



JOURNAL

**THE INFLUENCE OF ACCOUNTING DIGITALIZATION AND INFORMATION TECHNOLOGY USE ON FINANCIAL REPORT QUALITY WITH HUMAN RESOURCE COMPETENCE AS A MODERATING VARIABLE
AT PT. KERETA API LOGISTIK SUMATERA REGION**

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Abstract:

This study aims to examine the effect of accounting digitalization and information technology utilization on financial report quality, the effect of financial report quality on financial management accountability, and the moderating role of human resource competence at PT Kereta Api Logistik (KALOG) Sumatera Region. This research employed a quantitative approach with primary data collected through a 1-5 Likert-scale questionnaire distributed to 106 respondents selected using purposive sampling from a population of 125 finance and accounting employees. Data were analyzed using Structural Equation Modeling - Partial Least Square (SEM-PLS) with SmartPLS 4 software. The results show that accounting digitalization has no significant effect on financial report quality, whereas information technology utilization and human resource competence each have a positive and significant effect on financial report quality. Financial report quality was also found to have a positive and highly significant effect on financial management accountability. However, human resource competence does not moderate the effect of either accounting digitalization or information technology utilization on financial report quality. These findings indicate that improving financial report quality at a state-owned logistics company is determined more by the direct utilization of information technology and individual competence than by the mere presence of a digital system or interaction effects between variables.

Keywords:

Accounting Digitalization, Information Technology Utilization, Human Resource Competence, Financial Report Quality, Financial Management Accountability.

BACKGROUND

In the era of digital transformation, companies are required to present financial reports efficiently, accurately, on time, and in a way that is easily understood by stakeholders (Kasmir, 2022). Financial report quality is the result of a combination of sound accounting standards, proper recording processes, and adequate technological and human resource support (Hery, 2020). PT Kereta Api Logistik (KALOG), a subsidiary of PT Kereta Api Indonesia (KAI), continues to modernize its accounting system; however, in practice, obstacles remain in the physical-document verification stage, disruptions to the financial application that must be



handled by the head office, and variation in staff ability to operate the digital system, particularly in the Sumatera Region work unit.

Accounting digitalization is believed to be able to automate, integrate, and accelerate the recording and reporting of financial data (Zamzami et al., 2020). Lusiana (2024) found that accounting digitalization has a positive and significant effect on financial report quality, whereas Asmira and Rinjani (2025) found that the effect is not significant unless supported by internal control and user readiness. Information technology utilization also plays an important role because it accelerates data processing and strengthens internal control (Bodnar & Hopwood, 2020), as demonstrated by Mulyeni et al. (2025), although several other studies show inconsistent results due to limited infrastructure and organizational readiness. In addition, human resource competence has been positioned as a variable that can strengthen or weaken the relationship between technology utilization and financial report quality, although prior findings on this moderating role remain mixed (Listiarini et al., 2023; Frederica et al., 2023).

The phenomenon at KALOG Sumatera Region shows that although a digital system has been implemented, system disruptions and variation in staff ability still affect the timeliness and optimization of financial reporting. This gap between empirical field conditions and prior research findings constitutes a research gap regarding how accounting digitalization and information technology utilization affect financial report quality when human resource competence varies. Based on this, the present study aims to examine the effect of accounting digitalization and information technology utilization on financial report quality, the effect of financial report quality on financial management accountability, and the moderating role of human resource competence at PT Kereta Api Logistik Sumatera Region.

THEORETICAL FRAMEWORK

This study is grounded in Decision Usefulness Theory. Proposed by Staubus (2000), this theory explains that the primary purpose of preparing financial statements is to provide information that is useful to users in economic decision-making, so that quality financial statements must possess the characteristics of relevance, reliability, timeliness, and understandability (Kieso et al., 2020; Hery, 2020). Accounting digitalization enables the recording and reporting process to be conducted automatically, quickly, and in an integrated manner (Romney & Steinbart, 2022), while information technology utilization supports real-time data processing and easier access to information (Bodnar & Hopwood, 2020). The success of both factors depends on human resource competence as the main user of the system (Sutrisno, 2020; Suwardjono, 2021), while the resulting financial report quality ultimately becomes the basis for the company's financial management accountability to its stakeholders (Mardiasmo, 2021).

Based on the theoretical review and prior research, the conceptual framework of this study links accounting digitalization (AD) and information technology utilization (ITU) as exogenous variables, financial report quality (FRQ) as an intervening variable, financial management accountability (FMA) as an endogenous variable, and human resource



competence (HRC) as a moderating variable on the AD-FRQ and ITU-FRQ paths. Based on this framework, the hypotheses proposed in this study are as follows:

H1: Accounting digitalization has a positive and significant effect on financial report quality. H2: Information technology utilization has a positive and significant effect on financial report quality. H3: Human resource competence has a positive and significant effect on financial report quality. H4: Financial report quality has a positive and significant effect on financial management accountability. H5: Human resource competence moderates the effect of accounting digitalization on financial report quality. H6: Human resource competence moderates the effect of information technology utilization on financial report quality.

METHOD

This study employed a quantitative approach with a causal-associative design. The population consisted of 125 finance and accounting employees of PT Kereta Api Logistik (KALOG) Sumatera Region. The sample was determined using a non-probability sampling technique, namely purposive sampling, with the criteria that employees must be directly involved in preparing financial reports and use the digital accounting system, resulting in 106 respondents. Primary data were collected through a 1-5 Likert-scale questionnaire (Sugiyono, 2021) distributed via Google Form. Five variables were measured: accounting digitalization (8 indicators), information technology utilization (8 indicators), human resource competence (6 indicators), financial report quality (8 indicators), and financial management accountability (8 indicators), developed based on Purwohedi (2022), Erviando and Simanjuntak (2025), Jogiyanto (2021), and Sutrisno (2020).

Data were analyzed using Structural Equation Modeling - Partial Least Square (SEM-PLS) with SmartPLS 4.1 software, as this method is suitable for analyzing complex models with a relatively small sample size (Hair et al., 2022). The measurement model (outer model) evaluation included tests of convergent validity (outer loading > 0.70 and Average Variance Extracted/AVE > 0.50), discriminant validity (Fornell-Larcker criterion), and reliability (Cronbach's Alpha and Composite Reliability > 0.70). The structural model (inner model) evaluation included the coefficient of determination (R^2), effect size (F^2), and predictive relevance (Q^2) via the PLSpredict procedure. Hypothesis testing was conducted through a bootstrapping procedure, with a hypothesis accepted if the t-statistic > 1.96 and p-value < 0.05 (Hair et al., 2022).

RESULT

The majority of respondents were female (67.9%), aged 20-30 years (54.7%), held a bachelor's degree (46.2%), served as operational staff (89.6%), and had 1-5 years of tenure (62.3%). The dominance of operational staff is relevant to the focus of this study because staff are the ones directly involved in the daily input, processing, and verification of financial data. Descriptive results indicate high to very high ratings across all variables, with a mean score of 4.36 for accounting digitalization and 4.30 for financial management accountability on the 1-5 Likert scale.



The outer model test results show that all indicators have an outer loading value above 0.70, thus satisfying the convergent validity requirement. The discriminant validity test using the Fornell-Larcker criterion shows that the square root of the AVE of each construct is greater than its correlation with other constructs, so that all constructs are declared discriminantly valid. The reliability and convergent validity results are presented in Table 1.

Table 1. Reliability and Convergent Validity Test Results

Variable	Cronbach's Alpha	Composite Reliability	AVE
Financial Management Accountability (FMA)	0.940	0.951	0.707
Accounting Digitalization (AD)	0.914	0.930	0.624
Financial Report Quality (FRQ)	0.907	0.925	0.607
Human Resource Competence (HRC)	0.911	0.931	0.691
Information Technology Utilization (ITU)	0.909	0.926	0.609

Source: Data processed by researchers, 2026.

The structural model test results show an R-Square value of 0.371 for FRQ, meaning that AD, ITU, HRC, and their interaction terms jointly explain 37.1% of the variance in FRQ. The R-Square value for FMA is 0.417, meaning that FRQ explains 41.7% of the variance in FMA. The effect size (F^2) test shows that FRQ has a large effect on FMA (0.715), while ITU has a small effect on FRQ (0.075), followed by HRC (0.030), whereas AD has a very small F^2 value (0.002). The Q^2 predict values for FRQ and FMA are 0.261 and 0.322, respectively (both > 0), indicating that the research model has good predictive relevance.

The hypothesis testing results obtained through the bootstrapping procedure are presented in Table 2.

Table 2. Hypothesis Testing Results (Bootstrapping Output)

Path	Coefficient (O)	T-Statistics	P-Values	Result
AD → FRQ (H1)	0.046	0.538	0.591	Rejected
ITU → FRQ (H2)	0.278	2.966	0.003	Accepted
HRC → FRQ (H3)	0.183	2.002	0.045	Accepted
FRQ → FMA (H4)	0.646	7.820	0.000	Accepted
HRC x AD → FRQ (H5)	0.051	0.498	0.619	Rejected
HRC x ITU → FRQ (H6)	-0.160	1.523	0.128	Rejected

Source: Data processed by researchers, 2026.

Based on Table 2, accounting digitalization has no significant effect on financial report quality (H1 rejected), whereas information technology utilization (H2) and human resource competence (H3) each have a positive and significant effect on financial report quality. Financial report quality has a positive and highly significant effect on financial management accountability (H4), with the highest t-statistic among all paths tested. Meanwhile, human resource competence does not moderate the effect of either accounting digitalization (H5) or information technology utilization (H6) on financial report quality.



DISCUSSION

The insignificant effect of accounting digitalization on financial report quality (H1) is presumably due to the suboptimal implementation of the digital system in daily work practices, where the digitalization process still relies on physical document verification and system-disruption handling that depends on the head office, so that the benefits of automation have not been fully realized. This condition is relevant to Decision Usefulness Theory, which emphasizes that the usefulness value of information is determined by the extent to which the process produces relevant and reliable information, rather than merely by the presence of the system itself (Staubus, 2000; Hery, 2020). This finding differs from Lusiana (2024), who found a positive effect of accounting digitalization, but is consistent with Asmira and Rinjani (2025), who confirmed that digitalization has no significant effect unless supported by adequate internal control and user readiness.

Information technology utilization was found to have a positive and significant effect on financial report quality (H2), presumably because its benefits are directly felt by employees through easier data access, faster processing, and fewer input errors. This result reinforces the view of Bodnar and Hopwood (2020) and Jogiyanto (2021) that information technology utilization produces financial reports that are more relevant, timely, and accessible, and is consistent with the findings of Mulyeni et al. (2025). Human resource competence also had a positive and significant effect on financial report quality (H3), although at a marginal level of significance, consistent with Sutrisno (2020), who states that competence encompasses the knowledge, skills, and work attitude that determine task effectiveness, and consistent with Masriyah et al. (2025).

Financial report quality showed the strongest effect on financial management accountability (H4), with the highest t-statistic among all paths tested. This is reasonable because financial reports are essentially the primary medium of financial management accountability itself, so that the more relevant, reliable, and timely the information presented, the greater management's capacity to account for its financial management policies to stakeholders. This finding reinforces Mardiasmo's (2021) concept of accountability and is consistent with Defana and Rahayu (2023).

The lack of a moderating effect of human resource competence on either the accounting digitalization path (H5) or the information technology utilization path (H6) indicates that the obstacles faced by KALOG Sumatera Region are more infrastructural and procedural in nature, such as technical authority centralized at the head office, which lies beyond the control of individual employee competence at the regional unit. Based on Solimun's (2011) classification, human resource competence in this context is more appropriately positioned as a direct predictor variable, as evidenced in H3, rather than as a pure moderator. This result is consistent with Frederica et al. (2023), who found that human resource competence does not strengthen the effect of accounting information systems on financial report quality because the success of information systems also depends on other components such as computer networks, hardware, and software, and is consistent with Pakawaru (2024).



CONCLUSION

This study concludes that accounting digitalization has no significant effect on financial report quality, while information technology utilization and human resource competence each have a positive and significant effect on financial report quality at PT Kereta Api Logistik (KALOG) Sumatera Region. Financial report quality was found to be the main determinant of financial management accountability, showing the strongest effect among all paths tested. Human resource competence does not moderate the effect of either accounting digitalization or information technology utilization on financial report quality, and is therefore more appropriately positioned as a direct predictor variable. Overall, financial report quality at KALOG Sumatera Region is determined more by the direct effects of information technology utilization and human resource competence than by the level of accounting digitalization or the moderating effect of human resource competence.

Practically, KALOG management is advised to evaluate the integration between physical documents and the digital system, accelerate the handling mechanism for system disruptions by strengthening regional technical support, and conduct regular and evenly distributed accounting and digital-system competence training for all employees. This study is limited by its sample coverage, which includes only one operational region; future research is therefore recommended to expand the sample to other operational regions or similar state-owned logistics companies, and to add other variables such as internal control systems or organizational commitment to obtain a more comprehensive picture of the determinants of financial report quality.

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