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Design And Implementation Of A Web-Based Financial Information System With Internal Audit Feature To Enchance Transparency And Accountability At Getsemani Church Sorong

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Abstract: The rapid development of information technology has transformed how organizations, including churches, manage financial data. This study presents a novel web-based church financial information system that integrates internal audit features to enhance transparency, accountability, and efficiency in fund management. Unlike traditional manual approaches using books and spreadsheets, the proposed system introduces a structured digital framework that facilitates accurate recording, timely reporting, and simplified audits. The system was developed using the Waterfall model and implemented with PHP, MySQL, and the Laravel framework in a web-based environment. It provides distinct user roles for treasurers, auditors, administrators, and congregants to ensure secure, role-based access and effective oversight. Validation through Black Box testing confirmed that all functional requirements were met. Usability testing using the System Usability Scale (SUS) with 20 respondents produced a SUS score of 84.6 (Excellent category), indicating high user satisfaction and ease of use. Performance testing conducted with Google Lighthouse under standard desktop conditions achieved an average score of 82.5, demonstrating good performance in terms of speed, accessibility, and technical optimization. Overall, the system has proven effective in improving the transparency, efficiency, and reliability of church financial management, thereby strengthening trust and governance within the digital transformation era.

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INTRODUCTION

Technological developments in the current era have created an increasing need for fast, accurate, and reliable information. Various organizations are required to adapt to ongoing technological changes (Marentek et al.,2017). Information has become one of the most important assets in supporting organizational performance, including within church institutions. One critical aspect is the management of financial information (Al-Okaily et al., 2023). Churches are organizations that provide community-based services (Lukow et al., 2022) and, as non-profit institutions, play a central role in serving the community both spiritually and socially. Therefore, churches must uphold both vertical and horizontal (to the congregation and society) responsibilities to ensure that their financial accountability model minimizes potential social and ethical issues that may arise from poor governance (Rupilele, 2018).

Church activities are supported by funds obtained from various sources, such as weekly offerings, special offerings, personal donations, and charity events. The application of technology in financial management is essential to ensure transparency and accountability, which in turn strengthen the congregation's trust in the management of church funds. However, many Indonesian Protestant Churches (GPI), including GPI Jemaat Getsemani Sorong, still rely on manual recording systems using notebooks and spreadsheets that are not integrated. Financial data are recorded manually, transferred to Excel, and later printed and announced to the congregation. This process often leads to recording errors, delays in reporting, and lengthy audit procedures because the Treasury Audit Agency (BPP) must recheck cash books and transaction evidence manually. Such inefficiencies reduce internal supervision and create risks of misappropriation, despite the fact that church finances are sourced from congregational funds that must be managed responsibly and transparently.

Auditing in many churches is also conducted manually and periodically, without system-based validation or real-time monitoring. This lack of technological integration limits the effectiveness of financial oversight. In contrast, advances in web-based information systems provide opportunities to develop integrated platforms that allow flexible, real-time access for authorized church officials. These systems can be equipped with internal audit modules to automatically check data consistency, detect anomalies, and generate evaluation reports that support accountability. However, there is a lack of research and implementation of integrated financial information systems with internal audit features in church organizations.

Although several studies have explored digital financial management in non-profit organizations, most have focused on general accounting automation or reporting systems without incorporating internal audit mechanisms tailored to the governance needs of religious institutions. For instance, previous research on non-profit financial systems (e.g., [insert specific study or author, year]) provided automation of bookkeeping processes but did not address real-time validation, role-based access control, or audit traceability. This research gap underscores the need for a comprehensive system that supports transparency, accountability, and oversight in church financial management.

To address these issues, this study investigates the following research question: "How can a web-based church financial information system integrated with internal audit features enhance transparency and accountability in church fund management?" Data collection for this study was conducted through interviews, observations, and document analysis at GPI Jemaat Getsemani Sorong. Interviews were conducted with three church administrators, two auditors, and one treasurer to identify system requirements and workflow challenges. The researchers also reviewed financial reports, transaction logs, and audit documentation to understand the existing processes and data structures. These findings were validated through triangulation between interview results and document analysis to ensure the reliability of user requirements.

This research contributes both theoretically and practically. Theoretically, it builds upon the concepts of information transparency (Fung, Graham, and Weil, 2007), accountability in non-profit governance (Ebrahim, 2003), and digital governance frameworks emphasizing data integrity and accessibility. Practically, it offers a model for churches to improve financial oversight, minimize human error, and strengthen congregational trust through digital transformation. The development of a web-based financial information system with internal audit features for Getsemani Church Sorong

represents a strategic initiative toward transparent, accountable, and efficient church fund management in the digital era.

RESEARCH METHODOLOGY

Research Implementation and Data Sources

This study adopts the Waterfall model as the primary software development methodology to design and implement a web-based financial information system for the Getsemani Sorong Church, equipped with internal audit features (Figure 1). The Waterfall model was chosen because it offers a systematic, structured, and sequential development process, ensuring that each phase is completed and validated before progressing to the next. This method is particularly effective for projects with clearly defined requirements and minimal anticipated changes during development conditions consistent with this study, where user needs were identified early through communication with church administrators. Compared to agile or iterative approaches, the Waterfall model provides stronger documentation control, milestone clarity, and predictable progress tracking, which are essential in projects involving multiple non-technical stakeholders (Alazzawi et al., 2023; Dian & Muhammad, 2022).

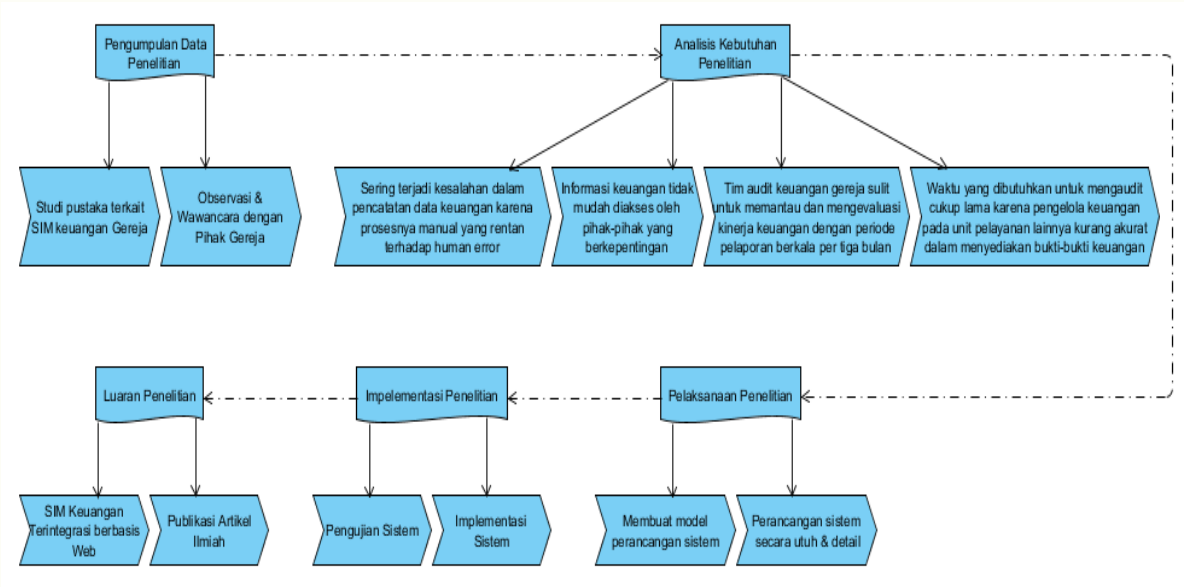

Figure 1. Research Implementation Method

A diagram illustrating the sequential process of developing the web-based financial information system using the Waterfall approach.

The research implementation process consists of five main activities:

1. identifying existing issues in church financial management,
2. collecting user and system requirements,
3. designing and developing the system,
4. testing and evaluating system functionality, and
5. deploying the finalized system to end users.

Data for this study were obtained from both primary and secondary sources: (1) Primary data were gathered through interviews, direct observations, and documentation involving the treasurer, auditor, administrator, and several congregation members of the Getsemani Sorong Church. These interactions provided insights into workflow structures, financial procedures, and user expectations. (2) Secondary data included literature reviews, previous studies, and financial documents from the church that informed system modeling and requirement validation.

System Development Design: Waterfall Model

The development of the Getsemani Sorong Church financial information system follows the five main phases of the Waterfall model (Figure 2): Communication, Planning, Modeling, Construction, and Deployment.

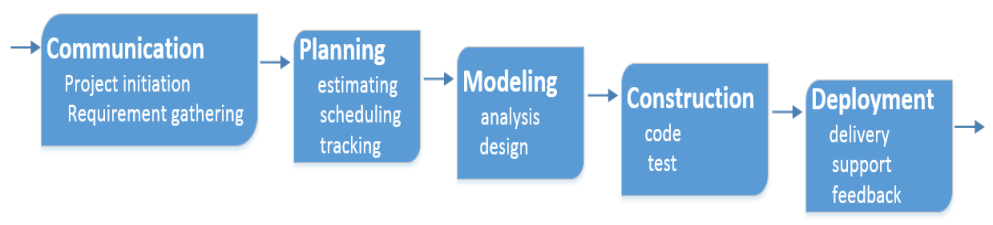

Figure 2. Waterfall Model Stages

A schematic representation of the sequential stages of the Waterfall model applied in this study.

1. Communication

This stage focused on identifying complete and accurate system requirements through interviews, observations, and document analysis. The objective was to define the core functions needed to support transparency and accountability in church financial management (Arifin et al., 2022).

2. Planning

The planning phase involved preparing a project roadmap, development schedule, and resource allocation strategy. Technical specifications, system objectives, and project scope were defined to guide subsequent stages.

3. Modeling

In this stage, the functional and structural requirements were translated into UML-based system models, including use case, activity, and class diagrams. These models illustrated user interactions, data flow, and relationships between components, ensuring alignment between user expectations and technical design (Rupilele et al., 2018).

4. Construction

The construction stage encompassed coding, system integration, and testing. The system was implemented using web-based technologies (PHP, MySQL, and the Laravel framework). Functionality verification was conducted through Black Box testing, which assesses whether features meet specified requirements without examining internal code logic (Febriyanti, Sudana, and Piarsa, 2021).

5. Deployment

After successful testing and validation, the system was deployed on a web server. Training sessions were conducted for church staff—including the treasurer, auditor, and administrator to facilitate effective adoption and operational use.

RESULTS AND DISCUSSIONS

Use Case Diagram Design

The design process began with the development of use case and class diagrams to illustrate system functionality and data relationships. The use case diagram (Figure 3) identifies four main actors Treasurer, Auditor, Administrator, and Congregation each with distinct access rights and functions. This separation of roles ensures secure data handling and accountability, aligning with the principles of role-based access control and information transparency in digital governance.

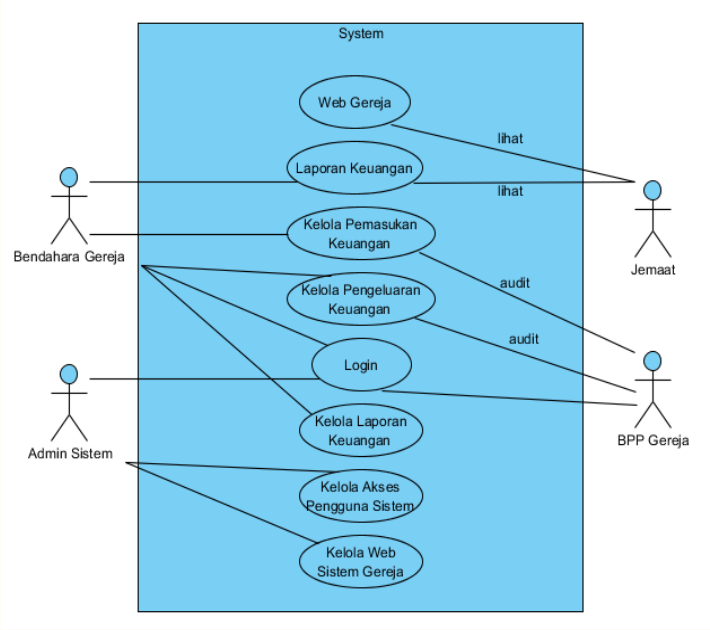

Figure 3. System *Use Case* Diagram

Class Diagram Design

The class diagram (Figure 4) models the system's data structure, including Users, Transactions, Categories, and AuditLogs. The clear relational mapping between classes supports efficient data management and audit trail recording, an essential aspect of accountability in non-profit financial systems (Ebrahim, 2003).

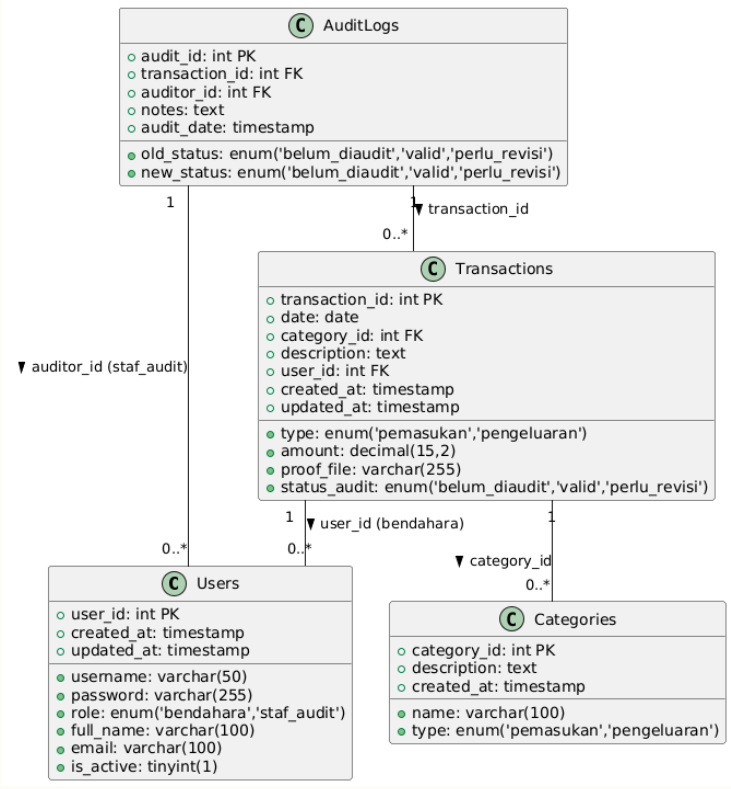

Figure 4. System *Class* Diagram

Figures 3–4 thus provide the conceptual foundation of the system's transparency mechanism, not merely visual documentation.

System Implementation and Functionality

After completing the design phase, the system was implemented using a web-based platform. Figures 5–13 illustrate the interface flow from login authentication and dashboards to transaction management and audit reporting.

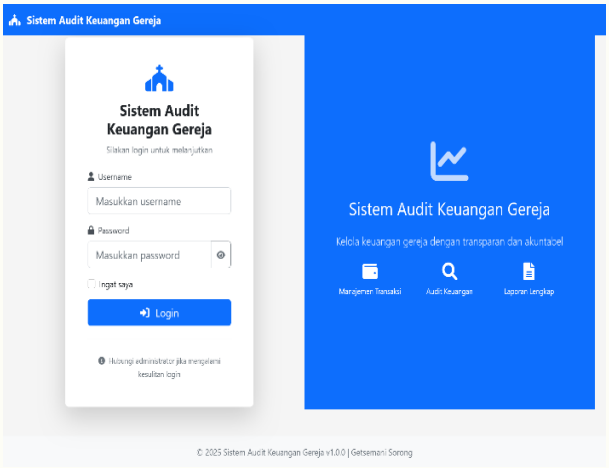

Figure 5. System *Login* Page

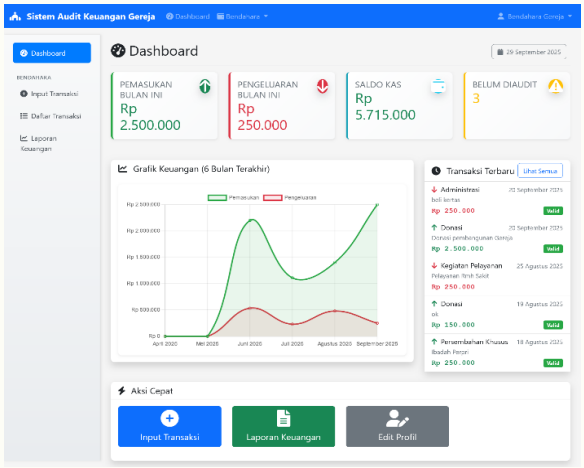

Figure 6. Treasurer *Dashboard* Page

When accessing the Getsemani Sorong church financial information system, users of the system, in this case the treasurer and auditor, are first asked to *log in* by entering *their username* and *password* as shown in Figure 5. If the authentication data entered is correct, the system will direct the user to the *dashboard* page. However, if there is an error in entering *the username* or *password*, the system will display a notification that the data entered is *invalid*, preventing the user from proceeding to the next page.

The treasurer dashboard (Figure 6) centralizes real-time financial information, reducing reporting delays that previously occurred in manual process.

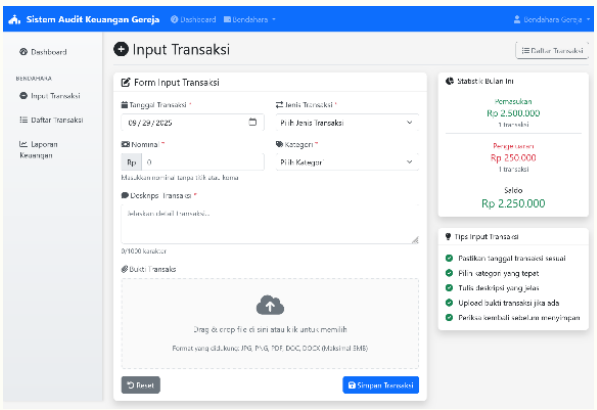

Figure 7. Financial transaction *input form* page

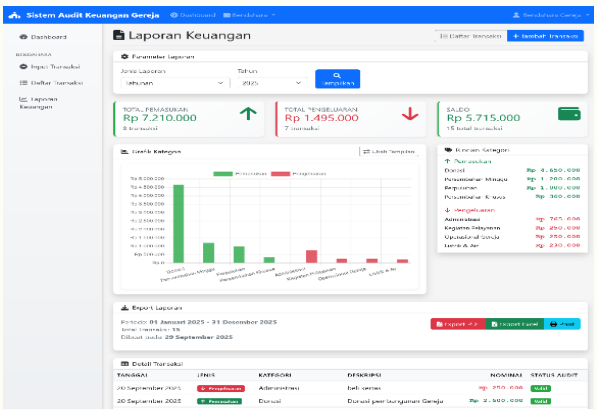

Figure 8. Financial Report Page

Financial transaction data, namely income and expenses managed by the treasurer, can be accessed in the transaction *input* menu, with a *form* containing the transaction date, transaction type, amount, category, transaction description, and transaction proof *upload*. The display can be seen in Figure 7.

In addition to managing financial transactions, the treasurer can also view a list of transactions and manage the Church's financial transaction reports in the financial reports menu. The financial report display contains income, expenditure, and balance reports that can be displayed based on the report type selection (monthly, annual, special period), year selection, and/or month selection. Additionally, transaction graphs based on categories, transaction category details, transaction details, and report exports in *PDF*, *Excel*, and *print* formats are also displayed.

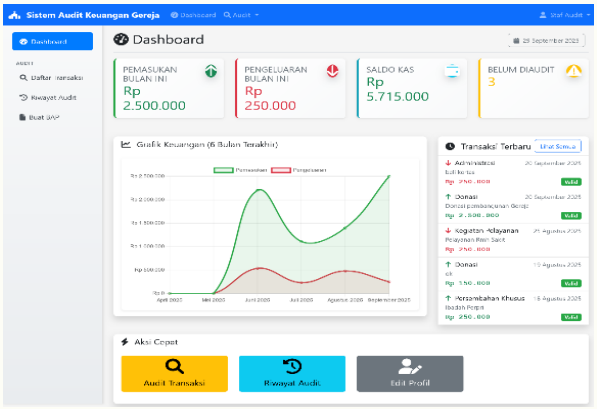

Figure 9. Auditor *Dashboard* Page

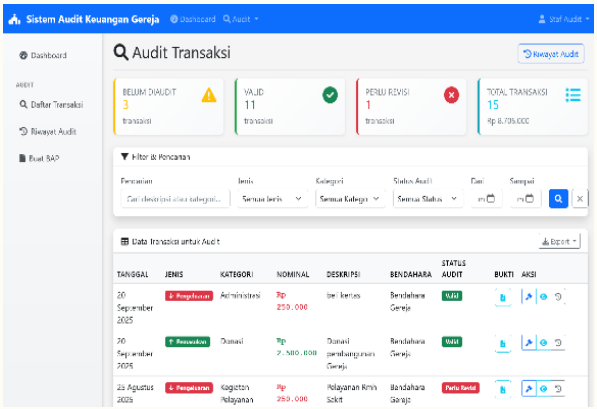

Figure 10. Transaction Audit Page

The auditor dashboard (Figure 9) integrates audit monitoring and reporting, improving internal financial oversight.

When conducting an audit, the auditor must view the list of financial transactions entered by the treasurer by accessing the transaction list or transaction audit page, which will display the number of transactions that have not been audited, the number *of valid* transactions, the number of transactions that need to be revised, and the total number of transactions. The auditor can also display and filter the transaction list based on transaction type, category, audit status, and transaction period. The transaction audit list page is shown in Figure 10.

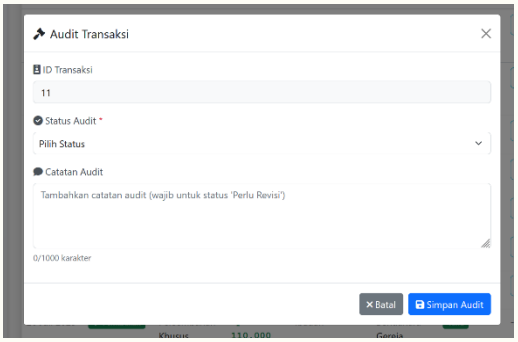

Figure 11. Transaction Audit *Form* Page

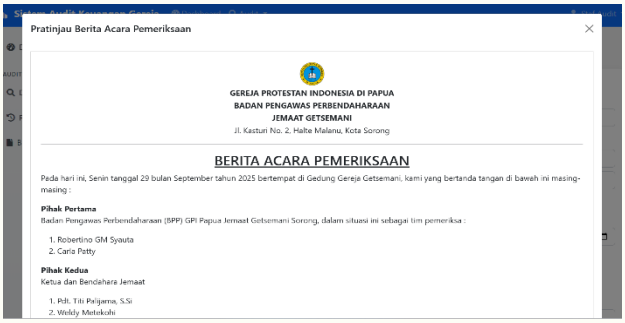

Figure 12. Preview Page of the Audit Report

Auditors can audit transactions that have not yet been audited by viewing transaction evidence, transaction details, and selecting the transaction audit button, which will display *the* audit *form*. This form consists of a transaction ID, audit status (valid transaction is correct, *needs* revision needs correction) and audit notes. The display can be seen in Figure 11.

The next step for the auditor after auditing financial transactions is to wait for the scheduled time to create an inspection report during the church cash closing process when meeting directly with the church treasurer. The inspection report page can be seen in Figure 12.

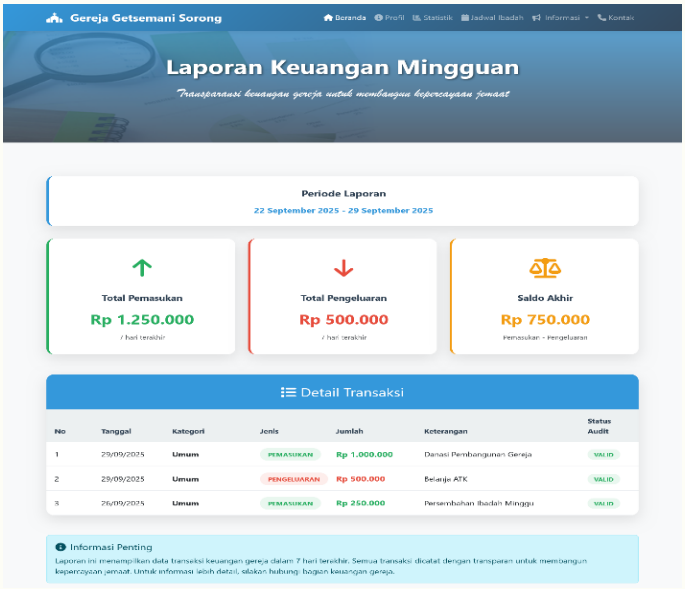

Figure 13. Financial Report Page

The congregation view (Figure 13) provides open access to verified financial reports, reinforcing organizational transparency and trust (Fung, Graham, & Weil, 2007).

These design choices reflect a user centered approach, where the system's interface and access hierarchy are tailored to the cognitive and operational needs of different users. This aligns with theories of user-centered design and digital adoption, which emphasize that usability and trust are key drivers of successful technology implementation in community-based organizations (Davis, 1989; Venkatesh & Bala, 2008).

System Testing (Black Box Method)

System functionality was evaluated using the Black Box Testing method to validate whether each system component produced outputs consistent with the specified functional requirements. This method focuses on verifying external behavior inputs, outputs, and user interactions without considering internal program code. Testing was conducted on two main user roles: the Treasurer and the Auditor, reflecting their respective permissions and workflow responsibilities.

Each function was tested multiple times using representative scenarios derived from user requirements. The evaluation metrics included:

1. **Test case success rate (%):** proportion of cases that produced correct outputs.
2. **Error rate (%):** proportion of cases with incorrect or unexpected outputs.
3. **Response accuracy:** correctness of displayed or stored data relative to expected system behavior.
4. **Functional coverage:** percentage of total features tested successfully.

Table 1. System Testing

No	*Test Item*	*Target User*	*Input*	*Expected Output*	*Test Results*
1	*Login*	*Treasurer*	*10*	*10*	*100*
2	*Transaction Input*	*Treasurer*	*15*	*14*	*93.3*
3	*Financial Report*	*Treasurer*	*10*	*10*	*100*
4	*Login*	*Auditor*	*10*	*10*	*100*
5	*Transaction List*	*Auditor*	*12*	*11*	*91.7*
6	*Transaction Audit*	*Auditor*	*10*	*9*	*90*
7	*Audit History*	*Auditor*	*8*	*8*	*100*
8	*Create BAP*	*Auditor*	*8*	*8*	*100*

Average success rate: 96.9%
Average error rate: 3.1%

Testing results show that all core functions including login, transaction management, report generation, auditing, and audit history operated correctly in 96.9% of cases. Minor issues observed were limited to rare instances of delayed data synchronization during simultaneous multi-user access, which were promptly corrected during debugging. Compared to benchmark findings in similar studies on web-based financial systems (Febriyanti, Sudana, and Piarsa, 2021; Arifin et al., 2022), this success rate indicates above-average functional reliability and demonstrates strong system readiness for operational use.

The testing outcomes confirm that the system meets the functional requirements of the Getsemani Sorong Church. It ensures accurate transaction processing, transparent reporting, and effective auditing workflows thereby supporting the church's goals of enhancing transparency, accountability, and efficiency in financial management.

Usability Testing and Interpretation

In addition to testing using the Black Box Testing method, this study also conducted usability testing to assess the ease of use and user acceptance of the Getsemani Sorong Church web-based financial information system. This test used the System Usability Scale (SUS) method, which is a standard instrument for evaluating the usability of various products and user interfaces (Ningsih & Muzakir, 2021), (Sa'adah et al., 2024).

The SUS questionnaire consisted of 15 statements given to 20 respondents, who were system users, namely church treasurers, internal auditors (Church BPP), and administrators. Each statement was rated using a 1–5 Likert scale (1 = strongly disagree, 5 = strongly agree). The SUS score was calculated by summing the scores of each respondent, then calculating the overall average score to obtain the final usability score (Prayoga & Kristiana, 2024).

Table 2. Usability Testing Results

Respondent	*P1*	*P2*	*P3*	*P4*	*P5*	*P6*	*P7*	*P8*	*P9*	*P10*	*P11*	*P12*	*P13*	*P14*	*P15*	*Total Score*	*Value (%)*
R1	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*3*	*4*	*4*	*4*	*4*	*59*	*98.33*
R2	*4*	*3*	*4*	*4*	*3*	*4*	*4*	*3*	*4*	*4*	*4*	*4*	*3*	*4*	*4*	*56*	*93.33*
R3	*3*	*4*	*3*	*3*	*3*	*4*	*4*	*4*	*3*	*4*	*3*	*4*	*4*	*4*	*3*	*53*	*88.33*
R4	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*60*	*100.00*
R5	*3*	*3*	*4*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*46*	*76.67*
R6	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*60*	*100.00*
R7	*3*	*4*	*3*	*4*	*4*	*4*	*4*	*4*	*3*	*3*	*4*	*4*	*4*	*3*	*4*	*55*	*91.67*
R8	*4*	*4*	*4*	*4*	*4*	*3*	*4*	*4*	*4*	*4*	*4*	*4*	*3*	*4*	*4*	*58*	*96.67*
R9	*4*	*4*	*4*	*4*	*3*	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*59*	*98.33*
R10	*3*	*3*	*3*	*4*	*3*	*3*	*4*	*4*	*3*	*4*	*3*	*3*	*3*	*4*	*3*	*50*	*83.33*
							Total									***556***	—
							Average Score										***92.67***

Based on the calculation results, the average SUS score obtained was 92,67 which falls into the following categories: Acceptability Range: *Acceptable*, Grade Scale: *A*, Adjective Rating: *Excellent*, NPS, Classification: *Promoter*. This score indicates that the system has a very good level of usability and is acceptable to users. Respondents rated the system as easy to operate, with a fairly intuitive interface, and features such as transaction recording, auditing, and financial reporting that work effectively. Users feel that this system improves transparency and efficiency in financial management within the church environment. A usability score above 80 indicates that this system is feasible and ready for operational use.

System Performance Testing

System performance testing is an important stage in web application development to ensure optimal service quality for users (PN, 2024; Barus et al., 2021). This testing is conducted using Lighthouse, an open-source audit tool developed by Google and integrated with the Chrome browser.

Lighthouse provides comprehensive analysis of four main aspects, namely Performance, Accessibility, Best Practices, and Search Engine Optimization (SEO) (Al-farel & Dzikrillah, 2025).

This testing method is used because it provides a quantitative evaluation of the speed, accessibility, and technical quality of web-based system interfaces. Based on the test results using Lighthouse, the following scores were obtained:

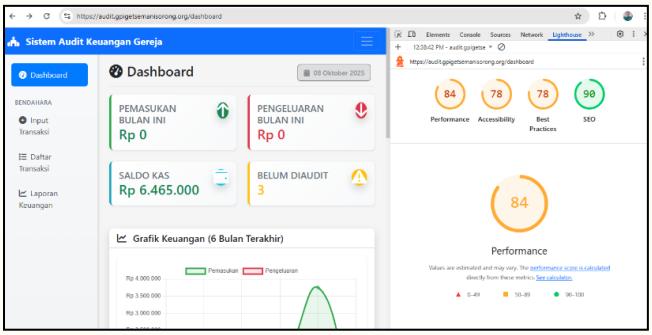

Figure 14. System Performance Test Results

The test results show that the information system has good overall technical quality, with an average score of 82.5%. The highest score was in the SEO aspect, indicating that the system has been well optimized for online searches. Meanwhile, the performance aspect received a high score (84%), indicating that the system is capable of responding quickly to user interactions. However, in terms of accessibility and best practices, there are still several areas that require minor improvements, such as increasing the readability of text elements and optimizing front-end security.

According to Assyafa and Budi (2025), testing system performance using Lighthouse is important to ensure that web systems have good speed, accessibility, and technical quality before being widely implemented. Thus, the results of these tests can be used as a reference in efforts to optimize speed, accessibility, and overall user experience.

CONCLUSIONS

This study successfully designed and implemented a web-based church financial information system equipped with an internal audit feature to enhance transparency and accountability in fund management at the Getsemani Sorong Church. The system was developed using the Waterfall method, following the stages of communication, planning, modeling, construction, and implementation. Testing results using Black Box Testing confirmed that all system functions operated according to user requirements, covering transaction recording, financial report generation, and real-time audit processes. Furthermore, usability testing with the System Usability Scale (SUS) method produced an average score of 92,67% (Excellent category), indicating that the system is intuitive, user-friendly, and well-received by users. Meanwhile, performance testing with Lighthouse achieved an average score of 82.5%, demonstrating good system performance in terms of speed, accessibility, and technical optimization.

Despite these positive results, the study has certain limitations. The system testing was conducted within a limited scope—specifically at the Getsemani Sorong Church—so broader generalization to other institutions may require further validation. Additionally, the system's internal audit feature focuses primarily on financial data consistency and reporting accuracy, without yet incorporating advanced analytics or AI-based anomaly detection. For future research, it is recommended to expand system testing across multiple churches or religious institutions with diverse administrative structures to evaluate scalability and adaptability. Further development could also include integration with mobile platforms, automation of audit trails using artificial intelligence, and cloud-based data management to improve accessibility and security. Overall, this information system has proven effective in improving efficiency, transparency, and congregational trust in church financial management, while laying the groundwork for future advancements in digital financial governance for religious organizations.

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REFERENCES

Al-farel, M. D., & Dzikrillah, A. R. (2025). Evaluasi Framework Pengembangan Web KinarBhusana: Studi Performance, SEO, dan Accessibility Menggunakan Laravel dan Bootstrap. *Bulletin of Computer Science Research*, *5*(3), 235–242.

ALazzawi, A., Yas, Q., & Rahmatullah, B. (2023). A Comprehensive Review Of Software Development Life Cycle Methodologies: Pros, Cons, And Future Directions. *Iraqi Journal for Computer Science and Mathematics*, *4*(4), 173-190. https://doi.org/10.52866/ijcsm.2023.04.04.014

Al-Okaily, M., Al-Kofahi, M., Shiyyab, F. S., & Al-Okaily, A. (2025). Determinants Of User Satisfaction With Financial Information Systems In The Digital Transformation Era: Insights From Emerging Markets. *Global Knowledge, Memory and Communication*, *74*(3), 1171-1190. https://doi.org/10.1108/GKMC-12-2022-0285

Arifin, N. Y., Indra, R., Borsam, B., Ahmad, I., Tyas, S. S., Sulistiani, H., Hardiansyah, A., & Suri, G. P. (2022). *Analisa Perancangan Sistem Informasi*. Cendikia Mulia Mandiri.

Assyafa, I., & Budi, S. (2025). Pengembangan Aplikasi Presensi QR Code Berbasis Website Dengan Metode Agile. *Jurnal Informatika: Jurnal Pengembangan IT*, 10(2), 264–277. https://doi.org/10.30591/jpit.v10i2.8472

Barus, A. C., Harungguan, J., & Manulu, E. (2021). Pengujian Api Website Untuk Perbaikan Performansi Aplikasi Ditenun. *Journal Of Applied Technology And Informatics Indonesia*, 1(2), 14–21. https://doi.org/10.54074/jati.v1i2.33

Febriyanti, N. M. D., Sudana, A. K. O., & Piarsa, I. N. (2021). Implementasi Black Box Testing Pada Sistem Informasi Manajemen Dosen. *Jurnal Ilmiah Teknologi Dan Komputer*, *2*(3), 535-544. https://doi.org/10.24843/JTRTI.2021.v02.i03.p12

Lukow, E. D., Najoan, X. B., & Sentinuwo, S. R. (2022). Rancang Bangun Aplikasi Pengelola Keuangan Gereja Berbasis Android: Design and Development of Android-Based Church Financial Management Application. *Jurnal Teknik Informatika*, *17*(4), 307-314.

Marentek, B., Lumenta, A. S., & Lantang, O. A. (2017). Rancang Bangun Web Service Sistem Informasi Keuangan GMIM Wilayah Tomohon 3 . *Jurnal Teknik Informatika*, *12*(1), 1-7. https://doi.org/10.35793/jti.v12i1.17859

Dian, S. M., & Muhammad, A. R. (2022). Logical Framework Of Information Technology: Systematization Of Software Development Research. *Telfor Journal*, *14*(1), 26-32. https://doi.org/10.5937/telfor2201026S

Ningsih, M., & Muzakir, A. (2021). Mengevaluasi User Interface Untuk Meningkatakan User Experience (Ux) Menggunakan Metode System Usability Scale (Sus). *Bina Darma Conference on Computer Science (BDCCS)*, 3(2), 365-374.

PN, S. M. (2024). Pengembangan Sistem Informasi Berbasis Web Untuk Meningkatkan Keamanan Pelayanan Publik. *Jurnal Intelek Dan Cendikiawan Nusantara*, *1*(3), 4736–4744.

Prayoga, E. I., & Kristiana, T. (2024). Evaluasi Usability Pada Aplikasi Hrmwincorp Menggunakan Metode System Usability Scale (Sus). *Jurnal Informatika dan Teknik Elektro Terapan*, *12*(2). https://doi.org/10.23960/jitet.v12i2.4094

Rupilele, F. G. J. (2018). Perancangan Sistem Informasi Manajemen Pelayanan Anggota Jemaat, Baptisan, Dan Pernikahan Berbasis Web (Studi Kasus: Gekari Lembah Pujian Kota Sorong). *Jurnal Teknologi Informasi dan Ilmu Komputer*, *5*(2), 144-152. https://doi.org/10.25126/jtiik.201852685

Rupilele, F. G. J., Soulisa, I., Palilu, A., Hasibuan, A., Winesty, O. F., Goraph, F. A., & Tondo, S. (2018). Management information system for monitoring and inspection of the implementation of Universities. *Int. J. Eng. Technol*, *7*(2.13), 451-456. https://doi.org/10.14419/ijet.v7i2.13.18138

Sa'adah, P., Wibowo, G. W. N., & Kusumodestoni, R. H. (2024). Analisis Kegunaan Aplikasi GoPay Berdasarkan Metode System Usability Scale. *Jurnal Minfo Polgan*, *13*(1), 533-542. https://doi.org/10.33395/jmp.v13i1.13726