



IMPLEMENTATION OF THE SIMBG APPLICATION TO IMPROVE THE QUALITY OF BUILDING PERMIT SERVICES AT THE INVESTMENT AND ONE-STOP INTEGRATED SERVICES OFFICE IN PALU CITY, CENTRAL SULAWESI

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Abstract

This study aims to analyze the quality of building permit and approval services in the implementation of the Building Management Information System (SIMBG) application at the Palu City Investment and One-Stop Integrated Services Agency (DPMPTSP), Central Sulawesi. The study used a qualitative approach with a service quality theory that encompasses speed, accuracy, convenience, and fairness. The research method used qualitative methods with data collection techniques through observation, interviews, and documentation. This study utilized the theory of Taliziduhu Ndraha (2003) with aspects of speed, accuracy, convenience, and fairness. Informants consisted of officials from the Palu City Investment and One-Stop Integrated Services Agency and permit applicants. The results showed that the SIMBG application provides convenience and fairness in the service process, as it is easily accessible to applicants. The fairness aspect itself provides good treatment for applicants because it is regulated by the existing system. However, the speed aspect is not optimal due to technical constraints, such as

network and power outages resulting in suboptimal network performance. This is also a frequent complaint by applicants, such as system disruptions that must be addressed quickly, of course, with the availability of human resources or experts in the field of information technology. The findings of this study can be a basis for local governments to improve and perfect digital-based service systems. To improve this, the government is also expected to provide funds for system maintenance and human resource development or experts, so that they are able to create more efficient, inclusive, and sustainable services.

Keyword : implementation, public services, SIMBG

1. Introduction

Public services are one of the government's primary functions in meeting public needs. In the context of development, building permits are a crucial aspect influencing the orderly and ongoing progress of physical development in accordance with laws and regulations. Building permits serve as an instrument to ensure that the building construction process meets established technical, aesthetic, and spatial planning standards. Therefore, building permit services play a strategic role in supporting sustainable and orderly development.

In an effort to improve service quality, the Indonesian government has adopted a digital technology-based approach. One important innovation in the building permit sector is the implementation of the Building Management Information System (SIMBG) (Amelia, 2023). The SIMBG application is designed to simplify the process of submitting and managing building permits, thereby reducing bureaucratic hurdles, increasing transparency, and accelerating service times. Through this application, the public can apply for building permits online, monitor the progress of the permit process, and receive permit decisions without having to visit the service office in person.

Building permits play a crucial role in supporting sustainable development governance. As a regulatory instrument, building permits play a role in ensuring that building construction is carried out in accordance with safety, health, comfort, and spatial planning standards. Furthermore, the permit process also serves as a government control mechanism for spatial planning violations and inappropriate land use.

However, in practice, building permit services often face various challenges. In some regions, the building permit application process is still carried out manually with cumbersome procedures, resulting in significant time delays. This situation

often generates complaints from the public and is an indicator of the low quality of public services. Therefore, innovation in the service system is needed to overcome these bureaucratic obstacles (Rahayu, 2022).

At the regional level, the Palu City Investment and One-Stop Integrated Services Agency (DPMPTSP) is one of the agencies that has adopted the SIMBG application. This transformation aims to improve the efficiency and effectiveness of building permit services in Palu City. The implementation of the SIMBG application is expected to provide convenience for the public, strengthen service accountability, and support government programs to accelerate infrastructure development.

However, the adoption of technology in public services is not without its challenges. Some frequently encountered obstacles include technical issues, such as system instability, limited technological infrastructure, and uneven digital literacy levels among the public. Furthermore, the readiness of human resources in government agencies is also a critical factor influencing the successful implementation of the SIMBG application. Therefore, a comprehensive evaluation is needed to assess the extent to which the SIMBG application can improve the quality of building permit services in Palu City, Central Sulawesi.

This study aims to analyze the quality of building permit services through the SIMBG application at the Palu City DPMPTSP. The analysis is based on the theory of service quality, which encompasses four main dimensions: speed, accuracy, convenience, and fairness. This study is expected to provide an empirical overview of the effectiveness of SIMBG use and provide recommendations for improving the quality of public services in Palu City.

2. Literature Review

The Building Management Information System (SIMBG) is a web-based electronic system for managing Building Permits (PBG), Building Permits (SLF), Building Permits (SBKKBG), and Building Permits (RTB). It is managed by the Directorate General of Human Settlements and is accessible through the official website <https://simbg.pu.go.id/>. SIMBG aims to create transparent, effective, and efficient licensing services nationally. SIMBG's implementation is supported by Government Regulation No. 16 of 2021, which replaces the Building Permit (IMB).

Definition and Function: SIMBG is an integrated licensing portal for managing Building Permits (PBG), Building Permits (SLF), Building Ownership Certificates (SBKKBG), Demolition Technical Plans (RTB), and building data collection. The Universitas Dinamika Bangsa Repository is based on the laws and regulations related to building management, particularly Government Regulation No. 16 of 2021, which regulates the procedures for obtaining a PBG as a replacement for a Building Permit (IMB).

3. Methodology

This research uses a qualitative descriptive approach to analyze the quality of building permit services through the SIMBG application in Palu City. This method was chosen because it provides an in-depth understanding of the application's implementation and public perceptions of the quality of services provided (Creswell, 2018). The following are the research steps:

Research Location: The research was conducted at the Capital Investment and One-Stop Integrated Services Agency (DPMPTSP) of Palu City, Central Sulawesi, as the agency responsible for building permit services through the SIMBG application.

Research Informants: The research informants were

selected using a purposive sampling technique: DPMPTSP employees directly involved in managing the SIMBG application; the public or SIMBG application users who have submitted building permit applications; and other relevant parties, such as developers and technical agencies that collaborate in the permit process.

Data Collection Techniques were collected through in-depth interviews, conducted to obtain direct information from informants regarding the implementation and obstacles in using the SIMBG application, Participatory observation Observing the service process at the DPMPTSP Palu City, Central Sulawesi to understand the workflow and use of the application directly, Documentation Collecting secondary data in the form of reports, application usage guides, and regulations related to building permits.

4. Results and Discussion

The results of this study indicate that the SIMBG application has significant potential to improve the quality of public services in PBG licensing. However, successful implementation of this system requires ongoing efforts to address technical, social, and infrastructure challenges. These findings can provide important input for local governments in formulating more inclusive and effective digital-based service policies.

Table 1 Number of Service Applicants

Year	Number of PBG Applicants (Resolved)
2022	463
2023	483
2024	797
2025	992

Source: Palu City Investment and One-Stop Integrated Services Office

Based on the table above, the application's implementation has consistently increased over the years from 2022 to 2025. A significant increase occurred in 2023 to 2024, with an increase of approximately 314 applicants, compared to only 195 applicants from 2024 to 2025, with an average of 100 applicants. The application has created convenience for the public seeking PBG permits.

Speed

Research results show that implementing the SIMBG application can accelerate the permitting process compared to manual methods. Users can access the service at any time without having to visit the DPMPTSP office in person. Permit processing times are also more measurable due to the digital system that automatically processes data according to established standards. However, technical obstacles often arise, such as network issues and the public's lack of understanding of SIMBG technology, which can result in the permitting process exceeding the target.

Accuracy

The digital system in the SIMBG application allows for more accurate data input, reducing the risk of human error. However, technical challenges such as system errors and inconsistencies in user-uploaded data remain, requiring ongoing evaluation to minimize disruptions.

Convenience

The SIMBG application is considered to significantly simplify the permit application process for the public. This convenience is particularly felt by those who are

technologically literate and have adequate internet access. However, for some users who are less familiar with technology or who live in areas with limited internet access, the application remains a challenge.

Equity

Services through the SIMBG application are generally considered fair because all applicants are treated equally based on the data uploaded without manual intervention. However, gaps in technological literacy and internet access among the public are issues that need to be addressed to ensure that this service is accessible to all levels of society.

Discussion

Research on the quality of Building Approval (PBG) licensing services through the SIMBG application at the Palu City Investment and One-Stop Integrated Services Agency (DPMPTSP), Central Sulawesi, yielded important findings that highlight the quality and challenges of implementing technology in public services. The current research focuses on analyzing the quality of Building Approval (PBG) licensing services through the SIMBG application at the Palu City Investment and One-Stop Integrated Services Agency (DPMPTSP). Using indicators of speed, convenience, accuracy, and fairness, this study aims to measure the extent to which the SIMBG application meets public expectations and identify challenges faced in its implementation.

The fundamental difference between this study and previous research lies in its focus on the SIMBG application as a digital innovation specifically in the building permit sector. While previous research has tended to discuss the general application of technology in public services, this study more specifically explores the quality of the SIMBG application in Palu City, taking into account the

local context, such as technological infrastructure readiness, employee competency, and public response.

Speed

Speed of service is an important indicator in measuring the quality of public services. This study found that the speed of building permit processing through the SIMBG application in Palu City showed improvements compared to the previous manual method. The permit application process, which previously took an average of 20 working days, can now be completed in 10 working days. The public also experienced the benefits of digitalization, which allows them to submit permit applications online without having to visit the service office in person. However, the study showed that despite this progress, the service speed has not yet reached the established Minimum Service Standard (SPM) target of five working days.

Several obstacles were identified as contributing to the suboptimal speed indicator. The first obstacle was technological limitations. The SIMBG application server frequently experienced downtime, especially during peak periods, such as the beginning and end of the year, when the number of users increased. This problem resulted in delays in processing permit applications. Furthermore, uneven internet connections in some areas of Palu City hampered efficient access to the application. This situation was particularly felt by residents living in outlying areas with inadequate internet infrastructure.

Limited human resources at the Palu City DPMPTSP also contribute to service speed issues. The limited number of experts is unable to keep up with the surge in permit applications that occurs during certain periods. Furthermore, not all employees have sufficient technical expertise to operate the SIMBG application optimally, resulting

in slower service delivery.

To address these challenges, several improvements are needed. One solution is to increase the application server capacity to handle a larger number of users, especially during peak periods. Providing free internet access in certain locations can also assist those with limited access. Optimizing the application system through the development of an automatic validation feature can reduce the time required for document verification. This minimizes manual staff involvement, resulting in a more efficient service process.

Furthermore, increasing human resource capacity is crucial. The DPMPTSP needs to add experts to address the backlog of applications and provide further training to employees to improve their skills in utilizing the SIMBG application's features. With these measures, service speed is expected to significantly improve, meeting established service standards and providing maximum benefits to the Palu City community.

Accuracy

The accuracy of building permit services through the SIMBG application in Palu City has demonstrated optimal results in various aspects, particularly in ensuring that decisions made align with community needs and applicable regulations. This digital system enables more accurate data processing compared to manual methods, thereby reducing the risk of previously common administrative errors. The integrated technical evaluation process within the application ensures that permit applications are thoroughly reviewed according to established standards.

The application's ability to provide clear and specific information to the public is also an indicator of good service accuracy. The public can easily understand document requirements, process flows, and technical criteria through the guidance provided within the application. This helps reduce non-compliant applications, speeding up the approval process and minimizing the need for document revisions.

The success in maintaining service accuracy is also supported by an automated validation system designed to check the completeness and accuracy of data uploaded by users. This process helps ensure that only correct and relevant data is processed further, reducing the potential for errors due to manual oversight. Furthermore, this mechanism provides convenience to the public because they can immediately identify any deficiencies in their applications.

Another factor supporting accuracy is the reliability of the human resources managing the application. Palu City's DPMPTSP employees have been trained to understand how to use the SIMBG application, including handling technical evaluations that require in-depth interpretation of regulations. This way, the decision-making process can be carried out consistently and objectively, assuring the public that their applications are processed with the highest level of professionalism.

Furthermore, service accuracy is also reflected in the application's ability to manage data and information in real time. This enables the public to receive permit decisions without unnecessary delays, while also providing confidence that the process they are going through fully complies with regulations and technical standards. An integrated reporting system within the application also helps increase transparency, allowing the public to verify that the permit process is carried out correctly and without irregularities.

These results indicate that service accuracy through the SIMBG application has achieved maximum standards. Although minor challenges remain, such as the need for more timely regulatory updates, the overall system has been able to meet public expectations and support the creation of quality public services in Palu City.

Ease of Use

Indicators of optimal ease of use can be seen from several interrelated aspects. First, good accessibility is a crucial element, where services or systems must be easily accessible to all users, regardless of location or device. If a system is widely accessible and not limited

to a specific device, then ease of access has been achieved (Hamzah, 2020).

Furthermore, a simple and easy-to-use system or service is a key indicator. Users don't need to complete multiple steps or search for complex information, as all necessary elements are clearly organized and structured. Users can easily understand how to use the service, even without special training. This demonstrates that the system has been designed to ensure simplicity.

Intuitive navigation is also crucial. A system designed with easy-to-understand navigation allows users to quickly find the information or features they need without feeling confused or frustrated. A clear and understandable interface design significantly supports this, making the user experience more efficient and enjoyable.

Furthermore, a reliable system, one that functions without technical glitches, demonstrates maximum usability. When users encounter no obstacles or technical errors, they perceive the system or service as completely reliable. Ease of access to relevant and clear information is also an equally important indicator. Users can easily obtain the information they need without having to search for it for too long or being confused by irrelevant information. This demonstrates that the system or service provides clear and transparent access for its users.

Flexibility of use is another indicator of maximum usability. Services that can be tailored to user needs provide greater convenience because they allow users to tailor their experience to their individual preferences. This gives users a sense of freedom in accessing services. A quick response to user actions or requests is also part of maximizing ease of use. Users who receive a prompt response from the system feel more valued and well-served. This enhances the overall user experience and indicates that the system is working effectively.

Finally, the alignment between user expectations and what the system provides is a key indicator. When users perceive that a service or system meets their expectations in terms of ease of use, it is certain that the

ease of use indicator has been achieved. All of these elements, well-integrated, form a service that is easy for users to access, use, and enjoy without any significant obstacles or difficulties.

Justice

Indicators of optimal justice can be seen from various aspects that ensure that all parties involved are treated fairly and equally. One key aspect is the equitable distribution of resources or services (Alamsyah, 2020). When services or policies are implemented fairly, their benefits will be felt by all entitled parties, without discrimination or inequality. Resources, whether assistance, information, or facilities, must be distributed based on the needs or rights of each individual or group, not based on personal preferences or positions of power.

Furthermore, transparent and clear decision-making procedures are crucial to ensuring fairness. Users or the public must clearly understand how decisions are made and the legal or policy basis for them. When these procedures are transparent, all parties feel valued and treated fairly, as no one feels they are being treated arbitrarily or inconsistently with applicable regulations.

The next aspect is equality of treatment. Every individual or group must be treated equally, with no preferential treatment given to any party unless there is a specific need that must be met. In the context of public services or government policies, this means that all parties have equal opportunities to access and utilize existing services, without artificial barriers or bias in the process.

The provision of fair legal rights and protection is also an important indicator of justice. Every individual or group should have equal rights to file claims or resolve disputes, with equal access to legal institutions and dispute resolution. When the legal system functions well and delivers justice

without discrimination, justice in society or the service in question can be considered optimal.

Responsiveness to complaints or dissatisfaction also indicates the extent to which justice is implemented. Fair services or policies focus not only on equal distribution but also on how problems or injustices arise (Ismail, 2023). When complaints are processed quickly and fairly, and corrective actions are taken in accordance with applicable regulations, this demonstrates that the system adheres to the principle of justice.

Respect for human rights is also an indicator of optimal justice. When a system or service guarantees the basic rights of every individual without any violations, this demonstrates a commitment to justice. All parties should feel secure and respected in their rights, without fear of discrimination or unfair treatment.

Overall, maximum justice is achieved when all elements within a system or policy ensure that all parties are treated equally, with respect for their rights, and transparency and equity in the decision-making process. Thus, justice is not only about what is provided, but also how it is provided and how it is accounted for to all parties.

5. Conclusion

This study focuses on analyzing the implementation of the SIMBG application to improve the quality of building permit services at the Investment and One-Stop Integrated Services Office in Palu City, Central Sulawesi. This study aims to evaluate the implementation of the SIMBG application based on indicators of speed, accuracy, ease of use, and fairness of service, as well as to identify challenges faced in implementing this system.

The results show that the SIMBG application significantly improves the speed and accuracy of services, thereby accelerating the process of submitting and processing permit data. However, issues sometimes

arise in terms of speed, where technical issues such as network issues and users' lack of technological understanding can sometimes lead to delays of up to 21 days. Ease of access is also felt by technologically literate communities, although challenges remain for certain groups facing limited digital literacy or internet access. Furthermore, this application helps create fairness in services by minimizing manual intervention and potential discrimination. However, barriers such as technical constraints, the technology gap in the community, and the need for employee training remain issues that require attention.

This research makes an important contribution to broadening the understanding of the application of digital technology in public services, particularly in the context of building permits. The findings of this study can serve as a foundation for local governments to improve and enhance digital-based service systems, thereby creating more efficient, inclusive, and sustainable services. This research also emphasizes the importance of collaboration between government, communities, and technology providers to support effective digital transformation in public services.

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