



Nexus between Digital Competency Level and Performance Level of State Civil Apparatus

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Abstract

This study analyzes the relationship between digital competence and performance of the State Civil Apparatus (ASN) in supporting the Digital Transformation agenda in Indonesia. Digital competency is measured using five variables from the DigComp 2.2 framework: Information and Data Literacy, Communication and Collaboration, Digital Content Creation, Digital Security and Problem Solving. Meanwhile, ASN performance is assessed through three variables: Task Performance, Contextual, and Adaptive. Data was obtained from 206 ASN respondents through questionnaires and analyzed using Confirmatory Factor Analysis (CFA). The results showed a significant positive relationship between digital competence and ASN performance, with a correlation of 0.769. The Digital Content Creation and Problem-Solving variables had the lowest competency levels, while the 41-45, 36-40, 51-55, and 56-62 years age groups showed a significant percentage of low categories. This research confirms the need to increase digital competence in improving ASN performance to support the success of digital transformation in the public sector.

Introduction

Human resources (HR) who are reliable in using digital technology are needed to support the Digital Transformation agenda in Indonesia. Digital Transformation is the main agenda in the Digital Indonesia Vision 2045, which reflects the government's commitment to the development of digital technology and to human resources in Indonesia to be able to utilize technology optimally to avoid the digital divide (Menkominfo RI, 2023). According to Curtis, the focus of the digital transformation program is not only about providing services online, but also about creating a work environment where this transformation can occur. One of them requires developing the skills and mindset of employees to adapt to the digital work environment (Curtis, 2019).

This is in line with Presidential Regulation Number 18 of 2020 concerning RPJMN 2020-2024, which emphasizes that bureaucratic reform needs to encourage every ASN to have specific skills and competencies that can help the bureaucracy face the digital era and industry 4.0. Thus, the digital transformation agenda in Indonesia can occur with the support of the State Civil Apparatus (ASN): PNS and PPPK.

In the digital era, the ability to use internet-based digital tools effectively and adapt in a digital environment is now an essential competency for individuals and organizations (Eom & Lee, 2022). The adoption of digital technologies in public services provided by the government can improve efficiency and transparency, and can increase citizen participation in the service process (Levesque et al., 2024). Therefore, employees in the public sector, especially civil servants, are required to have sufficient digital skills or competencies to carry out their duties effectively in providing public services.

Nonetheless, some studies reveal that employees in the public sector tend to have lower levels of digital competence, which may be due to factors such as limited training, resistance to change, and generational differences in technology adoption (Virnandes et al., 2024). In addition, there is low motivation in mastering technology among older generations (Kuhlmann & Heuberger, 2023). This gap poses a serious challenge, especially in the implementation of national programs such as the E-Government agenda that relies on digital transformation (Nafiana et al., 2024).

The Ministry of Communication and Digital (formerly the Ministry of Communication and Information/KOMINFO) stated that the level of ASN digital mindset reported that around 30% of ASNs already have a good digital mindset. However, most ASNs still need to improve their understanding and skills in using digital technology to work more efficiently and innovatively. The 30% figure reflects the gap between awareness of the importance of digital transformation and ASN's ability to adopt digital technology as a whole. Many ASNs have recognized the benefits of digital technology. However, challenges such as limited access to technology, lack of ongoing training, and resistance to change slow down the improvement of their digital capabilities (Waluyo, 2024).

Assessment in the implementation of E-Government is measured through the E-Government Development Index (EGDI). EGDI is an index used to measure a country's progress in developing electronic government services assessed by the Online Services Index (OSI), Telecommunication Infrastructure Index (TII) and Human Capital Index (HCI) indicators. Assessment of the implementation of E-Government in Indonesia in 2024, ranked 64th in the world out of 193 countries. Of the three indicators, HCI, which measures the capacity of human resources in utilizing and contributing to E-Government services, is the lowest indicator with a value of 0.72 and lags behind the other indicators TII at 0.86 and OSI at 0.8.

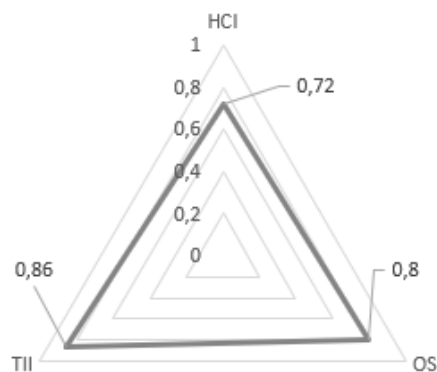


Figure 1. Indonesia's EGDI Assessment in 2024

Source: E-Government Survey 2024 (United Nations, 2024)

The digital competence of ASN is something that needs attention. In some studies, digital competence can affect the level of employee performance. According to Saeful and Ekhsan's research, individuals who have better digital skills are able to adapt more quickly to technological change, solve complex challenges, and collaborate more effectively in a digital environment (Saeful & Ekhsan, 2024). In the public sector, digital competencies are associated with improved public services, better citizen engagement, and increased organizational efficiency (Bastidas et al., 2024). Employees in the public sector who possess sufficient digital competencies are better able to adapt to change, make optimal use of technology, and support

successful reforms (United Nations, 2013). Finally, civil servants with digital skills are able to adapt to evolving demands and contribute to public sector innovation (Yogar et al., 2024).

Therefore, this study aims to analyze the relationship between digital competence and ASN performance. Although there has been research that provides a basis for understanding the importance of digital competence in the work environment, there is no reference research on the relationship between competence and ASN performance in Indonesia. This research seeks to fill this void by evaluating the level of digital competence and its impact on performance. This research will provide new insights into the impact of digital competency levels in the workplace, as well as inform the development of strategies to strengthen ASN's digital skills in the digital era.

Literature Review

Digital Competency

The push for administrative reform in the public sector emphasizes the importance of employees with digital skills (United Nations, 2024). The digital competence of employees in the public sector is important for understanding digital governance and ensuring efficient public services (Huu, 2023). Digital competence according to the European Commission is the ability to use communication tools, digital media, or networks to find, use, create information, evaluate, and utilize it in a healthy, wise, intelligent, careful, appropriate, and law-abiding manner in order to foster communication and interaction in everyday life.

The measurement of Digital Competencies can refer to the DigComp 2.2 framework developed by the European Commission (Vuorikari et al., 2022). The five main variables in assessing digital competence in the DigComp 2.2 framework, the first is Information and data literacy. This variable assesses the ability to search, evaluate and use information and digital content effectively, including filtering relevant information and criticizing digital content. Second, communication and collaboration, which is the ability to communicate, interact, and collaborate digitally, including awareness of rules and ethics in communicating and working in networks. Third, digital content creation, namely the skills to create and edit digital content, as well as understanding aspects of copyright and licensing, including basic programming skills. Fourth, Digital Safety, which is the knowledge and awareness to protect devices, personal data, physical health, and digital well-being, as well as building awareness of online security risks. Lastly, Problem solving, which is the ability to recognize digital needs, solve technical problems, and utilize digital tools for innovation and self-development.

Employee Performance

Meanwhile, employee performance is the level of achievement of tasks or responsibilities given to an employee in an organization. This performance reflects the extent to which individuals are able to meet predetermined standards in carrying out tasks, both quantitatively and qualitatively (Campbell & Wiernik, 2015). Employee performance measurement can be measured through three dimensions, namely Task Performance, Adaptive Performance and Contextual Performance (Pradhan & Jena, 2017). First, task performance, which assesses employees' ability to complete core tasks, including target achievement, timeliness, and output quality. Second, adaptive performance, which assesses employees' ability to adapt to change, deal with unexpected situations, and overcome pressure and complex problems. Third, contextual performance, which measures an employee's contribution beyond core tasks, such as helping colleagues, creating a conducive work environment, and demonstrating commitment and initiative.

Methods

This research adopts a quantitative approach that aims to objectively test the relationship between various variables that can be measured (Creswell & Creswell, 2018). The analysis used is descriptive analysis, which is an analysis that aims to provide a detailed description of the phenomena that occur without aiming to draw general conclusions or generalize (Sugiyono, 2013). Data collection in this study used a questionnaire instrument to assess the variables and indicators to be measured from respondents (Sugiyono, 2013). Meanwhile, the sampling technique used is nonprobability sampling, namely the selection of respondents is carried out purposively based on the respondent's willingness to be willing and have the characteristics or information to answer the questions needed by the researcher (Creswell, 2014).

The collected data were analyzed using the confirmatory factor analysis (CFA) method. This method was chosen because the research aims to measure the relationship between digital competence and ASN performance. CFA tests the extent to which measured variables are able to represent theoretical latent constructs. This technique is used to evaluate the suitability between predetermined measurement theories. In CFA, latent constructs are described as ellipses (circles or ovals), while measured variables are represented in rectangular shapes. Correlational or covariance relationships are indicated by double-headed curved arrows. Figure 2 presents the CFA theoretical model, where the curved arrow between the two latent constructs (digital competency and employee performance) illustrates the correlational relationship between them (Hair et al., 2019).

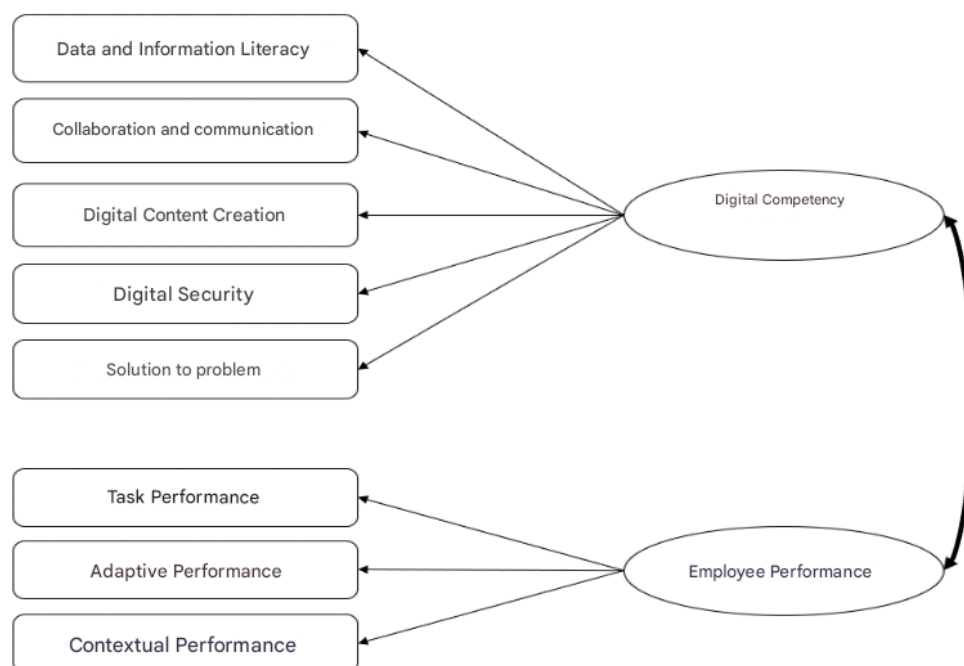


Figure 2. Theoretical Model for Analyzing the Relationship between Digital Competency and Employee Performance

Thus, the theoretical model as shown in Figure 2 is built based on analyzing the relationship between the concept of digital competence that refers to the DigComp 2.2 framework and the concept of employee performance measurement. Thus, the hypothesis of this research is as follows:

H₀ : There is no relationship between digital competence and employee performance.

H₁ : There is a relationship between digital competence and employee performance.

The research instrument was a research questionnaire that measured digital competencies and employee performance. The digital competency assessment aspects were prepared based on the DigComp 2.2 framework from the European Commission which has been modified based on research needs (Table 1). Meanwhile, to measure employee performance, the assessment aspects adopted research conducted by Pradhan and Jena and adjusted to the ASN work behavior standards (Table 2) as stipulated in the PAN-RB Ministerial Regulation (Regulation of the Minister of Administrative Reform and Bureaucratic Reform on Performance Management of State Civil Apparatus Employees, 2022). The regulation stipulates performance indicators and criteria that must be met by ASN, including aspects of individual performance and work behavior.

Table 1. Digital Competency Measurement

Digital Competency Variable	Assessment Indicator
Information and data literacy	search for and retrieve required data from a variety of information on the Internet
	able to analyze which sources of information and digital content are trustworthy and reliable
	able to compare which sources of information and digital content are trustworthy and reliable
	able to critically evaluate which sources of information and digital content can be trusted and relied upon
	able to critically analyze data, information and digital content obtained
	able to critically interpret data, information and digital content obtained
	able to critically evaluate data, information and digital content
	able to select, store and retrieve digital data and information as needed
	able to select and process appropriate digital data and information for specific needs
	Collaboration and Communication
understand appropriate digital applications for online communication needs	
being able to share data, information and digital content with others through <i>software</i> or applications on a digital device	
can help advise and refer others on digital devices and apps	
can participate in a community of people on a digital platform	
can look for opportunities to develop themselves and participate in the digital space	
can utilize digital platforms to work together (collaborate) with other parties	
can utilize digital service providers to distort data, resources and information for personal or group interests.	
can maintain applicable social norms when using digital technology and interacting online	
respect other people's different opinions	

Digital Competency Variable	Assessment Indicator
	always uphold the values of Pancasila in doing activities in the digital world
	never provoke conflict or make negative comments on social media
	never commit hate speech on Social Media
	can adapt in adjusting strategies on how to communicate with people of different ethnicity, culture and country.
	can create and manage one or more accounts across multiple digital platforms
	can protect personal reputation in digital activities
	be careful in maintaining data confidentiality in utilizing digital services
Digital Content Creation	can create and edit digital content in different formats
	can express themselves (ideas, opinions, <i>personality</i> , etc.) through digital content created
	can modify and process certain new information and knowledge into relevant content.
	understand how copyright and licenses apply to digital products
	can create and develop a program/application on a computer to solve a specific problem or task.
Digital Security	protect devices and digital apps/accounts
	understand the risks and threats of not protecting devices
	understand the steps on how to maintain the safety, security and confidentiality of data on the device
	understand how to safeguard personally identifiable information to protect themselves and others from negative impacts
	understand that there is a "Privacy Policy" in each digital service to inform how personal data is used
	understand and avoid physical health risks/threats when using digital technology
	understand and avoid mental health risks/threats when using digital technology
	can avoid and protect themselves and others from potential dangers in the digital world such as <i>cyberbullying, bodyshaming, hate speech</i> etc.
	realize that digital technology is used for social good and invite others to do social activities
	be aware of the environmental impact of digital technologies and their use
Problem Solving	able to identify technical problems that occur when using digital devices
	able to determine solutions or <i>digital tools</i> that can be used in solving problems experienced
	can organize and customize the use of digital devices according to personal needs

Digital Competency Variable	Assessment Indicator
	able to use digital <i>software</i> tools to create new knowledge content and innovative products
	can participate in problem solving utilizing video conferencing services on digital devices
	understand digital field skills or weaknesses that need to be improved and updated
	able to support others to develop their digital competencies
	strive to be <i>up-to-date</i> in developing themselves following the development of digital technology

Table 2. Employee Performance Measurement

Employee Performance Variable	Assessment Indicator
Task Performance	maintain high standards of work
	have a good level of discipline in complying with rules and ethics in the workplace
	able to handle and complete tasks without much supervision
	passionate about work
	can handle multiple tasks to achieve organizational goals
	complete tasks on time
	My colleagues believe that I am a high achiever in the organization.
Adaptive Performance	Can cooperate and coordinate well for effective teamwork
	can manage their work very well despite the pressure and demands.
	can accomplish teamwork in any situation or change.
	always believe that mutual understanding can lead to viable solutions within the organization
	always patient when receiving criticism from team members or coworkers
	comfortable with job flexibility
Contextual Performance	able to adapt well in coping with organizational changes over time
	provide assistance to coworkers when requested or needed
	likes to handle additional responsibilities or work
	expressing sympathy and empathy to coworkers when they are in trouble
	actively participate in group discussions and work meetings
	used to praise coworkers for their good work
	derive much satisfaction in mentoring others in the organization
	regularly share knowledge and ideas among team members or coworkers
used to maintain good coordination between fellow workers	

Employee Performance Variable	Assessment Indicator
	used to mentoring new coworkers outside the scope of work
	communicate effectively with coworkers for problem solving and decision making

Respondents in this study were ASNs working in Ministries and Institutions (Central Government). Based on information from the Ministry of PAN-RB, ASNs who are transferred (to IKN) must master digital literacy or competence (Setuningsih, 2024). Determining the number of respondent samples can use the ratio of observation-to-variables principle. According to Hair, with the ratio of observation-to-variables principle, researchers can determine with certainty the minimum number of respondents when the sampling frame is unclear. The ratio of the ratio of observations to the number of variables used is 20: 1 (Hair et al., 2019). Based on these provisions, the number of respondents is 10 (eight) variables multiplied by 20 (ten). Therefore, this study took a minimum of 200 ASN respondents in the Central Government.

Data collection using questionnaires was carried out by utilizing google forms distributed through the Instagram and X digital platforms. Data collection through the questionnaire was carried out from September 16, 2024 to October 25, 2024 by obtaining 206 respondents. Furthermore, the data processing was carried out using Excel software and further analyzed using IBM AMOS 26 software.

Results and Discussion

Demographic Data

Respondents' demographic data consisted of gender, age, ASN status, length of service, and education level. In terms of gender, 54% of respondents were male, while 46% were female. The age category is dominated by the 26-30 years age group (29%) and 31-35 years (26%). ASN status shows that the majority of respondents are civil servants (89%), while the other 11% are PPPK. In terms of tenure, respondents with a tenure of 1-5 years are the largest group (36%), followed by those with a tenure of 6-10 years (22%) and 11-15 years (21%). For education level, most respondents have S1/D4 education (74%), followed by S2 (21%), while only 3% and 2% of respondents have high school and D3 education. There were no respondents with a doctoral degree.

Confirmatory Factor Analysis

CFA analysis is conducted to assess the reliability and validity of the theoretical model, fitness model and correlation based on predetermined conditions. Based on CFA provisions (Brown, 2015)The reliability and validity of the theoretical model is measured through the construct reliability (CR) and Average Variance Extracted (AVE) values. Based on the assessment results in Table 3, this theoretical model has a fairly good level of reliability and validity. The minimum value of CR is 0.7 and AVE is 0.5. Table 3 shows that, the relationship model between variables in Digital Competency has a CR of 0.850 and an AVE of 0.737, so it can be interpreted that reliability and validity are very good. Meanwhile, the employee performance model can also explain the relationship between variables very well because it has a CR value of 0.937 and an AVE of 0.913.

Table 3. Model Reliability and Validity Assessment

Variables	Loading Factor	CR	AVE
Information and Data Literacy	0,741	0,850	0,737
Communication and Collaboration	0,900		
Digital Content	0,533		
Digital Security	0,811		
Problem Solving	0,713		
Task Performance	0,920	0,937	0,913
Adaptive Performance	0,931		
Contextual Performance	0,886		

Source: Results of primary data analysis

Meanwhile, in testing the measured variables in explaining the latent constructs, it is assessed through the model fitness criteria (Figure 3). The results of this study found that the theoretical model has a fairly good level of fit. This can be seen from the Chi-Square value = 42.850 with degree of freedom (DF) = 19, so that the value of the Chi-Square / DF Ratio value is 2.25 (provisions < 3.00). Therefore, statistically this model is sufficient to be said to have good data suitability. In addition, the suitability of the model can see the GFI value = 0.9 and the CFI value = 0.957 (provision > 0.9). Both focus on assessing how well the hypothesized model fits the empirical data. Meanwhile, the AGFI value = 0.8 (provision > 0.8), TLI = 0.937 (provision > 0.9), both values indicate that the complexity of the relationship between variables can be explained well by a model. However, the RSMEA value = 0.11 (provision = 0.05 - 0.1). RMSEA measures how well the hypothesized model is based on empirical data by considering the level of simplicity (parsimonious) of the model. Based on the RSMEA assessment, this model is not so good at explaining the hypothesis with the model built.

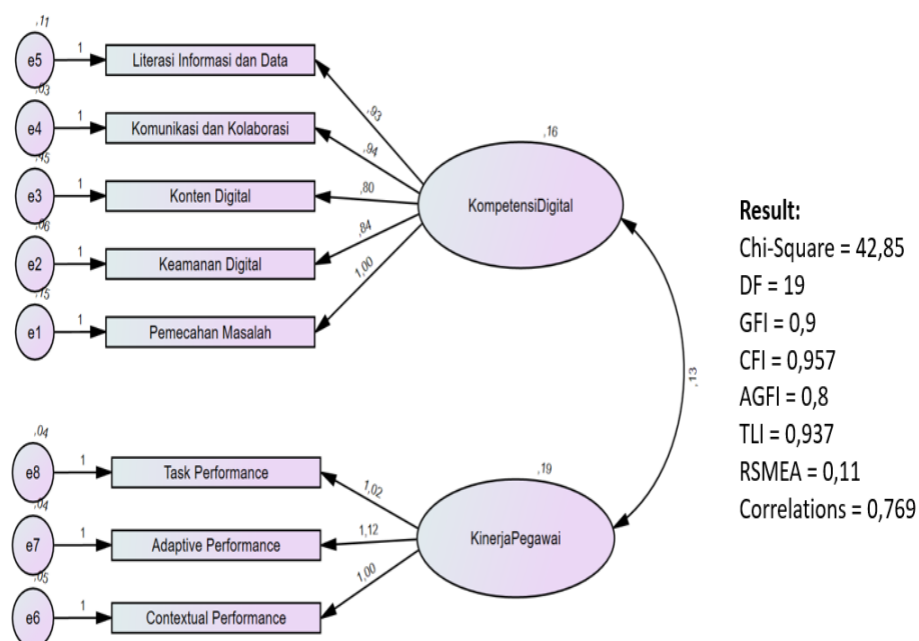


Figure 3. Model Fit and Correlation Analysis Results

Source: AMOS output

Nevertheless, overall this theoretical model shows that all measured variables can represent their respective latent constructs and the relationship between latent constructs (digital

competence and employee performance) based on empirical data. Furthermore, the level of relationship or correlation of digital competence and employee performance can be seen from the AMOS output in Figure 3, at a correlation value of 0.769 (scale = 0 - 1). The correlation value is close to 1, so it can be interpreted that there is a fairly good relationship between the level of ASN digital competence and ASN performance.

Thus, this study proves that the level of digital competence of an ASN has an influence on the level of performance of an ASN. Therefore, there is a relationship between digital competence and employee performance (H_0 is rejected). In other words, the higher the digital competence of an ASN, the higher the performance of an ASN and vice versa.

Descriptive Analysis

Categorization of Digital Competency Level

Furthermore, the assessment of the level of digital competence of respondents in this study is categorized based on the normal distribution into five intervals based on the normal distribution using six standard deviation units. (Azwar, 2012). The categories include very low ($X < M - 1.5SD$), low ($M - 1.5SD < X < M - 0.5SD$), average ($M - 0.5SD < X < M + 0.5SD$), high ($M + 0.5SD < X < M + 1.5SD$), and very high ($M + 1.5SD < X$), where M is Mean and SD is Standard Deviation.

Table 4 displays the categorization of digital competency levels based on five main variables: Information and Data Literacy, Communication and Collaboration, Digital Content Creation, Digital Security, and Problem Solving. For the Information and Data Literacy variable, most respondents were in the very high (32%) and high (19%) categories, with 21% in the low category and 4% in the very low category. The Communication and Collaboration variable was dominated by the high (35%) and very high (23%) categories, while only 16% were in the low category and 4% in the very low category.

The Digital Content Creation variable showed the lowest distribution in the very high (6%) and high (7%) categories, while most respondents were in the low (25%) and very low (39%) categories. For Digital Safety, the majority were in the very high (33%) and high (30%) categories, with 11% in the low category and 5% in the very low category. Finally, Problem Solving has a fairly even distribution, with 17% in the very high category and 15% in the high category, as well as 23% in the low category and 18% in the very low category.

Table 4. Categorization of Digital Competency Assessment

Digital Competency Variable	Category	Percentage (%)
Information and Data Literacy	Very High	32
	High	19
	Medium	24
	Low	21
	Very Low	4
Communication and Collaboration	Very High	23
	High	35
	Medium	22
	Low	16
	Very Low	4
Digital Content Creation	Very High	6
	High	7
	Medium	23

Digital Competency Variable	Category	Percentage (%)
	Low	25
	Very Low	39
Digital Security	Very High	33
	High	30
	Medium	21
	Low	11
	Very Low	5
Problem Solving	Very High	17
	High	25
	Medium	17
	Low	23
	Very Low	18

Source: Results of primary data analysis

From the analysis of the low and very low categories, the two variables with the largest total percentages are Digital Content Creation (64%) and Problem Solving (41%). Special attention needs to be given to improving ASN's digital competence in the Digital Content Creation and Problem Solving variables. The Digital Content Creation variable has the largest percentage of low and very low categories (64%). In the digital era, the ability to create and edit digital content in various formats is a core skill required in almost all government sectors. ASNs who have this skill can be more effective in delivering information to the public, compiling engaging digital reports, or developing multimedia-based training materials. In addition, an understanding of copyright and licensing is essential to ensure that the use of digital content complies with the law, avoid copyright infringement, and promote digital ethics. This competency also supports innovation in public services through the development of programs or applications that can help solve various administrative and operational problems.

The Problem Solving variable has a total of 41% low and very low categories. The ability to identify and resolve technical issues is critical in ensuring smooth operations, especially in an era where the use of digital devices and software is becoming increasingly dominant. ASNs who are able to determine the right technology solutions can reduce operational downtime, improve work efficiency, and provide better public services. The ability to adapt and utilize digital tools in problem solving also supports increased innovation. In addition, with more work being done virtually, skills in using video conferencing services and digital collaboration tools are crucial. ASNs also need to continuously develop their digital competencies as technology advances, which in turn can strengthen individual and organizational performance. Improving competencies on these two variables will not only support ASN's individual performance but also strengthen the competitiveness and effectiveness of the organization as a whole. Thus, intensive training and skill development programs focused on these two aspects are needed to improve ASN's ability to face the challenges and demands of the digital era.

Digital Competency Level and Age Group

Table 5 shows the distribution of digital competency levels by age group. In the 21-25 age group, respondents are evenly split between the high (50%) and medium (50%) categories, with no respondents in the low or very low categories. The 26-30 age group has the largest proportion in the high (43%) and medium (32%) categories, but 18% are in the low category and 4% in the very low category. The 31-35 age group showed a more even distribution, with 36% in the medium, 32% in the high and 18% in the low categories, while 11% were in the

very low category. Meanwhile, the 41-45 years and 56-62 years age groups have a dominant distribution in the low and very low categories, indicating a need for digital competency development in these age groups.

Table 5. Digital Competency Level by Age Group

Age Group	Digital Competency Level Category	Percentage (%)
21 - 25	Very High	-
	High	50
	Medium	50
	Low	-
	Very Low	-
26 - 30	Very High	4
	High	43
	Medium	32
	Low	18
	Very Low	4
31 - 35	Very High	4
	High	32
	Medium	36
	Low	18
	Very Low	11
36 - 40	Very High	5
	High	18
	Medium	50
	Low	14
	Very Low	14
41 - 45	Very High	-
	High	14
	Medium	14
	Low	57
	Very Low	14
46 - 50	Very High	11
	High	33
	Medium	44
	Low	11
	Very Low	-
51 - 55	Very High	33
	High	-
	Medium	33
	Low	33
	Very Low	-
56 - 62	Very High	-
	High	-
	Medium	-
	Low	-
	Very Low	100

Source: Results of primary data analysis

From the table, the four age groups with the largest total of low and very low categories are 41-45 years: 71% (57% low, 14% very low); 36-40 years: 28% (14% low, 14% very low); 51-55 years: 33% (low); and 56-62 years: 100% (very low). This suggests that these age groups require digital competency development to improve their performance in the context of digitalization. In addition, the data indicates that ASN employees belonging to older generations have lower digital competencies than younger generations (age groups: 21-25, 26-30, and 31-36).

ASN Digital Competency and Digital Transformation

Based on this explanation, the need for digital competencies for ASN, especially in improving performance, is very important, especially in supporting the achievement of accelerated digital transformation in the Digital Indonesia Vision 2045. The Digital Indonesia Vision 2045 is the Indonesian government's strategic plan to achieve a comprehensive digital transformation, covering various sectors, to support national development and realize an advanced, inclusive, and globally competitive digital society. This vision is part of the projection of Indonesia 2045, which coincides with 100 years of Indonesian independence, with the aim of making Indonesia one of the developed countries in the world (Menkominfo RI, 2023).

Digital transformation in Digital Indonesia Vision 2045 includes the development of equitable telecommunications infrastructure, implementation of cutting-edge technologies such as 5G and IoT, digitalization of government services through E-Government and Smart City, as well as innovation in the industrial, education, and health sectors. Other focuses include improving people's digital literacy, developing digital talent, growing the digital economy through MSMEs and tech startups, as well as strengthening cybersecurity and implementing environmentally friendly technologies. All of this is aimed at creating an inclusive, globally competitive Indonesia that is ready to face the challenges of the digital era.

In digital transformation efforts, digital competence is a crucial element for ASN to improve the performance and effectiveness of public services. ASN is expected to continue to improve its ability to adapt to technological advances. Based on Law Number 20 of 2023 concerning the State Civil Apparatus, mandates that every ASN employee is required to develop competence through continuous learning. According to Eko Prasajo, digital transformation is one of the important efforts in bureaucratic reform in Indonesia. Policies such as Presidential Regulation No. 95/2018 on Electronic-Based Government System, Presidential Regulation No. 82/2023 on Acceleration of Digital Transformation and National Digital Service Integration and One Data Indonesia policy are set to encourage digitalization. However, one of the challenges that hinder the success of the process is digital competency (Prasajo, 2023). Digital competence among ASNs is still low, especially in the older generation. This hinders the adoption of new technologies and optimization of the use of digital systems. Improving digital literacy through training and education is crucial.

Digital transformation is affecting the way we live and work, making it important to identify the competencies needed to deal with it, and even capitalize on its opportunities (Wolff et al., 2021). Therefore, there is an urgency to increase ASN's digital competence in digital transformation efforts. ASN competence in the current digital era must have at least 2 (two) main competencies, namely in addition to being able to provide public services, ASN must have good digital competence (Herwanto, 2024). In addition, digitalization in public sector governance is also strongly influenced by ASN's ability to support various public service programs and activities (Aswin & Sofyan, 2022). According to Fonseca and Picoto, an employee needs to improve competencies related to data analysis, the use of digital technology, and collaboration through digital technology for digital transformation needs. (Fonseca &

Picoto, 2020).. So, it can be said that this digital competency is very significant to be improved in fulfilling digital transformation efforts in Indonesia according to the Digital Indonesia Vision 2045.

Conclusion

This research confirms the importance of digital competency as a major factor influencing the performance of the State Civil Apparatus (ASN) in Indonesia. The results of the analysis show a significant positive relationship between digital competence and ASN performance, where increased digital competence has a direct impact on the effectiveness and efficiency of their performance. The correlation of 0.769 between the two variables emphasizes the importance of mastering digital technology in supporting ASN tasks, especially in the context of government digital transformation. The findings also reveal that competencies related to Digital Content Creation and Problem Solving are at a low level among ASNs. This indicates an urgent need to improve digital skills in these two areas through focused training. These competencies are critical, given that ASN's ability to create, manage, and deliver relevant digital information is integral to public service delivery in the digital era. Analysis by age group highlights significant digital competency gaps in the 41-45 years, 36-40 years, 51-55 years, and 56-62 years age groups. These groups require a customized approach to ensure their engagement in the digital transformation agenda. The generational gap in digital literacy is a challenge that needs to be addressed to create an inclusive and globally competitive bureaucracy.

As part of the Digital Indonesia Vision 2045, digital transformation in the bureaucracy includes not only the application of technology, but also changes in work culture, increasing digital literacy, and strengthening ASN competencies. Policies such as Presidential Regulation No. 95 of 2018 on Electronic-Based Government System and Presidential Regulation No. 82 of 2023 on Accelerating Digital Transformation are important foundations in supporting this effort. However, the success of these policies depends heavily on ASN's readiness to adopt digital technology and adapt to change. Overall, this research provides strategic recommendations to improve ASN's digital competence through continuous training programs, improved technology infrastructure, and a cross-generational approach in HR development. With these measures, ASN can contribute more optimally in supporting the government's digital transformation and providing better public services. The sustainability of bureaucratic reform in Indonesia relies heavily on collective efforts to bridge the digital competency gap, which will ultimately realize a modern, adaptive, and responsive bureaucracy to the needs of society.

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