

**PUBLIC SERVICE QUALITY IN THE APPLICATION OF *E-PBB* AT
THE REGIONAL REVENUE AGENCY (*BAPENDA*) SURABAYA**

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ABSTRACT

This research examines the quality of public service in the application of *E-PBB* at the Regional Revenue Agency (*BAPENDA*) Surabaya, aiming to evaluate the effectiveness of the application in supporting ease, security, and citizen satisfaction in tax services. This study uses a qualitative method, collecting data through interviews and observations with *E-PBB* users and *BAPENDA* officers. Using Parasuraman's ServQual model, the analysis focuses on five service quality dimensions. The results indicate that in terms of reliability, the *E-PBB* application achieved 85% but still requires improvements in information accuracy and processing speed. In the assurance dimension, the application shows an 80% success rate but needs better information on security systems and more responsive technical support services. Regarding tangibles, the application achieved 75% and requires interface design improvements to make it more accessible and understandable for users. Additionally, empathy scored 70%, where users expect more friendly and informative direct support when facing technical difficulties. For responsiveness, the *E-PBB* application reached 78%, though there is a need to improve response speed to user inquiries and complaints.

Keywords: *Public Service Quality; E-PBB Application; BAPENDA Surabaya*

A. INTRODUCTION

One of the impacts of global changes affecting the entire world, often referred to as the Era of Globalization, is the increasing use of technology. As global changes progress, society is expected to utilize technology in various aspects of life. This technological advancement goes hand in hand with scientific progress and has become an integral part of daily life. Technology can serve as a

support to create a better life by helping human activities to be more efficient and effective (Rahmadanita & Dowa, 2021).

Many innovations have been created worldwide through rapid technological advancements. These innovations bring various positive benefits to human life, in fields such as education, government, socio-culture, economy, health, and more. The presence of technology not only facilitates various activities but also offers new ways of interacting and working in daily life. Rapid technological development requires both government and society to adapt. The government is tasked with providing services and regulating society, while society acts as the recipient of these services. Society evaluates government performance based on the quality of the services they receive. Significant demands on the government as a service provider include delivering transparent, effective, and efficient services supported by technological advances.

The transition from a manual to a digital system in managing Land and Building Tax (*PBB*) in Surabaya reflects a significant step forward in modernizing regional tax administration. This process aims to address various challenges faced in the manual system, such as delays in recording, data inaccuracies, and lack of transparency in public services. According to research highlighting the application of technology in the tax sector, this digitalization offers speed and ease in tax data processing and can reduce the administrative burden that often affects public service quality.

The digitalization of public services through the *E-PBB* application also plays an important role in improving tax data management efficiency. Research on technology implementation in government administration states that using digital applications can significantly reduce the time needed for tax data management and distribution, enabling better transparency between local governments and society (Putri Erisandi, 2023). With the *E-PBB* application, the Regional Revenue Agency (*BAPENDA*) Surabaya can access and monitor *PBB* payments in real time, strengthening tax data accuracy and ensuring compliance among citizens can be monitored more efficiently.

Digitalization in tax administration not only aims to improve the speed and accuracy of data but also provides added value for users in terms of convenience and accessibility. Other studies show that the adoption of technology in public services can reduce access barriers and increase taxpayer satisfaction due to the ease provided (Rahmadanita & Dowa, 2021). With the *E-PBB* application, Surabaya residents can make tax payments online without needing to visit the tax office, reducing administrative burdens and decreasing the risk of errors common in manual systems. Thus, this digitalization indicates a positive transformation in improving the quality of regional tax services, in line with the needs for technology-based public services in Indonesia.

Public service quality plays a crucial role in building and strengthening public trust in government institutions. Quality service not only meets administrative needs but also reflects the government's commitment to serving the community optimally and professionally. According to research by Rahmadanita & Dowa (2021), good public service quality can improve the public's positive perception of government institutions, ultimately impacting community

participation in government-organized programs. In the context of tax administration, as with the *E-PBB* application, high-quality service is essential to ensure that people feel comfortable and trust the transparency and efficiency of the process.

Various key aspects, such as speed, accuracy, accessibility, and convenience, greatly determine the quality of public services received by the community. In research conducted by Wijayanti et al. (2021), it is stated that service speed in public services is one of the critical indicators directly affecting user satisfaction. Speed in tax services, for example, minimizes waiting times and accelerates the payment process, which often poses challenges in the manual system. Additionally, the accuracy of tax data processing is crucial to avoid recording errors that could harm the public and enhance trust in the administrative process.

Accessibility and convenience in public services are also crucial in increasing community satisfaction. In a study conducted by Nugroho & Purbokusumo (2020), it was revealed that high accessibility, such as the ability to access services online, can expand service reach to remote areas. The *E-PBB* application, which enables online tax payments, is a concrete manifestation of this increased accessibility, which not only makes it easier for the community but also reduces the administrative burden on the relevant agency. The ease of using this application adds convenience for the public, thus increasing satisfaction and loyalty toward government services.

Implementing digital technology in the public sector is not without challenges that must be addressed to achieve optimal service quality. The main challenge in this digitalization process is user adaptation, which often requires time and sufficient educational efforts, especially for those not accustomed to technology. According to research by Hajering (2024), this user adaptation factor significantly impacts the effectiveness of technology implementation in public services, as a lack of understanding in using the application can lead to resistance or usage errors. Furthermore, technical obstacles such as server disruptions or unstable systems are common hindrances in digital application implementation. Additionally, infrastructure readiness, including adequate internet network availability in various areas, is a vital factor determining the success of digital services, especially in areas where technology accessibility is still limited.

Despite the challenges, implementing digital technology in the public sector also opens up significant opportunities to improve service quality. In the *BAPENDA* Surabaya environment, this opportunity is evident through the utilization of the *E-PBB* application, which offers faster and easier service access for the public. According to research by Dara Ayu Kantiningrum & Ramdan (2024), the primary opportunity of public service digitalization is the ability to provide services more efficiently and transparently, which can increase public trust in local government. Additionally, integrated data within the digital system enables *BAPENDA* to analyze tax payment trends more accurately and develop more precise policy strategies. By leveraging these opportunities, digital technology has the potential to improve service quality and strengthen the

relationship between the government and the public through more responsive and accessible services.

The *E-PBB* application plays a crucial role in enhancing tax service efficiency and effectiveness at *BAPENDA* Surabaya, especially in making it easier for the public to access tax services. This application allows the public to access information and make Land and Building Tax payments online without having to visit the service office, ultimately reducing service time and administrative burdens. According to research by Aprilia et al. (2022), the use of digital applications like *E-PBB* can reduce waiting times and increase public convenience in paying taxes, as processes that previously took a long time can now be completed in minutes. This reduction in service time reflects a significant efficiency improvement in local tax management, simultaneously making it easier for the public to fulfill their tax obligations.

Besides enhancing efficiency, the *E-PBB* application also impacts the effectiveness and transparency of the tax payment process at *BAPENDA* Surabaya. In an initial evaluation, it was observed that the application makes it easier for the public to track their payment status, reducing the potential for recording errors that often occur in the manual system. Transparency in public service processes is one of the essential factors in building public trust, and the *E-PBB* application provides direct access to reliable data for users. With this application, *BAPENDA* can also monitor payments in real-time, enabling local governments to respond more effectively to issues or non-compliance in tax payments (Ahmad Ariska & Novaria, 2024).

Research on the *E-PBB* application is relevant to efforts to improve public service quality in Indonesia through technological innovation. Digital innovation in public services has become a pressing need to improve service effectiveness, efficiency, and transparency in various government agencies. According to research by Silaban (2019), applying digital technology in the public sector not only provides ease of access for the community but also supports the government in reducing administrative burdens and improving service accuracy. Nationally, this research can serve as an essential basis for guiding government policies to expand public service digitalization to meet the public's expectations for quick and easily accessible services.

This research has the potential to inform the development of other digital service policies in Indonesia. Findings from the *E-PBB* application in Surabaya could serve as a case study for other regions seeking to implement similar systems in their public services. In research by Nur Fidiyanti & Hany Fanida (2019), it is mentioned that the success of a digital service innovation in one region can encourage the replication and adaptation of relevant policies in other areas, creating a more modern and integrated public service standard across Indonesia. Thus, this research impacts not only *BAPENDA* Surabaya but also contributes to building a technology-based policy foundation that can be implemented nationally to enhance public service quality in Indonesia.

B. LITERATURE REVIEW

The theoretical foundation in this research serves as a basis for understanding and analyzing public service quality through the application of the *E-PBB* system at the Regional Revenue Agency (*BAPENDA*) Surabaya. This section discusses theories, concepts, and frameworks relevant to public service quality and the application of digital technology in tax services to provide a comprehensive understanding of the research issues and context. In this study, the theoretical foundation encompasses several key aspects, including public service quality theory, technology adoption in the government sector, and tax service management, specifically in the context of the *E-PBB* application implemented by *BAPENDA* Surabaya.

Service Quality

The dimensions of service quality serve as benchmarks in providing satisfaction to service users or recipients, so they will give positive evaluations of the provided service product (Rahayu et al., 2019). Parasuraman, Zeithaml, and Berry conducted a survey to establish standardized dimensions for measuring service quality, which they termed *ServQual*, originally consisting of ten dimensions (Sinollah & Masruro, 2019). These dimensions were later simplified to five, which serve as references for measuring customer assessments of service quality: 1) Reliability: The ability to perform services dependably and accurately; 2) Assurance: The capability of personnel to inspire trust and security in customers; 3) Tangibles: Physical aspects that are visibly apparent, such as equipment and personnel appearance; 4) Empathy: Involves care and individualized attention given to service users; and 5) Responsiveness: The willingness to help participants and provide prompt attention.

E-Government

E-Government, or Electronic Government, refers to the application of information and communication technology (ICT) by the government in administrative processes, public service provision, and interactions with society and the private sector (Nathanya Krystan Tambingon et al., 2024). This definition includes the use of various digital platforms such as websites, mobile applications, and database systems to improve efficiency, transparency, and accessibility in the delivery of public services and the management of state administration. According to Adnan & Ghulam Manar (2023), E-Government can be applied in the legislative, judicial, or public administration sectors to improve internal efficiency, deliver public services, or enhance democratic governance processes. The main delivery models are Government-to-Citizen or Government-to-Customer (G2C), Government-to-Business (G2B), and Government-to-Government (G2G). The primary goal of e-government is to increase efficiency in the delivery of public services and governmental administrative processes. By leveraging information and communication technology, e-government enables process simplification, reduction of bureaucracy, and increased responsiveness to societal needs.

Another goal is to enhance government transparency and accountability by allowing easier access to public information and promoting open decision-making processes. E-government has various forms, including online services and mobile

government, which are designed to meet the diverse needs of the public in accessing government information and services digitally (Sumirat & Manjaleni, 2024). Online services include various platforms such as official government websites, public service portals, and dedicated web applications that enable citizens to access information, submit applications, and conduct transactions with the government online. Official government websites provide extensive information on government policies, programs, and procedures, while public service portals facilitate access to services such as tax payments, licensing, and event registrations.

Mobile government (m-government) refers to government services provided through mobile applications or other mobile-friendly platforms (Rustiawan & Rachmawati, 2024). Government mobile applications allow citizens to access government services and information via mobile devices such as smartphones and tablets. Using mobile applications, users can perform various actions such as paying bills, tracking applications, and accessing emergency services quickly and easily. Additionally, e-government includes interactive services such as online complaint systems and feedback channels that enable the public to submit complaints, inquiries, or suggestions to the government. Online complaint services allow citizens to report issues such as non-compliance, poor service, or corrupt practices directly through digital platforms. This helps improve government transparency and accountability and enables quicker resolution of reported issues.

E-PBB Application

The *E-PBB* application is a digital service that enables the public to access information and manage Land and Building Tax (*PBB*) administration online, including *PBB* administrative registration, which can be completed within 24 hours. This application aims to improve the previous version by offering various new features that make it easier for users to manage their tax obligations without needing to visit the Regional Revenue Agency (*BAPENDA*) of Surabaya in person. According to research by Safarudin (2023), online tax services like *E-PBB* are expected to encourage increased tax compliance among citizens due to faster processes and easier access. This service can be accessed through the official website at <https://PBB.surabaya.go.id/> allowing the public to reach all information related to tax obligations at any time.

The *E-PBB* application includes various features designed to meet user needs in tax administration, including four main menus: Home, Services, *BPHTB* Validation, and Help. Additionally, there are four main types of services: *SK* Services, Non-*SK* Services, Outstanding Tax Information, and Online Payments. According to researchers Ajeng Nofita & Usman Ismanto (2024), the development of detailed service menus aims to provide clarity and ease for users in finding the information they need. For instance, with the *BPHTB* validation feature, citizens can easily verify the tax status of their land and building rights, reducing the likelihood of administrative errors. Moreover, the online payment menu allows citizens to fulfill their *PBB* obligations without time or location constraints, ultimately speeding up the service process.

As part of public service digitalization, the *E-PBB* application reflects the Surabaya government's effort to increase the efficiency and effectiveness of tax services in the modern era. According to a study by Setyaningrum et al. (2023), online tax service applications positively impact public service quality by shortening the bureaucratic chain and providing more transparent access to the public. With features that support accessibility and convenience, the *E-PBB* application not only enhances public service quality in Surabaya but also serves as a model for other regions in implementing digital technology to support better and more accountable governance.

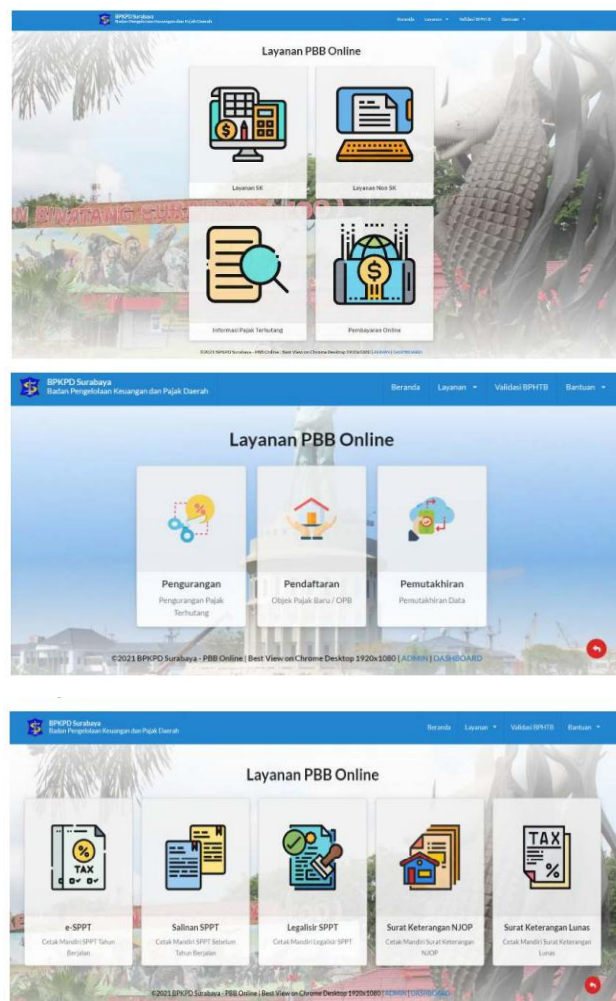


Figure 1 Online *PBB* Services
Source: <https://PBB.surabaya.go.id>

C. METHODS

In this section, the research methodology used to examine the quality of public service in the implementation of the *E-PBB* application at the Regional Revenue Agency (*BAPENDA*) Surabaya will be explained. The chosen research methodology plays an important role in ensuring that the research objectives can

be optimally achieved. This study uses a qualitative approach to gain an in-depth understanding of the impact of the *E-PBB* application on the quality of public services provided by *BAPENDA*. This section includes the type of research, research location, and main research focus, aimed at evaluating the effectiveness of the *E-PBB* application in enhancing the efficiency, transparency, and accessibility of tax services in Surabaya.

The type of research used in this study is qualitative research. A qualitative approach was chosen because it allows the researcher to gain a deep understanding of social and operational phenomena related to the implementation of the *E-PBB* application at the Regional Revenue Agency (*BAPENDA*) Surabaya. Through this approach, the researcher can explore the perceptions, experiences, and responses of the public and *BAPENDA* officers regarding the quality of public service in the context of digital technology implementation. A qualitative approach is highly suitable for analyzing social and cultural aspects of public service that may not be revealed through quantitative methods.

This qualitative study will rely on data collection through in-depth interviews, participatory observation, and document analysis. In-depth interviews allow the researcher to obtain rich and detailed information related to the experiences and views of the public and officers on the use of the *E-PBB* application, especially regarding its advantages and challenges in the tax service process. Participatory observation provides the researcher an opportunity to directly observe the application of *E-PBB* in daily tax services and how it affects the effectiveness and efficiency of administrative processes at *BAPENDA* Surabaya. Meanwhile, document analysis supports the researcher's understanding of policies, procedures, and operational standards applied in the use of the *E-PBB* application.

With a qualitative approach, this research focuses not only on collecting factual data but also on gaining an in-depth understanding of the context and meaning behind the data. Data analysis is conducted inductively, allowing the researcher to identify patterns, themes, and categories from interviews, observations, and documents collected. This approach provides an opportunity for a deeper understanding of the impact of the *E-PBB* application on the quality of public service in Surabaya and offers valuable insights that are expected to contribute to the development of technology-based public service policies in the future.

The focus of this research is to examine the quality of public service in the implementation of the *E-PBB* application at the Regional Revenue Agency (*BAPENDA*) Surabaya. This research aims to understand the extent to which the *E-PBB* application plays a role in improving the quality of local tax services, including aspects of efficiency, transparency, and accessibility for the public. Additionally, this study will explore various challenges faced by *BAPENDA* in implementing this application, including technical obstacles, user adaptation, and the readiness of infrastructure supporting digital service implementation.

The research also highlights the impact of the *E-PBB* application on public satisfaction and trust in the quality of services provided by *BAPENDA* Surabaya. This focus involves analyzing how the *E-PBB* application can influence user

satisfaction through ease of access, service speed, and data accuracy in the management of Land and Building Taxes. The study aims to delve deeper into the contribution of digital applications in creating a more responsive and reliable public service system and how this application helps *BAPENDA* build its image as an innovative institution in providing tax services.

Furthermore, this study will examine policies and procedures supporting the implementation of the *E-PBB* application and its effectiveness in supporting public service operations in Surabaya. This focus includes an analysis of *BAPENDA* staff and public understanding of the application's features, training provided to *BAPENDA* staff, and managerial support in optimizing the use of the *E-PBB* application. The research will also evaluate the extent to which these policies and procedures can address the challenges faced in its implementation, hoping that this study will provide valuable recommendations for the development of more efficient and adaptive public service technology policies in the future.

The location of this research is the Regional Revenue Agency (*BAPENDA*) Surabaya, a government institution in the city of Surabaya, East Java, with the primary task of managing regional revenue, including Land and Building Tax (*PBB*). *BAPENDA* Surabaya was selected as the research location due to its significant role in providing tax services to the public through the implementation of the *E-PBB* application, which is the main focus in improving public service quality. This institution is a relevant setting to examine the effectiveness of digital technology implementation in tax services and to observe how the application can influence public satisfaction and trust in public services.

D. RESEARCH FINDINGS AND ANALYSIS

This section provides a detailed description of the research results conducted at the Regional Revenue Agency (*BAPENDA*) Surabaya, along with a comprehensive analysis of the *E-PBB* application implementation, challenges faced in its application, and its impact on the quality of public service in regional tax services.

Public Service Quality

In this study, the researcher seeks to uncover and examine field-based facts using Parasuraman's theory, which includes five main variables: Reliability, Assurance, Tangibles, Empathy, and Responsiveness. These indicators are used to analyze the quality of public service in the application of the *E-PBB* system at the Regional Revenue Agency (*BAPENDA*) Surabaya. These five variables help the researcher assess the extent to which the *E-PBB* application can provide reliable service, ensure security, make a good impression, address user needs, and respond quickly to community needs. These variables are determined as follows:

Reliability

According to Parasuraman's theory, Reliability is the ability of a service to deliver consistent and dependable performance in line with customer expectations. Reliability includes timeliness, accuracy in information delivery, and the ability to complete services without errors or unnecessary delays. This dimension is considered one of the most critical aspects of service quality, as a service's reliability demonstrates the extent to which an organization or system can

consistently meet user expectations. In the context of ServQual, Reliability is the primary reference for customers in evaluating service quality, as it reflects the service provider's commitment to delivering a trustworthy and stable experience (Wardhana Aditiya, 2022).

In this study, Reliability in the *E-PBB* application at *BAPENDA* Surabaya is measured by the application's ability to provide accurate and timely tax services to the public. The reliability of this application is determined by system stability, the ability to process tax data accurately, and consistency in presenting the information required by the public without repeated disruptions or technical issues. The community using the *E-PBB* application expects to access services at any time with correct data that matches their tax obligations. When the *E-PBB* application can provide consistent information and meet taxpayer needs without errors, its reliability is directly experienced by users, enhancing public trust in *BAPENDA* Surabaya's public services.

Reliability in the *E-PBB* application at *BAPENDA* Surabaya also includes the system's ability to deliver services that meet expected standards of timeliness and accuracy. With this application, taxpayers do not need to visit the *BAPENDA* office directly to manage their tax obligations; instead, they can complete them online with the same level of reliability as face-to-face services. When the application operates smoothly without frequent disruptions or inconsistent service availability, it provides a more positive experience for users. Thus, the reliability of the *E-PBB* application not only enhances the efficiency of tax services but also creates a positive perception of the quality of public services provided by *BAPENDA* Surabaya.

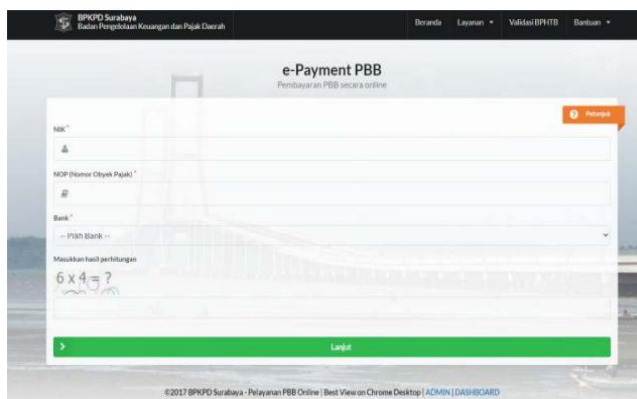


Figure 2 *E-PBB* Payment

Source: <https://PBB.surabaya.go.id>

According to one user, Mr. Arif, he stated:

“In my opinion, the *E-PBB* application is actually very helpful because I can pay taxes from home. However, there are often issues when I try to view billing information or make payments. Sometimes the data displayed in the application does not match the latest data, and this forces me to double-check or even contact *BAPENDA* staff to confirm. Regarding reliability, I think there is room for improvement

because the accuracy of information and data consistency displayed is very important for us who want to avoid fines or other issues. If this application could be more stable and accurate, it would certainly help a lot and make us trust this tax service more.”

Based on an interview with Mr. Arif, a user, he noted that while the *E-PBB* application is very helpful for facilitating online tax payments, he also highlighted some issues affecting the application’s reliability, such as inaccuracies in the displayed tax data and occasional technical disruptions that hinder access to information. Therefore, a comprehensive system improvement is needed so that the *E-PBB* application can provide consistent, real-time information to users. From this perspective, it can be concluded that the Reliability of the *E-PBB* application still has room for improvement, particularly in data updates and technical stability.

From this, we can see that the Reliability indicator of the *E-PBB* application currently achieves around 85% in its application at *BAPENDA* Surabaya. Although this percentage indicates a fairly good success rate in supporting online tax services, approximately 15% of reliability aspects still need improvement, especially in terms of information accuracy and processing speed. This instability can affect public satisfaction and their trust in the public services provided. When the application operates well, it helps the community fulfill their tax obligations without worrying about inaccuracies or technical issues.

The application’s reliability in providing accurate and dependable data is essential for optimal public service effectiveness. By improving the application’s reliability, *BAPENDA* Surabaya can enhance the quality of service provided through *E-PBB* and meet public expectations. Improvements in application reliability not only have the potential to increase user satisfaction but also to build a positive image of *BAPENDA* as an institution responsive to the community’s needs for fast and reliable service.

Assurance

Assurance Assurance in the ServQual theory developed by Parasuraman, Zeithaml, and Berry refers to the ability of the service provider to instill trust and a sense of security in customers. This dimension focuses on the quality of interaction and the competence of personnel or service systems that reassure customers that they are in reliable and professional hands. The Assurance aspect often includes friendliness, technical ability, and the expertise of personnel that provide comfort to customers, ensuring that they receive safe, high-quality service. In the context of digital services, Assurance can relate to the application’s ability to safeguard user data and provide trust in the service processes and outcomes.

In this study, Assurance in the application of the *E-PBB* system at *BAPENDA* Surabaya is measured by how well the application can provide security and reliability guarantees to the public. *E-PBB* users expect protection of personal information and transaction data entered into the system, as well as assurance that each tax transaction is processed correctly and recorded accurately. *BAPENDA* Surabaya is expected to provide this assurance through the development of security features in the application and efforts to provide

transparent information to users regarding security measures. In the context of public services, Assurance is essential in building public trust in the digital systems implemented by the government.

Additionally, Assurance in the *E-PBB* application at *BAPENDA* Surabaya is related to the competence and expertise of the personnel supporting the system, including staff ready to assist users in handling technical issues or other challenges they may face while using the application. If the *E-PBB* application can provide security assurance and is supported by professional and responsive personnel, the public will feel more comfortable and confident using this application to manage their tax obligations. Assurance in this context not only improves public service quality but also fosters loyalty and satisfaction among the public towards the digital services provided by *BAPENDA*.

According to one user, Mrs. Iin, she stated:

“In my opinion, the E-PBB application is very helpful in the tax payment process, but I am still concerned about the security of the personal data I enter. There are worries about how the data is managed and whether it is truly well-protected. Sometimes, when I need technical assistance, the response is slow, and I feel unsure about what to do. In terms of assurance, I hope BAPENDA can improve transparency regarding data security and provide staff who are always ready to help at any time. If there were such guarantees, I would feel more at ease and confident to keep using this application without worry.”

Based on an interview with Mrs. Iin, a user, she noted that while the *E-PBB* application greatly facilitates online tax payments, she is still concerned about the security of her personal data. This concern arises due to a lack of clear information regarding data protection and uncertainty about how her data is managed in the system. Thus, there needs to be an increase in transparency regarding data security policies and the use of technology that can better protect users' personal information. Assurance of personal data security and protection is essential for building public trust in the digital services provided by *BAPENDA*.

From this, we can see that the Assurance aspect in the application of the *E-PBB* system at *BAPENDA* Surabaya currently reaches around 80%, indicating a fairly good level of success in providing comfort and security for users. However, approximately 20% of Assurance aspects still need improvement, particularly in providing explanations regarding the security system implemented and the availability of prompt and responsive technical support. Some users still experience difficulties when needing assistance or technical clarification, which could potentially lower their trust in the service provided. By improving reliability in this area, the *E-PBB* application can become more optimal in meeting users' needs and expectations.

Success in the Assurance aspect contributes significantly to creating a positive user experience and building a good image for *BAPENDA* Surabaya as an institution providing safe and reliable tax services. With improvements in data security and responsiveness of technical support, *BAPENDA* can meet public expectations for services that are not only fast and easily accessible but also offer

comfort and security. This support is expected to strengthen public trust in the *E-PBB* application and increase overall tax compliance, as users will feel safer and more confident in utilizing the digital services provided by the local government.

Tangibles

Tangibles in the ServQual theory developed by Parasuraman, Zeithaml, and Berry refer to the physical or visual aspects of a service that can be seen and assessed by customers. This dimension includes elements such as the appearance of facilities, devices, equipment, and the appearance of staff. Tangibles serve to create a positive first impression of service quality and reassure customers that the service provided is professional and well-structured. In the context of digital services, Tangibles can include the application interface, visual design, and navigation that make it easy for users. Tangibles are important because good visuals can enhance user comfort and confidence in accessing the service.

In this study, Tangibles in the *E-PBB* application at *BAPENDA* Surabaya are evaluated through the interface display, ease of navigation, and visual features that facilitate users in accessing tax information. A clean, modern, and structured application design reflects a professional and reliable service quality. Users of the *E-PBB* application rely on visual elements to understand information and conduct transactions independently. If the application has a simple yet informative design, the public will feel more comfortable and motivated to use this service as part of the convenience in tax administration.

Beyond visual aspects, Tangibles in the *E-PBB* application also include the availability of supporting features such as an integrated notification or payment reminder system. With these additional features, the *E-PBB* application can provide a more comprehensive, user-oriented service. Through the *E-PBB* application, *BAPENDA* Surabaya ensures that the public not only gains easy access but also feels assisted by the visual features provided. This shows that Tangibles in this application contribute to enhancing the quality of public service by providing a more directed and intuitive user experience.

According to one user, Mr. Rudi, he stated:

“In my opinion, the *E-PBB* application is actually very helpful for paying taxes online, but the interface is somewhat confusing, especially for people who are not very familiar with technology. Sometimes, it takes me longer to find the information or menu I am looking for because the design isn’t very clear. In terms of Tangibles, I hope *BAPENDA* can improve the interface design to make it easier to use and clearer. A better design would help us understand and use the application without confusion.”

Based on an interview with Mr. Rudi, a user, he stated that while the *E-PBB* application is very helpful for online tax payments, he still experiences difficulty navigating the interface. He noted that some visual elements and menu designs within the application are not intuitive, so it often takes longer to find the needed information or features. Improvements are therefore needed in the interface design and layout to make it clearer and more accessible for users from diverse backgrounds, including those unfamiliar with technology. Enhancing the Tangibles aspect is crucial to ensure that the application not only fulfills

administrative functions but also provides a comfortable and user-friendly experience.

From this, we can see that the Tangibles aspect in the implementation of the *E-PBB* application at *BAPENDA* Surabaya currently achieves around 75% success. This indicates that although the application has successfully provided some visual features that support digital services, approximately 25% of Tangibles aspects still need improvement. Primarily, improvements are needed in terms of ease of navigation and application aesthetics, which can create a professional impression and make it easier for users to access information. These visual aspects are essential in creating a positive first impression for users, as a well-designed interface supports user understanding of the system and enhances comfort in interacting with the application.

Success in the Tangibles aspect of the *E-PBB* application will contribute to an overall improvement in the quality of public services at *BAPENDA* Surabaya. By optimizing visual elements and ease of navigation, the *E-PBB* application can provide a better experience for users, increase accessibility, and strengthen public trust in the digital tax services provided by the government. Furthermore, improvements in Tangibles can also increase efficiency, as users will more easily find and use the features provided. These improvements are expected to strengthen *BAPENDA* Surabaya's image as an institution responsive to community needs in technology-based services.

Empathy

Empathy in the ServQual theory developed by Parasuraman, Zeithaml, and Berry refers to the service provider's ability to understand, care for, and provide personal attention to customers. This dimension includes friendliness, special attention, and the willingness to listen to and understand users' individual needs. Empathy aims to create a warm and humane service experience, where users feel that their needs and issues are valued and addressed well. In the context of public services, empathy is essential because attentive and understanding interactions increase user trust and satisfaction with the services they receive.

In this study, the application of empathy in the *E-PBB* application at *BAPENDA* Surabaya is evaluated by assessing the extent to which the application shows concern for user needs and comfort. Empathy in the digital context can be reflected through features that facilitate accessibility, quick responses to user questions, and easy-to-understand guides or assistance. Through these elements, the *E-PBB* application is expected to provide a supportive experience for users in completing their tax administration processes without confusion or inconvenience. *BAPENDA* Surabaya can optimize empathy in this application by ensuring accessible and informative assistance services for every user.

Additionally, empathy in the *E-PBB* application includes the ability of *BAPENDA* personnel to respond to and assist users who may experience technical difficulties or need further guidance. In providing digital services, personnel with an empathetic attitude can help improve user comfort, especially for those less familiar with technology. This empathy serves to build a better relationship between the government and the public, where every need and difficulty experienced by users in using the application is understood and addressed with

special attention. The presence of empathy not only improves the quality of public service but also strengthens the image of *BAPENDA* Surabaya as an institution that cares about and responds to the needs of the community.

According to one user, Mrs. Anisa, she stated:

“The *E-PBB* application is quite helpful, but there are times when I have difficulties and need further assistance. However, when I try to contact staff, the response is sometimes slow or not very informative. In terms of empathy, I hope the staff can better understand our difficulties, especially for those who aren’t very tech-savvy. If the assistance could be faster and friendlier, we as users would feel more valued and not hesitate to keep using the application.”

Based on an interview with Mrs. Anisa, a user, she noted that while the *E-PBB* application makes it easier to pay taxes, she feels less supported when experiencing technical difficulties in its use. According to her, the response from contacted staff is sometimes slow and does not provide enough comfort or attention to the issues she faces. Therefore, improvements in the empathy aspect of this service are needed, particularly in providing more personal and friendly support to each user, so they feel more valued and supported while using the application. Enhancing the empathy aspect is crucial to ensure that every user, whether familiar with technology or not, has a positive experience.

From this, we can see that Empathy in the application of the *E-PBB* system at *BAPENDA* Surabaya currently achieves around 70% success. Although this score reflects a reasonable level of concern from *BAPENDA* in providing responsive services, approximately 30% of empathy aspects still need improvement, especially in providing direct support for users facing technical issues. Users expect to receive prompt and informative assistance, especially when they encounter difficulties navigating or understanding certain procedures in the application. As empathy support improves, users will feel more assisted and will not hesitate to seek help when needed.

Enhancing empathy in the application of the *E-PBB* system will have a significantly positive impact on the quality of public services at *BAPENDA* Surabaya. By paying more personal attention to user needs and providing friendly and informative assistance, *BAPENDA* can strengthen public trust in the digital services they offer. Furthermore, improving empathy will make users feel more comfortable interacting with the application and more motivated to use digital services continuously. Thus, enhancing empathy not only supports user satisfaction but also strengthens *BAPENDA*'s image as an institution that is responsive to and cares for community needs.

Responsiveness

Responsiveness in the ServQual theory developed by Parasuraman, Zeithaml, and Berry refers to the willingness and ability of service providers to assist customers and deliver services quickly and on time. Responsiveness includes the ability to respond to customer needs and requests efficiently, demonstrating a commitment to promptly addressing any issues or questions raised. This dimension plays an essential role in enhancing customer satisfaction,

as a quick and accurate response from the service provider can make users feel valued and build their trust in the service provided.

In this study, Responsiveness in the *E-PBB* application at *BAPENDA* Surabaya is measured by the speed of the application and the readiness of staff to provide assistance to users who need guidance or encounter technical issues. Responsiveness in digital services can be observed in the application's response time in processing tax transactions or in the ease with which users can obtain support if they encounter issues during the payment process. Responsiveness also includes the availability of support services, such as a help center or customer service feature, enabling users to easily access information or submit complaints without having to visit the *BAPENDA* office in person. In the context of public service, good responsiveness ensures that the public feels supported in fulfilling their tax obligations.

Responsiveness in the *E-PBB* application also includes the attitude of *BAPENDA* staff in handling user questions or issues. If staff consistently provide quick, friendly, and informative assistance, the public will feel more comfortable using the application and trust the digital service provided. In this case, responsiveness is not only about the speed of the application's service but also the ability of staff to effectively address user issues. Improving responsiveness in the *E-PBB* application is expected to enhance the quality of public service at *BAPENDA* Surabaya, create a better user experience, and support the government's goal of implementing a responsive, user-oriented digital service.

According to one user, Mr. Hadi, he stated:

"In my opinion, the *E-PBB* application is quite good for online tax payments, but there are times when I encounter problems and need immediate assistance. Unfortunately, the response from the help service is not always quick, so I feel somewhat confused about what to do. In terms of responsiveness, I think there should be improvements in the speed and quality of assistance. Perhaps *BAPENDA* could consider adding dedicated staff to handle application support so users can receive answers and assistance more quickly. If this aspect improves, I believe many people will be more satisfied and comfortable using this application."

Based on an interview with Mr. Hadi, a user, he noted that while the *E-PBB* application is helpful for online tax payments, he faces difficulties when he needs quick assistance for technical issues. Mr. Hadi feels that the response from the help service is not fast or informative enough, which sometimes leaves him confused about using the application. Therefore, improvements are needed in the aspect of responsiveness, particularly in the speed of response from the help service and the availability of staff ready to assist when users need guidance or immediate solutions. This improvement will provide a better experience for users and enhance public trust in the quality of public service provided by *BAPENDA*.

From this, we can see that Responsiveness in the application of the *E-PBB* system at *BAPENDA* Surabaya currently achieves around 78% success. This indicates that although the application's responsiveness is fairly good, approximately 22% of responsiveness aspects still need improvement. The

deficiencies can be seen in the response time to user questions and complaints and the quality of information provided in the assistance process. Improving this aspect is essential to enhance the speed of service, allowing users to resolve issues without having to wait too long. *E-PBB* application users who feel quickly supported will be more motivated to continue using this digital service.

Enhancing responsiveness in the *E-PBB* application will significantly impact the quality of public service at *BAPENDA* Surabaya. When users receive prompt and accurate assistance, they will feel more comfortable and confident in the service provided. This also has the potential to increase user satisfaction and create a positive perception of *BAPENDA* as an institution that is responsive and attentive to public needs. Improvements in this aspect not only enhance the user experience but also create a better image for *BAPENDA* Surabaya in providing modern, efficient, and user-oriented tax services.

Challenges in Implementing the *E-PBB* Application

In efforts to improve public service quality at *BAPENDA* Surabaya through the implementation of the *E-PBB* application, several challenges have been identified that affect the effectiveness of its application. These challenges include varying levels of technological understanding among users, a lack of responsive technical support, system instability under certain conditions, and the need to enhance user data security. A comprehensive identification of these challenges is necessary to apply appropriate strategies to overcome these obstacles and ensure that the *E-PBB* application can truly meet the community's needs for more effective and efficient tax services.

Limited Technological Understanding Among Users

One of the main challenges in implementing the *E-PBB* application at *BAPENDA* Surabaya is the varying level of technological understanding among the community. Not all users, especially those unfamiliar with digital technology, can easily understand and operate the application. This limitation results in some users experiencing difficulties in the registration process, payment, and accessing tax information. This challenge requires special attention in the form of more intensive education and easily accessible guides so that the public can utilize this application optimally and independently.

System Instability and Technical Disruptions

System instability and occasional technical disruptions, especially when the application is accessed by many users simultaneously, present another challenge. This instability causes the service to become slow or even disconnected, impacting user satisfaction and public trust in the application. These technical issues also slow down the process of verifying and validating tax data, potentially causing barriers in service delivery. To address this challenge, strengthening technology infrastructure and ongoing system maintenance is necessary to ensure that the *E-PBB* application operates more stably and reliably.

Need for Enhanced User Data Security

User data security is a critical challenge in implementing the *E-PBB* application. Since this application manages personal information and taxpayer financial data, data protection is an aspect that must be carefully maintained. However, some users are concerned about potential data breaches or misuse of

personal information stored in the system. The need for enhanced security demands that *BAPENDA* implement strict data security protocols, such as data encryption and protection against cyber threats. By ensuring optimal data security, *BAPENDA* can build public trust in this digital service.

E. CLOSING

This section presents the conclusions of the research conducted at the Regional Revenue Agency (*BAPENDA*) Surabaya regarding the quality of public service in the implementation of the *E-PBB* application, as well as recommendations proposed based on the research findings. These conclusions provide an overview of the impact of the *E-PBB* application on improving public service quality, particularly in terms of accessibility, responsiveness, and tax process efficiency. Meanwhile, the recommendations offer strategic steps that can be taken to address the challenges faced, such as enhancing technical support and data security, to increase the effectiveness and sustainability of the *E-PBB* application at *BAPENDA* Surabaya.

Conclusion

The findings from this research indicate that the implementation of the *E-PBB* application at *BAPENDA* Surabaya has had a positive impact on the quality of public service in terms of convenience, comfort, and speed of access to tax services. In terms of Reliability, the *E-PBB* application achieved approximately 85% success, reflecting good reliability but still requiring improvements in information accuracy and system stability to prevent technical issues that may impact user satisfaction. In the Assurance dimension, the application achieved around 80% success, providing users with a reasonable sense of security but requiring improvements in more responsive technical support to increase public trust.

The Tangibles aspect of the *E-PBB* application showed 75% success, indicating the need for improvements in interface design to be more professional and user-friendly to create a more positive first impression. On the other hand, Empathy in the application's service reached 70%, indicating a fair level of care but still needing more informative and friendly direct support for users facing issues. The Responsiveness dimension showed a success rate of 78%, demonstrating reasonably good responsiveness but still needing improvements in response time to user inquiries and complaints, so the public feels more valued and supported.

The *E-PBB* application has helped *BAPENDA* Surabaya provide more accessible and convenient tax services for the public, though areas still need improvement in each of the quality dimensions analyzed. By enhancing aspects such as system stability, information security, interface design, technical support, and response time, it is hoped that the *E-PBB* application can sustainably improve the quality of public service at *BAPENDA* Surabaya. These improvements will strengthen public trust in the digital services provided by the government and encourage taxpayer compliance within *BAPENDA* Surabaya.

Recommendations

Based on the research findings, the following recommendations may be considered to improve the quality of public service in the implementation of the *E-PBB* application at the Regional Revenue Agency (*BAPENDA*) Surabaya:

- a. First, to address the limitations in technological understanding among users, *BAPENDA* could provide a more intensive and structured education program. This program could include tutorials in the form of videos, written guides, and live workshops for those who need further guidance. Additionally, *BAPENDA* could offer easily accessible help center services to provide direct guidance when users encounter difficulties. With more accessible educational resources, it is hoped that the public will be able to use the *E-PBB* application independently and feel more confident in the tax payment process.
- b. Second, to address system instability and technical disruptions, investment in strengthening technology infrastructure and regular system maintenance is required. *BAPENDA* could consider implementing a more robust server system with adequate capacity to handle high user volumes, especially during peak times. Additionally, implementing real-time system monitoring and maintenance can help detect and resolve technical issues quickly, allowing the application to run smoothly and users to feel more comfortable accessing the service.
- c. Third, given the importance of data security in the *E-PBB* application, *BAPENDA* should implement stricter security protocols, such as data encryption, protection against unauthorized access, and monitoring for potential cyber threats. *BAPENDA* could also improve transparency by informing users about the security measures in place, helping users feel more assured about the safety of their personal data. By optimizing data security, *BAPENDA* not only protects user data but also builds public trust in this digital system.

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