



The Role of Digital Leadership Mediated by Digital Skill in Improving Organizational Performance

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Abstract

Objective – The main objective is to examine the role of digital leadership mediated by digital skill in improving organizational performance in line with digital transformation efforts within the General Election Commission of North Sulawesi.

Design/methodology – The sample used in this study amounted to 78 people who are elements of the commissioner and secretariat of the General Election Commission of North Sulawesi Province. Testing the relationship between variables and hypotheses was carried out using the Structural Equation Modeling (SEM) technique.

Results – Based on the results of hypothesis testing, it can be concluded that Digital Leadership has a significant effect on Organization Performance and Digital Skills. Meanwhile, Digital Skill has a positive effect on Organizational Performance but does not have a significant effect. The indirect relationship between Digital Leadership and Organizational Performance through Digital Skills does not have a significant effect.

Research limitations/implications – This study concludes that the role of digital leadership has a major influence on improving organizational performance in the era of digital transformation. The era of technology 4.0 requires leaders to develop their digital skills in utilizing technology to face the development of information technology in organizations.

Novelty/Originality – The originality of this research lies in the object of research where previous studies have only analyzed the digital transformation process in the private sector but the public sector namely the government has not been carried out.

Keywords: Digital transformation, digital leadership, digital skill, organization performance

1. Introduction

The existence of the fourth industrial revolution, also known as the "cyber physical system," in which the application is based on automation helped by information technology, resulting in a diminished human function. Digital government technology or e-government are seen as critical to enhancing government and public relation (Dwivedi et al., 2016; Morgeson et al., 2011). Some see e-government as a powerful tool for improving internal efficiency, service delivery quality, and public participation and engagement (Dwivedi et al., 2016; N. P. Rana et al., 2016).

Looking at the industrial era 4.0, humans are faced with the situation of being able to compete with others to survive in the world of competition. One of the efforts made is through increasing the qualifications and abilities possessed in order to be able to adapt to developments. In competition in the era of the industrial revolution 4.0, humans are faced with conditions to compete with the existence of technology that is developing faster. Therefore, there is concern about the role of humans which can later be replaced by the role of robots. The automation offered through technology will have an impact on human existence. Advances in AI and related subfields have paved the

path for the creation of Intelligent Automation¹, a new type of automation. The application of AI in ways that can learn, adapt and improve over time to automate tasks that were formally undertaken by a human (Frey & Osborne, 2017).

Today the world is faced with the development of technology and information in every line of life. Along with its development, information technology has become part of the activities of human life. The era of the fourth industrial revolution or often called the Industrial Revolution 4.0 was initiated in 2011 at the Hannover Fair, Germany. The issue of the Industrial Revolution became quite a strategic issue and was used as the theme of international meetings, especially at the World Economic Forum (WEF) in Davos, Switzerland in 2016. This issue was welcomed positively and made a phenomenon with the industrial revolution fundamentally influencing behavior and lifestyle. and human work (Pfeiffer, 2017)

The utilization of information technology in all sectors is certainly very helpful for organizations to achieve the expected goals. Along with the nation of the industrial revolution 4.0, government revolution 4.0 is a systematic and fundamental transformation in government that accepts and adapts. Through an information system that incorporates resources, information technology, and information relations, the industrial revolution 4.0 encourages an automated system in all stages of public service (Rochmansjah & Karno, 2020). Understanding the linked aspect associated with trusts in the context of digital government survival and applying them in effective strategic planning can aid government policymakers (Janssen et al., 2018; Zeike, Choi, et al., 2019).

With the presence of digitalization, it poses a challenge where unemployment occurs but on the other hand it can open up new jobs (Naude, 2019). Therefore, it is very important for the role of the Human Resources Manager to ensure the quality and competence of employees to face this challenge. In the context of fulfilling skilled employees, it is a challenge for HRD to be able to make it happen. The role of digitization in the world of work will certainly have an impact on the role of humans because of the need for qualified skills that must be human capital. In addition, an increase in technological capability will result in unemployment and change the nature of work and the workforce, due to the trend of using technology in every job to accelerate the achievement of organizational goals (G. Rana & Sharma, 2019).

The fourth industrial revolution's technologies are now being debated in both the scientific community and among business executives. Companies can attain leadership by changing their company model, focusing on customer experience, employing big data technologies, boosting flexibility, and changing asset management practices thanks to new digital technology (Gusakov, 2020). Limited natural resources must immediately be optimized with mastery of information technology and workforce competence. Through digital transformation, companies gain a new perspective on managing companies, optimizing company operations, and changing business models more efficiently. Similarly, digital transformation can improve the performance of public services in government agencies and institutions, both through the creation of e-government, Electronic-Based Government System (SPBE) and smart city apps.

In 2020, United Nations (UN) issued an e-government Development Index ranking which placed Indonesia in 88th place with a score of 0.6611 which is an increase of 19 levels compared to 2019 which was ranked 107. An assessment conducted by United Nations on the E-Government Development Index Indonesia, namely: (1) Online Services Index (0.6824), Telecommunication Infrastructure Index (0.5669) and Human Resources Index (0.7342). Meanwhile, Indonesia's E-Participation Index reached 0.75 and received the title of Very High Participant Index. United Nations in assigning the E-Participation Index predicate to countries based on an assessment that refers to the standard in which country is at 0.75 points as Very High EGDI, for points 0.50 to 0.75 as High EGDI, points 0.25 to 0.

According to the Global Innovation Index data released in 2021, Indonesia's current ranking is at position 87th out of 131 countries. From 2016 to 2020 Indonesia's

ranking in 2020 is in position 85th out of 131 countries. This position has not changed since 2018. Meanwhile in Southeast Asia, Indonesia's position has also experienced a similar situation where it is still in the seventh position under Singapore which is still at the top with 56.6.3 points, Malaysia with 42.42 points, Vietnam with 37.12, and Indonesia with 26.49 points.

The Indonesian government, as stated in the National Medium-Term Development Plan (RPJMN), which is an elaboration of President Joko Widodo's vision and mission, encourages his staff to accelerate the implementation of digital transformation in all sectors, especially the government sector. According to Jokowi, Indonesia's position is still inferior when compared to neighboring countries in ASEAN and ASIA, namely Malaysia and Singapore. According to the Institute for Management and Development Survey, Indonesia ranks 56 out of 63 countries. Unlike Singapore, which is in the 2nd position, Malaysia is in the 26th position and even Thailand is in the 40th position.

Therefore, President Jokowi explained 5 (five) acceleration steps that must be taken immediately to accelerate digital transformation in Indonesia. To begin, the development of high-speed internet infrastructure. Second, the establishment of a National Data Center (PDN), which is required to implement the One Data Indonesia policy. Third, comprehensive and long-term human resource development in the digital sphere, starting with digital literacy, digital talent, and leadership in the digital age. Fourth, through encouraging programs such as MSMEs/microfinance selling online, farmers/fishermen using digital technology, and the growth of digital startups, the digital economy ecosystem would be consolidated. Fifth, essential legislation supporting the digital ecosystem is expected to be completed, particularly the Bill on Personal Data Protection (RUU PDP) and the Bill on Job Creation in the telecommunications/broadcasting sector.

Internal Governance Policy, Internal Services Policy, Institutions, Strategy and Planning, Information and Communication Technology, Government Administration, and Public Services are the seven aspects of the Electronic-Based Government System (SPBE) review process. Data released by the Ministry of Empowerment of State Civil Apparatus and Bureaucratic Reform of the Republic of Indonesia in 2021 the results of the SPBE evaluation of the Secretariat of Non-Structural Institutions (LNS) places the General Elections Commission (KPU) at Index 2.16 or the predicate Average. Index values that represent the level of SPBE implementation are grouped by predicate can be seen in Table 1.

Table 1.
Electronic-based
government system
maturity index
predicate

Maturity Index	Predicate
4.2 – 5.0	Excellent
3.5 – < 4.2	Very Good
2.6 – < 3.5	Good
1.8 – < 2.6	Average
< 1.8	Poor

Of course, this is inversely proportional to the strategic plan set by the General Elections Commission for implementing digital transformation, policy directions in improving the quality of public communication are carried out with 3 approaches, namely (1) Strengthening information and public communication governance as well as providing content and access, (2) Increasing public ICT literacy and (3) Strengthening the role and quality of human resources in the field of communication and information, press institutions, broadcasting, and journalists.

Human resources refer to humans' ability to realize their potential as adaptive and transformative social creatures capable of managing themselves and all of nature's potential in order to achieve welfare in a balanced and sustainable order. Human resources are best understood in common terms as a vital aspect of the systems that

make up an organization because human resources become planners, actors, and determinants of realizing the goals of the organization. To achieve the goals of the organization, the role of human resources is quite vital even though it is assisted by the latest equipment and technology. Improving human resources is an interesting topic to discuss and study because human resources are one of the most strategic resources.

Leadership is the key to influencing the creation of a business innovation process model. This process is considered something that is created and changed continuously and evolutionarily with certain antecedents (Sniukas, 2015). Digital leadership is a combination of leadership and digital skills to get the most out of digital technology and improve business performance (Wasono & Furinto, 2018). Research conducted by Al-Husban et al., (2021) found that digital leadership has a positive impact on organizational performance. This result is in line with what was found by Jelmer (2020), Mardiana et al. (2019).

In contrast to found in their research, they stated that digital leadership capability only has a positive impact on company performance (organizational performance) after being mediated by digital marketing capability. However, the effect is not significant if mediated by digital technology capability (Amelda et al., 2021). The results of this study are in line with what was found by Yopan et al. (2022) that found that digital leadership does not directly affect business performance. However, they affect company performance indirectly through business model innovation. This shows that customer orientation and digital leadership are antecedent factors of business model innovation.

In the current era of information technology development, the General Election Commission, as a non-structural state institution, has set a transformation direction in the 2020-2024 strategic plan, focusing on digitalization to support and realize accuracy and speed in providing information to the public. Of course, digital skills and leadership are required to implement digital transformation within the general election commission. Although digital transformation is now underway, the results of the Ministry of Administrative Reform and Bureaucratic Reform's assessment show that the Electronic-Based Government System index is still below average. The accumulation of assessments in districts/cities and provinces is, of course, how this value is acquired.

Several previous studies on digital leadership were conducted in the private sector such as in telecommunications companies and internet of things. Digital transformation efforts initiated in the government sector certainly require organizational leaders in the government to have digital capabilities. Therefore, this research was conducted with the main objective of examining the role of digital leadership in improving organizational performance in the government sector in line with the digital transformation efforts that are currently being carried out, especially in the General Election Commission. This paper discusses the literature review of digital leadership, digital skills, and organizational performance, also discusses the research methodology, results and discussion, then conclusions, limitations, and future research.

2. Literature Review, Theoretical Framework, and Hypothesis Development

2.1 Digital Leadership

Leaders have an important role in efforts to realize and encourage the implementation of digital transformation often with the current development of industry 4.0 (Li et al., 2016). The competition in the digital era with the development of this technology requires leaders to be able to compete and improve their abilities, especially in mastering technology in order to face the challenges of today's goes. According to Zhu (2015), digital leadership is how to use technology that can be measured from 5 characteristics including thinker, creative, global visionary, curious, and deeply.

To overcome these obstacles and assist firms in moving forward with the change, digital leaders must possess a set of abilities (Frank et al., 2019; Somerville,

2013). The combination of leadership and digital capabilities in optimally utilizing information technology and technology aimed at improving the company is translated as digital leadership (Wasono & Furinto, 2018). Digital leadership is currently considered a necessity in improving organizational performance in creating competitive advantage in the era of the industrial revolution 4.0. Because of this, the purpose of this research is to examine whether digital leadership can affect organizational performance. Digital leadership according to Abdel Moneim (2016) is leaders that use digital solutions such as Artificial Intelligence and the Internet of Things (IoT) proactively will improve and enhance corporate performance.

Digital leadership will play a role in organizational development in achieving its goals by implementing strategies to achieve each vision and mission with the digitalization process (Zeike, Bradbury, et al., 2019). To realize the achievement of digital transformation, a manager must have skills in digital leadership. Several articles define digital leadership as the ability that a person has to influence others such as colleagues, superiors, and subordinates to utilize and engage in the use of technology as an organizational development effort in achieving predetermined performance.

Utilization of digitalization in organizational management will increase the effectiveness of an organization showing that the integration of digitalization in organizational management increases the effectiveness of communication between administrative levels (Jelmer, 2020). As a result, productivity increases, and output increases, leading to greater customer satisfaction and market share. In creating an organizational vision and how to make it happen, digital leadership is considered to play an important role in an organization by leveraging the capabilities and enthusiasm of employees and streamlining organizational operations (Mardiana et al., 2019). Digital leadership is considered an effective resource in achieving the sustainability of an organization that has a competitive advantage which refers to the optimal and efficient use of resources (Artuz & Bayraktar, 2021).

H1. Digital leadership has a positive and significant effect on organizational performance.

2.2 Digital Skills

Digital skills now have become a crucial thing for us. Humans have been familiar with technology since the industrial revolution that began in the mid-18th century in England and the United States, and have lived side by side with technology ever since. When technology is getting closer to everyday life, humans are required to be more flexible to follow the changes and developments of the times.

Qualifications have become increasingly significant in modern society, the economy, education, and employment. This epoch is referred to as the digital age, and the digital society is referred to as (Ashcroft & Watts, 2005). Therefore, policies to support digital adoption must go hand in hand with increasing digital skills (Gal et al., 2019).

Digital skills include all technology-related skills ranging from basic skills or literacy, general skills for all workers, and specific skills for information technology professionals (Motyl et al., 2017). There are 4 dimensions in measuring digital skills including digital technical skills, digital communication, digital analysis, and digital thinking (van Deursen et al., 2016).

Empirical studies conducted in previous studies show that leadership has a role in the development of abilities, competencies and skills. Zeike, Choi, et al., (2019) in their research found that effective digital leadership can be achieved with 2 approaches, namely competence and awareness of digital transformation and the ability to carry out digital strategies in organizations).

This era of mandatory computing necessitates new approaches to assessing and theorizing digital skills, which remain a critical component of the digital divide. Leadership skills require a leader to be able to take advantage of digital technology in

integrating every agenda in a company or organization (Allmann & Blank, 2021). Everyone involved in the organization is involved in developing digital capabilities to improve skills to realize the organization's goals in carrying out digital transformation.

H2. Digital leadership has a positive and significant effect on digital skills.

2.3 Organization Performance

In today's changing economy, firms must outperform their competitors in order to survive. This study aims to investigate the impact of both strategic orientation and innovation on organizational performance in order to reach this better performance (Obeidat, 2016). Organizational performance is defined as an organization's actual output or results as compared to its expected outputs (or goals and objectives). Organizational performance also refers to the organization's success or achievement of its goals at the end of a program or project (Richard et al., 2009).

In contrast to Bernardin & Russell (1993) defines performance as the record of outcomes produced on a specified job function or activity during a specified time period. In this definition, the aspect emphasized by the two authors is a record of the outcome or final results obtained after a job or activity has been carried out for a certain period of time.

Organizational performance can be defined as the organization's ability to achieve goals by using resources efficiently and effectively (Tseng & Lee, 2014). It is imperative to establish a measurement system that provides managers and employees with clear direction and goals set by the organization. Another definition of organizational performance is a reflection on the achievement of the quantity and quality of work produced by individuals, groups, and organizations that can be measured (Tomal & Jones, 2015).

Today's organizations are required to be dynamic and continue to increase their productivity and be able to compete and make the organization competitive. Increasing employee competence is an important part to support organizational performance. Management studies reveal that organizational performance is an important and interesting element for research. According to Koohang et al. (2017) revealed that organizational performance is a measure of the development and progress of an organization. The success of the organization in achieving the expected goals can be seen by comparing the results that have been achieved with the planning carried out.

In various previous studies, there are several parameters or indicators related to organizational performance. In addition, employee satisfaction according to Zhai & Tian (2020), customer satisfaction (Chakraborty & Biswas, 2020; Wang, 2020), productivity (Al-Surmi et al., 2020), quality (Loukis et al., 2019), efficiency (Merendino & Melville, 2019), and effectiveness (Vermeeren et al., 2014; Zhou, 2019).

The enterprise's purpose is to maximize value and interests, which is accomplished through improving the firm's fundamental competitiveness and streamlining the value chain (Hafeez et al., 2002). The goal of corporate digital transformation is to establish distinctive core competitiveness, develop long-term development strategies, design reasonable organizational structures, optimize value chain networks, and formulate long-term development strategies (Paschou et al., 2020). Companies need to improve their digital skill to meet market needs by carrying out digital transformation with a strategy of using digital technology as a strategy to survive in the midst of technological developments as found by Usai et al. (2021) and Chen et al. (2021) Zhang et al., 2021).

Enterprises need a full digital transformation of strategy, business, organization, competency, and operation in the digital economy (Yu & Moon, 2021). Efforts to improve the ability of resources in an organization need to be done. Digital skills play a role in influencing company performance which mediates the role of digital leadership in improving the performance of an organization. Technological skills and competency are crucial resources necessary for the innovation process in organization performance (Freel, 2005).

H3. Digital skill has a positive and significant effect on organization performance.

3. Research Method

The research was conducted at the General Election Commission of North Sulawesi Province. The study population consisted of 79 Commissioners and 212 Secretariats. A total of 78 people responded to questionnaires distributed online. This number of samples has met the requirements as argued by Fraenkel et al., (2012) which show that for correlational research, the minimum sample size is 30 respondents.

The data used in this study namely primary data sourced from the distribution of questionnaires via a Google form. Furthermore, questionnaires to respondents were distributed via WhatsApp groups. The respondents were asked to answer 34 questions related to digital leadership, digital skills and organizational performance. Each question was measured using a Likert scale with 5 points starting from strongly disagree to strongly agree.

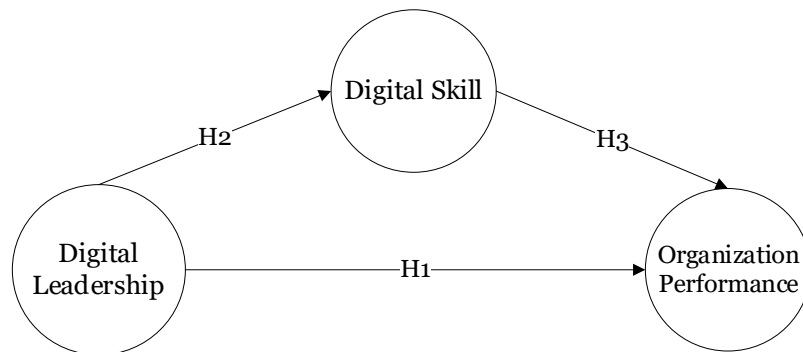
The variables used in this study are digital leadership (X) as the independent variable, assessed by 5 latent variables, digital skills (Z) as the intervening variable, assessed by 4 latent variables and organizational performance (Y) as the dependent variable, assessed 3 laten variable.

Table 2.
Operation variable

Variable	Latent Variable	Indicator
Digital Leadership (X)	Thinker Leadership (TL)	4
	Global Visionary (GV)	3
	Creative Leadership (CL)	3
	Inquisitive Leadership (IL)	3
	Profound Leadership (PL)	3
Digital Skills (Z)	Digital Technical Skill (DTS)	2
	Digital Communication (DC)	2
	Digital Analysis (DA)	2
	Digital Thinking (DTT)	2
Organizational Performance (Y)	Employee Satisfaction (ES)	4
	Quality (Qy)	3
	Productivity (Pr)	3

Testing the relationship between variables was carried out using the Structural Equation Modeling (SEM) technique. The analytical tool used to measure direct and indirect relationships between variables uses Partial Least Squares (PLS-SEM) with the help of Smart PLS 3 software.

Figure 1.
Conceptual model



4. Results

4.1 Characteristics of Respondents

Based on the questionnaire that has been created and distributed in April 2022, the number of respondents who have filled out the questionnaire via Google Form is 78 respondents. The characteristics of respondents who have filled out the questionnaire can be seen in Table 3. Furthermore, the data was analyzed using Smart PLS Version 3.2.9 to analyze Structural Equation Modeling (SEM).

	Description	Frequency	Percent
Gender	Female	32	41%
	Male	46	59%
Education	Senior High School	3	4%
	Diploma	4	5%
	Bachelor	48	62%
	Magister	22	28%
	Ph.D	1	1%
Position	Commissioner	14	18%
	Secretary	11	14%
	Head of Division	3	4%
	Head of Sub Division	31	40%
	Staff	19	24%
Age	21 s/d 30	4	5%
	31 s/d 45	48	62%
	>46	26	33%

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Table 3. Characteristics of Respondents

In the path coefficient in Figure 2, indicators that have a loading factor coefficient < 0.7 are dropped from the next research diagram and recalculated for further data processing. So, in the next diagram the ES4 is dropped from the next research diagram, as shown in Figure 3. The stages of testing carried out in analyzing statistical data are carried out in 3 stages, namely the first is carried out by testing the outer model where the stages are carried out to test the reliability and validity of each variable. As for the second stage, it is done by testing the inner model where at this stage the relationship between variables will be tested whether it has an effect or not. The third stage is testing the hypothesis that has been built according to the research model.

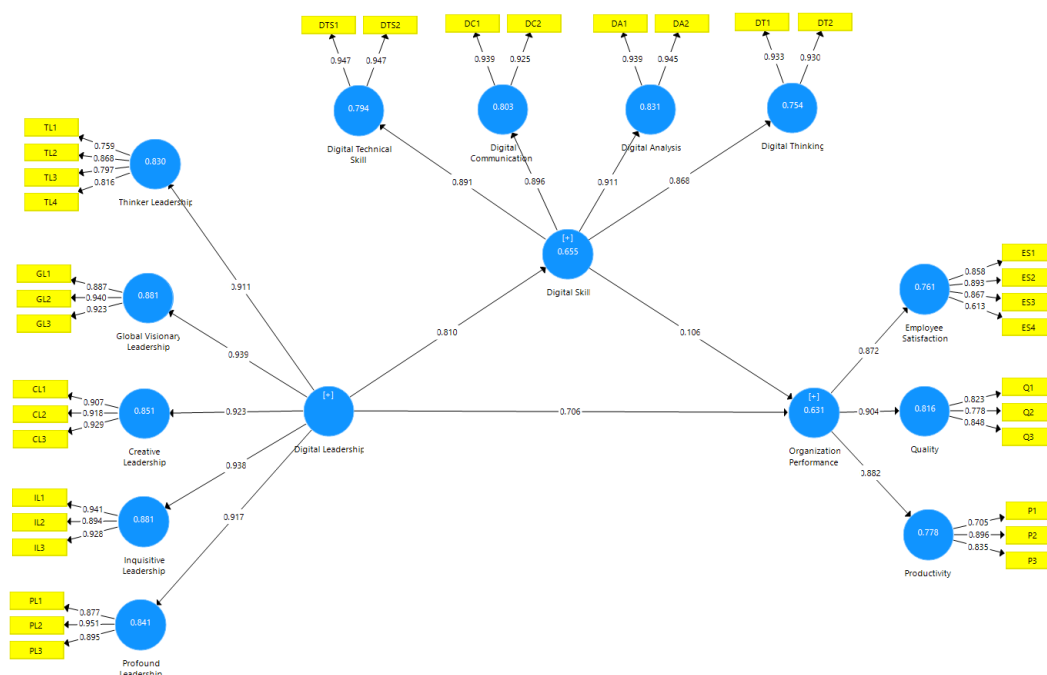


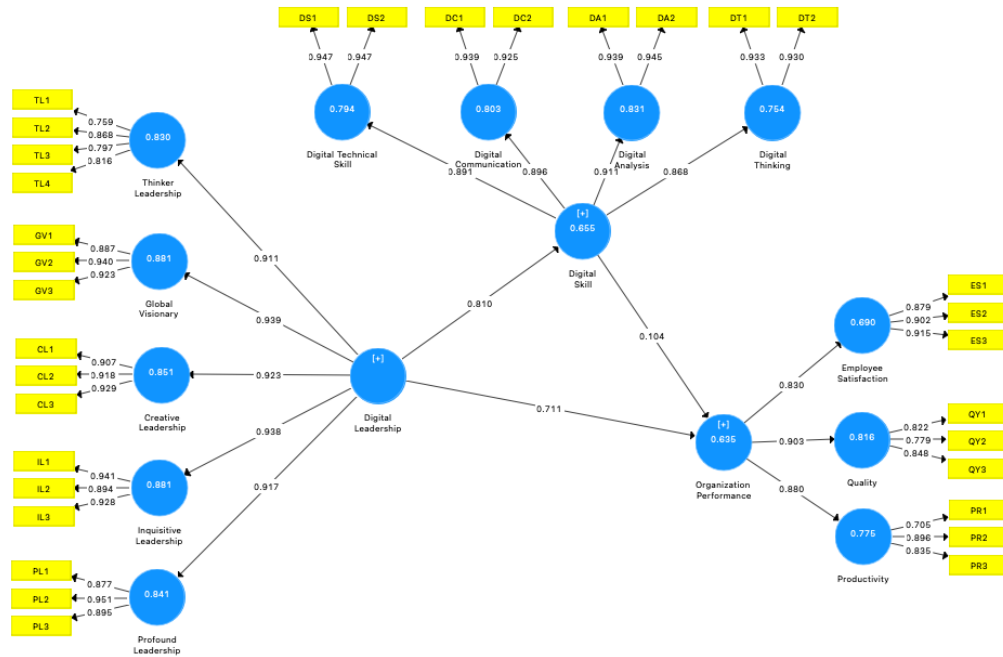
Figure 2. Outer model

4.2 Outer Model Evaluation

Outer Model analysis is an analysis conducted to see the relationship of latent variables with each indicator. There are several tests carried out on the Outer Model including Convergent Validity, Discriminant Validity, Composite Reliability, Average Variance Extracted (AVE) and Cronbach Alpha. The stages carried out on convergent validity are by looking at the value of the loading factor and the average variance extracted (AVE). The validity of the indicator can be seen from the value of the loading factor (LF).

Based on the general rule (rule of thumb), the loading factor must have a value > 0.7 to be said to be valid. Referring to Figure 3 after the Calculate PLS Algorithm has been carried out, it shows that the Loading Factor (LF) value of each indicator has a value > 0.7, so all indicators are declared fit.

Figure 3.
Outer model fit



4.3 Reliability and Validity Tests

To test whether the variables used are valid, the stages of the construct validity test are carried out. In SEM-PLS, for the Reliability Test stage, by looking at the value of Cronbach's alpha and composite reliability. Cronbach's Alpha values for all constructs must be > 0.7 so that they have good reliability or are categorized as reliable as the data in Table 4 can be seen that all the data displayed have Cronbach's alpha and composite reliability > 0.7, where the Cronbach's alpha value of each construct is digital leadership (0.968), digital skills (0.939) and organization performance (0.894). While the composite reliability values for each construct are digital leadership (0.971), digital skills (0.949) and organization performance (0.914).

Discriminant Validity testing is carried out by looking at the Fornell-Larcker Criterion and cross-loading value. This is a cross-loading factor value that can be used to see if the construct has a good discriminant, by comparing the loading value on the planned construct to the loading value on the construct used. As the results of data analysis show the Fornell-Larcker Criterion as shown in Table 5 and cross loading as shown in Table 6. This shows that all indicators are declared valid.

	Cronbach's Alpha	Composite Reliability	AVE	Status
TL	0,826	0,885	0,658	reliable
GV	0,905	0,941	0,841	reliable
CL	0,906	0,941	0,842	reliable
PL	0,894	0,934	0,825	reliable
IL	0,911	0,944	0,849	reliable
Digital Leadership	0,968	0,971	0,678	reliable
DTT	0,884	0,945	0,896	reliable
DA	0,873	0,940	0,887	reliable
DC	0,849	0,930	0,869	reliable
DT	0,848	0,929	0,868	reliable
Digital Skill	0,939	0,949	0,700	reliable
ES	0,881	0,927	0,808	reliable
PR	0,748	0,856	0,666	reliable
QY	0,750	0,857	0,667	reliable
Organization Performance	0,894	0,914	0,519	reliable

Table 4.
Construct reliability and validity

	CL	DA	DC	DT	DTS	DL	DS	ES	GV	IL	OP	PL	Pr	Qy	TL
CL	0,918														
DA	0,572	0,942													
DC	0,630	0,807	0,932												
DT	0,739	0,720	0,666	0,932											
DTS	0,706	0,727	0,730	0,712	0,947										
DL	0,923	0,646	0,659	0,786	0,793	0,824									
DS	0,743	0,911	0,896	0,868	0,891	0,810	0,837								
ES	0,756	0,506	0,485	0,624	0,594	0,763	0,620	0,899							
GV	0,840	0,548	0,570	0,677	0,707	0,939	0,703	0,664	0,917						
IL	0,834	0,630	0,625	0,780	0,776	0,938	0,789	0,745	0,857	0,921					
OP	0,758	0,544	0,585	0,681	0,612	0,795	0,679	0,830	0,657	0,794	0,721				
PL	0,796	0,627	0,615	0,730	0,798	0,917	0,778	0,672	0,815	0,852	0,724	0,908			
Pr	0,591	0,451	0,541	0,543	0,493	0,639	0,568	0,541	0,499	0,658	0,880	0,587	0,816		
Qy	0,653	0,451	0,517	0,598	0,509	0,695	0,582	0,607	0,581	0,694	0,903	0,652	0,794	0,817	
TL	0,801	0,611	0,608	0,708	0,680	0,911	0,731	0,691	0,833	0,794	0,738	0,785	0,617	0,631	0,811

Table 5.
Fornell-Larcker criterion

	CL	DA	DC	DTS	DTT	ES	GV	IL	PL	Pr	Qy	TL
CL1	0,907	0,536	0,581	0,699	0,723	0,789	0,828	0,832	0,777	0,558	0,626	0,760
CL2	0,918	0,439	0,510	0,555	0,567	0,665	0,726	0,662	0,642	0,498	0,513	0,720
CL3	0,929	0,592	0,639	0,680	0,735	0,621	0,752	0,791	0,763	0,569	0,651	0,722
DA1	0,535	0,939	0,765	0,652	0,635	0,459	0,496	0,533	0,561	0,369	0,412	0,572
DA2	0,542	0,945	0,755	0,716	0,720	0,493	0,535	0,651	0,619	0,478	0,437	0,578
DC1	0,625	0,765	0,939	0,729	0,694	0,540	0,577	0,645	0,625	0,516	0,545	0,606
DC2	0,546	0,738	0,925	0,628	0,541	0,356	0,482	0,513	0,517	0,491	0,412	0,523
DTS1	0,658	0,664	0,692	0,947	0,692	0,514	0,642	0,703	0,765	0,463	0,515	0,645
DTS2	0,678	0,712	0,691	0,947	0,656	0,611	0,697	0,767	0,746	0,470	0,450	0,643
DTT1	0,699	0,707	0,595	0,684	0,933	0,601	0,673	0,726	0,674	0,468	0,498	0,685
DTT2	0,679	0,634	0,648	0,642	0,930	0,561	0,587	0,727	0,686	0,545	0,617	0,634
ES1	0,634	0,434	0,395	0,505	0,539	0,879	0,579	0,702	0,522	0,458	0,442	0,576
ES2	0,709	0,491	0,485	0,601	0,597	0,902	0,602	0,687	0,676	0,508	0,652	0,651
ES3	0,691	0,436	0,421	0,490	0,543	0,915	0,609	0,623	0,604	0,490	0,529	0,632
ES4	0,315	0,328	0,294	0,319	0,416	0,407	0,227	0,338	0,319	0,521	0,458	0,361
GV1	0,731	0,578	0,549	0,678	0,639	0,717	0,887	0,834	0,748	0,479	0,567	0,739
GV2	0,782	0,486	0,507	0,654	0,611	0,568	0,940	0,764	0,742	0,435	0,490	0,753
GV3	0,796	0,444	0,513	0,615	0,612	0,544	0,923	0,762	0,753	0,459	0,540	0,799
IL1	0,763	0,657	0,625	0,745	0,745	0,653	0,835	0,941	0,823	0,614	0,652	0,774
IL2	0,729	0,542	0,581	0,679	0,676	0,689	0,711	0,894	0,663	0,611	0,648	0,670
IL3	0,810	0,540	0,522	0,718	0,732	0,720	0,817	0,928	0,857	0,595	0,620	0,746
PL1	0,595	0,611	0,529	0,698	0,578	0,473	0,618	0,701	0,877	0,493	0,530	0,650
PL2	0,753	0,559	0,594	0,795	0,717	0,603	0,753	0,786	0,951	0,473	0,526	0,719
PL3	0,802	0,547	0,550	0,682	0,682	0,732	0,832	0,824	0,895	0,624	0,709	0,761
PR1	0,392	0,367	0,471	0,363	0,436	0,323	0,287	0,435	0,371	0,705	0,425	0,330
PR2	0,556	0,336	0,367	0,333	0,504	0,547	0,448	0,567	0,516	0,896	0,780	0,560
PR3	0,482	0,420	0,521	0,525	0,395	0,423	0,464	0,598	0,532	0,835	0,683	0,585
QY1	0,548	0,313	0,427	0,337	0,465	0,427	0,397	0,465	0,420	0,674	0,822	0,492
QY2	0,583	0,472	0,431	0,487	0,543	0,550	0,515	0,598	0,638	0,542	0,779	0,494
QY3	0,477	0,329	0,411	0,428	0,462	0,514	0,512	0,635	0,546	0,722	0,848	0,559
TL1	0,652	0,437	0,496	0,493	0,476	0,567	0,589	0,555	0,575	0,381	0,514	0,759
TL2	0,654	0,563	0,499	0,620	0,613	0,619	0,694	0,686	0,715	0,469	0,429	0,868
TL3	0,683	0,568	0,531	0,608	0,606	0,568	0,715	0,740	0,701	0,696	0,686	0,797
TL4	0,606	0,396	0,442	0,470	0,491	0,481	0,697	0,577	0,539	0,433	0,408	0,816

Table 6.
Cross loading

4.4 Inner Model Evaluation

Evaluation of the measurement model or inner model is done by looking at the criteria for the R-Square value and significance. According to Hair et al. (2011) that the reference value for R Square is 0.75 strong category, 0.50 moderate category and 0.25 weak category. Based on the output of the analysis using the bootstrapping method, the R-square value is shown in Table 7. The R-Square value for the Digital Skill (DS) variable in the model is 65.5% which can be explained by the Digital Leadership variable and is included in the moderate category. As for the Organization Performance (OP) variable in the model, it is 63.5% which can be explained by the Digital Leadership variable and this is included in the moderate category.

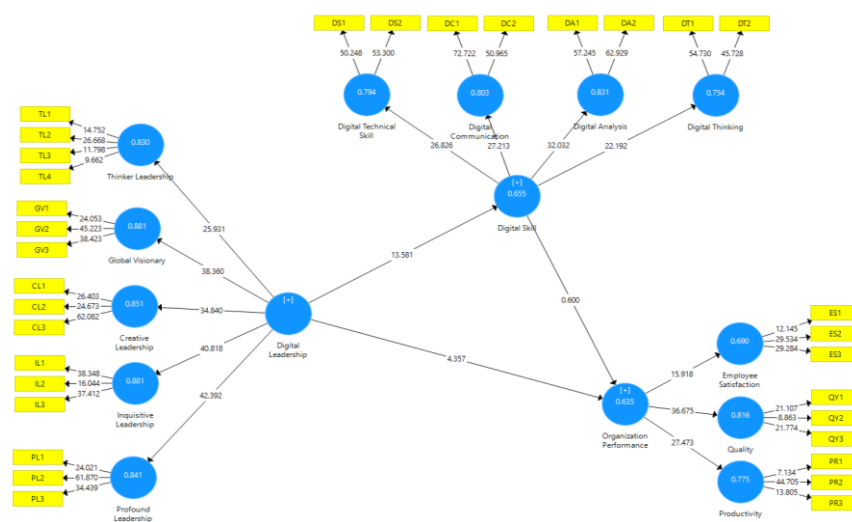
Table 7.
R-Square

	R Square	R Square Adjusted
TL	0,830	0,828
GV	0,881	0,879
CL	0,851	0,849
IL	0,881	0,879
PL	0,841	0,839
Digital Skill	0,655	0,651
DTT	0,794	0,791
DA	0,831	0,829
DC	0,803	0,801
DT	0,754	0,751
Organization Performance	0,635	0,625
ES	0,690	0,685
PR	0,775	0,772
QY	0,816	0,814

4.4 Hypotheses Testing

After testing the relationship between latent variables and indicators, it shows that all the indicators built support the specified variables. Tests have been carried out by looking at Convergent Validity, Discriminant Validity, Composite Reliability, Average Variance Extracted (AVE) and Cronbach Alpha. The next step is to see the relationship between variables through the Smart PLS application. To see the relationship of influence between variables, a bootstrapping process was carried out to test whether the direct relationship between variables had a significant relationship with one another. In addition, the indirect relationship between variables can also be tested.

Figure 4.
Complete path
diagram of research
model



H	Relationship	T-Value	P-Value	Decision
H1	Digital Leadership -> Organization Performance	4.335	0.000	Supported
H2	Digital Leadership -> Digital Skill	13.581	0.000	Supported
H3	Digital Skill -> Organization Performance	0.600	0.549	Not Supported

Table 8.
Hypothesis testing for direct effect

Based on the output of the analysis, it can be concluded that Digital Leadership has a positive effect on Organizational Performance as indicated by the parameter coefficient value of 0.711, the significance value is indicated by the t-statistic of 4.335 which is greater than the t-table of 1.96. Digital Leadership has a positive effect on Digital Skills as indicated by the parameter coefficient value of 0.810, while the significance value is indicated by the t-statistical value of 13,581 which is greater than the t-table of 1,96. While Digital Skill has a positive effect on Organizational Performance as indicated by the parameter coefficient value of 0.104, it does not have a significant effect as evidenced by the t-statistic value of 0.600 which is smaller than the t-statistic which is 1.96.

Relationship	T-Value	P-Value	Decision
Digital Leadership -> Digital Skill -> Organization Performance	0.600	0.549	Not Supported

Table 9.
Testing for indirect effect

Meanwhile, the Indirect Effect value for Digital Leadership on Organizational Performance through Digital Skills is 0.084, and the significance value is 0.549 where this number is greater than the P-Value where the value should be <0.05. In addition, the t-statistic value of 0.600 is smaller than the t-table which is 1.96. This means that Digital Leadership does not have a significant effect on Organization Performance if it is mediated by Digital Skills. So, the Digital Skill is a variable that does not indirectly affect the Digital Leadership variable on Organizational Performance.

The period in which the development of information technology is growing rapidly as well as digital transformation in all sectors encourages organizational leaders to develop their capabilities in digital technology. Leaders are faced with technological developments in the midst of tasks and responsibilities. This development certainly has an impact on organizational performance. The utilization of technology helps leaders to make decisions to improve performance. Therefore, it is important for a leader to improve his abilities and skills to adopt new technologies.

5. Conclusion, Implication and Limitation

The research model developed in this study consists of 3 variables, namely Digital Leadership, Digital Skills and Organizational Performance. The results of the analysis to test the validity and reliability. Based on Figure 3, the results for Outer Loading are more than 0.7 from each indicator, so the three variables are considered valid. While the results of the analysis on discriminant validity are as shown in table 4 where the Average Variance Extracted (AVE) value has a value of more than 0.7, so all variables are considered valid. These three variables indicate that the three variables are valid.

In the challenges of technological development, leaders are required to be able to adapt to developments so that they are able to adapt to changes in new habits in the use of technology. Digital technology has changed business processes in an organization, especially in the government sector. Digital transformation has been generally considered by both academia and business practice as a vital approach for organizations to improve organizational resilience (J. Zhang et al., 2021).

Miceli et al. (2021) examine the role of a digital transformation in increasing organizational resilience. Digital leadership has an important role in efforts to realize organizational resilience in an effort to improve organizational performance. The era of

globalization provides room for leaders who have digital capabilities to improve their performance. In the current government sector, the use of e-government is a necessity. The reason is that the application of information technology will optimize the available resources.

Strengthening digital abilities is required to increase organizational performance. However, it will require major support from digital literacy in order to achieve it, as well as an appreciation of the importance of creating digital capabilities to support organizational performance. According to Santoso et al. (2019) the influence of innovative work behavior on employee performance was modulated by digital literacy, and higher digital literacy of employees further amplified the influence of innovative work behavior on employee performance.

The limitation of this research is that the study conducted is exploratory research where the use of variables is very limited. The sample in the study who answered the questionnaire was not fully at the level of policy making. In addition, with limited time the respondents who were expected to participate were not fulfilled. Therefore, further research needs to be done to expand the variables used, including collaboration, digital literacy and competitive advantage. In addition, in future research, the involvement of policymakers, namely the top leadership, can be fully involved in decision making. Another limitation in this research is that the number of respondents is only 78 people, so for future research, the number of respondents can be increased.

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