

The Influence of Information Quality, Service Innovation, and Website Usability on Public Satisfaction with the JAKEVO System at Sub-District Offices in Jakarta

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Abstract This study aims to investigate the influence of information quality, service innovation, and website usability on public satisfaction in using the JAKEVO digital platform at sub-district offices in Jakarta. As digital transformation becomes a core element of modern public service, platforms like JAKEVO are expected to streamline bureaucracy, enhance transparency, and promote citizen engagement. However, the true measure of success lies in user satisfaction and how the platform responds to the needs of diverse users. Using a quantitative approach, this study surveyed 120 JAKEVO users and analyzed the data using PLS-SEM. The results indicate that all three variables – information quality, innovation, and usability – have a positive and significant effect on public satisfaction. This suggests that enhancing digital services must prioritize both technical excellence and citizen-centric design.

Keywords: Information quality, service innovation, website usability, JAKEVO, public satisfaction.

Introduction

The modernization of public service through digital platforms has become an essential step for governments to respond to the expectations of transparency, efficiency, and accessibility (Denhardt & Denhardt, 2000). In Jakarta, one such initiative is the JAKEVO system – Jakarta Elektronik Open System – designed to provide various administrative services online. This digital transformation is part of a broader e-government strategy aimed at improving service delivery and public engagement (Heeks, 2006).

Despite its potential, the successful adoption of JAKEVO depends heavily on user experience. Many citizens still face barriers due to digital illiteracy, limited internet access, or a lack of familiarity with online administrative procedures. Hence, it is crucial to examine three key factors influencing public satisfaction: the quality of information provided, the degree of innovation in service delivery, and the ease of using the website.

The study is grounded in the Technology Acceptance Model (Davis, 1989) and the SERVQUAL framework (Zeithaml et al., 1990), both of which highlight the importance of perceived usefulness, ease of use, and service quality in user satisfaction. By evaluating the public perception of JAKEVO across Jakarta, this research aims to identify critical areas for improvement and contribute to policy recommendations for more inclusive and efficient digital public services.

Literature Review

2.1 Information Quality

Information quality is defined as the degree to which information is accurate, timely, complete, and relevant (Wang & Strong, 1996). In digital services, especially government platforms, users rely heavily on the clarity and accessibility of information to navigate administrative procedures. Poor information can lead to user frustration, errors, and decreased trust (Laudon & Laudon, 2020).

2.2 Service Innovation

Service innovation in the public sector refers to the introduction of new or improved services,

processes, or delivery mechanisms that better meet user needs (Osborne & Brown, 2011). On platforms like JAKEVO, innovation includes simplified application flows, real-time tracking, and integration with other government systems. Innovative services foster trust, reduce transaction costs, and signal a responsive government.

2.3 Website Usability

Usability refers to how easily users can interact with a system to achieve their goals effectively and satisfactorily. Based on the TAM model (Davis, 1989), ease of use directly influences user acceptance. For public platforms, usability must account for varying levels of digital literacy and ensure inclusive design principles (Susanti & Mahendra, 2023).

2.4 Public Satisfaction

Public satisfaction is the outcome of user experiences with digital services. It reflects not only the service outcome but also the process, ease of interaction, and perception of fairness (Dwiyanto, 2006). High satisfaction leads to continued use and increased trust in government.

Methods

This study employed a quantitative research approach using a survey method to analyze the relationship between information quality, service innovation, website usability, and public satisfaction with the JAKEVO system.

3.1. Population and Sample

The population in this study were Jakarta residents who had used JAKEVO for administrative services. A purposive sampling technique was used to select 120 respondents. The criteria included individuals aged 18 years and older who had used JAKEVO at least once within the past 6 months.

3.2. Characteristics of Respondents

Of the 120 respondents, 54% were female and 46% male. Most participants (60%) were aged between 21–30 years, 30% were aged 31–40 years, and the remaining 10% were over 40. In terms of education, 70% had a university degree, and 30% had a senior high school diploma. This diversity reflects the typical demographic of urban digital service users.

3.3. Data Collection Instrument

The instrument used was a structured online questionnaire distributed via Google Forms. It consisted of closed-ended questions measured using a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The questionnaire was developed based on previously validated research instruments:

- Information Quality: clarity, accuracy, completeness, and relevance (DeLone & McLean, 2003)
- Service Innovation: user-centered design, integration, and responsiveness (Tidd & Bessant, 2009)
- Usability: accessibility, ease of navigation, and simplicity of language (Davis, 1989)
- Public Satisfaction: effectiveness, efficiency, and overall satisfaction with the JAKEVO experience

3.4. Validity and Reliability Testing

Instrument validity was tested using outer loading analysis with a minimum threshold of 0.70. Reliability was assessed using Cronbach's Alpha and Composite Reliability (CR), with acceptable values being >0.70. Average Variance Extracted (AVE) was also calculated to ensure convergent validity (>0.50).

3.5. Data Analysis Technique

The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) through SmartPLS 3.0 software. This method was chosen due to its suitability for complex models with multiple constructs and small to medium-sized samples. The analysis included:

- Evaluation of the measurement model (outer model): for reliability and validity
- Evaluation of the structural model (inner model): for hypothesis testing and coefficient significance
- Path coefficient analysis and R^2 values to assess the predictive power of the independent variables

This comprehensive approach ensured that the results of the analysis provided valid and robust insights into the digital public service experience via the JAKEVO platform.

Result and Discussion

This study aimed to examine the influence of information quality, service innovation, and website usability on public satisfaction in the use of the JAKEVO system. Data from 120 respondents were analyzed using PLS-SEM via SmartPLS. The results are presented below.

4.1 Measurement Model Evaluation

The measurement model was assessed through validity and reliability testing. All indicators had loading factors above 0.70 and passed the minimum r-table threshold (0.195), confirming convergent validity. The Cronbach's Alpha and Composite Reliability values for each construct also exceeded 0.70, indicating strong internal consistency. The Average Variance Extracted (AVE) for each construct was above 0.50, confirming adequate convergent validity.

Furthermore, discriminant validity was established using the Fornell-Larcker criterion, where the square root of each construct's AVE was greater than its correlation with other constructs. Multicollinearity was not an issue, as all Variance Inflation Factor (VIF) values were below 10.

Table 1. Validity and Reliability Summary

Variable	Cronbach's Alpha	Composite Reliability	AVE	Description
Information Quality (X1)	0.894	0.921	0.715	Valid & Reliable
Service Innovation (X2)	0.919	0.939	0.753	Valid & Reliable
Website Usability (X3)	0.947	0.960	0.822	Valid & Reliable
Public Satisfaction (Y)	0.924	0.944	0.735	Valid & Reliable

4.2 Structural Model and Hypothesis Testing

Hypothesis testing was conducted using path coefficient analysis. The results showed that all three independent variables significantly influenced public satisfaction in using JAKEVO services.

Table 2. Path Coefficient and Hypothesis Testing

Hypothesis	Path	β Coefficient	T-Statistic	P-Value	Result
H1	Information Quality \rightarrow Satisfaction	0.216	2.548	0.012	Supported
H2	Service Innovation \rightarrow Satisfaction	0.301	3.295	0.001	Supported
H3	Website Usability \rightarrow Satisfaction	0.411	4.215	0.000	Strongly Supported

4.3 Discussion

The findings confirm that all three variables—information quality, service innovation, and website usability—positively affect user satisfaction with the JAKEVO platform. Among them, website usability showed the strongest influence, indicating that ease of navigation, clarity of interface, and accessibility are crucial in shaping public perception of digital government services. This supports Davis's (1989) Technology Acceptance Model, which emphasizes perceived ease of use as a key determinant of user acceptance.

Service innovation also had a significant impact, consistent with Osborne and Brown (2011), who argue that public sector innovation must adapt to citizen needs. Features such as integrated systems, faster service flows, and online tracking contribute to a more responsive user experience.

Information quality, while showing a slightly lower effect, remains important. Accurate, clear, and relevant information enhances public trust and reduces procedural errors, aligning with Wang and Strong's (1996) concept of high-quality information systems.

In summary, these results suggest that improving digital public services should prioritize not only

technological features but also user-centric design and clear communication. These findings offer practical implications for enhancing the inclusivity and effectiveness of platforms like JAKEVO.

Conclusion

This study aimed to analyze the influence of information quality, service innovation, and website usability on public satisfaction with digital public services through the JAKEVO platform in sub-district offices across Jakarta. Based on the results of the PLS-SEM analysis with 120 respondents, all three independent variables were found to have a positive and significant effect on public satisfaction.

Among them, website usability emerged as the most dominant factor influencing user satisfaction. This highlights the importance of user-friendly design, intuitive navigation, and easy accessibility in enhancing the overall user experience. Service innovation also played a vital role, offering value through integrated services, faster processing, and real-time tracking. Meanwhile, information quality significantly contributed to satisfaction by ensuring the clarity, accuracy, and relevance of the content provided on the platform.

In conclusion, the success of digital public service platforms such as JAKEVO is not solely dependent on technological capabilities, but also on how well the system meets user expectations and comfort. Prioritizing user-centered design, reliable information, and relevant innovations is key to improving satisfaction and trust in digital government services.

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