transformation tend to be more innovative in their approach to digital solutions than those that do not. This research outcome underscores the importance of digital transformation as a driver of digital innovation in organizations, highlighting the need for service sectors to strategically leverage digital technologies to foster digital innovation and maintain competitiveness in the digital age. There are many examples of advanced technology being used to improve various aspects of business operations. For instance, AI-powered chatbots are being used to provide round-the-clock customer support.

To test Hypothesis 3. Our study investigated the mediating role of digital innovation in the correlation between digital transformation and organizational performance. Based on our findings, digital transformation has a positive impact on organizational performance, but it is digital innovation that serves as the crucial link to fully unleash that potential. This finding agrees with Al-ayed et al. (2023). Visualize digital transformation as the catalyst that kindles a flame within an organization. It involves a comprehensive change in thinking, procedures, and values, all driven by the implementation of digital technologies. This transformation cultivates an environment conducive to the thriving of innovation. Digital innovation plays a vital role in connecting the transformed environment with significantly enhanced performance. The aim is to utilize the opportunities presented by digital transformation to create innovative service models, improve current services, and optimize operations through innovative means.

For question 4 to be perfectly answered, H4 was tested. There is a positive significant impact of digital transformation on customer experience. This finding supported hypothesis 4 consistent with the previous research outcomes of Zaki (2019). This digital transformation represents more than just a technological enhancement; it signifies a fundamental change in the way services are provided and perceived. digital transformation promotes significant convenience and accessibility. Customers now can conveniently access a wide range of services at any time and from any location using user-friendly mobile applications. Envision effortlessly overseeing your finances via a mobile banking application, requesting a delectable meal delivered directly to your residence with a few simple actions, or scheduling a medical consultation online without the inconvenience of lengthy phone conversations. This convenience enables customers and preserves their valuable time, resulting in a more favourable perception of the service experience. Furthermore, digital transformation enables the utilization of personalization to its full potential. Each engagement on digital platforms produces valuable customer data. Businesses that utilize this data can customize service offerings and recommendations in a manner that was previously inconceivable. Envision the experience of receiving personalized travel packages designed specifically to cater to customers' interests, insurance plans customized to perfectly align with your distinct needs, or product recommendations based on your previous purchases. This degree of customization establishes a feeling of rapport with the service provider, promoting customer loyalty and satisfaction.

In the context of Hypothesis 5, which examined the impact of customer experience on organizational performance in Indonesia's service sector, the analysis yielded no statistically significant relationship, leading to its rejection. This finding could be attributed to the nature of the employed measurement indicators. Customer experience relied on intangible metrics, while four out of five organizational performance metrics were quantitative and tangible. This discrepancy in measurement types could have masked a potential relationship between customer experience and organizational performance. Future researchers are encouraged to explore alternative metrics for customer experience to potentially yield different results.

Question 6 was finally answered by testing hypothesis 6. The finding of this research indicates a positive significant impact of digital innovation on organizational performance. H6 was supported and the finding is inconsistent with the findings of previous researchers such as Khin and Ho (2020) and Al-ayed et al. (2023). digital innovation has a transformative impact on customer experience. Envision a realm where the ability to utilize services is no longer restricted by temporal or geographical constraints. Mobile applications and internet platforms enable customers to schedule appointments, purchase groceries, or handle financial matters, all with minimal effort. Moreover, digital innovation enables the utilization of personalization to its fullest potential. Information obtained

from digital interactions serves as a valuable source of knowledge regarding customer preferences. Companies can utilize this data to customize service offerings and suggestions, fostering a feeling of connection and loyalty. Travel companies can create customized vacation packages by considering previous travel patterns, while insurance providers can provide plans that cater to specific requirements. This customized approach surpasses mere convenience; it cultivates a feeling of being esteemed and comprehended by the service provider. Moreover, digital innovation enhances the efficiency of operations. Automating repetitive tasks allows for the allocation of valuable human resources to more strategic pursuits.

5.1 Implication for practice.

This research offers practical guidance for managers and executives navigating the complexities of digital transformation. The study emphasizes the crucial role of digital innovation in driving successful transformation initiatives. It demonstrates that leveraging existing capabilities to create a strong digital foundation can significantly improve organizational performance. Furthermore, the findings highlight the importance of understanding the digital landscape of a firm's industry. By fostering digital innovation within a well-established digital transformation framework, companies can unlock their full potential for achieving superior performance.

5.2 Limitations and Future Research

Our study of digital transformation in the context of Indonesia's service sector highlights several limitations that pave the way for future research. The limited number of respondents restricts the generalizability of findings, and the focus on overall impact without considering specific technologies leaves room for deeper dives. Furthermore, the metrics for assessing the impact of customer experience require deeper exploration. Further research should aim to identify and validate specific customer experience metrics that have a demonstrable effect on organizational performance within the service sector.

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