

Analyzing the Public Trust in West Java Digital Financial Transparency (Web-based): A SEM-PLS Approach

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ABSTRACT

Public financial transparency through digital platforms is essential for fostering good governance and democratic accountability. Although local governments have increasingly deployed digital reporting systems, a significant gap remains between technological availability and public awareness and engagement. This study analyzes the effect of the completeness of the information presented on government financial websites on public trust in digital financial transparency within the Regional Government of West Java, Indonesia. Using the Technology Acceptance Model (TAM) as a theoretical framework, this research examines how the completeness of disclosed financial information influences public trust in and engagement with government financial portals. Data were collected through a quantitative survey administered to 45 citizens in West Java. Descriptive analysis reveals a critical awareness gap: 68.89% of respondents have never accessed the regional public financial portals. The structural relationship between information completeness and public trust was tested using Structural Equation Modeling based on Partial Least Squares (SEM-PLS) executed in SmartPLS. The measurement model satisfies all reliability, convergent validity and discriminant validity criteria, while the structural model demonstrates that the completeness of information presented on government websites has a positive and significant effect on public trust ($\beta = 0.840$; $t = 22.288$; $p < 0.000$), so that the first hypothesis is accepted. The model explains 70.6% of the variance in public trust ($R^2 = 0.706$), which falls within the substantial category. The findings offer actionable policy recommendations for public administrators to shift from passive data publishing to complete, citizen-centric digital disclosure, thereby enhancing public trust and civic participation.

Keywords: digital financial transparency, public sector awareness, awareness gap, E-government, TAM, SEM-PLS, West Java

INTRODUCTION

In the modern era of public governance, digital financial transparency has emerged as a cornerstone of fiscal accountability, anti-corruption strategies, and democratic integrity (Grimmelikhuijsen et al., 2021; Porumbescu, 2016). Governments worldwide are shifting toward electronic government (E-Government) systems to publish budget allocations, public procurement details, and real-time revenue reporting. In Indonesia, the adoption of digital finance systems has been accelerated by regional autonomy frameworks and national mandates for public information openness (Law No. 14 of 2008). The Regional Government of West Java has been a pioneer in deploying digital platforms—such as open budgeting portals, local revenue dashboards, and public oversight tools—designed to make public finance accessible to all citizens.



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However, the supply of digital openness by public institutions does not automatically translate into active public consumption or awareness—a phenomenon recognized in public policy literature as the “transparency paradox” or the “public awareness gap” (Cucciniello et al., 2017; Schmidhuber et al., 2021). While government agencies frequently highlight technical deployments as evidence of open governance, citizen engagement with these financial portals remains remarkably low. Preliminary data gathered from citizens in West Java demonstrates a stark awareness deficit: 68.89% of respondents reported that they have never accessed any official digital public finance portal or application provided by the regional government. This empirical reality highlights a critical disconnect between institutional infrastructure and civic participation.

Previous studies on digital transparency have primarily focused on supply-side determinants, such as institutional readiness, technical capabilities, and legal mandates (Alt & Lassen, 2014; Piotrowski & Van Ryzin, 2007). Conversely, research evaluating demand-side factors—specifically how citizens perceive, comprehend, and utilize public financial data—remains underdeveloped in regional contexts of developing nations (Ingrams, 2019). Furthermore, existing literature increasingly suggests that the primary barrier to public adoption lies less in technical access than in the substance of what is actually disclosed, since incomplete and fragmented financial reporting deprives citizens of the information, they need to form a judgement about the use of public funds (Schnackenberg & Tomlinson, 2016).

This study addresses this gap by examining the structural relationship between the completeness of the information presented on regional government financial websites and public trust in digital financial transparency in West Java. Grounded in the Technology Acceptance Model (TAM) originally formulated by (Davis, 1989) and expanded in public sector contexts by (Venkatesh et al., 2012), this research positions the completeness of disclosed information as the core antecedent of public trust and civic engagement. The novelty of this study lies in its focus on sub-national public finance in Indonesia, using empirical survey data analyzed through Structural Equation Modelling via Partial Least Squares (SEM-PLS). The objective of this research is to identify whether the completeness of the information presented on regional government financial websites serves as a significant predictor of citizen trust in digital financial transparency. Accordingly, the study proposes one directional hypothesis, namely that the completeness of the information presented on government websites has a positive and significant effect on public trust (H1).

METHODS

This research employs a quantitative research design utilizing survey methodology to investigate public awareness and perceptions of digital financial transparency. The study was conducted in West Java, targeting residents across diverse demographic backgrounds, educational levels, and professional sectors. A cross-sectional survey design was selected to gather empirical evidence on citizen interaction with official regional financial portals.

Population and Sample

The population for this study comprises citizens residing in the province of West Java. A convenience sampling technique was utilized, yielding a total sample size of 45 respondents. The sample

encompasses diverse demographic strata, including varying educational attainments (from high school to postgraduate degrees) and professional categories (public servants, private sector employees, academics, and students). All 45 respondents provided complete evaluations on the detailed Likert-scale measurement indicators assessing digital portal quality. This sample size satisfies the minimum requirement for PLS path modelling, which specifies at least ten times the largest number of structural paths directed at any single construct in the model (Hair et al., 2019).

Data Collection and Instrumentation

Data were collected through a structured online questionnaire. The key instrument was structured into two variables:

1. Exogenous Construct.

Completeness of Information (X): four reflective indicators (X1.1–X1.4) assessing the completeness of budget and realisation figures, the completeness of organizational and program details, the availability of adequate summaries of public fund usage, and the sufficiency of explanations accompanying financial terminology

2. Endogenous Construct(Y)

Public Transparency Perception and Trust (Y): four reflective indicators (T1.1–T1.4) evaluating perceived overall transparency, the reliability of the published financial data, confidence in the accountability of public fund management, and trust in the regional government's financial reporting.

Data Analysis Technique (SEM-PLS)

Data analysis is performed using Structural Equation Modelling based on Partial Least Squares (SEM-PLS) executed via SmartPLS software. SEM-PLS was selected due to its suitability for exploratory research, smaller sample sizes, and non-normal distributional assumptions (Hair et al., 2019; Ringle et al., 2020) The analysis process follows a two-stage evaluation model:

1. Evaluation of the Measurement Model (Outer Model):

- Convergent Validity: Assessed through indicator outer loadings (≥ 0.70) and Average Variance Extracted ($AVE \geq 0.50$)
- Discriminant Validity: Verified using the Heterotrait-Monotrait ratio ($HTMT < 0.90$) and Fornell-Larcker criterion.
- Construct Reliability: Evaluated using Composite Reliability ($CR \geq 0.70$) and Cronbach's Alpha (≥ 0.70)).

2. Evaluation of the Structural Model (Inner Model):

- Assessment of path coefficients β , coefficients of determination (R^2), effect sizes (f^2), and predictive relevance (Q^2) calculated through a bootstrapping procedure with 5,000 resamples to evaluate statistical significance ($p < 0.05$).

RESULTS AND DISCUSSION

This section reports the empirical findings obtained from the 45 respondents residing in West Java. Descriptive screening of the access-behaviour items confirms the persistence of a substantial awareness gap: 68.89% of respondents stated that they had never accessed any official digital public finance portal operated by the regional government, while the remaining 31.11% had accessed at least one platform, most frequently the regional budget portal. The structural relationship between the completeness of the information disclosed on those portals and public trust was subsequently estimated using Structural Equation Modelling based on Partial Least Squares (SEM-PLS) in SmartPLS, following the two-stage evaluation procedure of the outer model and the inner model.

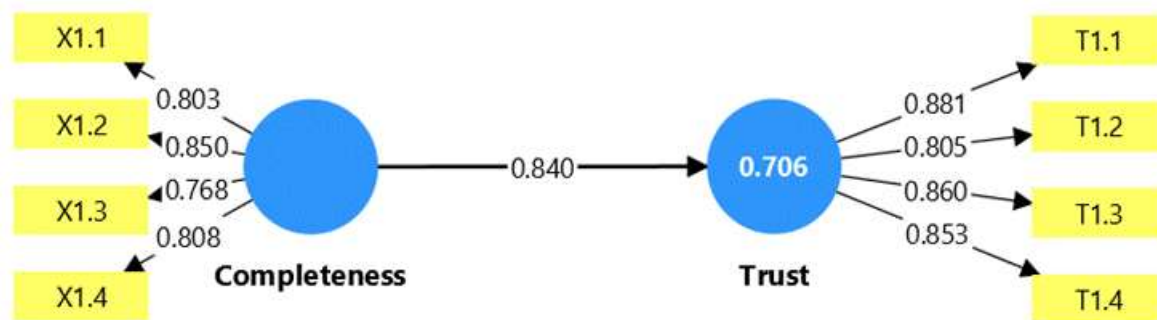


Figure 1. SEM-PLS Structural Model

Figure 1 presents the estimated path model. The model comprises one exogenous latent construct, Completeness of Information, measured by four reflective indicators (X1.1–X1.4), and one endogenous latent construct, Public Trust, measured by four reflective indicators (T1.1–T1.4). All outer loadings on their respective constructs exceed the 0.70 threshold recommended by Hair et al. (2019), the single structural path linking the two constructs carries a coefficient of 0.840, and the model accounts for 70.6% of the variance in public trust. The detailed evaluation of the measurement model and the structural model is presented in the following sub-sections.

Table 1. Construct Reliability and Validity

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)	Explanation
Completeness	0.822	0.824	0.882	0.653	Valid
Trust	0.872	0.873	0.912	0.723	Valid

Table 1 summarises the results of the construct reliability and convergent validity assessment. The Cronbach's alpha values of 0.822 for Completeness of Information and 0.872 for Public Trust, together with composite reliability (rho_a) values of 0.824 and 0.873 and composite reliability (rho_c) values of 0.882 and 0.912, all exceed the 0.70 benchmark. Both constructs are therefore internally consistent and reliably measured. Convergent validity is likewise satisfied: the Average Variance Extracted

reaches 0.653 for Completeness of Information and 0.723 for Public Trust, comfortably above the 0.50 cut-off, which indicates that each latent construct accounts for more than half of the variance of its own indicators. The measurement instrument is thus reliable and valid, and the structural estimates reported below rest on a sound measurement foundation rather than on a fragile instrument.

Table 2. Outer Loadings and Cross Loadings of the Indicators

Indicator	Completeness	Trust	Explanation
T1.1	0.725	0.881	Valid
T1.2	0.626	0.805	Valid
T1.3	0.826	0.860	Valid
T1.4	0.674	0.853	Valid
X1.1	0.803	0.719	Valid
X1.2	0.850	0.621	Valid
X1.3	0.768	0.674	Valid
X1.4	0.808	0.705	Valid

Table 2 reports the outer loadings and cross loadings of the eight measurement items. Each indicator loads most strongly on the construct it is intended to represent. The four completeness indicators load between 0.768 and 0.850 on Completeness of Information, exceeding their cross loadings on Public Trust, which range from 0.621 to 0.719, while the four trust indicators load between 0.805 and 0.881 on Public Trust, exceeding their cross loadings on Completeness of Information. Every primary loading surpasses the 0.70 threshold, so no indicator required elimination. The comparatively high cross loading of T1.3 on Completeness of Information (0.826) reflects the close theoretical proximity of the two constructs, yet it remains below the primary loading of that indicator on Public Trust (0.860). The cross-loading criterion of discriminant validity is therefore satisfied, confirming that the two constructs are empirically distinct and that no indicator has been misassigned.

Table 3. Path Coefficient and Hypothesis Testing (Bootstrapping, 5,000 Resamples)

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Completeness - > Trust	0.840	0.836	0.038	22.288	0.000

Table 3 presents the results of the bootstrapping procedure with 5,000 resamples used to test the proposed hypothesis. The path from Completeness of Information to Public Trust yields an original sample path coefficient of 0.840, a sample mean of 0.836 and a standard deviation of 0.038. The resulting t-statistic of 22.288 far exceeds the critical value of 1.96 at the five per cent level of significance, and the p-value of 0.000 is well below 0.05. The completeness of the information presented on the regional government's financial website therefore exerts a positive and statistically significant effect on public trust. Hypothesis 1 is accepted.

The magnitude of the coefficient deserves particular emphasis. A path coefficient of 0.840 indicates that a one-standard-deviation improvement in the perceived completeness of the information published on a government portal is associated with a 0.840-standard-deviation increase in public trust, an effect that is not merely statistically significant but substantively large by the conventions of PLS path modelling. The narrow standard deviation of 0.038 and the closeness of the bootstrap sample mean of 0.836 to the original estimate further indicate that the relationship is stable across resamples rather than an artefact of a particular sample configuration. The completeness of the information presented on government websites is thus established as the dominant determinant of citizens' trust in digital financial transparency in West Java.

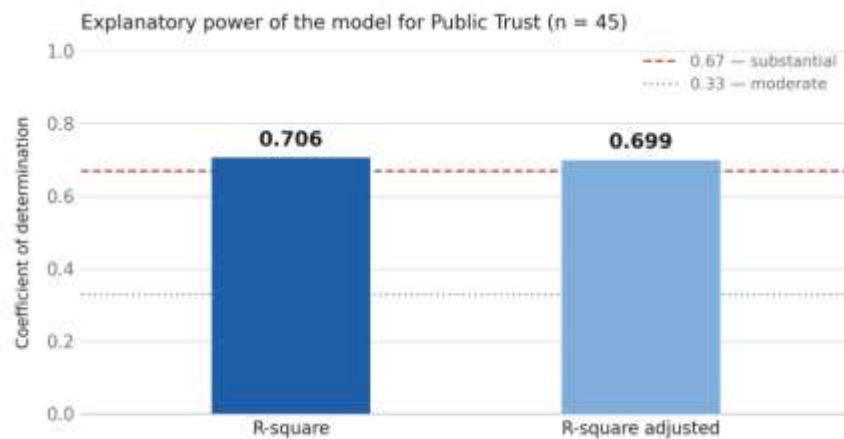


Figure 2. Coefficient of Determination (R-square) for Public Trust

Figure 2 displays the coefficient of determination for the endogenous construct. The model produces an R-square of 0.706 and an adjusted R-square of 0.699 for Public Trust. This means that 70.6% of the variance in public trust in West Java's digital financial transparency is explained by the completeness of the information presented on the regional government's website alone, while the remaining 29.4% is attributable to factors outside the model. Following the classification proposed by Chin (1998) and reaffirmed by (Hair et al., 2019), an R-square value above 0.67 falls within the substantial category, and both the unadjusted and the adjusted values reported here remain above that threshold. The negligible difference of 0.007 between the two values confirms that the explanatory power of the model is not inflated by the number of predictors and that the model remains parsimonious. The strength of this figure reinforces the central finding of the study: the completeness of the information presented on government websites is not a peripheral attribute of a public financial portal but the principal lever through which public trust is constructed.

These findings carry a clear theoretical and practical implication. Within the Technology Acceptance Model framework, the results indicate that what determines citizens' acceptance of, and confidence in, digital financial transparency is not the mere existence or technical accessibility of a portal but the substantive completeness of what is disclosed on it. Citizens do not extend trust to a government simply because data has been published; they extend trust when the published data is complete enough to be understood, verified and connected to the actual use of public funds. This is consistent with Schnackenberg and (Schnackenberg & Tomlinson, 2016), who argue that disclosure translates into

perceived transparency only when the information disclosed is sufficiently comprehensive, and with (Grimmelikhuijsen et al., 2021), who demonstrate that partial or fragmented disclosure may erode rather than reinforce public trust. The policy implication is that regional governments should move from a compliance-oriented model of passive data publishing towards citizen-centric disclosure, in which budget allocations, realisation figures, organizational and program details, and narrative explanations of public fund usage are presented completely and in an intelligible form.

CONCLUSION

This study set out to determine whether the completeness of the financial information presented on regional government websites shapes the trust that citizens place in digital financial transparency, and the evidence is unequivocal. Structural Equation Modelling based on Partial Least Squares, estimated on responses from forty-five citizens of West Java, demonstrates that the completeness of the information presented on government websites exerts a positive and statistically significant effect on public trust, with a path coefficient of 0.840 and a t-statistic of 22.288 at a p-value below the conventional level of significance. The first hypothesis is therefore accepted. Because the measurement model satisfies every conventional criterion of reliability, convergent validity and discriminant validity, this conclusion rests on a sound instrument rather than on a fragile measurement structure.

The explanatory strength of the model reinforces the same message. The completeness of the information presented on government websites alone accounts for slightly more than seventy per cent of the variation in public trust, a proportion that falls within the substantial category and leaves comparatively little room for competing explanations. Trust in digital financial transparency is therefore built primarily on the substance of what is disclosed rather than on the mere presence of a digital platform. The persistent awareness gap documented among the respondents should accordingly be read not as evidence of citizen indifference but as a rational response to portals that publish less than citizens need in order to understand how public money has been spent.

The practical consequence for public administrators in West Java is that investment in digital infrastructure will not by itself generate the trust that transparency policy is intended to produce. What earns trust is disclosure that is complete: budget allocations together with their realisation, the organizational and program details standing behind each figure, and plain explanations of how public funds have been used. Reorienting regional transparency practice from passive publication towards complete and citizen-centred disclosure is the most direct route to closing the gap between technological availability and public confidence. Future research may extend the model by incorporating perceived ease of access, digital literacy, and information timeliness as additional determinants. Importantly, a major limitation of this study lies in its small sample size of forty-five respondents, gathered through convenience sampling. This non-probabilistic approach constrains the generalisability of the findings across the broader population of West Java or other regions. To strengthen empirical robustness and external validity, subsequent studies should draw on a larger, probabilistically selected sample.

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