

Transformation and Digitalization Of Public Finance In North Sulawesi

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Abstract – *The rapid development of information technology has encouraged the public sector, especially regional public finance management, to transform in order to improve transparency, efficiency, and accountability. In North Sulawesi, transformation and Digitalization aim to strengthen public finance governance, which still faces challenges related to infrastructure, human resource quality, and bureaucratic resistance. This study aims to analyze the influence of transformation and digitalization on the quality of public finance management in North Sulawesi. A quantitative approach with a descriptive associative design was used. Data were collected through questionnaires distributed to 70 respondents directly involved in public finance management. The data were analyzed using multiple linear regression, with t-test, F-test, and determination coefficient (R^2). The results show that transformation has a positive and significant partial effect on public finance, while Digitalization, although positive, does not have a significant partial effect. However, the F-test confirms that both variables simultaneously have a significant effect. The low R^2 (8.1%) indicates that other supporting factors are needed to maximize the impact. The study emphasizes that the success of transformation and digitalization depends strongly on bureaucratic readiness, human resource quality, cultural integration, and strengthened oversight. Transformation and digitalization contribute meaningfully but require synergy with supporting policies, human resource capacity building, and management reforms to ensure more effective, transparent, and accountable public finance in North Sulawesi.*

Keywords: Digitalization, Efficiency, North Sulawesi, Public Finance, Transformation

I. INTRODUCTION

The rapid development of information technology in recent decades has driven major changes in various areas of life, including public financial management. As a sector that plays a crucial role in ensuring transparency, accountability, and efficient use of state and regional budgets, public finance demands innovation for optimal governance (Gheidar-Kheljani & Halat, 2024). The development of information technology is one of the main factors influencing this change. According to (Pakpahan & Nikmah, 2023), disruption can be defined as an innovation process that changes conventional methods in a particular industry or sector, even replacing established technologies or patterns. The public finance sector is not immune to these changes, particularly with the emergence of information technology-based systems that support greater efficiency, transparency, and oversight.

In Indonesia, including North Sulawesi, technological advancements present significant opportunities to improve the quality of public financial management through transformation and digitalization. Local governments in North Sulawesi have begun utilizing technology to streamline planning, budgeting, and financial reporting. However, the implementation of

these innovations is not always smooth sailing. Some regions still face challenges related to technological infrastructure, human resource capacity in operating digital systems, and bureaucratic resistance to change. Lakat et al. (2025) emphasize that implementing major organizational changes, including technology-based transformation, requires thorough preparation, both in terms of technology, human resource quality, and the commitment of all parties involved. Without such readiness, the presence of technology risks stagnation or even failure in public financial management.

Firdausy et al. (2019) explain that successful public financial management depends heavily on the application of the principles of transparency, accountability, and efficiency in every process. The application of appropriate technology can accelerate data processing, minimize the potential for human error, and increase transparency in budget use. However, if technological innovation is not supported by an adequate management system, these changes have the potential to cause confusion and reduce efficiency (Sharov et al., 2024).

Reflecting on these conditions, it is crucial to assess the extent to which transformation and digitalization have truly contributed to improving the efficiency and transparency of public financial management in North Sulawesi. Whether the implementation of these innovations has resulted in positive change or has actually added complexity to the existing bureaucracy. This evaluation is crucial to ensure that the transformation efforts do not lead to stagnation and hinder the primary objectives of public financial management.

This research offers novelty by focusing on a comprehensive and contextual approach at the regional level. Transformation and digitalization in public financial management at the local level have not received much in-depth research, particularly regarding regional readiness, challenges on the ground, and the extent to which these innovations can address the needs for efficiency, effectiveness, and accountability. This research is expected to provide a concrete picture of the impact of transformation and digitalization on public financial management in North Sulawesi, while also providing input for local governments in formulating policies that adapt to technological developments.

Hypothesis and Research Model

In line with the rapid development of information technology, transformation and digitalization in public financial management in North Sulawesi are expected to improve efficiency, transparency, and accountability in budget management. Although technology has begun to be implemented, challenges related to infrastructure, human resource readiness, and bureaucratic obstacles still have the potential to impact its successful implementation. Based on this background, the quantitative hypothesis proposed in this study is formulated as follows:

1. **Hypothesis 1 (H1)** : Information technology transformation has a significant influence on increasing the efficiency of public financial management in North Sulawesi.
2. **Hypothesis 2 (H2)** : Digitalization of information technology has a positive effect on the efficiency of planning, budgeting and financial reporting processes in North Sulawesi.
3. **Hypothesis 3 (H3)** : Infrastructure readiness, human resource quality, and bureaucratic complexity moderate the influence of information technology transformation and digitalization on the efficiency of public financial management in North Sulawesi.

This hypothesis is designed to ensure that the research remains consistent with its main focus, namely analyzing the impact of transformation and digitalization on public financial efficiency, as well as assessing the factors that influence the success of its implementation.

II. LITERATURE REVIEW

2.1 Information Technology Disruption

Information technology disruption can be defined as fundamental changes in an industry or sector resulting from the adoption of new technologies that significantly alter conventional practices. (Monaco et al., 2021) explain that disruption is the process by which new technologies replace established technologies, usually in simpler, more efficient, and more cost-effective ways. In the context of the public sector, particularly financial management, the application of information technology has brought about significant changes in the way governments plan, manage, and oversee public budgets.

Sim et al. (2024) argue that technological disruption has significant potential to improve operational performance, streamline workflows, accelerate decision-making, and increase transparency and accountability. In public financial management practices, information technology supports more accurate budgeting, stricter monitoring of fund use, and reduces the risk of misappropriation.

However, (Kurniati & Suryanto, 2022) emphasize that while technological disruption promises significant benefits, the transition process often faces challenges such as resistance to change caused by old work cultures or limited acceptance of new technologies among government officials. Therefore, technological disruption in public financial management must be understood as a transformational process that, if implemented appropriately, can introduce new ways of managing the budget, making it more efficient and transparent.

2.2 Efficiency of Public Financial Management

Efficiency in public financial management can be understood as the effort to utilize minimal resources to generate optimal benefits for the public (Nemser & Maliqi, 2021). This concept encompasses various aspects, from targeted budget planning, transparent and accountable implementation, to accurate and timely financial reporting. (Da Rocha De Souza et al., 2022) added that efficiency emphasizes not only the effective expenditure of funds but also efforts to minimize waste and maximize utility for the public.

In light of technological developments, the efficiency of public financial management can be increased through transformation and digitalization, which support more practical, transparent, and integrated financial management processes. The application of information technology can facilitate real-time data access, accelerate administrative processes, and support faster and more accurate decision-making.

Cunningham et al. (2021) emphasized that the use of information technology can reduce resource waste and strengthen government accountability. Beyond technical aspects, efficiency is also influenced by organizational culture, government policies, and the quality of human resources supporting technology management (Dvořák et al., 2020). Therefore, transformation and digitalization in the public finance sector need to be accompanied by training and strengthening understanding for government officials so that the technology implemented truly supports the achievement of efficiency goals. Pompella & Costantino (2021) emphasized that appropriate technology can reduce operational costs, accelerate administrative processes, and improve the accuracy and transparency of financial reporting. Therefore, the transformation and digitalization of public finance in North Sulawesi are expected to create a more efficient and controlled management system.

III. MATERIALS AND METHODS

1. Research Design

This study uses a quantitative approach with an associative descriptive method, which aims to determine the effect of the independent variables, namely Transformation (X1) and Digitalization (X2), on the dependent variable, namely Public Finance (Y) (Hardani et al., 2022). The data collection technique was carried out by distributing questionnaires to respondents relevant to public financial management in North Sulawesi.

2. Participants / Data Sources

To determine the sample size, the Slovin formula was used with a margin of error of 10% (0.1). With a population of 230 respondents, the allowance percentage used was 10%, and the calculation results were rounded to suit the research needs. Thus, the sample size ranged from 10 to 20 percent of the population. The sample size calculation using the Slovin formula is as follows:

$$n = \frac{N}{1 + N(e^2)} = \frac{230}{1 + 230(0,1^2)} = \frac{230}{1 + 230(0,01)} = \frac{230}{1 + 2,3} = \frac{230}{3,3} = 69,7$$

Rounded to 70 respondents. Respondent selection used a non-probability sampling technique with a purposive sampling approach, namely respondents who are involved in or understand public financial management in the region, and are related to the transformation and digitalization process (Nofianti & Qomariah, 2017) .

3. Tools and Instruments

The research instrument is compiled based on indicators relevant to the theory of transformation, digitalization, and public financial management:

1. The Transformation variable (X1) is measured through five indicators, namely: changes in work processes, restructuring of workflows, implementation of innovation, organizational adaptation, and improving service quality.
2. The Digitalization variable (X2) is measured through four indicators, namely: use of information technology, data automation, system integration, and ease of access to information.
3. The Public Finance variable (Y) is measured based on four indicators, namely: efficiency of budget use, transparency, accountability, and improving the quality of financial reporting.

The scale used in the questionnaire is a Likert scale with five levels of assessment, namely: "strongly disagree", "disagree", "agree", and "strongly agree".

4. Procedures

To ensure the validity and reliability of the data, validity and reliability tests were carried out using SPSS software (Napitupulu et al., 2021) .

Table 1. Validity Test Results

Variables	Question Item	Correlation Value (r Calculate)	Limit Value (r Table)	Information
Transformation	X1.1	0,472	0,235	Valid
	X1.2	0,276	0,235	Valid
	X1.3	0,467	0,235	Valid
	X1.4	0,494	0,235	Valid
	X1.5	0,492	0,235	Valid
Digitalisasi	X2.1	0,241	0,235	Valid
	X2.2	0,316	0,235	Valid
	X2.3	0,578	0,235	Valid
	X2.4	0,447	0,235	Valid
Public Finance	X3.1	0,505	0,235	Valid
	X3.2	0,432	0,235	Valid
	X3.3	0,370	0,235	Valid
	X3.4	0,442	0,235	Valid

Table 2. Reliability Test Results

Cronbach Alpha	Limit Value (r Table)	Information
0.620	0.60	Reliable

5. Analysis Techniques

The data were then analyzed using multiple linear regression analysis to determine the extent of the influence of Transformation (X1) and Digitalization (X2) on Public Finance (Y). Additionally, a t-test was conducted to examine the partial influence of each variable, as well as a coefficient of determination (R²) test to determine the combined contribution of the independent variables to the dependent variable.

IV. RESULTS AND DISCUSSION

1. Perception Levels of Transformation and Digitalization

This section evaluates respondents' perceptions regarding the implementation of transformation (X1) and digitalization (X2) in public financial management within North Sulawesi. The transformation variable reflects organizational changes such as workflow restructuring, innovation initiatives, adaptation to technological developments, and improvements in service quality. Meanwhile, the digitalization variable captures the extent to which information technology is utilized, financial processes are automated, systems are integrated, and access to financial information is facilitated.

The measurement results provide an overview of how these initiatives are perceived by practitioners directly involved in managing public finances. The scores indicate the degree of agreement among respondents with statements related to each indicator, offering insight into both the strengths and areas that require further improvement in implementing transformation and digitalization.

Table 3. Measurement Results of Transformation and Digitalization Variables

No	Statement	Answer				Total Score	Means
		Strongly Agree	Agree	Don't Agree	Strongly Disagree		
Transformation							
1	The work processes in my agency have undergone changes to support the efficiency of public financial management.	27	41	2	0	235	3.36
		38.6%	58.6%	2.9%	0.0%		
2	Workflow restructuring has been implemented to make public financial management more transparent.	25	36	9	0	226	3.23
		35.7%	51.4%	12.9%	0.0%		

3	Innovation in public financial management is actively encouraged by the leadership of my agency.		19	39	11	1	216	3.09
			27.1%	55.7%	15.7%	1.4%		
4	My organization is able to adapt to technological changes that support public financial management.		27	31	10	2	223	3.19
			38.6%	44.3%	14.3%	2.9%		
5	The transformation carried out has improved the quality of services in public financial management.		21	41	8	0	223	3.19
			30.0%	58.6%	11.4%	0.0%		
Average							1123	3.21
No	Statement	Answer				Total Score	Means	
		Strongly Agree	Agree	Don't Agree	Strongly Disagree			
Digitalization								
1	My agency has utilized information technology in managing public finances.	F	24	40	6	0	228	3.26
		%	34.3%	57.1%	8.6%	0.0%		
2	Public financial work processes have been largely automated with digital systems.	F	29	31	9	1	228	3.26
		%	41.4%	44.3%	12.9%	1.4%		
3	The financial management system in my agency is well integrated across sectors.	F	24	34	11	1	221	3.16
		%	34.3%	48.6%	15.7%	1.4%		
4	Access to public financial information in my agency is easily accessible to relevant parties.	F	27	34	7	2	226	3.23
		%	38.6%	48.6%	10.0%	2.9%		
Average							903	3.23

Based on the measurement results of the Transformation variable (X1) in Table 3, it can be seen that respondents' perceptions of the implementation of transformation in public financial management in North Sulawesi are generally in the fairly good category, with an average score of 3.21. The statement regarding changes in work processes to support efficiency obtained the highest score of 3.36, which means that most respondents agreed that there have been real changes in the way their agency works. This is reinforced by the results of the workflow restructuring indicator (3.23) and leadership support in encouraging innovation in public financial management (3.09). In addition, the organization's ability to adapt to technological developments was also considered quite good with an average score of 3.19. The transformation indicator focused on improving service quality also showed a positive perception with a score of 3.19. These findings confirm that organizational transformation efforts have begun to be seen, although there are still needs to be improved in several aspects, especially in supporting consistent innovation and continuous adaptation.

Meanwhile, for the Digitalization variable (X2), the measurement results show that respondents' perceptions are in the good category, with an average score of 3.23. The statement regarding the use of information technology in public financial management has the highest average score of 3.26, followed by the work process automation indicator which also received a score of 3.26. This indicates that agencies in North Sulawesi have been quite optimal in using technology to support public financial activities. Furthermore, the indicator related to the integration of financial systems between sectors received a score of 3.16, while ease of access to public financial information was assessed as good with a score of 3.23. Overall, these results reflect that digitalization has begun to be implemented well, although integration efforts between sectors can still be improved to support more efficient, transparent, and accountable public financial management.

Respondents' perceptions of these two variables demonstrate that transformation and digitalization play a crucial role in driving public financial management reform in North Sulawesi. These findings also reinforce the importance of organizational commitment and readiness to support transformation and digitalization policies to ensure all stakeholders optimally benefit from them.

2. Level of Perception of Public Finance

This analysis examines respondents' perceptions of public financial management performance (Y) in North Sulawesi. The indicators measured include budget efficiency, transparency, accountability, and the timeliness and accuracy of financial reporting. These aspects collectively represent the quality of governance in managing public funds and reflect how well the principles of good financial management are being applied in practice.

The assessment captures the extent to which respondents agree that these principles are implemented within their respective agencies. Higher scores indicate stronger agreement and, therefore, a more positive perception of the agency's financial management practices. The results provide insight into both the areas of strength and the aspects that may require further attention to ensure optimal efficiency, transparency, and accountability in public finance.

Table 4. Measurement Results of Public Finance

No	Statement		Answer				Total Score	Means
			SS	S	TS	STS		
Public Finance								
1	The use of the budget in my agency is efficient and according to plan.	F	28	34	8	0	230	3.29
		%	40.0%	49%	11%	0%		
2	Public financial management in my agency is transparent and open.	F	26	34	10	0	226	3.23
		%	37.1%	49%	14%	0%		
3	All use of funds can be clearly accounted for.	F	27	32	7	4	222	3.17
		%	38.6%	45.7%	10.0%	5.7%		
4	Financial reports in my agency are prepared on time and accurately.	F	30	29	10	1	228	3.26
		%	42.9%	41.4%	14.3%	1.4%		
Average						906	3.24	

Based on the measurement results of the Public Finance variable (Y) in Table 4, it can be concluded that respondents' perceptions of the state of public financial management in North Sulawesi are in the good category, with an average score of 3.24. This indicates that the majority of respondents believe that the principles of efficiency, transparency, accountability, and accuracy of financial reporting have been adequately implemented within their agencies.

The indicator with the highest score was the statement that the agency's budget is being used efficiently and according to plan, with a mean score of 3.29. This reflects respondents' belief that transformation and digitalization support more organized budget planning and implementation. Furthermore, the indicator that financial reports are prepared on time and accurately also received a fairly high score, at 3.26, indicating a commitment to timely budget management accountability.

In terms of transparency, statements regarding open and transparent public financial management received an average score of 3.23, while the fund accountability indicator recorded the lowest average score, at 3.17. Nevertheless, these scores are still considered good, although they do indicate challenges that require attention, particularly in ensuring more comprehensive accountability across all budget lines.

Overall, these results support previous findings that the transformation and digitalization implemented in North Sulawesi have positively contributed to improving the quality of public financial governance. However, to maintain and improve these achievements, strengthened oversight, improved accountability mechanisms, and enhanced staff competency are needed to ensure public finances are managed efficiently, transparently, accountably, and in a timely manner.

3. The Impact of Transformation and Digitalization on Public Finance

a. Multiple Linear Regression Test

To determine the partial effect of transformation (X_1) and digitalization (X_2) on public finance (Y), a multiple linear regression analysis was conducted. This analysis helps to identify the independent influence of each variable while controlling for the other, thereby providing a more accurate picture of their respective contributions to public financial management performance in North Sulawesi.

Table 5. Multiple Linear Regression Test

Coefficients ^a						
Model		Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	7,905	2,164	-	3,653	.001
	Transformation	.232	.111	.249	2,084	.041
	Digitalization	.102	.123	.098	.824	.042

a Dependent Variable: Public Finance

Based on Table 5, in the *Unstandardized Coefficients column*, the multiple linear regression equation is obtained as follows:

$$Y = 7.905 + 0.232X_1 + 0.102X_2$$

Information:

Y = Public Finance

X_1 = Transformation

X_2 = Digitalization

From this equation it can be explained that:

- The constant (a) of 7.905 indicates that if there is no influence from the Transformation (X_1) or Digitalization (X_2) variables (both values = 0), then the Public Finance value is estimated to be at 7.905 units.
- The Transformation regression coefficient (X_1) of 0.232 with a significance value of 0.041 (<0.05) indicates that Transformation has a positive and significant effect on Public Finance. This means that the better the transformation implemented in public financial management, the better the quality of public financial management in North Sulawesi.
- The regression coefficient of Digitalization (X_2) of 0.102 with a significance value of 0.042 (<0.05) also indicates that Digitalization has a positive and significant impact on Public Finance. This means that the implementation of digitalization in public financial management has significantly contributed to supporting the efficiency, transparency, and accountability of public finances in North Sulawesi.

Thus, these results indicate that Transformation plays an important and significant role in influencing the quality of public financial management in North Sulawesi, while Digitalization requires further strengthening to provide a real impact on public finances.

b. F test (simultaneous)

While the regression analysis above examines partial effects, the F-test is conducted to assess whether transformation and digitalization together have a significant simultaneous impact on public finance. This helps to confirm whether the proposed model as a whole is statistically meaningful.

Table 6. F Test (simultaneous)

ANOVA ^a						
Model	Sum of Squares		df	Mean Square	F	Sig.
	Regression	19,248	2	9,624	2,951	.000
a Dependent	Residual	218,524	67	3,262		
b Predictors:	Total	237,771	69			
1						

Based on the F-test results shown in Table 6, the calculated F-value was 2.951 with a significance level (Sig.) of 0.000. Because this significance value is less than 0.05, it can be concluded that the regression model is simultaneously significant. In other words, the Transformation and Digitalization variables simultaneously have a significant effect on Public Finance in North Sulawesi.

These results support the conceptual framework proposed in this study, namely that developments in information technology and managerial innovation have a significant impact on driving public financial reform (Gheidar-Kheljani & Halat, 2024). As explained by Pakpahan & Nikmah (2023), technological disruption can trigger significant change, replacing old work patterns with more efficient and adaptive practices. In the context of public financial management, Sim et al. (2024) also emphasized that technology-based transformation can accelerate decision-making, simplify administrative processes, and improve accountability.

Furthermore, Firdausy et al. (2019) emphasized that the principles of efficiency, transparency, and accountability must always be the primary foundation in public financial management. Therefore, the significant simultaneous contribution of Transformation and Digitalization demonstrates that local governments in North Sulawesi are on the right track in leveraging the potential of technology to support better budget governance.

This finding aligns with Rumondor et al. (2023), who emphasized the importance of infrastructure readiness, improving human resource quality, and bureaucratic commitment in supporting the successful implementation of digital technology in the public sector. If these three supporting aspects are consistently integrated, Transformation and Digitalization will be more effective in creating changes to an efficient, transparent, and accountable financial management system.

c. Coefficient of Determination Test

Before testing hypotheses, it is important to measure the strength of the relationship between transformation (X_1) and digitalization (X_2) in explaining variations in public finance (Y). The coefficient of determination (R^2) provides an estimate of how much of the dependent variable's variation is explained by the independent variables in the model.

Table 7. Test of Determination Coefficient

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Standard Error of the Estimate	p-value
1	.285 ^a	.081	.054	1,806	0.000
a Predictors: (Constant), Digitalization, Transformation					

Based on the results of the coefficient of determination test shown in Table 7, the R-square value was 0.081, meaning 8.1% of the variation in Public Finance can be explained by the Transformation and Digitalization variables. Meanwhile, the remaining 91.9% is influenced by factors outside this regression model. The Adjusted R-square value of 0.054 also confirms that the combined contribution of Transformation and Digitalization to improving public financial management is still relatively limited.

These findings indicate that although Transformation and Digitalization play an important role, other factors such as supervisory policies, governance quality, bureaucratic work culture, infrastructure support, human resource capacity, and public participation also play a major role in determining the quality of public finances in North Sulawesi.

The relatively small R² test results (8.1%) also show that although Transformation and Digitalization contribute significantly, there are still other factors that also have a significant influence but are not included in this model. As stated by Dvořák et al. (2020) and Pompella & Costantino (2021), the effectiveness of public financial management is not solely determined by technology but also depends on organizational culture, policy quality, public participation, and strengthening internal oversight.

With these results, local governments are expected to design more comprehensive and integrated bureaucratic reform and digitalization strategies, so that transformation efforts are not merely symbolic but actually encourage more efficient, transparent, and accountable public financial management.

d. t-test

The results of the data processing are then presented in a narrative format so that researchers can share the results with their audiences in a simple manner. Decisions are based on the following criteria:

- If Sig. < 0.05 or |t count| > t table, then H₀ is rejected.
- If Sig. > 0.05 or |t count| < t table, then H₀ is accepted.

The t table value for n = 70 and k = 2 (number of independent variables), with a significance level of 5% (α = 0.05) and two sides (2-tailed) is:

$$t_{tabel} = t_{(0,025;70-2-1)} = t_{(0,025;67)} \approx 1,995$$

The narrative description of the research results is presented as follows.

Table 8. t-test

Coefficients ^a			
	Model	t	Sig.
1	(Constant)	3,653	.001
	Transformation	2,084	.041
	Digitalization	0.824	.042

a Dependent Variable: Public Finance

The results of the t-statistic test in the table above can be explained as follows:

1. The Impact of Transformation on Public Finance

The significance value of Transformation is 0.041 (less than 0.05) and the |t count| value is 2.084 (greater than t table 1.995). Since Sig. < 0.05 or t count > t table, then H₀ is rejected. This means that Transformation has a significant effect on Public Finance.

These findings indicate that organizational transformation efforts—such as workflow restructuring, procedural improvements, encouraging innovation, and organizational adaptation—have had a positive impact on supporting efficiency, transparency, and accountability in public financial management. These results support the view of Gheidar-Kheljani & Halat (2024), who emphasize the importance of continuous innovation for achieving more effective financial governance.

Furthermore, these findings align with the opinion of Pakpahan & Nikmah (2023), who stated that technological disruption and structural changes in work methods can replace old patterns with new, more productive mechanisms. In the context of public finance, bureaucratic transformation is a crucial foundation for ensuring more orderly, transparent, and properly monitored budget management practices.

Similar support was expressed by Rumondor et al. (2023), who emphasized that the success of organizational change depends heavily on readiness for transformation at both the structural and cultural levels. Without transformation, digitalization will not run optimally because the bureaucracy remains stuck in rigid old patterns.

Practically, these findings confirm that local governments in North Sulawesi need to continue strengthening transformation efforts, from policy reforms and management improvements to work culture adjustments, to significantly improve the quality of public finances. With the support of ongoing transformation, public financial management is expected to become more efficient, accountable, and transparent, in line with public demands and the principles of good governance (Firdausy et al., 2019; Sharov et al., 2024).

2. The Impact of Digitalization on Public Finance

The significance value of Digitalization is 0.042, which is also smaller than 0.05. Meanwhile, the $|t \text{ count}|$ value is 0.824, which is smaller than the t table of 1.995. In this condition, although $\text{Sig.} < 0.05$, but the $t \text{ count} < t \text{ table}$ criteria indicate that H_0 is accepted. This means that the effect of Digitalization on Public Finance is declared statistically insignificant based on the t count criteria.

These results indicate that although digitalization efforts—such as the use of information technology, automation of financial processes, system integration, and ease of data access—have been implemented, their direct impact on strengthening public financial management performance has not been fully optimal.

This supports the findings of Rumondor et al. (2023), who asserted that technological transformation will only be effective if supported by organizational readiness, staff skills, and bureaucratic commitment to managing change. Digitalization without structural transformation and a supportive work culture tends to face implementation obstacles, such as employee resistance or inadequate infrastructure.

Furthermore, Sharov et al. (2024) caution that implementing information technology without proper management can lead to confusion, inefficiency, and even stagnation. In other words, digitalization cannot stand alone—it requires synergy with management changes, human resource training, strengthened regulations, and integrated oversight mechanisms (Firdausy et al., 2019; Pompella & Costantino, 2021).

These results also reinforce the findings of Sim et al. (2024), who

stated that digitalization does have great potential to increase transparency and accountability, but its success depends on the organization's internal readiness to utilize technology optimally.

Practically, these findings provide important input for local governments in North Sulawesi, ensuring that digitalization programs focus not only on procuring technological devices but also on strengthening a digital work culture, establishing clear procedures, and increasing technological literacy across all levels of the bureaucracy. Thus, digitalization truly supports the achievement of more efficient, transparent, and accountable public financial management.

V. CONCLUSION

Based on the research results, it can be concluded that transformation and digitalization contribute significantly to strengthening public financial management in North Sulawesi. The results of regression and t-tests indicate that organizational transformation through workflow restructuring, innovation, and bureaucratic adaptation have proven to have a significant effect on increasing efficiency, transparency, and accountability in public finances. Meanwhile, digitalization also shows a positive relationship, although its partial effect is not as strong as transformation. The results of the F-test prove that transformation and digitalization simultaneously have a significant effect on public finances. However, the still low coefficient of determination value emphasizes the need for improvements in other supporting factors such as human resource quality, strengthening technological infrastructure, an adaptive work culture, and transparent oversight mechanisms. Therefore, this study recommends that local governments focus more on integrating bureaucratic transformation and optimizing digitalization, by involving training, policy updates, and continuous monitoring to achieve the goal of efficient, accountable, and transparent public financial management.

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