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Analyzing the Impact of Responsiveness, Digital Skills, and Management Support on Civil Servants' Performance in the Era of Smart Governance

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Abstrack

This study evaluates how responsiveness, digital proficiency, and managerial support shape the performance of civil servants (ASN) in Palopo City. Primary data were gathered through questionnaires administered to 370 ASN and analysed using Structural Equation Modelling (SEM) with AMOS 26. Validity assessments showed all indicators had factor loadings above 0.6, while reliability was strong, with Cronbach's alpha and construct reliability both exceeding 0.8. The model demonstrated good fit (CFI = 1.000; TLI = 1.022; RMSEA = 0.000) and explained a substantial portion of performance variance (R-square = 0.743), indicating that 74.3% of the variation in ASN performance is attributable to the exogenous variables. Hypothesis testing confirmed positive, statistically significant effects of responsiveness ($\beta = 0.128$; $p < 0.001$), digital skills ($\beta = 0.165$; $p < 0.001$), and managerial support ($\beta = 0.146$; $p < 0.001$) on ASN performance. Collectively, the findings underscore the value of integrating individual capabilities and organizational support to advance a professional, adaptive, and accountable civil service.

Keywords: Responsiveness, Digital Skills, Managerial Support, Civil Servant Performance, SEM-AMOS

1. Introduction

In the era of digital revolution and the concept of smart cities, governments around the world are encouraging the implementation of smart governance to improve government administration. Smart governance is a concept that integrates information and communication technology to improve efficiency, transparency, public participation, and responsiveness in the management of government services [1]. In Indonesia, the transformation towards smart governance has become an important agenda in bureaucratic reform in line with the development of digital technology.

The digitization of government in Indonesia began with Presidential Instruction No. 3 of 2003 on E-Government Development, then reaffirmed through Presidential Regulation No. 95 of 2018 on Electronic-Based Government Systems (SPBE). The COVID-19 pandemic has accelerated the implementation of SPBE and confirmed that digital transformation is a necessity for the public sector [2].

Local governments have begun to adopt the concept of smart governance. One example is the city of Palopo in South Sulawesi, which was selected for the implementation of a national Smart City program and has implemented various digital-based service initiatives. The implementation of this smart city program includes the development of ICT infrastructure, the provision of online public services, and the development of data-based regional innovations [3]. In the context of smart governance, government officials are required to be more responsive to the needs of the community, have competent digital skills,

and have management support that can increase organizational commitment. Responsiveness is the capacity of the government to ensure that programs and activities run smoothly while designing developments that are relevant to public needs and aspirations [4].In addition to responsiveness, the digital skills of the State Civil Apparatus (ASN) are a key factor in the era of smart governance, because the implementation of SPBE and digital services can only be optimal if employees possess sufficient digital competencies. However, in reality, only a small proportion of government employees truly master digital skills; a study found that around 19% of workers have basic-level digital skills and only 6% reach the intermediate level. This gap indicates the need to improve the digital competencies of the apparatus. Observation-based research has also demonstrated that digital skills have a positive and substantial impact on the performance of government employees.

Furthermore, management support within the State Civil Apparatus (ASN) environment plays a strategic role in strengthening the bureaucracy's readiness to face the demands of the smart governance era. This support not only relates to the provision of facilities and digital training, but also includes adaptive policies, agile leadership, and systems that encourage cross-unit collaboration. Recent research shows that human resource management changes in the digital era require alignment of digital competencies, the application of performance-based systems, and responsive leadership to achieve effective performance of the State Civil Apparatus (ASN).

Efforts to improve ASN performance continue to be a focus of Indonesia's bureaucratic reform agenda. The government has issued various regulations to encourage better performance management of the apparatus, as stipulated in Government Regulation No. 30 of 2019 concerning the Performance Appraisal of Civil Servants. This policy aims to promote improvements in employee performance through a more objective system of rewards and sanctions. Within the smart governance framework, the responsiveness of the apparatus, digital skills, and management support are expected to play significant roles in supporting the success of managing improvements in ASN performance. Responsive personnel tend to adjust services more quickly to citizen needs, thereby improving the quality and outcomes of public service performance. Similarly, personnel with high digital skills can leverage technology for service innovation and work efficiency, which has a positive impact on organizational performance. In the digital era, strong management support can increase organizational commitment and job satisfaction and, ultimately, employee performance. The combination of these three factors is expected to accelerate the realization of a high-performing bureaucracy that is adaptive to technological developments and societal needs in the digital age.

This study arises from that background by focusing its analysis on a local government institution, using the Government of the City of Palopo as a case study representing a region adopting smart governance. The study aims to examine the influence of responsiveness, the digital proficiency of the apparatus, and managerial support on improving ASN performance in the context of smart governance. The approach used is quantitative, employing multivariate linear regression analysis to measure the contribution of each independent variable to the dependent variable. Data collection was conducted using a questionnaire survey administered to ASN, in which each variable was operationalized into a set of statement indicators. Before analysis, the survey instrument was tested for validity and reliability; specifically, Cronbach's

alpha was used for the reliability test, where, in general, $\alpha \geq 0.70$ is considered to indicate a satisfactory level of reliability. Through this approach, the study is expected to provide empirical evidence on the importance of responsiveness, digital skills, and management support in supporting improvements in ASN performance, while also offering recommendations for local governments in developing the capacity of the apparatus to usher in an effective era of smart governance

2. Literature Review

2.1. Performance of the State Civil Apparatus (Y)

Employee performance is a core concept in human resource management and public administration. Three fundamental elements underlie employee performance—ability, motivation, and opportunity provided by the organization [1]. The literature also indicates that performance is influenced not only by individual factors, but also by organizational support in the form of policies, supervision, and work facilities [2] .

Smart governance emphasizes technology-based public administration, bureaucratic efficiency, and responsive public service delivery. Accordingly, members of the State Civil Apparatus (ASN) who demonstrate high performance are those who can align individual capabilities with organizational demands and contribute to the success of bureaucratic reform programs and the digitalization of public services.

2.2. Responsiveness (X1)

Responsiveness is a crucial indicator for measuring the quality of public services. Responsiveness is the ability of government officials to respond to public needs, aspirations, and complaints quickly, accurately, and proactively. Responsiveness is a characteristic of modern bureaucracy, oriented toward public satisfaction as users of public services [3].

Practically, civil servant responsiveness can be demonstrated through speed of service, accuracy in providing information, flexibility in addressing public issues, and a proactive approach to finding solutions. Therefore, the higher the level of civil servant responsiveness, the greater the likelihood that their performance will be favorably evaluated by both the public and their superiors.

2.3 Digital Skill (X2)

In the era of the industrial revolution 4.0, digital skills are a competency that every employee, including ASN, must have. Digital literacy is a set of abilities that enable individuals to operate digital technology, evaluate digital-based information, and apply it in daily activities and work tasks. [4]. Digital skills include technical skills, digital communication, information literacy, online collaboration, and technology-based problem solving [5]. For ASN, digital skills are the main key in supporting the e-government agenda, namely the use of digital systems used to increase efficiency, effectiveness, as well as accountability and transparency of government services. Digital skills not only increase the effectiveness of individual ASN work, but also strengthen the image of the bureaucracy as a modern institution that is adaptive to changes in the times.

2.4. Management Support (X3)

Management support is a crucial factor influencing civil servant performance. The Perceived Organizational Support (POS) theory explains that when employees perceive support from their organization, they demonstrate higher levels of commitment, loyalty, and performance [6]. This support can take the form of providing facilities, policies that support employee development, effective supervision, and even motivation from superiors.

In the context of civil servants, management support is essential to address the challenges of digital bureaucracy. For example, in implementing e-government applications, civil servants are not only required to be technically proficient but also require adequate training, guidance, and infrastructure. Management support can strengthen the influence of responsiveness and digital skills on civil servant performance.

2.5. Smart Governance

Smart governance denotes a governance approach that integrates digital technologies, cross-actor collaboration, and data-driven decision-making to enhance governmental performance and public value. This approach positions citizens as partners rather than mere service recipients through online participation channels, open consultation, and the co-production of policy. Its operational core encompasses data interoperability, service-architecture standards, process automation, and algorithmic transparency so that decisions can be audited, explained, and improved. At the managerial level, smart governance requires adaptive leadership, robust data governance, and a learning culture that fosters measured experimentation and continuous improvement. In service delivery, front–back-office integration and unified portals enable user experiences that are swift, inclusive, and secure. The ethical dimension is equally essential: privacy protection, bias mitigation, equitable access, and accountability must be embedded throughout the policy cycle. Resilience constitutes another pillar, leveraging predictive analytics and real-time dashboards for crisis response and service continuity. Ultimately, success is assessed by outcomes experienced by the public—time-cost efficiency, heightened trust, and improved quality of life—rather than by the number of applications deployed. Accordingly, investments should prioritize digital talent, data literacy, institutional integration, and transparent impact evaluation. Implementation requires a clear roadmap, cross-sector performance indicators, sustainable financing, and academia–industry–community partnerships to ensure relevant and scalable innovation. Independent oversight strengthens accountability.

2.6. Structural Equation Modelling (SEM)

Structural Equation Modeling (SEM) is a multivariate framework that integrates factor-analytic measurement models with regression-based structural paths to assess, within a single system, the relationships between latent constructs and their observed indicators. In SEM, unobserved (latent) variables are modeled alongside observed (manifest) indicators, which are conventionally depicted as ellipses and rectangles, respectively. Latent constructs are differentiated into exogenous causes and endogenous outcomes, linked by single-headed arrows to denote directional effects, while correlations among exogenous constructs are illustrated using double-headed arrows. An SEM comprises a measurement model, which

maps indicators to constructs, and a structural model, which maps causal relations among constructs. A key advantage of SEM is its capacity to handle hierarchical models with multiple dependent variables and complex simultaneous relationships. This approach enables researchers to address both regression and dimensionality questions, including the assessment of construct validity via Confirmatory Factor Analysis. SEM is implemented with software such as AMOS, LISREL, EQS, and Mplus. The standard procedure includes model specification, estimation, assessment of model fit, and interpretation of path coefficients. Within this framework, SEM functions as a comprehensive method for theory testing, measurement validation, and the evaluation of causal mechanisms in management research [7].

2.7. Research Design

Based on the theoretical review, the research framework can be formulated as follows. The performance of State Civil Apparatus (ASN) is influenced by various factors, including responsiveness, digital skills, and management support.

1. Responsiveness (X1) is expected to improve ASN performance, as ASN who are responsive to public needs are able to provide faster and more accurate services.
2. Digital Skills (X2) influence ASN performance, as the ability to use technology supports effectiveness, efficiency, and innovation in services, as well as utilizing e-government applications to improve work effectiveness.
3. Management Support (X3) represents the organization's attention to employees through policies, supervision, provision of facilities, and motivation provided to support performance.
4. ASN performance (Y) is the final outcome directly influenced by X1, X2, and X3. Therefore, the higher the level of responsiveness, digital skills, and management support, the higher the ASN performance in providing quality public services.

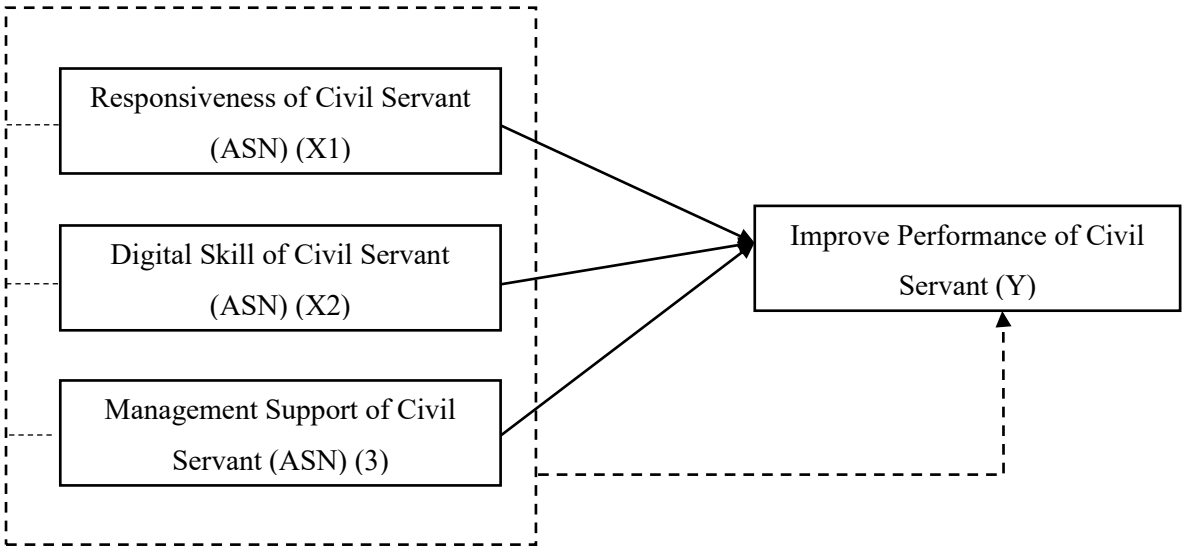

Figure 2.1 Research Design Diagram

3. Methodology

3.1 Research Type and Approach

This research employs a quantitative approach with an explanatory research design, which is used to numerically test the effect of independent variables on the dependent variable. Quantitative research allows researchers to obtain objective, structured data that can be analyzed using Multivariate Linear Regression statistical methods. The explanatory method is used because this research focuses on explaining the causal relationship between ASN Responsiveness (X_1), ASN Digital Skills (X_2), and Management Support (X_3) on ASN Performance Improvement (Y) in the Palopo City Government.3.2 Population and Research Sample.

3.2. Population and Research Sample

3.2.1. Population

BKPSDM data for 2025 indicate that the study population comprises all civil servants (ASN) in Palopo City, totaling 4,164 individuals. This population was selected for its relevance to the research problem and its capacity to provide a comprehensive overview of the conditions under investigation.

3.2.2 Sampling

Given the large size of the population, the researchers selected a sample to enhance the efficiency of the study in terms of time and cost. To determine a sample size that is representative of the population, Slovin's formula was employed. Slovin's formula is commonly used to calculate the required sample size for finite populations (i.e., those with a known total). Mathematically, Slovin's formula is expressed as :

$$\eta = \frac{N}{1 + N\,(e)^2)}$$

Description:
η = number of samples
N = population size
e = margin of error

With a population of N = 4,164 and an error rate of e = 5% or 0.05, the calculation of the sample size is as follows:

$$n = \frac{4164}{1 + 4164 \times (0{,}05)^2}$$

$$= \frac{4164}{1 + 4164 \times 0{,}0025}$$

$$= \frac{4164}{1 + 10{,}41}$$

$$= \frac{4164}{11{,}41} = 364{,}94$$

The result of this calculation is n = 364.94. This means that to maintain a margin of error of no more than 5%, the minimum sample size required is approximately 365 civil servants. In research practice, this number is then rounded up to 365 respondents as the final

sample size. Therefore, the sample size of 370 civil servants (more than the minimum sample size) is statistically adequate to represent the population of 4,164 civil servants in Palopo City with a margin of error of 5%.

3.3 Research Variables

3.3.1 Independent Variables

1. Civil Servant Responsiveness (X_1)

Describes the ability of civil servants to respond to public needs quickly, accurately, carefully, and timely, and to follow up on complaints.

2. Civil Servant Digital Skills (X_2)

Describes the ability of civil servants to operate digital devices, use office applications, utilize electronic-based public service systems, communicate digitally, and resolve technical issues.

3. Management Support (X_3)

Describes the extent to which leadership provides support in the form of work facilities, information, guidance, motivation, training, and coordination so that civil servants can perform optimally.

3.3.2 Dependent Variable

Improving Civil Servant Performance (Y)

Describes the results of civil servant work as seen from quality, quantity, timeliness, innovation and improvement, as well as responsibility and discipline in carrying out duties.

3.4 Data Collection Techniques

Research data was collected through a questionnaire using a five-point Likert scale:

1 = Strongly Disagree,
2 = Disagree,
3 = Neutral,
4 = Agree, and
5 = Strongly Agree.

The questionnaire was distributed to civil servants (ASN) via digital media (Google Forms) to facilitate more structured data entry and reduce the time required for data collection.

3.5 Research Instruments

Each research variable—ASN Responsiveness (X_1), ASN Digital Skills (X_2), Management Support (X3), and ASN Performance Improvement (Y)—represents five questions in the research questionnaire.

4. Results and Discussion

4.1 Respondent Characteristics

The respondents in this study were Palopo City Civil Servants (PNS). Several respondent characteristics were considered important, including gender, civil servant (ASN) rank, and length of service as an ASN.

4.1.1 Gender

Based on the results of the questionnaire conducted in Palopo City, a total of 370 respondents were recruited. Male respondents comprised 146 (approximately 39%) and female respondents comprised 224 (approximately 61%). This indicates that the majority of respondents were female.

4.1.2 Job Class

Based on the results of the questionnaire conducted in Palopo City, the distribution of respondents by job class revealed that out of a total of 370 respondents, category III was the most numerous with 241 respondents (65%), followed by category IV with 91 respondents (25%), category II with 33 respondents (9%), and category I with 5 respondents (1%). This indicates that the distribution of respondents within each job category is dominated by category III with the highest percentage, and category I with the lowest number of respondents.

4.1.3 Length of Service as a Civil Servant

Based on a questionnaire survey in Palopo City, the composition of respondents by length of service as a Civil Servant (N = 370) shows that the 6–10 year service category is the largest, with 84 (23%) employees, followed by 11–15 year service category with 79 (21%) employees, and 1–5 year service category with 75 (20%). Furthermore, 16–20 year service category recorded 64 (17%), 21–25 year service category with 45 (12%), and 26–30 year service category with the smallest number, with 23 (6%). In general, the distribution of respondents was relatively even across all categories of service category, with a higher concentration in the lower to middle service category (under 16 years).

4.2 Equation Modelling Analyzing (SEM)

4.2.1 Measurement Model Evaluation

Figure 1 shows the latent variables Responsiveness (X1) with 5 indicators, Digital Skills (X2) with 5 indicators, Management Support (X3) with 5 indicators, and Civil Servant Performance (Y1) with 5 indicators. This study used a SEM model developed including three exogenous latent variables and one endogenous latent variable with a total of 20 indicators. The relationships in the measurement and structural models were visualized using path diagrams, while the measurement model was constructed using Confirmatory Factor Analysis (CFA). The analysis was conducted using AMOS 26. The first step involved entering research data from SPSS into AMOS, then estimating the results to produce the output shown in Figure 4.1. The SEM path diagram was then validated and rehabilitated to ensure the model and its analysis were accurate, reliable, and trustworthy.

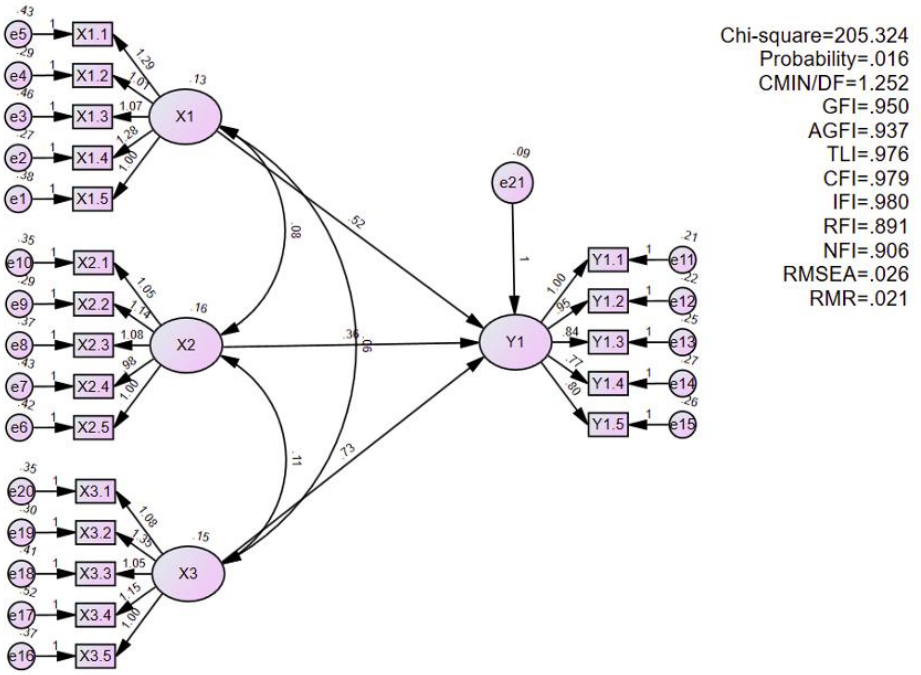

Figure 4.1. SEM Path Diagram (The Influence of Responsiveness, Digital Skills and Management Support in Improving the Performance of State Civil Apparatus in the Smart Governance Era).

4.2.2 Validity Test

Construct validity tests were conducted to assess whether each indicator accurately measured the latent variable. The goal was to ensure that all indicators truly represented the construct being analyzed. Indicator validity was evaluated through factor loading values (standardized loading). An indicator is considered valid if it has a positive loading greater than 0.50. Indicators that do not meet these criteria must be removed from the model [8].

Based on the analysis in Table 4.1, it was identified that all indicators in the variables Responsiveness (X1), Digital Skills (X2), Management Support (X3), and ASN Performance (Y1) showed factor loading values above 0.6. Thus, it can be concluded that all indicators in this study meet the validity criteria, making them suitable for use in measuring each latent variable, allowing the analysis to proceed to the next stage. Details of the validity test results are presented in the following table.

Table 4.1. Construct Validity Test Results (Convergent Validity)

Variable Laten	Variable Indicator		Notation	Correlation	Threshold	Explanation
Responsivities (X1)	1.1	I always strive to listen carefully to the needs and concerns of the public.	X1.1	0.690	0.6	Valid
	1.2	I strive to provide a quick response when completing core tasks or addressing public complaints.	X1.2	0.656	0.6	Valid
	1.3	I ensure that services provided comply with SOPs (Standard	X1.3	0.662	0.6	Valid

		Operating Procedures) for each public need or complaint.				
	1.4	I carefully review data and documents before processing them.	X1.4	0.706	0.6	Valid
	1.5	I am able to complete tasks on time without compromising the quality of my work.	X1.5	0.635	0.6	Valid
Digital Skill (X2)	2.1	I can operate a computer/laptop to complete daily work.	X2.1	0.712	0.6	Valid
	2.2	I can use Word/Excel applications and send digital documents effectively to complete my work more efficiently.	X2.2	0.697	0.6	Valid
	2.3	I can effectively search for work-related information online.	X2.3	0.691	0.6	Valid
	2.4	The use of digital technology, such as email or online meetings (Zoom/Google Meet), makes it easier for me to communicate and coordinate with relevant parties.	X2.4	0.642	0.6	Valid
	2.5	I have no difficulty adapting to application updates or new work systems at the office.	X2.5	0.658	0.6	Valid
Management Support (X3)	3.1	Leaders provide civil servants with the tools and technology needed to complete their work effectively.	X3.1	0.655	0.6	Valid
	3.2	Leaders provide adequate training or opportunities to participate in training related to developing civil servants' digital skills.	X3.2	0.741	0.6	Valid
	3.3	Leaders encourage civil servants to continuously innovate and improve services.	X3.3	0.667	0.6	Valid
	3.4	Leaders support strong coordination between departments/work units.	X3.4	0.662	0.6	Valid
	3.5	Leaders provide regular feedback to help civil servants improve their digital skills and responsiveness.	X3.5	0.646	0.6	Valid

Civil Servant Performance (Y)	4.1	I can work efficiently using available digital tools.	Y1.1	0.841	0.6	Valid
	4.2	I do my work according to procedures and always achieve the performance targets that have been set.	Y1.2	0.810	0.6	Valid
	4.3	With digital skills, I always complete work efficiently and on time according to targets.	Y1.3	0.774	0.6	Valid
	4.4	I take the initiative to find new ways to improve the quality of work or the quality of service.	Y1.4	0.753	0.6	Valid
	4.5	I strive to ensure that the work I do produces optimal results and has a positive impact on the office and the community.	Y1.5	0.756	0.6	Valid

4.2.3 Reliability Testing

Reliability testing is intended to ensure that the indicators used to measure latent variables (constructs) produce stable and consistent assessments of the same attribute. Construct reliability is evaluated using three criteria: construct reliability (CR), Cronbach's Alpha, and Average Variance Extracted (AVE) for the indicators forming the construct. A construct is considered reliable if the CR and Cronbach's Alpha values exceed 0.6 and/or the AVE value is above 0.5. A summary of the reliability testing results is presented in the following table:

Table 4.2 Construct Reliability Testing

Variable	*Construct Reliability*	*Cronbach's Alpha*	AVE	Explanation
Responsivities (X1)	0.792	0.810	0.463	Reliable
Digital Skill (X2)	0.794	0.815	0.470	Reliable
Management Support (X3)	0.752	0.804	0.454	Reliable
Civil Servant Performance (Y)	0.781	0.915	0.685	Reliable

Table 4.2 shows that the construct reliability test, measured by the criteria test, namely Construct Reliability and Cronbach's Alpha, is declared reliable because it has a value above 0.8. This can be concluded that the construct or latent variable in this study has good reliability.

4.3 Model *Structural Equation Modelling* (SEM) Evaluation

4.3.1. Goodness of Fit Model Test

The Goodness of Fit test in SEM is conducted to assess whether the proposed model or construct is appropriate to the empirical data. This study used several fit indices, namely CMIN/DF, RMSEA, TLI, CFI, and NFI. The test criteria using CMIN/DF: if the CMIN/DF

value is ≤ 2.00, the constructed construct is fit. Furthermore, an RMSEA (Root Mean Square Error of Approximation) value of ≤ 0.08 is considered acceptable. The criteria using TLI (Tucker-Lewis Index), CFI (Comparative Fit Index), and NFI (Normed Fit Index) of ≥ 0.90 indicate the constructed model is appropriate. The results of the model fit test are presented in the following table:

Table 4.3 Model Goodness of Fit Evaluation

Index	*Goodness of Fit*	*Cut Off Value*	Explanation
P-value	0.016	≥ 0.05	*Marginal Fit*
CMIN/DF	1.252	≤ 2.00	*Goodness of Fit*
TLI	0.976	≥ 0.90	*Goodness of Fit*
CFI	0.979	≥ 0.90	*Goodness of Fit*
RMSEA	0.026	≤ 0.08	*Goodness of Fit*
NFI	0.906	≥ 0.90	*Goodness of Fit*

Based on the results of the Goodness of Fit test (Goodness of Fit) in the table, it can be seen that most of the indices fall into the Good Fit category. The CMIN/DF value of 1.252 is below the maximum limit of ≤ 2.00, the TLI is 0.976, the CFI is 0.979, the RMSEA is 0.026, and the NFI is 0.906, all of which meet the cut-off value criteria. These results indicate that the model has a very good fit based on these five indicators. Meanwhile, the P-value of 0.016 is still below the minimum limit of ≥ 0.05, thus categorizing it as a Marginal Fit.

Overall, the developed model can be said to have a very good fit level, as the majority of indices (five out of six) meet the Good Fit criteria, while only one index shows a Marginal Fit. Based on the results obtained, the model can be declared adequate (fit) to proceed to the next stage of analysis. However, adjustments or modifications to the model are still recommended, if necessary, to ensure that all Goodness of Fit criteria are optimally met.

Table 4.4 The results of the model feasibility test (Goodness of Fit) after modifying the covariance index:

Index	*Goodness of Fit*	*Cut Off Value*	Explanation
P-value	0.985	≥ 0.05	*Goodness of Fit*
CMIN/DF	0.765	≤ 2.00	*Goodness of Fit*
TLI	1.022	≥ 0.90	*Goodness of Fit*
CFI	1.000	≥ 0.90	*Goodness of Fit*
RMSEA	0.000	≤ 0.08	*Goodness of Fit*
NFI	0.948	≥ 0.90	*Goodness of Fit*

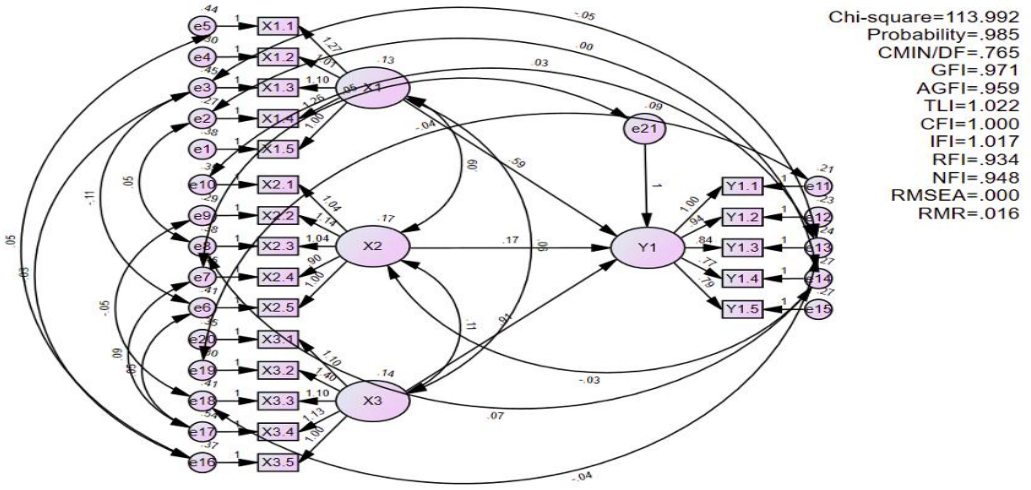

Figure 4.3 Path Diagram After Modifying the Covariance Index

The results of the model fit test indicate that of the six Goodness of Fit index criteria used to estimate parameters based on observational data, all indicators have met the minimum cut-off value and are therefore in the Goodness of Fit category. A P-value of 0.985 (≥ 0.05), CMIN/DF of 0.765 (≤ 2.00), TLI of 1.022 (≥ 0.90), CFI of 1.000 (≥ 0.90), RMSEA of 0.000 (≤ 0.08), and NFI of 0.948 (≥ 0.90) indicate that the model has an excellent fit with no indices falling into the marginal or poor fit categories.

Researchers are not required to meet all GOF criteria; instead, they may use four to five main indices, including absolute fit indices, incremental fit indices, and parsimonious fit indices [9]. In practice, it is difficult to obtain a model that meets all GOF criteria, so if most of the indicators are met, the model can be considered feasible [9]. Based on these results, the research model has optimally met the Goodness of Fit criteria, so it is declared feasible for use in the next analysis stage.

4.3.2 Test Value R-Square

The R-square value test is used to assess the magnitude of the influence and contribution of exogenous variables to endogenous variables and the extent to which the model is able to explain variations in endogenous variables [10]. In the AMOS application, the R-square value is displayed in the Square Multiple Correlations table. The following is a presentation of the results of the R-square value test analysis in this study.

Table 4.5 R-square Test Value

Variable Endogen	*R-square*
ASN Performance (Y)	0.743

Table 4.5 Presents the R-square value for ASN Performance (Y) of 0.743. This means that overall, the exogenous variables, namely Responsiveness (X1), Digital Skills (X2), and Management Support (X3) used in the model comprehensively contribute to explaining the variation in ASN Performance (Y) by 74.3%, while the remaining 25.7% is explained by other variables not used in this research model.

Table 4.6 Interpreters Coefficient R-*square*

Interval Coefficient	Level
0.800 - 1.000	Very strong
0.600 - 0.799	Strong
0.400 - 0.599	Strong enough
0.200 - 0.399	Weak
0.000 - 0.199	Very Weak

Source: (Cho et al., 2023)

Referring to Table 4.6, the relationship between the exogenous and endogenous variables is considered strong for the endogenous variable Y1 (ASN Performance).

4.4 Model Hypothesis Testing

4.4.1 Direct Effect Testing

Hypothesis testing for the direct effect is conducted by assessing the significance of the relationship between the latent variables to determine whether the hypothesis is accepted or rejected. At this stage, the hypothesis is declared accepted if the Critical Ratio (CR) value is > 1.96 and the p-value is < 0.05, or at a significance level of 5% [11]. The results of the direct effect testing in this study are presented in the following table:

Table 4.7 Direct Effect Hypothesis Test

Hypothesis	Line	*Standardized Coefficient*	S.E	C.R	*p value*	Explanation
H1	X1→Y1	0.128	0.029	4.43	***	Significant
H2	X2→Y1	0.165	0.034	4.869	***	Significant
H3	X3→Y1	0.146	0.03	4.894	***	Significant

Explanation: *** *p value <0,001*

Based on the results of the direct effect hypothesis test in Table 4.7, the following conclusions can be drawn:

1. The test of the effect of Responsiveness (X1) on ASN Performance (Y1) yielded a CR value of 4.430 with a p-value (*** < 0.001). This result indicates that the CR value is greater than 1.96 and the p-value is less than 0.05. This means that Responsiveness (X1) has a direct and significant effect on ASN Performance (Y1), thus accepting hypothesis (H1).
2. The test of the effect of Digital Skills (X2) on ASN Performance (Y1) yielded a CR value of 4.869 with a p-value (*** < 0.001). The test results indicate a CR value greater than 1.96 and a p-value less than 0.05. This means that Digital Skills (X2) has a direct and significant effect on ASN Performance (Y1), thus accepting hypothesis (H2).
3. The test of the influence of Management Support (X3) on ASN Performance (Y1) produced a C.R value of 4.894 with a p-value (*** < 0.001). These results indicate a C.R value greater than 1.96 and a p-value less than 0.05. Thus, it can be concluded that Management Support (X3) has a direct and significant influence on ASN Performance (Y1) so that the hypothesis (H3) is accepted.

4.5 Factors Influencing of Civil Servant Performance (ASN) (Y1)

Based on the results of the direct influence hypothesis test in Table 4.7, several factors significantly and positively influence ASN Performance (Y). These factors include Responsiveness (X1), Digital Skills (X2), and Management Support (X3). This indicates that the higher the level of responsiveness, digital skills, and management support possessed by ASN, the better the resulting performance. Therefore, the three hypotheses tested (H1, H2, and H3) were all accepted as they were proven to have a significant influence on ASN performance.

4.5.1 The Effect of Responsiveness on ASN Performance Variables

Based on the results of the study in Table X, it is shown that the Responsiveness variable (X1) has a direct influence on ASN Performance (Y), as proven through the hypothesis test with a CR statistic of 4.430, exceeding the threshold of 1.96, and a p-value of *** < 0.001, which is less than 0.05. The resulting standardized coefficient value of 0.128 is positive. This indicates that an increase in the exogenous latent variable, Responsiveness (X1), by one standard deviation (SD) can improve ASN Performance (Y) by 0.128 standard deviations.

These results illustrate that ASN who are responsive to public needs, quickly respond to complaints, and are able to complete work according to standard operating procedures (SOPs) will contribute more to improving performance quality. Good responsiveness enables ASN to maintain public trust, increase service satisfaction, and strengthen the positive image of government institutions. This finding aligns with previous research showing that responsive behavior of state officials has a significant impact on the quality of public services. Therefore, improving ASN responsiveness is an important strategy for achieving professional and accountable performance.

4.5.2 The Effect of Digital Skills on Civil Servant Performance

The results of the hypothesis test in Table X indicate that the Digital Skills variable (X2) has a direct influence on Civil Servant Performance (Y). The CR value obtained is 4.869, greater than 1.96, with a p-value of *** < 0.001, and a standardized coefficient of 0.165, which is positive. This means that an increase in the exogenous latent variable Digital Skills (X2) by one standard deviation will increase Civil Servant Performance (Y) by 0.165 standard deviations.

These findings indicate that the ability of Civil Servants to master computer devices, office applications, and adapt to digital-based work system updates plays a crucial role in supporting performance effectiveness and efficiency. Civil Servants with better digital skills can complete work more quickly and accurately, and are able to utilize technology to support communication and work coordination. This condition aligns with the era of digital bureaucratic transformation, which demands that state apparatus adapt to developments in information technology. Thus, mastery of digital skills is an increasingly relevant factor in improving Civil Servant performance in the era of digital governance.

4.5.3 The Effect of Management Support on Civil Servant Performance

Based on the test results in Table X, it is known that the Management Support variable (X3) has a direct effect on Civil Servant Performance (Y). The test results show a CR value of 4.894, greater than 1.96, a p-value of *** < 0.001, and a standardized coefficient of 0.146,

which is positive. This means that an increase in the exogenous latent variable, Management Support (X3), by one standard deviation can increase Civil Servant Performance (Y) by 0.146 standard deviations.

These results confirm that the role of leadership in providing facilities, coordination support, training opportunities, and regular feedback to Civil Servants is a crucial factor in driving optimal performance. Good management support creates a conducive work environment, increases Civil Servant motivation, and encourages innovative public services. This finding aligns with previous research confirming that managerial support has a significant impact on increasing employee productivity and job satisfaction [12]. Therefore, the stronger the management support received by Civil Servants, the higher the quality of performance they can achieve.

5. Conclusion

This study aims to analyse the direct effects of responsiveness, digital skills, and managerial support on the performance of civil servants (ASN). Primary data were collected through questionnaires administered to civil servants and the data were analyzed through Structural Equation Modelling (SEM) using the AMOS application. The SEM outputs show that all latent constructs were satisfactorily captured by their respective indicators. Based on the SEM processing and analyses conducted in this study , the following conclusions are drawn: Civil servant performance is significantly and positively influenced by responsiveness, digital skills, and managerial support. In other words, higher responsiveness in service delivery, greater mastery of digital skills, and stronger managerial support are associated with higher levels of performance. Responsiveness has a positive and significant effect on performance. This suggests that civil servants who are quick to respond to public needs are able to enhance the quality of public services and work effectiveness. Digital skills have a positive and significant effect on performance. Civil servants who are proficient in digital technologies complete tasks more efficiently and accurately and are more adaptive to the demands of bureaucratic digital transformation. Managerial support has a positive and significant effect on civil servant performance. Support in the form of work facilities, training, guidance, and supervision from leadership increases motivation, professionalism, and the achievement of performance targets. Accordingly, this study affirms that the combination of individual factors (responsiveness and digital skills) and organizational factors (managerial support) is a key determinant in realizing civil servant performance that is high-quality, professional, and accountable.

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