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ANALYSIS OF PUBLIC ACCEPTANCE OF E-GOVERNMENT SERVICES USING THE TAM MODEL (TECHNOLOGY ACCEPTANCE MODEL)

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Abstract

This study analyzes public acceptance of e-Government services in Indonesia using the Technology Acceptance Model (TAM), originally developed by Davis (1989), through a Systematic Literature Review (SLR) of national and international publications from 2015 to 2024. TAM positions Perceived Usefulness and Perceived Ease of Use as key drivers of technology adoption behavior, and in the context of public services, is further influenced by external variables such as trust and system quality. The findings show that Perceived Usefulness, Perceived Ease of Use, and Trust are consistently the dominant determinants of public acceptance of digital government platforms. Although adoption rates continue to increase, digital literacy gaps, access inequality, interface usability issues, and concerns over data security remain significant barriers. This study concludes that improving user experience, strengthening digital trust and cybersecurity, and enhancing digital inclusion programs are essential to ensuring sustainable e-Government adoption in Indonesia.

Keywords : *digital literacy, e-Government, technology adoption, Technology-Acceptance-Model*

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1. Introduction

The development of digital technology has fundamentally changed the way governments provide services to the public. The digitization of the public sector, known as e-Government, is a strategy for modernizing government administration to improve accessibility, efficiency, transparency, and public accountability. Indonesia, through initiatives such as Digital Indonesia 2024, Satu Data Indonesia, and the National Smart City acceleration programs, has demonstrated a strong commitment to strengthening technology-based public services (Ministry of Communication and Information Technology, 2023). However, the success of e-Government implementation does not depend solely on infrastructure readiness or regulatory frameworks but also on public acceptance as the end users of digital services. Therefore, research on the factors influencing e-Government acceptance is crucial for evaluating the effectiveness of digital policies and understanding user behavior in the context of public sector digitalization.

The Technology Acceptance Model (TAM) introduced by Davis (1989) is among the most commonly used theoretical frameworks for analyzing technology adoption. TAM highlights two major constructs, Perceived Usefulness (PU) and Perceived Ease of Use (PEOU), that influence user attitudes and intentions toward technology usage. This model has become an essential analytical tool in explaining the acceptance of new digital systems across sectors, including e-government. Global evidence shows the relevance of TAM in explaining psychological and cognitive factors influencing the use of e-Government platforms

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in both developed and developing countries (Balaskas et al., 2022; Rana et al., 2023). In Indonesia, TAM has been widely applied to evaluate various public digital services such as e-Tax, e-Court, Mobile-JKN, OSS-RBA, and regional digital applications including JAKI, JOGO Suroboyo, and SAKPOLE.

Statistics from the Ministry of Communication and Information Technology (2023) show that the adoption of digital government services increased from 42 percent in 2020 to 68.5 percent in 2023. Nevertheless, BPS (2023) reported a gap in digital utilization between urban (72.9 percent) and rural (41.5 percent) areas. This indicates that acceptance of e-Government among Indonesian citizens remains uneven and is shaped by factors such as infrastructure quality, digital literacy, and perceptions of the usefulness and usability of online services. Previous studies confirm this pattern. Sulistyowati et al. (2021) found that perceived usefulness and ease of use were the dominant determinants of local e-government system usage. Pratama et al. (2022), in their study on Mobile-JKN, identified technological resistance, digital trust, and system support as influential drivers of user intention toward public health service applications.

The COVID-19 pandemic accelerated the adoption of digital public services such as PeduliLindungi, digital vaccination systems, digital health platforms, and e-Court. This development raises an academic question regarding whether users adopt digital services only due to temporary emergency needs or whether digital platforms have permanently shifted public service behavior. TAM provides a conceptual foundation to analyze technology acceptance before, during, and after the pandemic (Rana et al., 2023). A thorough understanding of user acceptance is therefore instrumental to ensuring the continuity and long-term sustainability of digital government services.

Alongside core TAM constructs, the development of technology acceptance research in the public sector increasingly incorporates additional variables such as trust, perceived risk, facilitating conditions, and service quality (Venkatesh et al., 2016; Ahmad and Khalid, 2022). For Indonesia, trust in personal data protection and system reliability is particularly relevant following national data breach cases (Satria et al., 2023). Consequently, the adaptation of TAM in the Indonesian e-Government context requires additional construct refinement to account for socio-technological realities including digital trust, infrastructure readiness, and public digital literacy.

Although research on e-Government acceptance in Indonesia has grown, significant research gaps remain. Several prior studies examine only a single type of digital service, resulting in fragmented understanding that does not reflect national acceptance patterns. For example, Pratama et al. (2022) focused solely on Mobile-JKN, while Wu et al. (2024) emphasized local tax services. Further, most studies rely on localized surveys and have not synthesized multi-service patterns to identify broader acceptance tendencies. Another gap relates to the limited integration of socio-cultural and public trust factors into TAM, despite their relevance in developing countries where cultural norms and trust in government institutions strongly shape technology adoption (Balaskas et al., 2022). These limitations underline the need for a more comprehensive academic clarification of the gap between digital service availability and actual user acceptance across different demographics and regions.

The development of digital public services in Indonesia continues in line with the national digital transformation vision. More than 14,000 central and regional government services covering health, civil registration, licensing, taxation, and transportation have been digitized (Ministry of Communication and Information Technology, 2023). However, the increasing quantity of digital services does not automatically lead to consistent use. The more critical issue concerns whether citizens genuinely accept, adopt, and continuously use digital systems in everyday administration. From a behavioral standpoint, acceptance of e-Government depends on the perceived usefulness of services, ease of use, trust in data security, and consistency of user experience.

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The TAM framework remains a relevant analytical tool for examining these realities. Perceived usefulness and perceived ease of use shape user intentions toward technology adoption (Davis, 1989). In the Indonesian setting, digital trust, system quality, and technical support also influence e-Government acceptance (Widodo et al., 2021; Sulistyowati et al., 2021), aligning with the evolution of TAM toward the inclusion of external factors such as risk and infrastructure readiness (Venkatesh et al., 2016; Rana et al., 2023).

At the same time, Indonesia's digital ecosystem is becoming increasingly integrated through systems such as e-KTP, NIK as a single digital identity, SATUSEHAT health records, digital tax applications, OSS-RBA licensing, and one-stop regional public service applications. Despite this expansion, adoption may stagnate if users do not experience tangible benefits or encounter difficulties using digital platforms, particularly elderly citizens and rural communities where digital literacy remains low (BPS, 2023). This highlights that e-Government acceptance is socio-technological rather than purely technical.

The digital divide also persists in terms of internet access, education, and confidence in digital interaction. Although 78 percent of Indonesia's population has internet access, utilization of government digital services remains below the ASEAN-5 average (World Bank, 2022). Preference for face-to-face services, skepticism regarding data protection, and reluctance toward technology remain barriers to digital government adoption (Satria et al., 2023). The implementation of the Personal Data Protection Law (2022) further increases public expectations on data security and transparency. Balaskas et al. (2022) showed that public trust significantly influences e-Government acceptance in developing countries, indicating its relevance in the Indonesian context.

Previous studies in Indonesia also reported varied levels of e-Government acceptance across service types and regions. Pratama et al. (2022) found high acceptance of Mobile-JKN due to its perceived usefulness in the healthcare system. Wu et al. (2024) observed that ease of access and technical support influenced adoption of digital tax services. Chen and Aklikokou (2020) found that despite being aware of available digital services, citizens still showed strong preference for offline approaches because of conventional habits and doubts about system reliability. Although these studies provide useful insights, they have not yet yielded comprehensive national patterns that integrate psychological, technological, and contextual factors.

Considering these developments, research on e-Government acceptance in Indonesia requires a holistic academic approach. The present study applies an expanded TAM framework that includes perceived usefulness, perceived ease of use, attitudes, digital trust, and digital service experience. It focuses on essential digital public services that have broad national relevance, specifically citizen administration services (e-KTP and civil registry systems), national health platforms (Mobile-JKN and SATUSEHAT), and digital licensing services via OSS-RBA. These platforms were selected because they represent Indonesia's main digital transformation priorities and are used across provinces.

This study aims to analyze the level of public acceptance of e-Government services in Indonesia based on the Technology Acceptance Model, identify the dominant factors affecting digital service adoption, and propose strategic recommendations to improve digital governance. The research question guiding this study is how the expanded TAM framework explains public acceptance of e-Government services in Indonesia and which variables most strongly shape this acceptance across different service platforms and regions.

Accordingly, the guiding question of this research is: *How does the expanded Technology Acceptance Model explain public acceptance of e-Government services in Indonesia, and what key factors most significantly shape this acceptance across different regions and service platforms?*

2. Method

This study employed a Systematic Literature Review (SLR) to identify and synthesize empirical evidence on the determinants of public acceptance of e-Government services in

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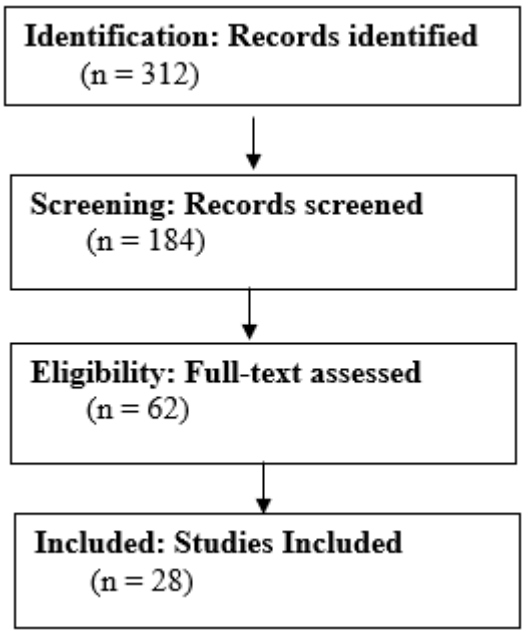
Indonesia based on the Technology Acceptance Model (TAM). The SLR approach was selected because it enables structured mapping of knowledge development, comparison of findings, and identification of acceptance patterns supported by previous empirical research (Snyder, 2019).

The literature search was conducted in four major scientific databases, namely Scopus, Web of Science, Google Scholar, and SINTA, using combinations of the keywords “TAM e-government Indonesia,” “technology acceptance model public service Indonesia,” “e-government adoption TAM,” and “public acceptance digital government Indonesia.” The publication period was restricted to 2015–2024 to capture the evolution of e-Government in Indonesia’s contemporary digital transformation era. Inclusion criteria consisted of peer-reviewed empirical articles focusing on the use of e-Government services in Indonesia, employing TAM or TAM-based model extensions, and presenting user acceptance variables. Exclusion criteria comprised non-scientific articles, policy reports without empirical analysis, and studies published prior to 2015.

The search process produced a pool of articles that were screened through title, abstract, and full-text evaluation. Eligible studies were analyzed using a thematic synthesis technique to categorize findings according to TAM constructs, including Perceived Usefulness, Perceived Ease of Use, Attitude Toward Use, and Behavioral Intention (Davis, 1989), along with contextual variables relevant to the public sector such as digital trust, system quality, and service experience (Rana et al., 2023). The selection and categorization process ensured that the extracted data aligned rigorously with the research objectives rather than merely summarizing study results.

To ensure methodological rigor, the review incorporated quality assessment of selected studies by evaluating research design, sampling adequacy, and contextual relevance to e-Government services in Indonesia (Kitchenham and Charters, 2007). Literature triangulation was also conducted by comparing empirical findings across national studies and international technology acceptance literature to assess the consistency of TAM variables in different public service settings. The final synthesis allowed the identification of dominant acceptance determinants and persistent barriers to e-Government adoption, forming the basis for theoretical insights and policy recommendations.



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3. Results and Discussion

The TAM Model and Technology Acceptance Behavior in Digital Public Services

Understanding public acceptance of digital public services is crucial to the success of e-Government implementation. The Technology Acceptance Model (TAM) developed by Davis (1989) provides a relevant framework for explaining individual perceptions and behavioral intentions in adopting digital systems. In the context of Indonesia, where administrative, health, taxation, licensing, and population services are increasingly digitized, public acceptance determines whether digital transformation can achieve bureaucratic reform, efficiency, and better service quality.

The results of the reviewed studies consistently show that Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) are the primary drivers of the intention to use e-Government services. Citizens are more likely to adopt digital platforms when they believe that the services speed up administrative processes and reduce waiting time (Sulistyowati et al., 2021). Ease of navigation, clear instructions, and intuitive system interfaces are also important in building user comfort, as evidenced in the adoption of local tax applications (Wu et al., 2024). These findings confirm the core prediction of TAM that usefulness and ease of use shape attitudes toward technology.

However, Indonesian e-Government adoption is not solely determined by perceptions of usefulness and ease of use. External variables such as digital trust, perceived data security, and system reliability are strongly associated with usage intention (Rana et al., 2023). Trust becomes especially critical given the concerns over national data breaches in recent years (Satria et al., 2023). Ahmad and Khalid (2022) show that trust has a mediating effect that strengthens the influence of PU and PEOU on behavioral intention, which implies that usefulness and convenience alone cannot guarantee adoption when digital trust is weak.

User behavior in public services is also shaped by administrative obligations and policy mechanisms. Certain services such as tax e-Filing and OSS-RBA licensing are mandatory for specific administrative purposes, yet sustainable system use only occurs when citizens experience tangible benefits and convenience (Sulistyowati et al., 2021). This shows that digital transformation cannot rely on obligation or enforcement alone; user acceptance remains central.

Socio-demographic factors influence acceptance outcomes. Digital literacy, access to information, and educational background determine the extent to which users can operate digital public services. BPS (2023) reported that rural communities have lower digital adaptability than urban users, resulting in a wide adoption gap. Chen and Aklikokou (2020) support this finding, noting that urban residents have higher digital service acceptance because of better access to information technology and familiarity with digital interfaces. These findings indicate that digital literacy functions as a moderating factor in TAM-based models for Indonesian e-Government.

System quality and technical support also play a key role in shaping user perceptions. Stable platforms, responsive features, and online help facilities reinforce positive user experiences. Research on the Mobile-JKN application indicates that system reliability and digital customer assistance increase satisfaction and loyalty (Pratama et al., 2022). Local government platforms such as JAKI and Jogja Smart Service also demonstrate that the application of UX-based design principles can increase adoption (Kominfo, 2023). These findings align with the extended TAM framework, in which system quality and user experience are linked to behavioral intention (Rana et al., 2023).

User experience emerges as one of the strongest determinants of long-term usage. Widodo et al. (2021) highlight that slow response times, repetitive login procedures, and error messages negatively affect continued use, while smooth interactions foster trust and motivation to stay. These realities underline the importance of human-centered design as a basis for digital public service development rather than purely administrative logic.

Overall, the reviewed studies indicate that public acceptance of e-Government in Indonesia results from the interaction of cognitive perceptions (usefulness and ease of use),

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affective determinants (trust and perceived security), and contextual factors (digital literacy, system quality, and user experience). TAM remains an effective analytical foundation for understanding the psychological and behavioral mechanisms of acceptance, yet the integration of external variables strengthens its suitability for developing countries. The key insight from this synthesis is that digital transformation will not reach its full potential through system rollout alone; it requires public confidence, accessibility, and user-oriented service design. With these insights, policymakers can develop digital service strategies that are more inclusive and sustainable for diverse user groups across Indonesia.

Factors Affecting the Acceptance of e-Government Services in Indonesia Based on the TAM Model

Public acceptance of e-Government services is largely determined by users' perceptions of the benefits, ease of use, and trustworthiness of government digital systems. Within the framework of the Technology Acceptance Model (TAM), the main factors that shape technology acceptance are Perceived Usefulness (PU) and Perceived Ease of Use (PEOU), which then influence Attitude Toward Use (ATT), Behavioral Intention (BI), and Actual Usage (AU) (Davis, 1989). In the context of digital public services, this theory provides a basis for understanding why people choose to use services such as Mobile-JKN, OSS-RBA, e-Samsat, Dukcapil Online, or regional applications such as JAKI (Jakarta) and JSS (Yogyakarta). Strengthening technology acceptance does not only depend on system innovation, but also on how technology is accepted and used in the administrative life of the community (Rana et al., 2023).

Empirical studies show that the usefulness of services (PU) is the most dominant factor in the acceptance of e-Government services in Indonesia. Sulistyowati et al,. (2021) found that users of digital government services in West Java were more receptive to applications when they felt an increase in efficiency, time savings, and ease of access to services. Similar findings were shown by Pratama et al. (2022) on Mobile-JKN users, where users stated that access to online health services reduced queues, facilitated registration, and provided ease of claims. In addition, research by Wu et al., (2024)on regional e-taxes shows that the perceived benefits of time savings and increased fiscal transparency significantly increase interest in using online tax services. These findings are consistent with global literature that confirms that the benefits of public technology motivate user behavior in developing countries (Ahmad & Khalid, 2022).

The second influential factor is ease of use (PEOU). Digital service users tend to choose systems that are easy to understand, do not require high technical skills, and provide clear guidance (Rana et al., 2023). In the Indonesian context, user experience and simplicity of interface are also key elements. Research by Chen & Aklikokou (2020) shows that people in Yogyakarta are quicker to accept digital administration systems that have simple navigation and responsive user support services. On the other hand, government applications that are complicated, prone to errors, or have inconsistent interfaces have the potential to reduce public interest in continuing to use digital services (Widodo et al., 2021).

In addition to PU and PEOU, digital trust is a very important external factor in the acceptance of e-Government services in Indonesia. Trust encompasses aspects of data security, personal information confidentiality, and the belief that the government is capable of managing public data securely (Balaskas et al., 2022). The Indonesian context shows high public sensitivity to the issue of personal data protection, especially after several cases of public data leaks at the national level (Satria et al., 2023). This causes trust to be a strong mediator between perceived benefits and behavioral intentions, meaning that the public will use digital systems when they are confident that their data is secure (Ahmad & Khalid, 2022). Therefore, strengthening cybersecurity, digital security literacy, and transparency in public data governance is a must for the government.

Other determining variables are the availability of technical support, the quality of information, and the suitability of digital services to public needs. Afrizal et al., (2024)

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emphasize that system quality plays a major role in influencing perceptions of ease of use, while the availability of customer support services increases user comfort and trust. Studies in several regions in Indonesia show the importance of offline support as a complement to digital services, especially for users with limited digital literacy (Sulistyowati et al,., 2021). Thus, a hybrid service model remains necessary during the transition to fully digital public services.

In addition to structural and technical factors, sociodemographic factors such as education level, age, geographic location, and digital experience also influence technology acceptance. BPS (2023) notes a significant gap in the use of digital services between urban (72.9%) and rural (41.5%) communities. Chen & Aklikokou (2020) emphasizes that older users are more likely to experience difficulties in adapting to government service technology.

This confirms that government digital policies must pay attention to digital inclusion aspects so as not to widen the gap in access to public services.

The following table shows the main TAM variables and research indicators in the context of e-Government:

Variable	Definition	Indicators
Perceived Usefulness (PU	Belief that e-Government improves service effectiveness	Time savings, faster service, increased transparency, convenience
Perceived Ease of Use (PEOU)	Belief that system is easy to learn and operate	Easy navigation, clarity of interface, low complexity, user guidance
Attitude Toward Use (ATT)	User's positive or negative feelings toward using systems	Willingness to use, satisfaction, perceived relevance
Behavioral Intention (BI)	Intention to continue using system	Continued usage intention, willingness to recommend
Trust	User confidence in system reliability and data security	Data security perception, privacy assurance, system integrity
Actual Usage (AU)	Real adoption and usage behavior	Frequency of access, task completion, service engagement

The review finds that users generally demonstrate a strong intention to continue using e-government platforms and are likely to recommend them to others, indicating sustained digital service acceptance. Within the Technology Acceptance Model (TAM), originally developed by Davis (1989), continued usage intention represents the ultimate behavioral outcome following perceived usefulness and ease of use. As summarized in Table 1, most empirical studies show that users who perceive government systems as useful, trustworthy, and easy to operate are more likely to maintain long-term engagement with digital public services.

The studies synthesized in this research show relatively consistent results, with PU, PEOU, and trust as the dominant factors. The following table compares the key findings of the Indonesian e-Government TAM study:

Platform	Key Findings	Dominant Variables
Regional service app (West Java)	Perceived usefulness and support influenced adoption	PU, Support
Mobile-JKN	Ease of use and trust increased intention	PEOU, Trust

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	to use	
e-Tax service	Perceived usefulness strongly predicted continued use	PU
Dukcapil Online (Yogyakarta)	Digital literacy affected ease of use and attitude	PEOU, Literacy
National e-Gov platforms	Data privacy concerns moerated adoption behavior	Trust, Risk

By looking at the comparative results of the study, it can be concluded that the acceptance of e-Government services in Indonesia revolves around three key factors: perceived benefits, ease of use, and user trust. However, the unique context of Indonesia, such as the level of digital literacy and data security issues, means that the TAM model needs to be developed by incorporating more complex social, cultural, and psychological variables.

Adoption Challenges, Acceptance Barriers, and Strategies for Strengthening TAM-Based e-Government in Indonesia

Although the adoption of e-Government in Indonesia has shown significant progress in recent years, public acceptance still faces a number of structural, social, and technical challenges that can hinder the effectiveness of public digital transformation. Based on the Technology Acceptance Model (TAM) approach, technology acceptance is influenced by perceived usefulness, ease of use, and trust in the system (Davis, 1989). In practice, the implementation of e-Government services often faces obstacles arising from low digital literacy, uneven infrastructure, challenges in public trust, and a lack of user-focused approaches in the development of public service applications. These findings are in line with the study by Sulistyowati et al,. (2021), which shows that successful digital adoption requires technical support and service quality sustainability so that the acceleration of digitalization is not only administrative but also transformative for people's behavior.

One of the main challenges is the high digital divide, both geographically and demographically. Urban communities are quicker to adopt e-Government services because they have better internet access, higher education levels, and a more digitally-friendly social environment (BPS, 2023). In contrast, people in rural or disadvantaged areas still face limited access to technology, low digital literacy, and a strong preference for face-to-face services. Chen & Aklikokou (2020) found that age and education level affect the ability to adapt to technology in population administration services, with older age groups showing greater resistance to the use of digital systems. This shows that e-Government adoption is not enough to simply provide a digital platform, but also to ensure equitable education and user support across all levels of society.

In addition to the digital divide, public trust in data security is a critical factor that influences the acceptance of government digital services. In several incidents of national data leaks, public trust in the security of digital systems has declined, resulting in a decrease in the intention to use online public platforms (Satria et al., 2023). In the extended TAM framework, digital trust functions as a moderator between perceived benefits and intention to use technology (Balaskas et al., 2022). Users who are uncertain about system integrity, data protection, or transparency in information management tend to be more cautious or reluctant to use digital services. Therefore, strategies to strengthen data security, increase transparency in information policy, and enforce personal data protection regulations are essential elements in promoting the sustainable adoption of e-Government.

On the technical side, complex application design, inconsistent interfaces, and system instability remain obstacles. Research by Wu et al., (2024)on local tax reporting systems shows that suboptimal user experience causes frustration and reduces continuance usage intention. Similarly, a study by Pratama et al. (2022) on Mobile-JKN users found that

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technical obstacles such as server downtime, login difficulties, and lack of user support had a negative impact on perceived ease of use (PEOU). These issues underscore the importance of a user-centered design approach in the development of government digital platforms and the provision of helpdesks and user training to increase public comfort and trust.

The next obstacle is cultural aspects and resistance to change. Traditional bureaucratic structures and manual administrative practices have created a strong culture of conventional services in some regions (Chen & Aklikokou, 2020). Even when digital services are available, some people still prefer offline services because they consider human interaction to be more reliable and provide a sense of certainty. Balaskas et al. (2022) explain that organizational culture and social norms can influence the acceptance of public technology, especially in developing countries where face-to-face interactions are considered more capable of providing clarity of service. This shows that the transition to digital requires a cultural transformation strategy that involves public education and improving the quality of digital interactions to build user trust and comfort.

In addition to individual and cultural factors, institutional support plays an important role in the successful adoption of e-Government. Afrizal et al., (2024) show that facilitating conditions such as training, help centers, supportive regulations, and inter-agency system integration contribute significantly to the sustainability of digital service use. In the Indonesian context, the success of digital services such as OSS-RBA and JAKI is due to the government's commitment to providing supporting infrastructure and regularly improving services based on user feedback (Kominfo, 2023). However, some regions still face challenges in interagency coordination and limitations in the technical capabilities of officials in operating e-Government systems (World Bank, 2022), resulting in inconsistent service quality across regions.

To overcome these challenges, strategies to strengthen e-Government acceptance need to consider three levels of intervention: technology, people, and public policy. At the technology level, the government needs to focus on improving system quality through simple interfaces, consistent user experiences, high system responsiveness, and international standard data security. At the human level, improving digital literacy through public training programs, providing digital consultation centers in villages and sub-districts, and conducting cyber security education campaigns can expand access and reduce fear of technology. Meanwhile, at the public policy level, the government must ensure inter-agency system integration, strengthen data protection policies, and implement organizational change management to ensure the sustainability of public service digitalization.

In the context of TAM theory, strategies to increase acceptance can be aligned with increasing perceived usefulness through fast and efficient service features, as well as enhancing perceived ease of use through user-friendly interface design and clear service guidelines. Furthermore, trust can be enhanced through data management transparency, improved system security, and government technology standard certification. With a holistic approach, e-Government implementation will not only result in procedural digitization but also digital transformation in the behavior and culture of Indonesian public services.

4. Conclusions and Suggestions

This study sought to answer how the expanded Technology Acceptance Model explains public acceptance of e-Government services in Indonesia. The synthesis demonstrates that perceived usefulness and perceived ease of use remain the strongest predictors of user acceptance, consistent with the original TAM formulation by Davis (1989). In addition, trust in digital systems and positive service experience emerge as crucial extensions of TAM in the public sector context, particularly due to the role of government credibility, data security concerns, and service quality perceptions in shaping citizens' willingness to use digital platforms.

The findings also show that adoption levels vary across demographic and regional lines, where higher digital literacy, better infrastructure, and strong institutional support

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correlate with higher acceptance. Conversely, limited digital capabilities, usability challenges, and fear of privacy breaches continue to inhibit adoption, especially in rural and low-access areas. Therefore, e-Government utilization in Indonesia is not determined solely by individual cognitive assessments, but also by institutional trust and equitable access conditions.In summary, the expanded TAM framework effectively captures both cognitive and contextual drivers of e-Government adoption in Indonesia, showing that acceptance is influenced by perceptions of utility, ease, trust, and service experience in combination with socio-infrastructural disparities. These insights reinforce the importance of designing digital public services that are functional, reliable, inclusive, and trustworthy in order to increase sustainable citizen adoption.

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