

Navigating Innovation in Public Services: Conceptual Insights into MyJPJ App Reception

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Abstract: The digitalization of public services has transformed citizen and government interactions, with mobile applications serving as key platforms for service delivery. In Malaysia, the MyJPJ app exemplifies this innovation by enabling digital access to road tax, driver's licenses and enforcement information. While the app streamlines transportation related services, its success ultimately depends on public reception. This paper proposes a conceptual framework to evaluate user receptions of the MyJPJ app by integrating the Technology Acceptance Model (TAM), the Unified Theory of Acceptance and Use of Technology (UTAUT) and the concept of public value creation. The framework emphasizes five interrelated dimensions: perceived usefulness, ease of use, trust and security, service quality and innovation and public value. By offering a holistic approach, the study contributes to both theory and practice, providing insights for policymakers and system designers to enhance usability, trust, and citizen satisfaction. Future research directions include empirical testing, sectoral comparisons and longitudinal assessments.

Keywords: *MyJPJ app, public service innovation, digital government, technology acceptance, public value, user perception*

1. Introduction

The rapid advancement of digital technologies has transformed how governments deliver public services, shifting from in-person interactions to digital platforms in order to promote efficiency, transparency and citizen empowerment (Bannister & Connolly, 2014; Cordella & Bonina, 2012). In recent years, scholars have underscored how this transformation remains salient in light of emergent technologies, with digital government reforms often framed as central to administrative modernization (Yang et al., 2024). The global move toward e-government underscores that integrating technology is no longer optional but essential for accessible and responsive public services.

In Malaysia, the MyJPJ mobile application (launched on 10 February 2023) exemplifies such efforts in the transport sector. Developed by the Road Transport Department (JPJ), it offers services such as license renewal, road tax management, vehicle verification and summons handling, thereby reducing dependence on physical documents. Posterior to its launch, the app recorded strong uptake over 2.5 million downloads in its initial days (JPJ, 2023). This reflects the public's early interest in leveraging digital channels for traditionally bureaucratic tasks.

Yet, widespread adoption does not guarantee success. Users' acceptance hinges on factors like perceived usefulness, ease of use, data security and quality of service, these dimensions emphasized in classic models like TAM and UTAUT (Davis, 1989; Venkatesh & Davis, 2000; Venkatesh et al., 2003). More recently, scholars have also recognized the influence of digital literacy in shaping e-government usage behavior (e.g. among rural women) (Does Digital Literacy Matter for E-Government Usage, 2025). Concerns about privacy, system reliability and equity in access persist as critical barriers (Chuah et al., 2024).

Beyond adoption metrics, the concept of public value offers a broader lens: digital innovations must deliver societal benefits (e.g. trust, accountability, inclusiveness) rather than just functional gains (Moore, 1995). Recent systematic reviews emphasize that public value creation is emerging as a core theme in e-government scholarship, clustering around adoption, service quality, citizen engagement and data privacy (Othman & Che Husin, 2024). Integrating public value with technology acceptance thus yields a more comprehensive understanding of how citizens perceive government platforms.

Against this backdrop, this paper proposes a conceptual framework to assess public reception of the MyJPJ app. By combining constructs from TAM, UTAUT and public value theory, the framework foregrounds five key dimensions: perceived usefulness, ease of use, trust and security, service quality and innovation and public value creation. Theoretically, the model extends adoption theories by embedding the public value perspective; practically, it offers evidence-based guidance for policymakers and system designers to enhance usability, trust, inclusion and citizen satisfaction in digital public services.

2. Literature Review and Theoretical Background

This section critically reviews existing literature to position the study within broader academic discussions. It establishes the conceptual foundation for the research, clarifies its objectives, and guides the selection of methodology. In doing so, it ensures the study's contributions are grounded in relevant theoretical and empirical contexts.

2.1 Service Innovation in the Public Sector

Service innovation in the public sector involves introducing new or enhanced services, processes or delivery methods to increase user value. Recent studies highlight the digitalization of citizen services, especially via online and mobile platforms as a central focus of governmental reforms aiming to improve access, reduce administrative burdens and boost transparency (Ali Assegaf, 2024; Frontiers, 2025). In Malaysia, initiatives such as upgrading the public sector open data portal (data.gov.my) and launching AI adaptation guidelines illustrate a transition towards “digital-first” public service delivery (Ministry of Digital, 2025; Selangor Journal, 2023). Nevertheless, public sector innovations differ from private sector ones because they are obliged to balance efficiency gains with societal goals like inclusivity, accountability and trust (Thirawan, 2025; Dayarana et al., 2025).

2.2 Technology Adoption in Citizen Services

Research on technology adoption in citizen services has long been framed through the Technology Acceptance Model (TAM), which argues that perceived usefulness and perceived ease of use are central predictors of user acceptance (Davis, 1989). More recent extensions such as UTAUT was constructs including performance expectancy, effort expectancy, social influence and facilitating conditions to account for adoption in varied public sector contexts (Venkatesh et al., 2003; Dwivedi et al., 2022). However, modern empirical studies show these models alone are often insufficient. For instance, in Malaysia, an extended TAM model investigating e-government service adoption found that while usefulness and ease of use remain strong predictors, perceived security plays a significant mediating role in influencing behavioral intention (Zubir & Latip, 2024). Similarly, meta-analytic evidence underscores that trust, risk, privacy and security strongly influence e-government trust and are essential for citizens' willingness to use government digital services (Information Systems Frontiers, 2024; Hooda et al., 2023). In the case of MyJPJ, citizens' perceptions of the JPJ's institutional credibility, the reliability of the app and assurances regarding data protection are therefore likely to be critical determinants of adoption.

2.3 Public Value Perspective

Although conventional technology adoption frameworks highlight individual perceptions such as usefulness and usability, evaluating digital government services demands consideration of public value for example, the societal benefits accruing from government interventions. Public value encompasses outcomes like legitimacy, trust, social equity, accountability and inclusivity (Moore, 1995). In Malaysia, recent policies such as the Public Sector Digitalization Strategic Plan (PSPSA 2021-2025) and initiatives by the National Digital Department to deploy emerging technologies (AI, cloud, blockchain) reflect efforts to generate value beyond operational efficiency, namely by strengthening transparency, citizen participation and responsible governance (Jabatan Digital Negara [JDN], 2024). For applications like MyJPJ, public value makes legitimacy, accountability and fairness central criteria, ensuring that digital innovations also address societal expectations and reinforce trust in public institutions.

2.4 Research Gap

While many investigations have addressed technology adoption in the private sector, there remains a shortage of studies that explicitly integrate adoption models with public value considerations in e-government service innovations. In Malaysia, research concerning government apps, especially transport related ones is sparse. Recent work on e-government services in urban Malaysian communities, however has begun to underscore facets like accessibility, trust in government and perceived usefulness as important predictors of usage (Aminuddin, Abu Hassan, & Gani, 2023; Zubir & Latip, 2024). These findings point to the necessity for a conceptual model that accounts both for standard adoption factors and broader societal outcomes when examining citizen responses to digital service innovations.

To fill this gap, this paper proposes a framework that merges technology adoption theories (such as TAM and UTAUT) with the notion of public value. It highlights five critical dimensions as determinants of citizen reception of the MyJPJ app: perceived usefulness; ease of use; trust and security; service quality and innovation and public value creation. Incorporating recent Malaysian empirical findings, such as the positive effect of perceived security on behavioural intention to use e-government services (Zubir & Latip, 2024) and the role of trust in government in service satisfaction (Aminuddin et al., 2023), the framework aims to offer a more comprehensive understanding of what drives acceptance and value creation in digital government platforms.

3. Conceptual Development

Public reception of the MyJPJ app can be better explained by combining constructs from established technology adoption models with public sector innovation perspectives. The Technology Acceptance Model (TAM) continues to emphasize perceived usefulness and ease of use as central predictors of user attitudes toward new technologies (Alraja et al., 2022; Mailizar et al., 2021). In the context of MyJPJ, perceived usefulness relates to whether the app reduces waiting times, minimizes bureaucratic processes and delivers tangible benefits compared to traditional service counters, while ease of use involves aspects of design, accessibility and overall user experience.

The Unified Theory of Acceptance and Use of Technology (UTAUT) provide further insight by incorporating performance expectancy, effort expectancy, social influence and facilitating conditions (Venkatesh et al., 2016; Dwivedi et al., 2020). For MyJPJ, peer recommendations and widespread smartphone adoption in Malaysia can significantly influence uptake, alongside reliable internet connectivity that enables seamless transactions. Beyond these adoption constructs, trust and security are particularly important in digital government services. Recent studies highlight that citizens' concerns about data protection, institutional reliability and system credibility strongly affect their willingness to adopt e-government apps (Alshamaila &

Papagiannidis, 2021; Zubir & Latip, 2024). In the case of MyJPJ, safeguarding personal data and maintaining confidence in JPJ's digital infrastructure are fundamental to building public trust.

Service quality and innovation also shape public perception. Research shows that when users perceive mobile services as innovative, delivering smoother interactions, greater transparency and improved convenience they are more likely to adopt them (Susanto et al., 2023). MyJPJ's ability to demonstrate innovation compared to manual processes will influence its reception. Finally, the concept of public value provides a broader evaluative lens. Public value theory suggests that digital government initiatives should not only deliver efficiency but also enhance transparency, accountability and citizen satisfaction (Twizeyimana & Andersson, 2019; Ciasullo et al., 2021). For MyJPJ, its contribution to strengthening trust in public institutions and creating societal benefits will be central to shaping long-term acceptance. Together, these five dimensions perceived usefulness, ease of use, trust and security, service quality and innovation and public value creation form the foundation of the conceptual framework (see Figure 1).

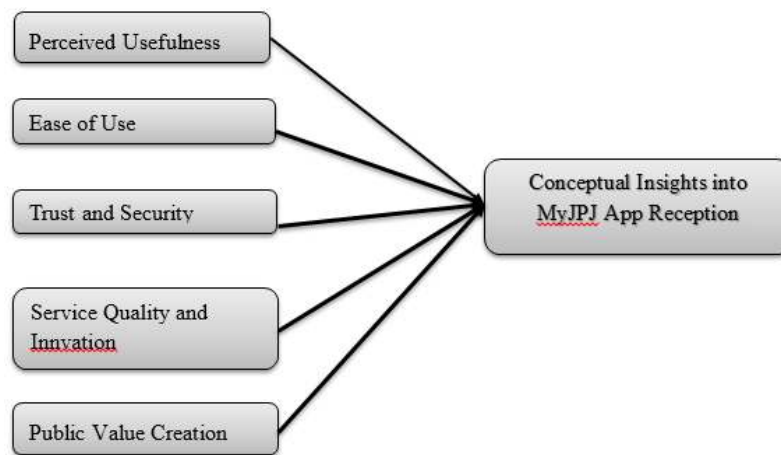


Figure 1: Conceptual Framework

4. Implications

This The proposed framework provides multiple contributions to theory and practice. From a theoretical standpoint, it advances traditional technology adoption models such as the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT) by embedding public value as a central dimension (Dwivedi et al., 2020; Venkatesh et al., 2016). While TAM and UTAUT emphasize individual-level perceptions like usefulness, ease of use and performance expectancy, the present framework argues that evaluating e-government innovations requires a broader lens that incorporates societal benefits such as inclusivity, trust, and accountability (Ciasullo et al., 2021).

Second, the integration of trust and security underscores the distinctive characteristics of digital public services. Unlike commercial platforms, government applications manage sensitive personal data and directly affect institutional credibility. Recent studies confirm that citizens' trust in digital services is heavily shaped by data protection measures, cybersecurity assurance and institutional transparency (Alshamaila & Papagiannidis, 2021; Zubir & Latip, 2024). This demonstrates that adoption in the public sector cannot be fully explained through traditional technology acceptance theories alone.

Third, the inclusion of service quality and innovation reflects the evolving expectations of citizens in digital ecosystems. Contemporary research indicates that users' perceptions of service innovation, whether the app simplifies processes, enhances transparency or delivers

convenience play a decisive role in adoption (Susanto et al., 2023). Embedding this dimension ensures that the framework goes beyond functionality to capture citizens' broader assessments of government service improvement. Overall, the framework contributes theoretically by bridging adoption theories with public value perspectives, thereby providing a more holistic foundation for future empirical studies on digital governance and transport service innovation.

From a practical perspective, the framework offers actionable insights for policymakers, system developers and public service managers in Malaysia and beyond. Emphasizing perceived usefulness and ease of use points to the importance of user-centered design, intuitive navigation and tangible benefits such as time savings and simplified transactions (Alraja et al., 2022). Equally, highlighting trust and security draws attention to the need for robust cybersecurity, transparent data policies and reliable service delivery to strengthen public confidence (Zubir & Latip, 2024). In addition, the focus on service quality and innovation suggests that continuous updates, integration with other digital government services and responsive technical support are critical for sustained adoption. Finally, embedding public value creation within service design ensures that MyJPJ functions not only as a digital upgrade but also as a governance tool that enhances transparency, accountability and long-term citizen trust (Twizeyimana & Andersson, 2019). Collectively, these implications provide a roadmap for improving the adoption of MyJPJ and similar platforms while balancing technological efficiency with societal value creation.

5. Future Research Directions

The conceptual framework proposed in this paper provides a foundation for future empirical studies on digital service innovation in the public sector. Several avenues for research are recommended. First, the future studies could empirically test the five proposed dimensions (*perceived usefulness, ease of use, trust and security, service quality and innovation, and public value creation*) through surveys or structural equation modeling (SEM). Such studies would validate the extent to which these constructs explain citizens' reception of the MyJPJ app and potentially identify interaction effects among the variables. Although this paper focuses on MyJPJ, the framework could be applied to other Malaysian government applications such as *MySejahtera* or *MyEG*. Comparative studies across platforms would reveal whether the same determinants hold consistent across service domains or if unique factors emerge in health, taxation, or transport contexts.

Public reception of government innovations may evolve over time. A longitudinal study could track changes in adoption and satisfaction as the MyJPJ app matures, new features are introduced or policy mandates (e.g., digital road tax) are enforced. This would offer valuable insights into the sustainability of digital adoption. Since digital government services are being adopted across Southeast Asia, cross-country comparisons (e.g., between Malaysia, Indonesia and Singapore) could assess how cultural, institutional and infrastructural factors influence public reception. Such studies would test the generalizability of the proposed framework in diverse settings.

Future research could enrich the framework by integrating emerging perspectives such as digital trust ecosystems, user experience design (UXD) or behavioral economics approaches to citizen adoption. This would ensure that the framework evolves alongside technological advancements and changing citizen expectations. By pursuing these directions, scholars can strengthen the theoretical grounding of digital government adoption research and provide practical recommendations for policymakers seeking to enhance citizen engagement with service innovations such as the MyJPJ app.

6. Conclusion

The digital transformation of public services has become a central feature of modern governance, promising greater efficiency, accessibility and transparency for citizens. In Malaysia, the MyJPJ app exemplifies this shift by replacing traditional counter-based services with a mobile platform for transport-related transactions. However, the success of such innovations depends not only on technological capacity but also on how they are received by the public. This paper has proposed a conceptual framework for evaluating public reception of the MyJPJ app, integrating insights from established technology adoption models with a public value perspective. The framework identifies five critical dimensions; *perceived usefulness, ease of use, trust and security, service quality and innovation and public value creation* that collectively shape citizens' perceptions of digital service innovation. By emphasizing both individual-level determinants (usefulness, usability, trust) and broader societal outcomes (public value), the model provides a more holistic lens for assessing adoption in the public sector.

The theoretical contribution of this paper lies in extending TAM and UTAUT by embedding public value as a central dimension of e-government adoption. Practically, the framework offers guidance for policymakers and system designers to enhance usability, strengthen trust and ensure that digital innovations deliver tangible societal benefits. Looking ahead, the proposed model invites empirical validation and comparative research across other government applications and regional contexts. As governments worldwide continue to digitalize, understanding the factors that shape public reception will be essential for ensuring that service innovations are not only efficient but also trusted, inclusive and valuable to citizens.

In conclusion, the MyJPJ app serves as a timely case for exploring the intersection of digital innovation, public trust, and citizen value. This conceptual study provides the groundwork for future research and offers practical insights for strengthening the success of e-government initiatives in Malaysia and beyond.

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