JURNAL BINA PRAJA
Journal of Home Affairs Governance

ARTICLE

Governance Innovation Through SiMAWAS

Impact Analysis and Service Enhancement for Strengthening Internal Supervision

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OPEN ACCESS

Citation: Purwanto, B. A., Putri, T. S., Indrayani, E., & Abrory, Y. (2025). Governance Innovation Through SiMAWAS: Impact Analysis and Service Enhancement for Strengthening Internal Supervision. *Jurnal Bina Praja, 17*(3). https://doi.org/10.21787/jbp.17.2025-2671

Submitted: 3 August 2025

Accepted: 23 November 2025

Published: 17 December 2025

Abstract: Digital transformation in the public administration sector has triggered significant changes in governance, with a focus on improving transparency, efficiency, and strengthening public trust through the implementation of e-Government initiatives. In Indonesia, where there is a tendency toward skepticism toward government institutions, the use of digital solutions such as the SiMAWAS platform implemented in Pekalongan Regency aims to strengthen internal oversight. This study proposes the development of an online consultation feature on the SiMAWAS platform to address the limitations of one-way communication that have hitherto constrained productive interaction between the Internal Government Oversight Agency (APIP) and the entities under its supervision. By adopting a design-based research approach based on the Lean User Experience (Lean UX) methodology, this study identifies user needs through documentation studies, informal interviews, and non-participant observations. A high-level prototype was developed using Figma, which includes consultation features, automated route settings, and real-time notification systems. Prototype testing was conducted using the Cognitive Walkthroughs and System Usability Scale (SUS) methods, involving 30 respondents, with an average SUS score of 82.5, indicating a good level of usability. The developed feature enables two-way communication, reduces response time, and enhances transparency through clear and open documentation of interactions. Despite challenges in terms of digital literacy and limited internet access, inclusive user-based design provides a more accessible solution for various user groups. The findings of this study contribute a practical model that can be adapted by local governments to strengthen internal oversight functions by utilizing interactive digital tools, in line with e-Government principles of creating accountability and expanding public engagement.

Keywords: Digital Transformation; E-Government; Internal Oversight; Lean UX.

1. Introduction

The paradigm of digital transformation, particularly through e-Government, is revolutionizing public administration by enhancing transparency, operational efficiency, and public access to services (Wu & Chong, 2021). In Indonesia, where historical public skepticism toward government institutions persists, e-Government serves as a strategic tool to rebuild trust by automating processes, reducing opportunities for corruption, and fostering open communication (Fadrial et al., 2024). This shift transcends mere digitization, aiming to create responsive, data-driven governance that aligns with societal needs (Abrory, Fahlevvi, et al., 2025; Shark, 2025). By leveraging technology, governments can demonstrate a commitment to integrity and service, strengthening the relationship between the state and its citizens (Alzaabi et al., 2025; Shark, 2025; Wei & Zhang, 2025).

The promise of e-Government in Indonesia is constrained by several factual problems. First, access remains uneven: internet penetration reached 79.5% in 2024, which still leaves ~20.5% (≈57 million people) offline and at risk of being excluded from digital public services. Second, while Indonesia's UN E-Government Development Index (EGDI) 2024 score improved to 0.799 (rank 64/193)—with an e-participation score of 0.795 (rank 35)—these mid-tier rankings signal gaps in online service depth and infrastructure compared to leading countries. Third, delivery risk is high: public-sector transformations globally underperform, with a McKinsey survey finding only 22% of government change programs delivered fully and on time, and broader benchmarks indicating only ~30% of digital transformations meet their objectives. Together, these figures highlight that beyond ambitions for transparency and efficiency, Indonesia's digital transformation must overcome access constraints, capability gaps, and low program success rates to reliably improve citizen outcomes (Effendy & Legowo, 2025; Shi & Zhang, 2025).

In Indonesia, the Inspectorate, as part of the Government Internal Supervisory Apparatus (APIP), plays a key role in promoting accountability in local governance. In Pekalongan Regency, for example, the Inspectorate monitors financial and administrative processes to ensure compliance and prevent inefficiency. However, the implementation of the Supervision Management Information System (SiMAWAS) presents several conceptual challenges when viewed through the Lean UX framework. Despite being a digital system, SiMAWAS lacks clearly defined, measurable outcomes such as improved audit cycle time, transparency, and traceability of follow-up actions (Skålén & Trischler, 2024) Additionally, critical assumptions about user experience, data reliability, workflow integration, and role clarity have not been validated through systematic user feedback (Nazarwin et al., 2025). The absence of a feedback loop limits adaptability and user-centered improvement. As a result, SiMAWAS operates reactively and compliance-driven rather than as a collaborative, results-oriented tool (Mardhiana et al., 2022). This analysis uses Lean UX principles to hypothesize outcomes, identify user needs, and design iterative experiments to validate these assumptions (Mardhiana et al., 2022). SiMAWAS also faces a critical communication limitation in its unidirectional model, where information flows only from the Inspectorate to auditees through formal reports and alerts (Skålén & Trischler, 2024) There is no mechanism for auditees to engage in dialogue, seek clarification, or request guidance. This gap undermines the Inspectorate's consultative role and limits stakeholder engagement, reducing the system's effectiveness in fostering trust in government (Khattab et al., 2024).

To address this limitation, the proposed solution is to integrate an Online Consultation Service feature into SiMAWAS. This feature would enable secure, user-

friendly, and accessible two-way communication, allowing auditees to ask questions, seek guidance, and engage in dialogue with auditor (Lubis et al., 2024; Sutaryo & Anto, 2023). By facilitating real-time interaction, this feature aligns with the Inspectorate's consultative role, fostering collaboration and ensuring actionable audit findings (Nazarwin et al., 2025). The system would include a chat interface, a ticketing system, and a knowledge base for common issues (Budiono et al., 2022). Additionally, this solution would improve stakeholder engagement, enhance compliance, and strengthen trust by demonstrating the Inspectorate's commitment to transparency (Bunga et al., 2023).

The feature's development will utilize the Lean UX methodology, emphasizing iterative prototyping, continuous user feedback, and rapid validation of assumptions. (Marthasari et al., 2025). Lean UX is well-suited to this context, as it delivers efficient, adaptable solutions (Krout et al., 2020). The process involves defining user needs, building minimal prototypes, and refining based on user testing, minimizing risks while aligning with the Inspectorate's goals. (Moreira et al., 2023). Prioritizing usability, Lean UX will ensure the feature is inclusive and effective, addressing communication gaps and improving user experience. (Gonzalez-González, 2023).

Lean UX has proven effective in various public sector applications, offering valuable lessons for SiMAWAS's enhancement. For example, a study on a government service portal in the UK used Lean UX to improve citizen engagement by iteratively refining the interface based on user feedback, resulting in a 25% increase in user satisfaction and a 15% reduction in support queries. Similarly, a healthcare system redesign in Canada applied Lean UX to develop an accessible patient portal, reducing user errors by 30% through continuous testing with diverse user groups (Alberti & Brajnik, 2020). In the context of internal auditing, a Lean UX approach was used to enhance a financial oversight platform in Australia, where iterative prototyping improved auditor-auditee collaboration, leading to a 20% increase in compliance rates (Aman et al., 2025). These cases demonstrate Lean UX's ability to create user-centric, impactful solutions by prioritizing feedback and iterative improvement, making it an ideal framework for addressing SiMAWAS's communication limitations.

The urgency of this intervention is clear. The Inspectorate's success in fulfilling its supervisory role depends on effective communication and collaboration with auditees. (Yanuarisa et al., 2025b). Without a consultation feature, SiMAWAS risks becoming a static tool, reducing auditee engagement and hindering governance improvements. (Fadrial et al., 2024) The lack of an accessible communication channel also perpetuates inequities, leaving under-resourced auditees without adequate support. (Shafie et al., 2023). By integrating a Lean UX-designed consultation feature, the Inspectorate can transform SiMAWAS into a platform that fosters trust and strengthens relationships with stakeholders, aligning with the broader goals of digital governance.

This research aims to address this gap with a comprehensive approach. Its objectives are: (1) to analyze SiMAWAS's current communication model, identifying limitations and user pain points, (2) to design an Online Consultation Service feature using Lean UX principles, ensuring security, accessibility, and responsiveness to auditee needs, and (3) to contribute to the literature on e-Government and public trust by integrating these concepts into a unified framework for improving digital audit platforms (Lermen et al., 2023): The study will provide the Pekalongan Regency Inspectorate with an actionable blueprint for SiMAWAS, offering a scalable model for other local governments in Indonesia and beyond. (Patergiannaki & Pollalis, 2023) By adopting a user-centered approach, this research aims to advance e-Government discourse and

strengthen the Inspectorate's role in transparent, accountable governance (Daniore et al., 2025; Tjandra et al., 2024).

2. Methods

This research employed a design-based research approach framed by the Lean User Experience (Lean UX) methodology to design and test an online consultation feature on the SiMAWAS system. Lean UX was chosen because it encourages rapid iteration, cross-functional collaboration, and minimal documentation—an approach that has proven effective in increasing the alignment of solutions with user needs across various software projects, including public sector applications (Moreira et al., 2023).

The research process followed the iterative Lean UX cycle, which consists of three main phases: Think, Design, and Test, as illustrated in Figure 1. This study was conducted in two iteration cycles to ensure significant improvements, aligning with best practices in iterative design for e-Government systems (Adinegoro et al., 2023).

Figure 1. The Research Stages Cycle Using Lean UX

2.1. Phase 1: Think (Declare Assumptions)

This initial phase is the starting point of the Lean UX process, focusing on declaring assumptions and understanding the problem. This was achieved through collaborative workshops with key stakeholders, including Inspectorate auditors and OPD staff, to ensure alignment with user needs and governance objectives (Daniore et al., 2025). The phase consists of four main activities:

2.1.1. Problem Statement

The team first defined the problem statement to create a shared understanding of the project's goals, drawing on methodologies used in public sector innovation .This was based on three criteria: the current system's objectives, issues stakeholders wished to address, and explicit requests for improvement, informed by studies on e-Government system limitations (Feleke & Lessa, 2024). The formulation was guided by questions such as: Who are the users? What problem are we solving? When and how will the application be used? These questions align with user-centered design principles (Abdulkareem & Mohd Ramli, 2021).

2.1.2. Hypothesis

The assumptions from the problem statement were converted into falsifiable hypotheses, following frameworks used in Lean UX for public service platforms

(Teixeira & Zaina, 2022). Each hypothesis followed a specific format to clarify the belief, the expected outcome, and the validation metric, structured as follows: We believe that [achieving this outcome] for [these users] will be possible with [this feature]. We will know this is true when we see [this measurable signal]. This approach ensured hypotheses were testable and tied to governance outcomes.

2.1.3. Proto-Personas

Based on the initial assumptions, the team created proto-personas to represent the target users (auditors and OPD staff), a widely used Lean UX method for efficiently modelling user needs. Unlike traditional, heavily researched personas, proto-personas are based on the team's existing knowledge and assumptions, making them suitable for rapid iteration in resource-constrained settings (Djatmiko et al., 2025). They were created using a four-quadrant template:

Figure 2. Template Proto Persona

2.1.4. Feature Brainstroming

Finally, the team brainstormed potential features to address the needs identified in the proto-personas, ensuring alignment with e-Government goals of transparency and engagement (Mensah & Mwakapesa, 2025). Each feature was framed as a hypothesis to ensure it was tied to a specific user outcome, drawing on collaborative ideation techniques.

2.2. Phase 2: Design (Create & Experiment)

In this phase, the team translated the hypotheses into tangible solutions, leveraging design practices from successful e-Government projects (Gunawan et al., 2023).

2.2.1. Style Guide

Before creating the prototype, a style guide was established to ensure visual consistency, referencing best practices from Google Material Design and Apple's Human Interface Guidelines. It defined core visual elements such as colours, typography, spacing, grids, buttons, forms, and icons, ensuring accessibility and usability for diverse users (Wazin et al., 2025).

2.2.2. Minimum Viable Product (MVP)

The core activity was creating an MVP to test the primary hypotheses, a strategy validated in Lean UX for rapid validation (Alhammad & Moreno, 2022). In this research, the MVP took the form of a high-fidelity, interactive prototype built in Figma, a tool widely used for e-Government interface design. It was designed to be the smallest possible experiment to validate or invalidate the initial assumptions, minimizing resource waste.

2.3. Phase 3: Test & Feedback

This phase focused on gathering feedback to refine the design through iterative testing, a critical step in ensuring user-centric outcomes.

2.3.1. Internal Testing: Cognitive Walkthrough

Each iteration began with a Cognitive Walkthrough conducted by three experienced UX evaluators, a method proven effective for identifying usability issues in public sector systems. This inspection method assessed the prototype's learnability by having evaluators complete a series of realistic tasks while answering four key questions:

a. Will the user try to achieve the right effect? (Is the action's purpose clear?)
b. Will the user notice that the correct action is available? (Is the control visible?)
c. Will the user associate the correct action with the effect they are trying to achieve? (Does the control's label match the user's goal?)
d. If the correct action is performed, will the user see that progress is being made toward their goal? (Is the feedback adequate?)

Priority recommendations from the walkthrough were immediately implemented before the next round of testing, ensuring iterative improvement. This process was informed by studies on usability testing in governance platforms.

2.3.2. External Evaluation: System Usability Scale (SUS)

After two full Lean UX cycles, the final revised prototype was tested with 30 end users (auditors and OPD staff) to assess its perceived usability, following industry standards for e-Government evaluation (Cheong et al., 2022). The System Usability Scale (SUS) was chosen for its reliability and efficiency, widely used in assessing public service interfaces (Abrory, Kamil, et al., 2025).

a. The final SUS score (ranging from 0 to 100) was calculated as follows:
b. For odd-numbered items (1, 3, 5, 7, 9), subtract 1 from the user's score.
c. For even-numbered items (2, 4, 6, 8, 10), subtract the user's score from 5.
d. Sum the new values for all 10 items and multiply the total by 2.5.

The sample size of 30 follows industry recommendations for reliable measurement. An average SUS score of ≥ 80 (Grade B, "Excellent" adjective rating) was set as the acceptability threshold, aligning with benchmarks for public sector usability. Iterations were halted once this threshold was met and over 90% of critical issues from the walkthroughs were resolved (Wazin et al., 2025).

3. Results and Discussion

In this study, we evaluated the impact of the implementation of the Supervisory Management Information System (SiMAWAS) on governance in Pekalongan Regency,

particularly in improving efficiency and transparency in supervision. To assess the impact of these changes, comparative data before and after the implementation of SiMAWAS was collected through interviews with two main groups directly involved in the use of this system, namely the Internal Government Supervisory Apparatus (APIP) and Auditi. These findings are reinforced by regulations such as Government Regulation (PP) No. 60 of 2008 on the Government Internal Control System (SPIP), which mandates APIP to conduct audits, evaluations, and monitoring for efficient governance.

The sources of the interviews included:

a. Pekalongan Regency Inspector - who plays an important role in supervision and strategic decision-making related to the implementation of SiMAWAS.
b. Head of Planning and Head of Analysis and Evaluation - who are involved in planning and evaluating the results of supervision and monitoring the implementation of SiMAWAS.
c. Auditor/PPUPD - responsible for conducting oversight and monitoring follow-up actions on oversight results.
d. Auditees from Kraton General Hospital and Kajongan Village - the entities being monitored, involved in the follow-up process, and directly benefiting from SiMAWAS.

The following is a clear comparison between the conditions before and after the implementation of SiMAWAS:

Table 1. Comparison Before and After the Implementation of SiMAWAS

Aspect	Before	After
Planning	Manual entry in MS Excel and Word, data is not well-organized	Planning data has been digitized, is more structured and accurate, and can be monitored in real time.
Implementation	Manual via paper records/Excel; supervision without real-time monitoring, prone to errors and delays.	Real-time via the iKegiatan sub-system; online entry of findings/cause and effect/recommendations; weekly notifications via WhatsApp/Email for structural officials
Monitoring	Manual monitoring is prone to data entry errors and is not accurately monitored. Monitoring is done more slowly and often involves more resources.	More structured monitoring that is directly accessible to relevant parties, using real-time data. The monitoring process is faster and more resource-efficient, with less involvement in manual processing.
Reporting	Reports that have not been digitized make access and verification difficult. It takes a long time to access and process report data.	More accurate data that is processed faster thanks to digitization. Faster reporting processes with automated system integration, minimizing processing time and data errors.
Evaluation	Supervision evaluation is suboptimal due to incomplete or delayed data. The evaluation process requires a long time for data collection and processing.	More accurate data-based evaluation using structured, real-time monitoring reports. Faster data collection and efficient report processing with an integrated system.

Although the implementation of SiMAWAS has brought positive changes to the oversight process, interviews with APIP and Auditee indicate that there are still communication gaps between the two parties that need to be addressed. Auditees sometimes have difficulty accessing information related to oversight findings or recommendations. Interactions between the Inspectorate and auditees are still often conducted through inefficient communication channels, such as email or face-to-face meetings, which take longer and do not always allow for quick responses. Based on these findings, we propose adding a consultation feature that allows auditees to ask questions or request clarification directly through the SiMAWAS platform. This feature will enable faster, more transparent, and centralized conversations, thereby improving collaboration between the Inspectorate and auditees. This online consultation feature will be developed using a Lean UX approach focused on rapid iteration, continuous

feedback, and cross-team collaboration, going through three main phases of development:

3.1. Think Phase

The Problem Statement of the SiMAWAS project successfully gathered valuable data through documentation studies, interviews, and observations, identifying critical issues in the system's unidirectional communication model (Budiono et al., 2022). The findings highlighted logistical barriers, delayed clarifications, and decentralized documentation, all of which hinder the Inspectorate's consultative role and e-Government objectives of transparency and engagement (Alberti & Brajnik, 2020; Fadrial et al., 2024).

From the existing problem statement, the following hypothesis is derived:

"It is expected that with the integration of a two-way online consultation feature in SiMAWAS, stronger consultative collaboration and better understanding of audit findings will be achieved for auditees."

Next is the creation of a poto persona. The main focus is on two key user groups: auditees from village governments, who often face limitations in administrative capacity in rural areas, and auditors (APIP) as facilitators of oversight. These proto-personas help validate assumptions about the need for two-way communication in SiMAWAS, ensuring that the design of the online consultation feature is more inclusive and effective.

This proto-persona represents users at the village level or in smaller units with limited technological access, who often struggle to obtain clarification on audit findings due to the one-way communication in SiMAWAS.

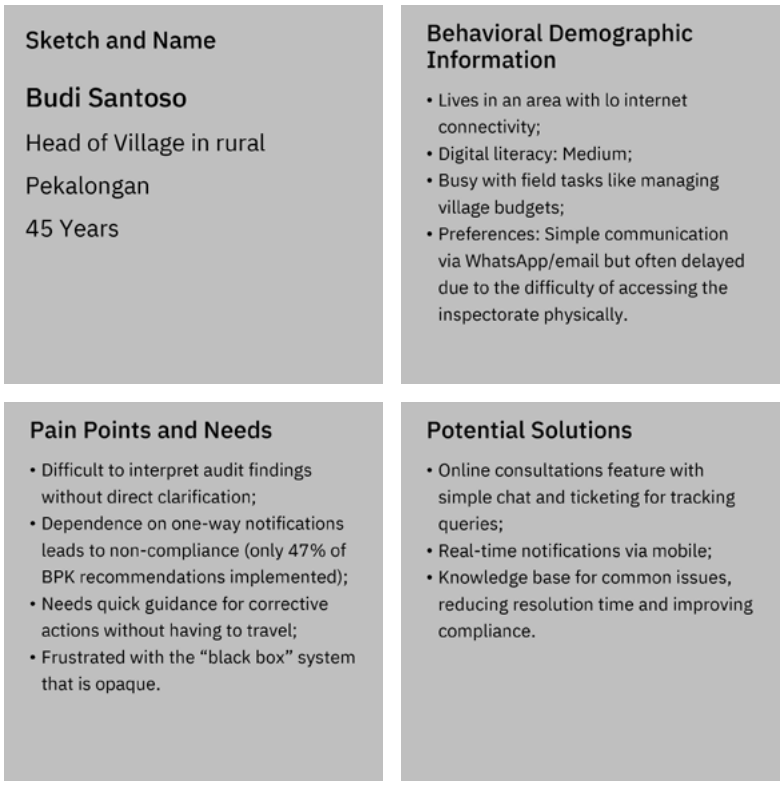

Figure 3. Proto Persona Auditi

This proto-persona also represents auditors as core users who require collaborative tools to transition from traditional oversight roles to management consultants, in line with the paradigm shift at the Pekalongan Inspectorate.

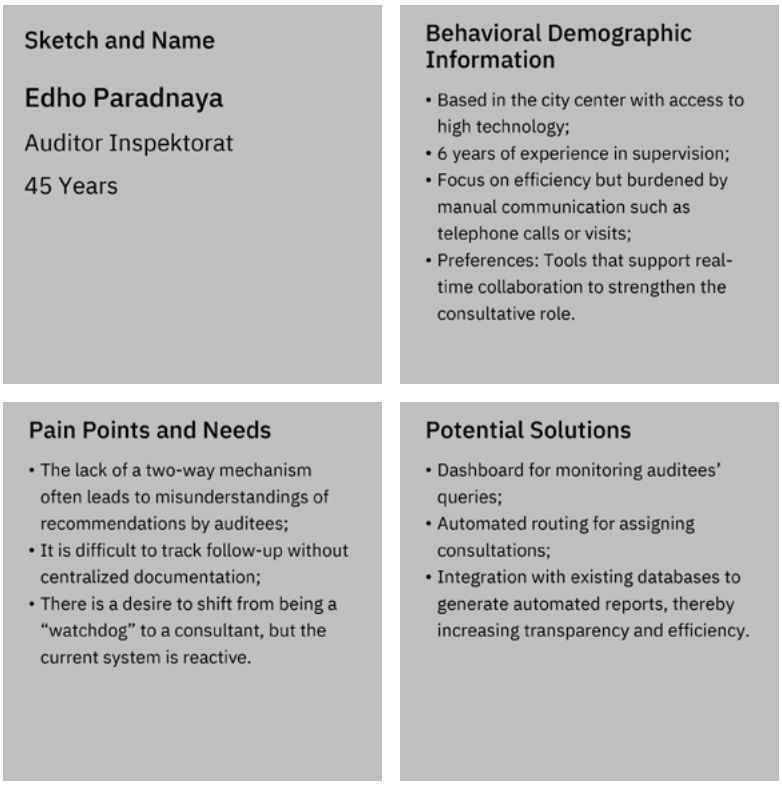

Figure 4. Proto Persona Auditor

The above process produces several key features as follows:

Table 2. Main Components of SiMAWAS Consultation Feature

No.	Component	Function
1	Consultation Form	Allows auditees to input the type of consultation, describe the problem, and propose an action plan.
2	Routing to Inspectorate Division	Automatically directs the request to the relevant Inspectorate Division (Irban) based on the consultation type.
3	APIP Process	Enables auditors (APIP) to review, respond to, and manage consultation requests.
4	Tracking	Provides auditees with real-time status updates on their requests: "Sent" → "In Process" → "Completed".
5	Notification	Sends automated notifications to auditees via WhatsApp or email when the status changes.

This table provides a clear overview of the proposed functionality, covering essential elements such as form submission, request routing, auditor processing, status tracking, and notifications. The components aim to streamline communication and documentation, addressing issues like delayed clarifications and decentralized records (Tjandra et al., 2024).

3.2. Design Phase

A high-fidelity prototype was created using Figma as a Minimum Viable Product (MVP)

3.2.1. Consultation Form

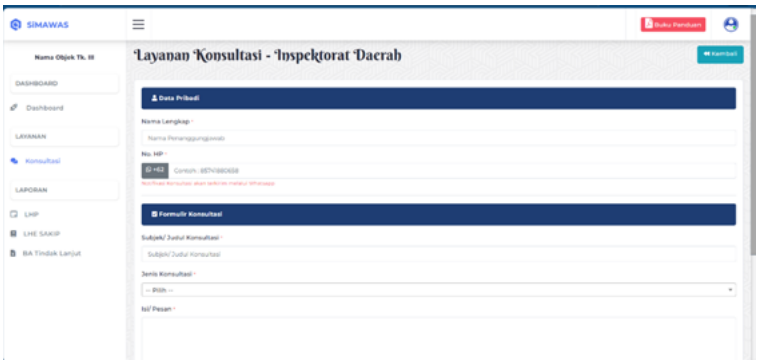

Figure 5. UserInterface Consultation Form

Allows the auditee to enter the sender's personal details including their WhatsApp number so that notifications can be sent, the type of consultation can be selected, the problem can be explained, and an action plan can be proposed.

3.2.2. Routing to Inspectorate Division

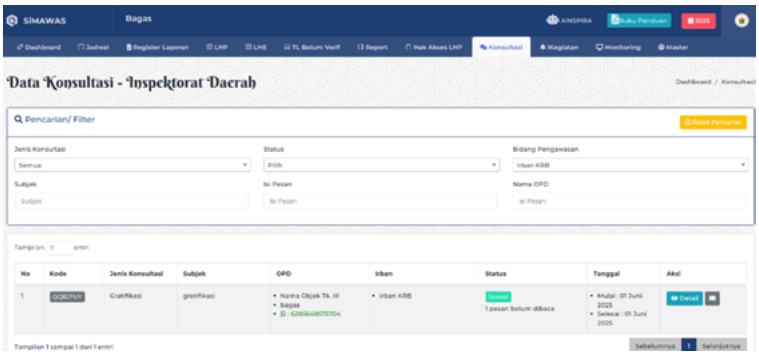

Figure 6. UserInterface Automating Routing to Inspectorate Division

As in the example of issues related to gratuities, they will be automatically routed to the Performance Monitoring and Bureaucratic Reform Division.

3.2.3. APIP/Auditor Process

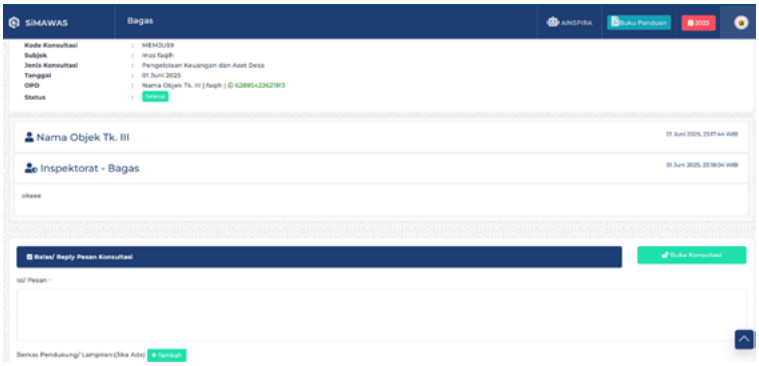

Figure 7. User Interface Responses Consultation From APIP/Auditee

Enables auditors (APIP) to review, respond to, and manage consultation requests submitted by auditees.

3.2.4. Tracking

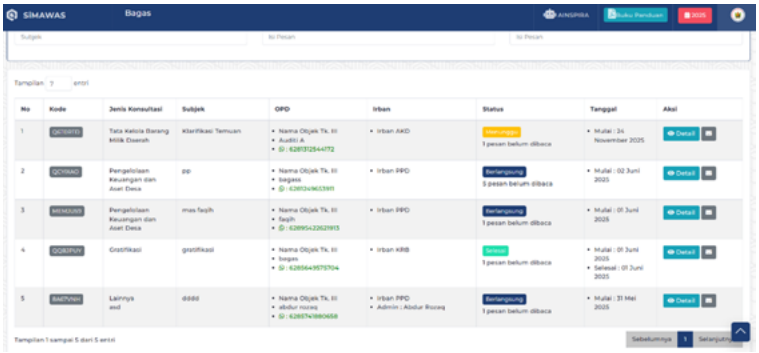

Figure 8. User Interface Consultation Tracking Feature From Auditor

Provides auditees with real-time status updates on their requests: “Sent” → “In Process” → “Completed”.

3.2.5. Notification

Figure 9. Notification via WhatsApp From the System

Send automatic notifications to the audited party via WhatsApp when the status changes according to the number listed on the consultation form.

The Design phase of the SiMAWAS project produced a detailed high-fidelity prototype for the Online Consultation Service. These elements demonstrate an effort to address the communication gap identified in the Think phase, aiming to enable secure and accessible two-way communication.

3.3. Test Phase: Testing and Iteration

The Test phase in Lean UX focuses on validating the prototype with users, collecting feedback, and iterating the design to improve usability and alignment with user needs (Gothelf, 2013; Moreira et al., 2023).

3.3.1. First Iteration: Cognitive Walkthrough

The Cognitive Walkthrough identified 12 critical usability issues, including:

Table 3. Critical Usability Issue

ID	Problem Description
CW-01	Inter-page navigation is inconsistent; users find it difficult to return to the main page after accessing sub-menus.
CW-02	Some buttons use technical language
CW-03	The consultation form is too complex and lengthy without instructions on how to fill it out.
CW-04	There are no instructions on the service process flow (content–send–follow up–response).
CW-05	The system does not provide confirmation after the “Send” button is pressed.
CW-06	Icons and symbols are not intuitive and lack tooltips.
CW-07	Small font size and low color contrast.
CW-08	The error message does not explain which part of the form is incorrect.
CW-09	There is no save draft feature on the consultation form.
CW-10	There is no feature to add supporting files in the consultation room chat.
CW-11	No help or contextual guidance features are available.
CW-12	System performance is slow on limited internet networks.

Several recommendations have been implemented based on these findings, including adding a user guide button, simplifying menu navigation, and optimizing performance for low bandwidth conditions. These changes aim to improve the usability and accessibility of the prototype, especially for auditees with limited technological resources.

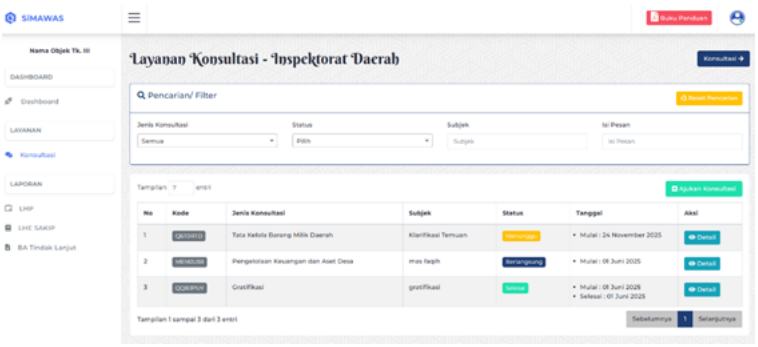

Figure 10. Addition of a Website User Guide Button

Here, a guidebook button has been added. This guidebook can be downloaded by users, both auditors and auditees, in PDF format to resolve issues found in the cognitive walkthrough in order to optimize the use of the SiMAWAS website, especially with the addition of this consultation feature.

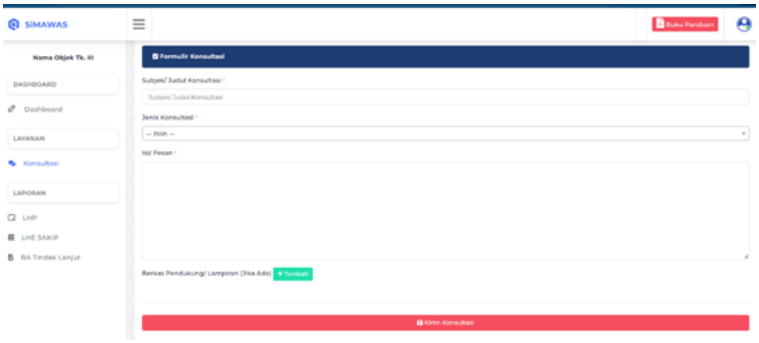

Figure 11. Addition of a Feature to Add Supporting Documents for Consultation

The consultation form also includes a feature for uploading files containing supporting documents for consultation requests.

3.3.2. Second Iteration: System Usability Scale (SUS) Evaluation

Following the initial revisions, the prototype was evaluated by 30 end-users, consisting of 15 auditors and 15 OPD staff, using the System Usability Scale (SUS).

Table 4. SUS Score

Respondent	SUS Score	Source
R1	87,5	Inspectorate
R2	82,5	Inspectorate
R3	87,5	Inspectorate
R4	77,5	Inspectorate
R5	85	Inspectorate
R6	75	Inspectorate
R7	92,5	Inspectorate
R8	87,5	Inspectorate
R9	77,5	Inspectorate
R10	87,5	Inspectorate
R11	60	Waru Kidul Village
R12	95	Inspectorate
R13	72,5	Regional Secretariat
R14	90	Health Service
R15	77,5	Inspectorate
R16	77,5	Inspectorate
R17	67,5	Inspectorate
R18	85	Inspectorate
R19	90	Langkap Village
R20	87,5	Sijambe Village
R21	92,5	Mesoyi
R22	75	SMPN 2 Karanganyar
R23	87,5	Dororejo Village
R24	80	Pegandon Village
R25	82,5	Legokkalong Village
R26	72,5	Sragi 2 Community Health Center
R27	85	Brengkolang Village
R28	92,5	Sambiroto Village
R29	82,5	SMPN 4 Bojong
R30	82,5	Depok Village
TOTAL SUS	**82,5**	

The average SUS score was 82.5, corresponding to a Grade B (“Excellent” adjective rating) and exceeding the project’s acceptability threshold of ≥80. The SUS score indicates that the prototype was generally perceived as usable, with 66.7% of respondents rating it above 80, suggesting a positive user experience for the majority.

The high scores reflect improvements made after the Cognitive Walkthrough, such as simplified navigation and added tooltips, which likely enhanced the interface's clarity. This reflects that the results of the consultation feature design have fulfilled the solution to the problems in the existing hypothesis.

4. Conclusion

This research aimed to address the challenges in internal supervision processes within Pekalongan Regency's government by developing the Consultation Service feature in the SiMAWAS system. The feature was designed to create an effective, secure, and real-time channel for supervision, incorporating a consultation form, status tracking, APIP handling, and an automated notification system. This design improves the speed and transparency of the consultation process, ultimately enhancing user participation from OPDs, sub-districts, and villages as auditees. By adopting an information technology-based approach, this feature facilitates direct involvement in the internal supervision process and contributes to the realization of accountable governance. The Consultation Service feature facilitates two-way communication, which is essential for optimizing the internal supervision process. Effective two-way consultation enables timely clarification, fosters collaboration between auditors and auditees, and ensures that audit recommendations are clearly understood and implemented. This interactive dialogue enhances transparency, accountability, and user engagement, ultimately leading to more efficient and trustworthy governance.

For the Consultation Service feature to be effective, it is crucial to involve all relevant stakeholders, such as OPDs, sub-districts, and villages, from the design stage to ensure their needs are met. Furthermore, regular training and socialization should be conducted to ensure that users can fully utilize the feature. Ongoing system evaluation is also necessary to gather feedback for continuous improvement. As a policy recommendation, local governments should implement needs assessment, continuous training, and system evaluations to enhance adoption and effectiveness. This approach will support the creation of a transparent and accountable internal supervision process in Pekalongan Regency, ultimately contributing to better governance.

Acknowledgment

Here we would like to thank all those who have contributed to the preparation of this article, especially the lecturers in the IPDN government information engineering technology study program and ASN in the Inspectorate of the Pekalongan district.

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