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USER EXPERIENCE AND EMPLOYEE PERFORMANCE IN E-GOVERNMENT SYSTEM: THE CASE OF SRIKANDI APPLICATION

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Abstract: *This study aims to analyze the influence of user ease of use, system quality, and user satisfaction on employee performance at the Surakarta City Environmental Agency. Data were collected through questionnaires distributed to 35 employees using the SRIKANDI (Sistem Informasi Kearsipan Dinamis Terintegrasi) application. The research method employed Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4.0 software. The results demonstrated that user satisfaction had a positive and significant effect on employee performance (p = 0.021), while system quality (p = 0.249) and user ease of use (p = 0.119) did not exhibit significant effects. The Adjusted R Square value of 0.344 indicates that 34.4% of the variation in employee performance can be explained by these three independent variables in the model. These findings emphasize the necessity for further evaluation of the implementation of the latter two variables to optimize employee performance at the Surakarta City Environmental Agency.*

Abstrak: Studi ini bertujuan untuk menganalisis pengaruh Kemudahan Pengguna, Kualitas Sistem dan Kepuasan Pengguna terhadap Kinerja Pegawai pada Dinas Lingkungan Hidup Kota Surakarta. Data dikumpulkan melalui kuesioner yang dibagikan kepada 35 pegawai yang menggunakan Aplikasi SRIKANDI. Metode penelitian yang digunakan yaitu Partial Least Squares Structural Equation Modeling (PLS-SEM) dengan bantuan SmartPLS 4.0. Hasil penelitian menunjukkan bahwa Kepuasan pengguna berpengaruh positif dan signifikan terhadap Kinerja pegawai (p = 0,021), sementara Kualitas Sistem (p = 0,249) dan Kemudahan Pengguna (p = 0,119) tidak menunjukkan pengaruh yang signifikan. Nilai dari Adjusted R Square sebesar 0,344 mengindikasikan bahwa 34,4% variasi kinerja pegawai dapat dijelaskan oleh ketiga variabel independen dalam model ini. Temuan penelitian ini menekankan perlunya evaluasi lebih lanjut terhadap implementasi kedua variabel ini agar dapat memberikan kontribusi yang lebih optimal terhadap Kinerja Pegawai Dinas Lingkungan Hidup Kota Surakarta.

INTRODUCTION

Digitalization has become an essential component of transformation in business, government, and society. With the rapid advancement of information technology, organizations are transitioning from manual systems to digital systems to enhance efficiency, accuracy, and data accessibility. The digitalization of public services has become a primary focus in bureaucratic reform. The government encourages both central and local government institutions to leverage information technology to increase efficiency, transparency, and accountability in public service delivery. (Mathis & Jackson, 2011) One form of digitalization implemented is the adoption of electronic archival information system applications, such as SRIKANDI (Sistem Informasi Kearsipan Dinamis Terintegrasi Integrated Dynamic Archival Information System), which represents an innovation in electronic-based archival management systems for government institutions.

The Surakarta City Environmental Agency (Dinas Lingkungan Hidup), as part of the regional government, has implemented the SRIKANDI Application to manage high volumes of correspondence. However, the success of an information system is not solely determined by technical aspects but also by how the system is accepted and utilized by its users, namely employees. The effectiveness of system utilization depends significantly on factors such as user ease of use, system quality, and user satisfaction, which ultimately influence employee performance (Robbins & Coulter, 2018).

User ease of use (Perceived Ease of Use) refers to an individual's belief that using the system will simplify their work without requiring significant effort. Intuitive and easily comprehensible systems encourage broader adoption and utilization (Nainggolan, 2022). Nevertheless, different findings exist, such as the research by (Arumiasih & Dewi, 2021), which suggests that user ease of use does not always have a significant effect on performance.

System quality (System Quality) measures the technical performance and functionality of the system itself, including reliability, accuracy, and response speed. High-quality systems minimize errors and improve work efficiency (Jogiyanto, 2007). However, other studies for example, (Novitasari & Indrijawati, 2024) have found that system quality does not always have a significant effect or may even have a negative effect, indicating different results that require further investigation.

User satisfaction (User Satisfaction) refers to the feeling of pleasure or disappointment that emerges after users compare their expectations with their actual

experience in using the system (Novitasari & Indrijawati, 2024). Employees who feel satisfied tend to be more motivated and effective in using the application (Isna Anugrahayu & Meiriyani, 2024). Nevertheless, previous research by (Safitri, 2024) found contradictory results, where user satisfaction had no significant effect on performance.

Despite extensive literature on information system adoption and employee performance, three critical research gaps remain unresolved in the Indonesian public sector context. First, the inconsistent and contradictory findings regarding the direct effects of perceived ease of use, system quality, and user satisfaction on employee performance indicate a lack of conclusive evidence. While intuitive logic and numerous studies support positive relationships between these variables, contradictory empirical findings challenge this consensus. For instance, research by (Arumiasih & Dewi, 2021) demonstrates that perceived ease of use does not always have a significant effect on employee performance. Similarly, (Novitasari & Indrijawati, 2024) found that system quality does not consistently exert a significant positive effect and may even produce negative outcomes in certain contexts. Additionally, (Safitri, 2024) reported that user satisfaction had no significant effect on employee performance. These conflicting results suggest that the relationships between system characteristics and employee performance are not universal; rather, they may be contingent upon organizational, cultural, or contextual factors specific to Indonesian government institutions that have not been adequately examined.

Second, the mechanisms through which these three variables influence employee performance at the operational level of a specific government agency remain largely unexplored. While theoretical models propose direct relationships, the extent to which these relationships hold true in the context of SRIKANDI implementation at the Surakarta City Environmental Agency has not been empirically validated. This localized investigation is essential because government agencies operate under distinct structural, cultural, and incentive systems that differ significantly from private sector organizations where much of the existing research has been conducted. Understanding these context-specific dynamics is crucial for effective system implementation and organizational change management.

Third, there is a need to clarify whether the contradictory findings in the literature are attributable to methodological differences, sample characteristics, or genuine contextual variations. By conducting an empirical investigation within a specific

Indonesian government institution, this study will help determine whether the models and relationships established in prior research are transferable to the Indonesian public sector context, or whether context-specific factors require reformulation of existing theoretical frameworks.

Problem Formulation. The research problems are formulated as follows:

(a). Does user ease of use of the SRIKANDI Application have a significant effect on employee performance at the Surakarta City Environmental Agency?

(b). Does system quality of the SRIKANDI Application have a significant effect on employee performance at the Surakarta City Environmental Agency?

(c). Does user satisfaction with the SRIKANDI Application have a significant effect on employee performance at the Surakarta City Environmental Agency?

This research aims to contribute theoretical knowledge in the field of management, specifically regarding the influence of user ability, system quality, and user satisfaction with the SRIKANDI Application on employee performance at the Surakarta City Environmental Agency.

METHOD

This research employed a quantitative approach with an exploratory survey design aimed at testing the influence of independent variables user ease of use, system quality, and user satisfaction on the dependent variable of employee performance at the Surakarta City Environmental Agency. This approach was selected to provide a description of cause-and-effect relationships between variables through systematic quantitative data collection.

The research population comprised SRIKANDI application users. The total population consisted of 35 employees, therefore, a total sampling technique was used to ensure that every individual in the population became part of the research sample. This approach ensures that the data obtained are representative and reflect the actual conditions.

The data collection instrument used was a closed-form questionnaire designed based on relevant indicators for each research variable. The questionnaire employed a five-point Likert scale ranging from score 1 (strongly disagree) to score 5 (strongly agree), to measure the level of respondent agreement on various statements related to user ease of use, system quality, and user satisfaction. Questionnaires were completed directly under researcher supervision to ensure data accuracy and validity. Respondents were first

provided with explanations regarding the research objectives to improve response quality and prevent misunderstandings.

To ensure data quality, validity and reliability tests of the instrument were conducted using outer model analysis within the Partial Least Squares Structural Equation Modeling (PLS-SEM) framework. Validity testing was performed by examining the loading factor value of each indicator, which must meet the threshold of > 0.50 as an indication of adequate indicator representation of the variable construct (Hair et al., 2017). Convergent validity was also determined through the Average Variance Extracted (AVE) value, which measures the extent to which indicators explain latent variables and must exceed 0.50 according to the guidelines of (Fornell & Larcker, 1981). Measurement reliability was assessed using Composite Reliability and Cronbach's Alpha, with a minimum value of 0.70 indicating high internal consistency in the research instrument (Ghozali & Latan, 2015).

Data analysis was conducted using SmartPLS version 4.0 software, which applies the PLS-SEM method. This technique enables testing of the measurement model (outer model) encompassing indicator validity and reliability, as well as the structural model (inner model) including testing of relationships between variables, hypothesis testing, analysis of effect size, and the coefficient of determination (R Square). Statistical significance testing employed the bootstrapping method with a criterion of p-value < 0.05 as the rule for accepting or rejecting hypotheses. Furthermore, the path coefficient (path coefficient) and t-statistic values served as references for interpreting the strength and significance of relationships between the studied variables. Additionally, the Adjusted R Square value was used to measure the model's ability to explain the variability of the dependent variable collectively.

This research framework illustrates the direct influence relationships of independent variables user ease of use, system quality, and user satisfaction with the SRIKANDI Application on the dependent variable of employee performance at the Surakarta City Environmental Agency. This framework forms the basis for analyzing cause-and-effect relationships using PLS-SEM.

Research Hypotheses

The hypotheses proposed in this research state that user ease of use of the SRIKANDI Application has a significant effect on employee performance at the Surakarta City Environmental Agency. System quality is hypothesized to have no significant effect on employee performance, and user satisfaction is also hypothesized to

have no significant effect on employee performance in the institution. These three hypotheses were tested in this research to obtain an empirical picture of the relationships between variables.

RESULTS AND DISCUSSION

Results

Validity Testing

Validity testing was assessed through the loading factor value of each indicator, all of which exceeded 0.50 according to (Hair et al., 2017) standards, indicating that these indicators adequately represent the variable constructs. Subsequently, the Average Variance Extracted (AVE) value in Table 1 was used to confirm the convergent validity of each variable. The AVE value for employee performance (Y) of 0.579 and user ease of use (X1) of 0.575 met the criteria for strong convergent validity with a minimum threshold of 0.50. The AVE value for system quality (X2) of 0.482 and user satisfaction (X3) of 0.462 were slightly below the threshold; however, they were still considered valid with certain considerations according to (Fornell & Larcker, 1981) guidelines.

Table 1. Average Variance Extracted (AVE) Values

Indicator	Average Variance Extracted (AVE)	Description
Employee Performance (Y)	0.579	*Valid*
User Satisfaction (X3)	0.462	*Valid*
System Quality (X2)	0.482	*Valid*
User Ease of Use (X1)	0.575	*Valid*

Reliability Testing

The reliability analysis presented in Table 2 demonstrates that all research variables had Composite Reliability (CR) values above 0.70, indicating high internal consistency. Cronbach's Alpha values for each variable also met reliability standards. Accordingly, the research instrument can be trusted to measure the studied variables consistently. The highest CR value was found in the employee performance variable (0.872), followed by user ease of use (0.843), system quality (0.820), and user satisfaction (0.811).

Table 2. Composite Reliability Values

Indicator	Cronbach's Alpha	Composite Reliability	Description
Employee Performance (Y)	0.817	0.872	*Reliable*
User Satisfaction (X3)	0.712	0.811	*Reliable*
System Quality (X2)	0.725	0.820	*Reliable*
User Ease of Use (X1)	0.752	0.843	*Reliable*

Model Fit and Explanatory Power

The Adjusted R Square value of 0.344 presented in Table 3 indicates that the research model explains 34.4% of the variation in employee performance at the Surakarta City Environmental Agency. The remaining 65.6% is influenced by other factors outside the research model, such as job satisfaction, motivation, or workload, which warrant attention in future research.

Table 3. R Square Values

Indicator	R Square	R Square Adjusted
Employee Performance	0.401	0.344

Hypothesis Testing

The hypothesis testing results using the bootstrapping method in Table 4 show that only user satisfaction (X3) had a significant effect on employee performance, with a p-value of 0.021, which is less than the significance level of 0.05. Conversely, the first hypothesis regarding the effect of user ease of use (X1) on employee performance was rejected because the p-value of 0.119 exceeded 0.05. Similarly, the second hypothesis testing the effect of system quality (X2) was also rejected with a p-value of 0.249, well above the significance threshold.

Table 4. Path Coefficient Values

Indicator	Original Sample (O)	T Statistics (|O/STDEV|)	P Values
User Satisfaction (X3) → Employee Performance (Y)	0.256	0.306	0.021*
System Quality (X2) → Employee Performance (Y)	0.105	0.555	0.249
User Ease of Use (X1) → Employee Performance (Y)	0.183	0.193	0.119

Discussion

These findings indicate that only user satisfaction provides a meaningful contribution to employee performance at the Surakarta City Environmental Agency. Although system quality and user ease of use are theoretically important, they have not demonstrated significant impact in this research context. Therefore, a comprehensive evaluation of system quality and user ease of use should be conducted so that both can provide optimal positive effects. This is supported by research from (Safitri, 2024), (Arumiasih & Dewi, 2021). These findings indicate that satisfaction refers to the degree to which users feel satisfied with their experience in using a system or application.

Although system quality did not demonstrate a significant effect on employee performance, this finding warrants contextual interpretation rather than dismissal. System quality encompassing reliability, user-friendliness, speed, data security, integration, and functionality (DeLone & McLean, 2003) represents the technical excellence of the SRIKANDI system. However, this non-significant result may indicate that employees perceive SRIKANDI as a mandatory government-mandated system rather than a voluntary performance tool, thereby reducing the impact of technical quality on individual performance outcomes.

Several organizational and policy factors explain this phenomenon. Bureaucratic Culture of Compliance, Indonesian government agencies operate within a hierarchical culture where system usage is enforced through formal regulations and performance evaluations. Employees comply with SRIKANDI usage regardless of system quality because non-compliance risks administrative sanctions rather than performance benefits (Peraturan Menteri PANRB No. 32 Tahun 2020).

Mandatory Policy Environment: The SRIKANDI system was implemented as part of national e-government initiatives mandated by Presidential Regulation No. 95/2018 on Electronic Based Government Systems (SPBE). This top-down policy approach means employees use the system due to regulatory requirements rather than perceived technical superiority. Workload Saturation: Environmental agency employees manage high volumes of correspondence and regulatory reporting. In such overloaded contexts, system quality improvements may yield diminishing returns because performance is constrained by workload volume rather than processing speed.

The insignificant effect of perceived ease of use on employee performance aligns with findings by (Arumiasih & Dewi, 2021) and(Novitasari & Indrijawati, 2024), but reveals deeper organizational dynamics. Theoretically, user-friendly systems should reduce cognitive load and enhance adoption. However, this research suggests that ease of use becomes less relevant when employees adapt through organizational learning mechanisms rather than individual perception.

CONCLUSION

Instrument validity and reliability were confirmed across all variables, ensuring robust measurement quality. All indicators achieved loading factor values above 0.50, demonstrating convergent validity. Although AVE values for system quality (X2 = 0.XX) and user satisfaction (X3 = 0.XX) fell slightly below the 0.50 threshold, these met Fornell

and Larcker (1981) criteria when combined with composite reliability scores exceeding 0.70. This confirms the research instrument's dependability for measuring perceived ease of use (X1), system quality (X2), user satisfaction (X3), and employee performance (Y).

User satisfaction emerged as the sole significant predictor of employee performance (β = 0.XXX, $p = 0.021 < 0.05$), while system quality ($p = 0.249$) and perceived ease of use ($p = 0.119$) showed insignificant effects. The research model explains 34.4% of performance variation (Adjusted $R^2 = 0.344$), with user satisfaction providing the dominant contribution in this mandatory public sector context. These findings align with prior Indonesian studies (Arumiasih & Dewi, 2021; Safitri, 2024; Isna Anugrahayu & Meiriyani, 2024), confirming that affective user experience outweighs technical factors when system usage is policy-mandated.

This study underscores the primacy of user satisfaction for digital system success in Indonesian government agencies and highlights the need for context-specific implementation strategies. Although system quality and ease of use remain theoretically important, their practical impact appears neutralized by bureaucratic compliance culture and institutional support mechanisms. Future research should explore moderating effects of organizational training, workload saturation, and policy enforcement to enhance model explanatory power and inform optimized SRIKANDI deployment strategies at Surakarta City Environmental Agency.

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