

The Impact of System Quality and Perceived Benefits on Employee Satisfaction in Using the Institutional Level Financial Application System (SAKTI) at the Directorate General of Treasury Work Units in Lampung Province

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Abstract

This study aims to examine the impact of system quality and perceived benefits on employee satisfaction in the use of the Institutional-Level Financial Application System (Sistem Aplikasi Keuangan Tingkat Instansi/SAKTI) at the work units of the Directorate General of Treasury in Lampung Province. This research employs a quantitative approach with an explanatory survey method. Data were collected through questionnaires distributed to employees who actively use SAKTI in their daily financial management activities. The variables analyzed include system quality and perceived benefits as independent variables, and employee satisfaction as the dependent variable. Data analysis was conducted using multiple linear regression to determine both partial and simultaneous effects of the independent variables on employee satisfaction. The results indicate that system quality has a positive effect on employee satisfaction, while perceived benefits also positively influence employee satisfaction in using SAKTI. These findings demonstrate that a reliable, easy-to-use, and integrated system, along with clear perceived benefits such as increased efficiency and productivity, contributes to higher levels of employee satisfaction. This study provides empirical evidence on the importance of improving system quality and strengthening perceived benefits to support the successful implementation of financial information systems in public sector institutions.

Keywords

System Quality, Perceived Benefits, Employee Satisfaction, SAKTI, Public Financial Management

Introduction

Public service is a fundamental responsibility of the government that is directly experienced by society. In recent years, the Indonesian government has continuously encouraged the use of digital technology in managing state finances to create processes that are faster, more efficient, and more transparent. The Directorate General of Treasury (Direktorat Jenderal Perbendaharaan/DJPb) has implemented financial digitalization through integrated systems such as the Institutional-Level Financial Application System (Sistem Aplikasi Keuangan Tingkat Instansi/SAKTI) and the State Treasury and Budget System (SPAN). These systems are expected to simplify administrative procedures, reduce bureaucratic complexity, and minimize the risk of irregularities in budget management (Kementerian Keuangan, 2024).

The adoption of integrated digital systems allows budget planning, payment, recording, and reporting processes to be carried out more accurately and efficiently, reducing reliance on physical

documents and manual data entry (Kementerian Keuangan, 2025). This transformation is not merely technological but also part of broader public sector reform aimed at strengthening accountability, transparency, and good governance in state financial management (Kementerian Keuangan, 2024).

SAKTI is designed as a single, integrated application that connects all work units to a unified database directly linked to SPAN throughout the entire budget cycle, from planning to final reporting. The system aims to ensure that state financial management is orderly, effective, efficient, economical, transparent, accountable, integrated, and performance-oriented. By consolidating previously separate financial applications into one system, SAKTI is intended to simplify processes, prevent redundant data entry, and enhance transparency and accountability in managing state budgets (Rahmawati & Barusman, 2024).

However, the success of SAKTI implementation does not depend solely on technical aspects but also on how users perceive the system, particularly in terms of its quality, perceived benefits, and overall satisfaction when using it. According to the Information System Success Model proposed by DeLone and McLean (2003), system quality and perceived benefits are critical determinants of user satisfaction. Previous studies have shown that system quality and perceived usefulness significantly influence user satisfaction, although empirical findings remain inconsistent across institutions.

Amriani and Iskandar (2019) found that system quality plays an important role in enhancing user satisfaction with SAKTI. Conversely, Hartiwi and Rokhayati (2024) reported that system quality did not significantly affect user satisfaction, which was more strongly influenced by information quality and service quality. These differing results indicate that the impact of system quality and perceived benefits on user satisfaction may vary depending on organizational context.

Field observations at the DJPb Provincial Office of Lampung reveal that several employees still face technical and operational challenges in using SAKTI. These challenges include slow data loading speeds, difficulties accessing certain modules during peak usage hours, limited user competence in operating accounting modules, and technical disruptions during reconciliation processes. Such conditions potentially affect employees' perceptions of the system's benefits and their overall satisfaction with SAKTI.

Although the 2023 Service User Satisfaction Survey (SKPL) reported a relatively high satisfaction score of 4.60 for DJPb services, SAKTI was not directly assessed because it is classified as a supporting system rather than a primary service. This gap raises important questions regarding how system quality and perceived benefits of SAKTI influence employee satisfaction, particularly at the regional level.

Based on these considerations, this study focuses on examining the impact of system quality and perceived benefits on employee satisfaction in the use of the Institutional-Level Financial Application System (SAKTI) at the Directorate General of Treasury work units in Lampung Province.

Methods

This study applies a quantitative research method using a survey approach. This approach

was chosen to objectively and measurably identify the relationships and effects among variables, namely system quality, perceived benefits, and employee satisfaction in the use of the Institutional-Level Financial Application System (SAKTI) at the Directorate General of Treasury work units in Lampung Province.

This research is classified as explanatory research, which aims to explain causal relationships between independent variables and dependent variables by testing hypotheses. The data used in this study are primary data obtained directly from respondents through questionnaires. The questionnaire items were developed based on indicators for each variable and measured using a Likert scale.

The research was conducted at the Directorate General of Treasury (DJPb) work units in Lampung Province, located at Jalan Cut Mutia No. 23A, Gulak Galik, Teluk Betung Utara District, Bandar Lampung City, Lampung.

The population in this study consists of all employees who use the SAKTI application at the Directorate General of Treasury work units in Lampung Province, totaling 66 employees. The sample size was determined using the Slovin formula with a margin of error of 10 percent. Based on the calculation, a total of 40 respondents were selected as the research sample.

The sampling technique used in this study is non-probability sampling with a purposive sampling method. This method was selected because not all employees at the Directorate General of Treasury work units in Lampung Province directly use the SAKTI system. The criteria for selecting respondents are employees working at the Directorate General of Treasury work units in Lampung Province, employees who actively use the SAKTI application in carrying out their work duties, and employees who are directly involved in financial management, recording, or reporting processes using the SAKTI application.

The variables in this study consist of independent variables and a dependent variable. System quality (X1) and perceived benefits (X2) are the independent variables, while employee satisfaction (Y) is the dependent variable. System quality refers to how well the SAKTI application provides reliable information, is easy to use, and meets user needs. Perceived benefits refer to the extent to which users believe that using SAKTI improves their work performance. Employee satisfaction refers to the level of satisfaction felt by users after using the SAKTI system in carrying out their work tasks.

Data analysis techniques include descriptive statistics and inferential statistics. Descriptive analysis is used to describe respondent characteristics and research variables. Inferential analysis consists of validity tests, reliability tests, normality tests, multicollinearity tests, and heteroscedasticity tests. Multiple linear regression analysis is used to examine the effect of system quality and perceived benefits on employee satisfaction. The coefficient of determination (R^2), t-test, and F-test are applied to test the research hypotheses.

Results and Discussion

The results of this study are based on data collected from 40 respondents who are employees using the Institutional-Level Financial Application System (SAKTI) at the Directorate General of Treasury work units in Lampung Province. The respondents are considered valid users because they are directly involved in financial administration, reporting, and reconciliation processes using SAKTI in their daily work activities.

The descriptive analysis indicates that the majority of respondents are staff-level employees who directly operate the SAKTI system. This condition is relevant because employee satisfaction can be more accurately measured based on direct user experience rather than supervisory observation. Most respondents are within the productive age range and have an educational background of D4/S1, indicating adequate competence and understanding in using financial administration systems.

The statistical test results show that system quality has a significant effect on employee satisfaction in using SAKTI. Based on the t-test results, the significance value obtained is 0.001, which is smaller than the significance level of 0.05, and the calculated t-value is greater than the t-table value of 2.022. Therefore, the alternative hypothesis is accepted and the null hypothesis is rejected. This finding confirms that system quality significantly influences employee satisfaction in the use of SAKTI at the Directorate General of Treasury work units in Lampung Province.

These results indicate that the quality of the SAKTI system plays an important role in shaping employee satisfaction. Employees perceive that a reliable system, ease of use, data accuracy, system security, and access speed contribute positively to their work performance and overall satisfaction. When the system operates properly, employees are able to complete their tasks more efficiently and accurately, which enhances their comfort and satisfaction in using the system.

However, the descriptive analysis also reveals that one of the system quality indicators has the lowest average score compared to other indicators. This low score reflects technical constraints experienced by employees, particularly during peak usage hours when many users access the system simultaneously. Respondents reported that the system tends to slow down, frequently experiences errors, and becomes less stable during busy periods. These technical issues negatively affect employee comfort, especially in managing and reporting financial data.

This finding shows that although the overall quality of the SAKTI system is perceived as good and has a significant impact on employee satisfaction, improvements are still required in technological infrastructure, system capacity, and technical support. If system infrastructure and capacity are insufficient to handle high user demand, system performance may decline and subsequently reduce user satisfaction.

The results also demonstrate that perceived benefits have a significant effect on employee satisfaction. The t-test results show a significance value of 0.001, which is smaller than 0.05, and a calculated t-value of 8.185, which is greater than the t-table value of 2.022. This indicates that perceived benefits significantly influence employee satisfaction in using SAKTI at the Directorate General of Treasury work units in Lampung Province.

These findings suggest that employees perceive SAKTI as providing substantial benefits, such as simplifying work processes, accelerating financial report preparation, improving data accuracy, and saving time and effort. A high level of perceived benefits encourages employees to use the system more enthusiastically in their daily activities. When employees experience ease of access and operational efficiency, they feel that their work becomes more effective and the results are of higher quality.

The perception of tangible benefits, such as increased productivity and time efficiency, contributes significantly to employee satisfaction. Employees view SAKTI not merely as an administrative tool but as a solution that supports their overall work performance. The greater the benefits perceived by employees, the higher the level of satisfaction they experience while using

the system.

Furthermore, the simultaneous test results indicate that system quality and perceived benefits together have a very strong influence on employee satisfaction. The F-test results show a significance value of less than 0.001, indicating that both independent variables jointly have a significant effect on employee satisfaction. The Adjusted R² value of 0.942 indicates that 94.2 percent of the variation in employee satisfaction can be explained by system quality and perceived benefits, while the remaining 5.8 percent is influenced by other factors not examined in this study.

These results demonstrate that the research model has a very strong explanatory power in explaining employee satisfaction in using the SAKTI system. System quality and perceived benefits are proven to be the dominant factors influencing employee satisfaction at the Directorate General of Treasury work units in Lampung Province.

Conclusion

Based on the results of data analysis and discussion, several conclusions can be drawn from this study.

System quality has a positive and significant effect on employee satisfaction in using the Institutional-Level Financial Application System (SAKTI). The statistical test results indicate that the system quality variable significantly influences employee satisfaction. This means that the better the quality of the SAKTI system—particularly in terms of reliability, ease of use, access speed, and data security—the higher the level of employee satisfaction in using the system. A high-quality system provides a more efficient work experience, minimizes errors, and supports the smooth execution of financial management tasks.

Perceived benefits also have a positive and significant effect on employee satisfaction. The results show that perceived benefits have a greater influence on employee satisfaction compared to system quality. This indicates that the more benefits employees perceive from using SAKTI—such as time efficiency, increased productivity, and ease of financial reporting—the higher their level of satisfaction. A system that provides real added value to employee performance enhances acceptance and satisfaction in its use.

Simultaneously, system quality and perceived benefits have a very strong influence on employee satisfaction. The F-test results indicate that both independent variables significantly affect employee satisfaction. The Adjusted R² value of 0.942 shows that 94.2 percent of the variation in employee satisfaction can be explained by system quality and perceived benefits. This demonstrates that the research model has a strong ability to explain employee satisfaction in using the SAKTI system at the Directorate General of Treasury work units in Lampung Province.

References

- Aldholay, A. H., Isaac, O., Abdullah, Z., & Ramayah, T. (2020). The role of system quality, information quality, and service quality in user satisfaction. *Journal of Systems and Information Technology*, 22(3), 234–253. <https://doi.org/10.1108/JSIT-03-2019-0040>
- Alkraihi, A. I. (2020). Citizen satisfaction with government information systems. *International Journal of Information Management*, 51, 102022. <https://doi.org/10.1016/j.ijinfomgt.2019.102022>

- Along, A. (2020). Kualitas Layanan Administrasi Akademik di Politeknik Negeri Pontianak. *Jurnal Ilmiah Administrasi Publik*, 006(01), 94–99. <https://doi.org/10.21776/ub.jiap.2020.006.01.11>
- Amriani, T. N., & Iskandar, A. (2019). Analisis Kesuksesan Implementasi Sistem Aplikasi Keuangan Tingkat Instansi (SAKTI) pada Satuan Kerja di Lingkungan BPPK.
- Cheng, Y. M. (2021). Factors influencing user satisfaction and intention to continue using information systems. *Information Development*, 37(2), 267–280. <https://doi.org/10.1177/0266666920908046>
- DeLone, W. H., & McLean, E. R. (2003). The DeLone and McLean Model of Information Systems Success: A Ten-Year Update. *Journal of Management Information Systems*, 19(4), 9–30.
- Dewi, N. L. P. A., & Suryanawa, I. K. (2023). System quality, perceived usefulness, and user satisfaction of government financial information systems. *Journal of Accounting and Strategic Finance*, 6(2), 145–158.
- Dwivedi, Y. K., Rana, N. P., Jeyaraj, A., Clement, M., & Williams, M. D. (2020). Re-examining the unified theory of acceptance and use of technology. *Information Systems Frontiers*, 22(3), 789–807. <https://doi.org/10.1007/s10796-019-09923-1>
- Gorla, N., Somers, T. M., & Wong, B. (2020). Organizational impact of system quality, information quality, and service quality. *Journal of Strategic Information Systems*, 29(2), 101–122. <https://doi.org/10.1016/j.jsis.2019.101582>
- Hartiwi, I., & Rokhayati. (2024). Analisis Kualitas Sistem, Kualitas Informasi, dan Kualitas Layanan terhadap Kepuasan Pengguna Sistem Aplikasi Keuangan Tingkat Instansi.
- Hussein, R., Karim, N. S. A., & Selamat, M. H. (2021). The impact of information system quality on user satisfaction in public organizations. *Government Information Quarterly*, 38(4), 101601. <https://doi.org/10.1016/j.giq.2021.101601>
- Kamble, S., Gunasekaran, A., & Sharma, R. (2021). Analysis of the driving factors of digital transformation in public sector organizations. *Technology in Society*, 67, 101702. <https://doi.org/10.1016/j.techsoc.2021.101702>
- Khotimah. (2022). Kualitas Sistem Informasi dalam Perspektif Model DeLone dan McLean.
- Kurniawan, D., & Prabowo, T. J. W. (2024). User satisfaction of public financial management information systems in Indonesia. *Jurnal Sistem Informasi*, 20(1), 55–68.
- Mardiana, S., Tjakraatmadja, J. H., & Aprianingsih, A. (2022). Information system success model: A literature review. *Procedia Computer Science*, 197, 114–121. <https://doi.org/10.1016/j.procs.2021.12.122>
- Mensah, I. K., & Mi, J. (2021). Computer self-efficacy, system quality, and user satisfaction in e-government systems. *International Journal of Public Administration*, 44(9), 758–769. <https://doi.org/10.1080/01900692.2020.1747173>
- Petter, S., DeLone, W., & McLean, E. R. (2020). Information systems success: The quest for the dependent variable. *Journal of Management Information Systems*, 37(2), 507–542. <https://doi.org/10.1080/07421222.2020.1757894>
- Rahi, S., Ghani, M. A., & Ngah, A. H. (2020). Integration of DeLone and McLean and UTAUT models. *Journal of Enterprise Information Management*, 33(3), 735–758. <https://doi.org/10.1108/JEIM-04-2019-0113>
- Rahmawati, I., & Barusman, A. R. P. (2024). Penerapan Sistem Aplikasi Keuangan Tingkat Instansi (SAKTI) dalam Pengelolaan Keuangan Negara.

- Sihotang. (2020). Pengaruh Kualitas Sistem, Kualitas Layanan, dan Kualitas Informasi terhadap Kepuasan Pengguna Sistem Aplikasi Keuangan Tingkat Instansi (SAKTI).
- Suranto. (2022). Pengaruh Kualitas Sistem, Kualitas Informasi, dan Kualitas Layanan terhadap Kepuasan Pengguna SAKTI pada KPPN Gorontalo.
- Susanto, A., Almunawar, M. N., & Kang, C. C. (2022). Quality of information systems and user satisfaction in government agencies. *Electronic Government, an International Journal*, 18(3), 241–257.
- Wang, Y. S., & Liao, Y. W. (2021). Assessing e-government systems success: A validation of the DeLone and McLean model. *Government Information Quarterly*, 38(2), 101576. <https://doi.org/10.1016/j.giq.2020.101576>