

The Effect of Implementing the Patriot Single Window (PSW) Application on the Quality of Digital Public Services in the Bekasi City Government

Vidya Zahra Salsabilla^{1*}, Rita Rahmawati², Neng Virly Apriliyani³

Djuanda University

Corresponding Author: Vidya Zahra Salsabilla

vidyazahrasalsabillaa@gmail.com

ARTICLE INFO

Keywords: Patriot Single Window, Digital Public Services, E-Government, Service Quality, And Digital Transformation.

Received : 25 April

Revised : 25 June

Accepted: 25 July

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ABSTRACT

This study aims to analyze the implementation of the Patriot Single Window (PSW) application, the quality of digital public services, and the effect of the application implementation on the quality of digital public services in the Bekasi City Government. This study uses a quantitative approach with an explanatory survey method. The data collection process was carried out using a Likert scale. Weight Mean Score (WMS), validity testing, reliability testing, simple linear regression, t-test, and coefficient of determination were used in data analysis. The study findings show that Patriot Single Window is in the very good category with an average of 4,57. The quality of digital public services is also in the very good category, with an average score of 4,45. The regression analysis results show that the implementation of Patriot Single Window has a positive and significant effect on the quality of digital public services, with a significance level of $0,000 < 0,05$ and a coefficient of determination of approximately 0,364. This indicates that successful implementation of digital public services can improve the quality of digital public services in Bekasi City.

INTRODUCTION

Digital transformation in government is a global strategy that aims to improve the quality of governance and public services through the use of digital technology (OECD, 2020). Many governments around the world use digital technology to create public services that are more efficient, transparent, integrated, and focused on the needs of the general public (United Nations Department of Economic and Social Affairs [UNDESA], 2022). The concept of digital government has emerged as a new paradigm that focuses not only on the use of information technology, but also on bureaucratic transformation and the creation of value for the general public (OECD, 2020).

In the era of digital transformation, governments must be able to provide public services that are fast, efficient, transparent, and affordable through the use of information technology. Digital transformation in the public sector is an important component in promoting good governance and improving the quality of services delivered to society. In this regard, the government encourages the implementation of the Electronic-Based Government System (SPBE) as a means of integrating digital public services within government institutions.

As one of the regions implementing digital transformation in public services, the Bekasi City Government is developing several information-technology-based innovations. One of these innovations is the Patriot Single Window (PSW) application, a digital platform provided by the Bekasi government to enable the public to access public administration and licensing services online through a single integrated service system. The existence of Patriot Single Window is one component of the Bekasi City Government's efforts to make public services more efficient, effective, and accessible to the general public. Through this application, people can access many services provided by the government without having to visit service offices. This system is designed as a digital service platform that integrates several public services into one service point, making administrative processes more efficient and practical.

The Bekasi City Investment and One-Stop Integrated Service Office (DPMPTSP) has a strategic approach to public services, particularly in the fields of licensing and investment. In accordance with the principles of coordination, integration, synchronization, simplification, security, and service certainty, the Bekasi City DPMPTSP aims to assist the Mayor in coordinating and administering integrated administrative services in licensing and investment.

According to the Organisation for Economic Co-operation and Development [OECD] (2020), the quality of digital public services is determined by users' perceptions of system efficiency, service availability, the clarity and effectiveness of service delivery, and the protection of personal data in the digital service process. According to the United Nations Department of Economic and Social Affairs [UNDESA] (2022), user experience in accessing digital public services, such as ease of navigation, consistency of information, and system maintenance, is very important in determining the quality of digital public services provided by the government.

In the context of digital government, the successful provision of public services digitally depends not only on the availability of technology, but also on

service integration among institutions, cooperation among government organizations, the development of technological infrastructure, the capabilities of human resources supporting the system, and the extent to which the public uses public services (UNDESA, 2022). This concept is explained in the E-Government Implementation Success Model, which was developed in the context of digital government policy by the Organisation for Economic Co-operation and Development (OECD, 2020) and expanded by the United Nations Department of Economic and Social Affairs (UNDESA, 2022). This indicates that the effectiveness of digital public government services is strongly influenced by service integration, interorganizational coordination, technological system readiness, and preparation for managing the adoption of digital services by the general public.

Based on the approach described above, the implementation of the Patriot Single Window (PSW) application in this study is defined as the level of success in applying an integrated digital public service system managed by the Bekasi government, which will then be analyzed as the independent variable in this study (UNDESA, 2022).

Based on the interview results, DPMPTSP-related services in the Patriot Single Window application include information on business licensing, licensing consultation, monitoring of license application status, public support services, and access to digital documents. This information explains that the purpose of integrating these services is to make it easier for the general public to receive services without having to go directly to the service center. (Bekasi City DPMPTSP, Interview Results, 2025).

LITERATURE REVIEW

E-Government and Digital Government

Two key concepts in technology-based government transformation are e-government and digital government (OECD, 2025). E-government is defined as the use of information and communication technology (ICT), particularly the internet, by the government to improve the quality of government operations (Sistem Informasi, 2024). Its main focus is on the digitalization of public services and administrative processes, such as online service delivery, increased accessibility, bureaucratic work efficiency, and information transparency for the general public (Frontiers in Political Science, 2024).

Therefore, e-government indicators include administrative efficiency and productivity, the quality of public services, transparency, public participation, and data security and integrity (Frontiers in Political Science, 2024). On the other hand, digital government has broader and more transformative capabilities, such as using digital technology as a key component of government modernization strategies to create public value (OECD, 2024).

Integrated Service System (Patriot Single Window)

An integrated service system, or single window, is a digital public service that enables the general public to access various government services through one integrated channel. According to the United Nations Department of

Economic and Social Affairs (UNDESA, 2022), a single-window system can be used to reduce the fragmentation of public services and improve the efficiency and consistency of government services by integrating digital systems.

Patriot Single Window (PSW) is a digital public service platform developed by the Bekasi government as a means of integrating several government services into one application. The development of this application is part of the implementation of the Electronic-Based Government System (SPBE), which aims to improve the effectiveness, efficiency, transparency, and quality of public services through the use of information technology. According to UNDESA (2022), integrating services into one digital platform is one of the main characteristics of digital government that focuses on ease of access and the needs of service users.

As an implementation of the single-window concept, Patriot Single Window integrates several services that were previously provided separately by OPD organizations into one digital channel. This integration enables the public to access several public services through one application without having to access many other systems. Based on the features available in the application, Patriot Single Window services can be categorized into several public service categories as follows: a. Licensing and investment services; b. Government and population administration services; c. Complaint and public information disclosure services; d. Health and social services; e. Education and human resource development services; f. Economic and taxation services; g. Emergency and public safety services; h. Smart City and city information services.

Quality of Digital Public Services

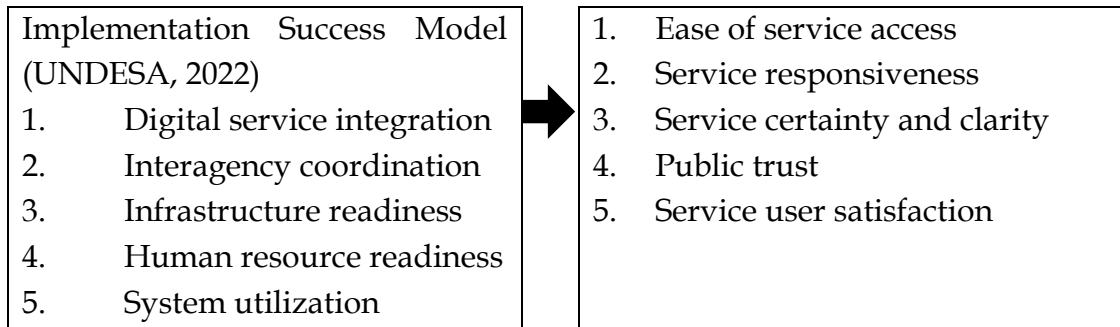
The quality of digital public services is determined by the government's ability to provide services that are easily accessible, responsive, transparent, and able to meet the needs of the general public through the use of digital technology (OECD, 2020). Meanwhile, UNDESA (2022) states that high-quality digital public services must be able to increase user satisfaction, improve service delivery, and build public trust in government digital service systems.

Public service quality is an important factor in government initiatives that prioritize public welfare. Zeithaml, Bitner, and Gremler (2018) define service quality as the level of service quality that can meet or exceed the needs of service users. In the public sector, service quality is related not only to service outcomes, but also to service delivery processes that are transparent, responsive, and accountable. In line with this, Osborne (2018) argues that contemporary public services must focus on public values and the needs of the general public as service users.

Conceptual Framework

Implementation of the Patriot Single Window (PSW) Application (Variable X) based on the E-Government
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Digital Public Service Quality (Variable Y) based on the Digital Public Service Quality Model (OECD, 2020)
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METHODOLOGY

The research methodology used is the explanatory survey method. This method is used to explain the causal relationship between independent and dependent variables through initial data collection (Neuman, 2019). The explanatory survey method is used because the objectives of this study are to: 1. Determine the level of use of the PSW application (X); 2. Determine the quality of digital public services (Y); 3. Determine the statistical effect of variable X on Y; and 4. Interpret the research results to draw causal conclusions. This method is useful for studying public administration and digital government because it can capture public perceptions as service users (OECD, 2020).

The population using the Patriot Single Window (PSW) application in Bekasi is the unit of analysis in this study. Users are considered the unit of analysis because the quality of digital public services is determined by the perceptions and experiences of service users (UNDESA, 2022). In addition, the successful implementation of government digital services is strongly influenced by the level of user satisfaction and usage (OECD, 2020). The population in this study consists of all individuals who have used the Patriot Single Window (PSW) application. Based on data from the Bekasi City Office of Communication, Informatics, Statistics, and Encryption in 2025, the number of registered users of the Patriot Single Window application exceeded 5,000 on Google Playstore.

The sampling technique used is probability sampling with the simple random sampling method, in which every member of the population has an equal opportunity to be selected as a respondent (Sugiyono, 2019).

Data collection techniques were carried out using two methods, namely:

1. Literature study, which was used to evaluate theories from books, journals, and other research sources; and
2. Field study, which was conducted through observation, interviews, and questionnaire distribution.

The questionnaire was used as the main instrument with a Likert scale from 1 to 5. Observation was conducted to understand actual field conditions, while interviews were used to collect information.

The Weight Mean Score (WMS), validity test, reliability test, normality test, simple linear regression analysis, hypothesis test (t-test), and coefficient of determination are several descriptive quantitative analysis techniques used in this study. The results were then interpreted into research categories to

understand the impact of the Patriot Single Window application on the quality of digital public services.

RESEARCH RESULTS

Based on data obtained from the Bekasi City Investment and One-Stop Integrated Service Office (DPMPTSP), the Patriot Single Window application integrates several public services provided by OPD organizations within the Bekasi City environment. According to the Bekasi City DPMPTSP Interview Results (2025), these services include population administration, licensing and investment, public complaint services, health services, regional tax services, public information services, labor and MSME services, monitoring of digital service processes, and various other local government services.

Based on observations and research findings, the implementation of Patriot Single Window has contributed to improvements in public service processes in Bekasi. When many services are integrated into one digital platform, the public can receive services more efficiently than through conventional systems. However, the successful implementation of this application depends on a number of factors, including interagency coordination, technological infrastructure, human resource competence, and the level of service utilization by the general public.

Recapitulation of the Patriot Single Window Implementation Variable and the Digital Public Service Quality Variable

Variable	Dimension	Indicator	Average	Criteria
Patriot Single Window Implementation (X) According to E-Government Implementation (UNDESA, 2022)	1. Digital Service Integration	1. Various government services are available in the PSW application	4,78	Very Good
		2. Interagency services are connected in one application	4,83	Very Good
		Dimension 1 Average	4,80	Very Good
	2. Interagency Coordination	1. Interagency service processes run in a coordinated manner	4,74	Very Good
		2. Service requests are forwarded to the relevant agencies	4,70	Very Good

		Dimension 2 Average	4,72	Very Good	
	3. Infrastructure Readiness	1. The system can be accessed without significant disruption	4,37	Very Good	
		2. The application remains stable during use	4,44	Very Good	
		Dimension 3 Average	4,40	Very Good	
	4. Human Resource Readiness	1. Officers are able to manage digital services	4,52	Very Good	
		2. Officers assist users when they encounter difficulties	4,43	Very Good	
		Dimension 4 Average	4,47	Very Good	
	5. System Utilization	1. The public uses the application for services	4,76	Very Good	
		2. Users are willing to use the application again	4,69	Very Good	
		Dimension 5 Average	4,72	Very Good	
	Total Average of Variable X		4,62	Very Good	
	Digital Public Service Quality (Y) Digital Public Service Quality (OECD, 2020)	1. Ease of Service Access	1. Services are easily accessed by the public	4,57	Very Good
			2. Service processes are easy to use	4,45	Very Good
			Dimension 1 Average	4,51	Very Good
		2. Service Responsiveness	1. Service requests are	4,40	Very Good

		processed quickly		
		2. User complaints are responded to quickly	4,49	Very Good
		Dimension 2 Average	4,44	Very Good
	3. Service Certainty and Clarity	1. Service procedures are easy to understand	4,47	Very Good
		2. Service status can be monitored by users	4,63	Very Good
		Dimension 3 Average	4,55	Very Good
	4. Public Trust	1. Users trust government digital services	4,51	Very Good
		2. Users feel safe using the services	4,60	Very Good
		Dimension 4 Average	4,55	Very Good
	5. Service User Satisfaction	1. Services meet user needs	4,63	Very Good
		2. Users are satisfied with digital services	4,61	Very Good
		Dimension 5 Average	4,62	Very Good
	Total Average of Variable Y		4,51	Very Good

Descriptively, the PSW implementation variable (X) obtained an overall average score of 4,62 (Strongly Agree category), while the digital public service quality variable (Y) obtained an average score of 4,51 (Strongly Agree category). These descriptive findings show a consistent pattern: every dimension in Variable X with a high score is followed by an almost equivalent positive response in the related dimension of Variable Y. For example, the success of service integration (X1=4,80) produces high service certainty (Y3=4,55), and human resource readiness (X4=4,47) contributes to service responsiveness

($Y^2=4,44$). This provides an initial indication of a positive influence between the two variables.

Validity Test

This test uses the Pearson Product Moment correlation technique with a total of respondents (n) = 100 and a significance level of 0,05, resulting in an r table value of 0,195. The testing criterion is that if calculated $r > r$ table, the item is declared valid.

Validity Test Results for Variable X (Implementation of the Patriot Single Window Application)

Item	calculated r	r table	Description
X1	0.672	0,195	Valid
X2	0.591	0,195	Valid
X3	0.713	0,195	Valid
X4	0.772	0,195	Valid
X5	0.624	0,195	Valid
X6	0.605	0,195	Valid
X7	0.705	0,195	Valid
X8	0.577	0,195	Valid
X9	0.701	0,195	Valid
X10	0.583	0,195	Valid

All statement items in the Patriot Single Window (PSW) Application Implementation variable have calculated r values ranging from 0,577 to 0,772. These values are greater than the r table value (0,195) at a significance level of 0,01 (2-tailed). Academically, these findings prove that all indicators in variable X are declared valid.

Validity Test Results for Variable Y (Digital Public Service Quality)

Item	calculated r	r table	Description
Y1	0.522	0,195	Valid
Y2	0.621	0,195	Valid
Y3	0.478	0,195	Valid
Y4	0.548	0,195	Valid
Y5	0.732	0,195	Valid
Y6	0.546	0,195	Valid
Y7	0.575	0,195	Valid
Y8	0.478	0,195	Valid

Y9	0.584	0,195	Valid
Y10	0.681	0,195	Valid

Based on Table 4.33, all statement items in the Digital Public Service Quality variable have calculated r values ranging from 0,478 to 0,732. These values are greater than the r table value (0,195) at a significance level of 0,01 (2-tailed). Academically, these findings prove that all indicators in variable Y are declared valid.

Reliability Test

This test uses Cronbach's Alpha method with a cut-off threshold of 0,70. The testing criterion is that if the Cronbach's Alpha value is $> 0,70$, the instrument is declared reliable.

Variable X	
Reliability Statistics	
Cronbach's Alpha	N of Items
.845	10

The reliability test on the Patriot Single Window (PSW) Application Implementation variable produced a Cronbach's Alpha value of 0,845. This value is far above the minimum reliability standard threshold of 0,70 (Ghozali, 2021). Thus, all 10 statement items in the variable X questionnaire are declared reliable or have a very good level of internal consistency.

Variable Y	
Reliability Statistics	
Cronbach's Alpha	N of Items
.774	10

The reliability test on the Digital Public Service Quality variable produced a Cronbach's Alpha value of 0,774. This value is above the minimum reliability standard threshold of 0,70 (Ghozali, 2021). Thus, all 10 statement items in the variable Y questionnaire are declared reliable or have a good level of internal consistency.

Normality Test

The normality test in this study was conducted using the Kolmogorov-Smirnov test with the following criterion: if the significance value (Asymp. Sig. 2-tailed) $> 0,05$, the data are declared normally distributed. The normality test in this study was conducted using the Kolmogorov-Smirnov test with the following criterion: if the significance value (Asymp. Sig. 2-tailed) $> 0,05$, the data are declared normally distributed.

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		100
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	2.86282012
Most Extreme Differences	Absolute	.088
	Positive	.075
	Negative	-.088
Test Statistic		.088
Asymp. Sig. (2-tailed)		.055 ^c

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Based on the Kolmogorov-Smirnov test results, the Asymp. Sig. (2-tailed) value obtained was 0,055. A significance value of $0,055 > 0,05$ indicates that the residual data are normally distributed. Thus, the normality assumption is fulfilled and the regression model is appropriate for subsequent hypothesis testing.

Hypothesis Test

According to Sekaran and Bougie (2019), the t-test examines whether the relationship found in the sample truly reflects the relationship in the population. The decision-making criterion is that if the Sig. value is $< 0,05$, H_a is accepted.

		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	16.786	3.829		4.384	.000
	PSW_Application_Implementation	.618	.083	.603	7.483	.000

a. Dependent Variable: Digital_Public_Service_Quality

The t-test results show a Sig. value of $0,000 < 0,05$, so H_a is accepted. This means that PSW implementation has a significant effect on the quality of digital public services.

Coefficient of Determination

The coefficient of determination is a statistical measure used to evaluate how well a regression model can explain the variation or changes that occur in the dependent variable caused by the independent variable (Ghozali, 2021).

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.603 ^a	.364	.357	2.877

a. Predictors: (Constant), PSW_Application_Implementation

b. Dependent Variable: Digital_Public_Service_Quality

Based on the Model Summary table, the R Square value obtained was 0,364. The criteria for assessing the coefficient of determination (Ghazali, 2021; Hair et al., 2019) indicate that a value of 0,364 falls within the range of 0,20 - 0,50, which is included in the "Moderate" criterion. This means that the effect of the Patriot Single Window Application Implementation variable (X) on Digital Public Service Quality (Y) is at a moderate level of influence.

CONCLUSION

Based on the research results and discussion that have been systematically described, the conclusions to answer the three research problem statements are as follows:

Implementation of the Patriot Single Window (PSW) Application in the Bekasi City Government.

The research results show that PSW implementation has been comprehensively successful and efficient, as indicated by the following dimensions: (1) The level of digital service integration, where various OPD services have been successfully consolidated into one channel in accordance with the single-window principle (World Bank, 2021); (2) The level of interdepartmental coordination is very effective in the electronic ticketing system, although there are several bureaucratic obstacles in the manual verification process in the back office; and (3) The level of infrastructure readiness shows that system performance is stable, although there are constraints related to the speed of the managing human resources.

Digital Public Service Quality in the Bekasi City Government after the Implementation of the Patriot Single Window Application

The research results show that the quality of PSW digital public services falls into the good category, as reflected in the following dimensions:

- (1) Ease of access to services indicates PSW's success in meeting administrative needs;
- (2) Service responsiveness shows perceived processing time compared with conventional services, although timely service completion is still influenced by technical work by OPDs;
- (3) Service quality is optimal because of real-time application status tracking, which creates transparency in the process; and
- (4) Public trust in the digital system is developing positively.

The Effect of Patriot Single Window (PSW) Application Implementation on Digital Public Service Quality

The empirical regression analysis results show that the use of the Patriot Single Window application has a significant and positive impact on the quality of digital public services. As a result, more effective implementation in the areas of service integration, interorganizational coordination, infrastructure, human resources, and system utilization (in accordance with the OECD and UNDESA models) will improve quality in the areas of accessibility, responsiveness, certainty, trust, and public support. These findings support the hypothesis that application availability automatically improves service quality; furthermore, they statistically show that digital service quality is a direct result of effective government implementation of certain factors.

SUGGESTIONS

The Bekasi City Government should improve cross-regional-apparatus service integration; develop digital infrastructure to maintain system stability; improve human resource capabilities in delivering digital services methodically; increase the socialization of digital application use among the general public to increase the use of digital services; and strengthen other variables, such as digital literacy, information system quality, and user satisfaction, to improve the coefficient of determination.

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