

EMPLOYEES' INTENTION TO USE A PERSONNEL MANAGEMENT INFORMATION SYSTEM: THE ROLES OF PERCEIVED USEFULNESS AND PERCEIVED EASE OF USE AT THE NATIONAL SEARCH AND RESCUE AGENCY

Yunita* 

Department of Office Administration Education, Faculty of Economics and Business,
Universitas Negeri Jakarta, Indonesia
Email: yunitaynt17@gmail.com

Henry Eryanto 

Department of Office Administration Education, Faculty of Economics and Business,
Universitas Negeri Jakarta, Indonesia
Email: henryeryanto@unj.ac.id

Umi Widyastuti 

Department of Office Administration Education, Faculty of Economics and Business,
Universitas Negeri Jakarta, Indonesia
Email: umiwidyastuti_feunj@unj.ac.id

ABSTRACT

This study aims to analyze the influence of perceived usefulness and perceived ease of use on the intention to use the personnel management information system at the National Search and Rescue Agency (BASARNAS). A quantitative approach was employed, utilizing a survey method involving 116 employees selected through a saturated sampling technique. Data were collected via questionnaires and analyzed using Partial Least Squares-Structural Equation Modeling (SEM-PLS). The results indicate that both perceived usefulness and perceived ease of use have a positive and significant effect on the intention to use, while perceived ease of use positively influences perceived usefulness. Furthermore, perceived usefulness was found to partially mediate the relationship between perceived ease of use and the intention to use. This study reinforces the application of the Technology Acceptance Model (TAM) within the public sector and offers practical utility for BASARNAS to optimize interface usability and system utility, thereby supporting administrative efficiency regarding personnel management.

Keywords: Perceived usefulness, Perceived ease of use, Intention to use

ABSTRAK

Penelitian ini bertujuan untuk menganalisis pengaruh *perceived usefulness* dan *perceived ease of use* terhadap intention to use sistem informasi pegawai di Badan Nasional Pencarian dan Pertolongan (BASARNAS). Penelitian ini menggunakan pendekatan kuantitatif dengan metode survei terhadap 116 pegawai yang dipilih menggunakan teknik sampel jenuh. Data dikumpulkan melalui kuesioner dan dianalisis menggunakan *Partial Least Squares-Structural Equation Modeling* (SEM-PLS). Hasil penelitian menunjukkan bahwa *perceived usefulness* dan *perceived ease of use* berpengaruh positif dan signifikan terhadap *intention to use*, serta *perceived ease of use* berpengaruh positif terhadap *perceived usefulness*. Selain itu, *perceived usefulness* terbukti memediasi secara parsial (*partial mediation*) hubungan antara *perceived ease of use* dan *intention to use*. Penelitian ini memperkuat penerapan *Technology Acceptance Model* (TAM) pada sektor publik dan memberikan implikasi praktis bagi BASARNAS untuk

mengoptimalkan kemudahan antarmuka serta kemanfaatan sistem guna mendukung efisiensi administrasi kepegawaian.

Kata kunci: Persepsi kegunaan, Persepsi kemudahan, Niat menggunakan

INTRODUCTION

Digital transformation and rapid technological developments have brought fundamental changes in various aspects of human life, especially in entering the Society 5.0 era. This era requires the integration of technology in all aspects of organizations to support work efficiency and effectiveness. In the context of public organizations in Indonesia, the implementation of digital based information systems is a strategic step to support e-government implementation to create a transparent, accountable, and adaptive bureaucracy. The rapid development of information and communication technology has encouraged organizations in both the public and private sectors to implement digital transformation in order to improve organizational effectiveness and efficiency. In the public sector, the implementation of digital technology has become one of the government's strategic priorities in realizing good governance through transparent, accountable, and efficient public services. Consequently, government institutions are expected to optimize the utilization of information systems to support administrative processes and improve employee performance. One of the main pillars is the management of internal government personnel administration, which is shifting toward integrated data based systems.

The Technology Acceptance Model (TAM) explains that user acceptance of technology is determined by two main factors: Perceived Usefulness and Perceived Ease of Use, which then form the Intention to use or someone intention to use technology continuously. Several previous studies confirm the relevance of TAM in the context of public digital administration, where the usefulness and ease of use of a system are proven to have a significant effect on continuous usage intention (Septia et al., 2024). When users feel that a system makes their tasks easier and provides clear results, the intention to continue using the system will increase. Human resource management is one of the organizational functions that has experienced significant digital transformation. Personnel information systems are increasingly utilized to facilitate employee administration, including personnel data management, attendance, leave administration, performance evaluation, promotion, and career development. The implementation of these systems not only simplifies administrative processes but also supports the availability of accurate and integrated information for organizational decision-making. Therefore, the success of a personnel information system depends not only on technological sophistication but also on employees willingness to continuously use the system in carrying out their daily work activities (Pradana & Yolanda, 2024).

One of the government institutions that has implemented digital personnel administration is the National Search and Rescue Agency (BASARNAS) through the Personnel Management Information System (SIMPEG). SIMPEG serves as an integrated personnel information system that supports employee administration, including personnel data management leave applications, rank promotion, performance records, and other human resource management activities. The implementation of Simpeg is expected to improve administrative efficiency while facilitating employees in accessing personnel services more effectively. Nevertheless, the successful implementation of the system is closely related to employees acceptance of the technology and their willingness to continuously utilize the application. Although Simpeg has been implemented to support personnel administration, preliminary observations conducted by the researcher indicate that several employees still experience difficulties in utilizing the system optimally. Some users perceive that certain features are not sufficiently easy to operate, while others feel that several processes require

additional guidance before they can effectively use the application. These conditions indicate that employees' perceptions regarding the usefulness and ease of use of Simpeg may influence their intention to continue using the system. Therefore, identifying the determinants of employees' acceptance of Simpeg becomes an important issue in ensuring the effectiveness of digital personnel administration within Basarnas.

Technology Acceptance Model, explains that an individual's intention to use information technology is primarily influenced by Perceived Usefulness and Perceived Ease of Use. Perceived Usefulness refers to the degree to which individuals believe that using a particular system will enhance their job performance, whereas Perceived Ease of Use refers to the extent to which individuals believe that using the system requires minimal effort. These two constructs are considered the primary determinants influencing users' behavioral intention toward technology adoption and have been widely validated in various information system studies (Liébana-Cabanillas et al., 2020). Several previous studies have reported that Perceived Usefulness positively influences users' Intention to Use information systems because users tend to continue using systems that provide tangible benefits for completing their work more effectively (Mulyaa & Mulyati, 2023). Likewise, Perceived Ease of Use has been found to directly influence both Perceived Usefulness and Intention to Use, indicating that systems perceived as easier to operate are more likely to be accepted by users (Ali et al., 2022). However, empirical findings regarding the mediating role of Perceived Usefulness in explaining the relationship between Perceived Ease of Use and Intention to Use remain inconsistent across organizational contexts, particularly in government institutions implementing personnel information systems.

Based on these conditions, this study aims to analyze the effect of Perceived Usefulness and Perceived Ease of Use on Intention to Use Simpeg at the Basarnas. Specifically, this study also examines the mediating role of Perceived Usefulness in the relationship between Perceived Ease of Use and Intention to Use. The findings are expected to contribute to the development of TAM research and provide practical recommendations for Basarnas in optimizing the implementation of Simpeg to support digital personnel administration. One real implementation of this transformation is the development of the Personnel Information System (SIMPEG) in the National Search and Rescue Agency (BASARNAS) Jakarta. Considering the high mobility of Basarnas personnel, Simpeg is very crucial in managing data on employment history, training, and performance effectively and efficiently (Nugroho, 2021). However, the success of this implementation faces challenges in the form of fluctuating actual utilization rates due to gaps in the perception of ease or benefits felt directly by employees in the field (Handayani et al., 2023). Technical uncertainty and a lack of understanding of system functions are often main obstacles in optimizing personnel information systems (Rahmawati & Setiawan, 2025). Based on an initial study through a pre-survey conducted by the researcher on Basarnas Jakarta employees, indications of technology acceptance problems were found.

LITERATURE REVIEW

Perceived Usefulness

Perceived usefulness is defined as a person's level of belief that using an information system can improve their work performance. The greater the perceived usefulness of a system, the greater the user's tendency to accept and utilize the system in their work activities. According to (Pradana & Yolanda, 2024), perceived usefulness is an important factor that encourages users to utilize technology sustainably because technology is perceived to increase work effectiveness and productivity. In the context of Simpeg, perceived benefits for employees can include ease of accessing personnel information, accelerated administrative processes, increased data processing accuracy, and time efficiency in completing work.

(Hakeem & Ratnasari, 2021) explain that users will be more willing to use a system if it can provide tangible benefits in supporting work completion. The results of research by (Mulyaa & Mulyati, 2023) also show that Perceived Usefulness influences Intention to Use, so that the greater the perceived usefulness of a system, the higher the intention to use the information system. Based on this description, Perceived Usefulness in this study is understood as the perception of Basarnas employees regarding the extent to which the Simpeg application can help improve the effectiveness, efficiency, productivity, and quality of personnel administration implementation.

Perceived Ease of Use

Perceived Ease of Use refers to a user's perception regarding the extent to which an information system is easy to learn, understand, and operate without requiring significant effort. Ease of use is a crucial factor in technology acceptance, as users are more inclined to adopt systems that are easy to use rather than those perceived as complicated or complex. According to (Ali et al., 2022), ease of use enhances user trust in a system, thereby encouraging sustained technology usage. Furthermore, (Hafizh et al., 2023) explain that a user-friendly system enables users to grasp system functions more quickly, allowing the system's benefits to be fully realized. This view is reinforced by (Migueli et al., 2024), who state that Perceived Ease of Use not only influences the Intention to Use but also enhances Perceived Usefulness, as ease of use makes it simpler for users to experience the benefits of the technology. In this study, Perceived Ease of Use reflects the perceptions of Basarnas employees regarding the ease of learning, understanding, operating, and controlling the features of the Simpeg application.

Intention to Use

Intention to Use is a person's tendency to use a technology continuously in the future (Davis, 1989). In the Technology Acceptance Model, the intention to use technology is influenced by the user's perception of the system's benefits and ease of use. The higher the benefits and ease of use perceived by the user, the greater their desire to use the technology in their daily activities. According to (Liébana-Cabanillas et al., 2020), Intention to Use is a key indicator that can predict future technology usage behavior. Research (Pradana & Yolanda, 2024) shows that users who have a positive perception of the benefits of a system will show a higher intention to use the system. The results of research (Mulyaa & Mulyati, 2023) also explain that Intention to Use is a crucial stage before users actually adopt a technology in their work. In this study, Intention to Use is defined as the intention of BASARNAS employees to continue using the Simpeg application to support the implementation of personnel administration on an ongoing basis.

Hypothesis Development

The theoretical framework of this study is based on the Technology Acceptance Model (TAM), which explains that users' acceptance of information technology is influenced by their perceptions of usefulness and ease of use. In this study, Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) are positioned as the independent variables, while Intention to Use (ITU) is the dependent variable. In addition, Perceived Usefulness acts as a mediating variable in explaining the indirect relationship between Perceived Ease of Use and Intention to Use. The conceptual framework of this study illustrates the relationships among the research variables, namely the influence of Perceived Usefulness and Perceived Ease of Use on employees' Intention to Use the Personnel Management Information System (SIMPEG) at the National Search and Rescue Agency (BASARNAS). Furthermore, this framework also explains the indirect effect of Perceived Ease of Use on Intention to Use through Perceived

Usefulness as a mediating variable. The proposed conceptual framework is developed based on the Technology Acceptance Model, which assumes that users who perceive a system as useful and easy to use are more likely to develop a stronger intention to use the technology. Accordingly, the conceptual framework of this study is presented in Figure 1.

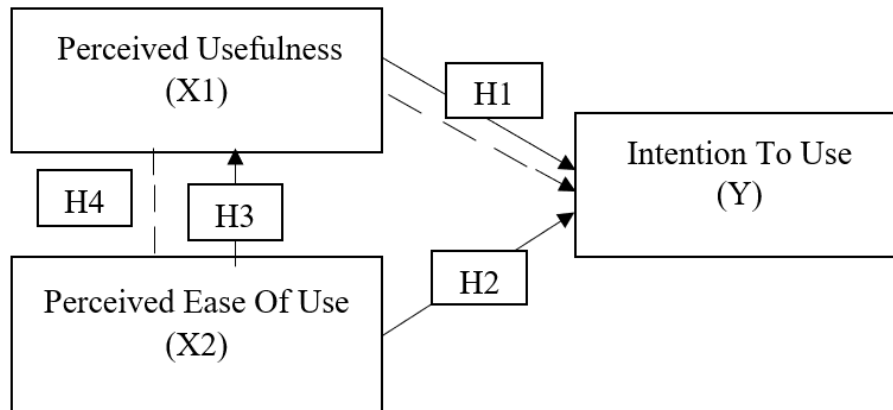


Figure 1. The Theoretical Framework
Source: Data Processed by The Author (2026)

METHOD

This study employed a quantitative research approach using a survey design to examine the relationships among Perceived Usefulness, Perceived Ease of Use, and Intention to Use the Personnel Management Information System (SIMPEG) at the National Search and Rescue Agency (BASARNAS). Quantitative research is appropriate for testing hypotheses and explaining causal relationships among latent variables through statistical analysis (Zulfikar et al., 2024). Data were collected using a structured questionnaire distributed online through Google Forms to respondents who actively use SIMPEG in carrying out personnel administration activities. The research was conducted at the National Search and Rescue Agency (BASARNAS), located at Jalan Angkasa Blok B.15 Kav.2–3, Kemayoran, Central Jakarta. Basarnas was selected because it is a government institution with high operational demands and requires an integrated personnel information system to support effective human resource management. The research implementation was carried out from October 2025 until April 2026, including proposal preparation, data collection, data analysis, and preparation of the research report. The population consisted of 116 Basarnas employees who use the SIMPEG application. Based on personnel records, the population comprised 85 Civil Servants (PNS), 19 Government Employees with Work Agreements (PPPK), and 12 honorary employees distributed across four divisions: Biro Umum (34 employees), Biro Perencanaan (30 employees), Biro Hukum (25 employees), and Biro Kepegawaian (27 employees). Because the population was relatively limited and accessible, this study employed a saturated sampling (census) technique, in which all members of the population were included as research respondents (Febriyanti, 2023). Consequently, the total sample consisted of 116 respondents. Primary data were obtained through questionnaires developed from validated indicators in previous studies. The research instrument consisted of three latent constructs, namely Perceived Usefulness (PU), Perceived Ease of Use (PEOU), and Intention to Use (ITU). Primary data were obtained using a structured questionnaire developed from measurement indicators adopted from previous studies. Minor wording modifications were made to ensure that the statements were appropriate for the organizational context of BASARNAS while preserving the original conceptual meaning of each construct.

Table 1. Instrument

Variable	Indicators	Source
<i>Intention to use</i>	a) <i>Intention to continue</i>	(Migueli et al., 2024)
	b) <i>Use in daily life</i>	
	c) <i>Frequent usage</i>	
<i>Perceived usefulness</i>	a) <i>Work More Quikly</i>	(R. Wulandari & Susanti, 2023)
	b) <i>Makes Job Easier</i>	
	c) <i>Increase Productivity</i>	
	d) <i>Enhance Effektivness</i>	
	e) <i>Job Performance</i>	
	f) <i>Useful</i>	
<i>Perceived ease of use</i>	a) <i>Clear and understandable</i>	(Monica & Japarianto, 2022)
	b) <i>Easy to learn</i>	
	c) <i>Easy to use</i>	
	d) <i>Controllable</i>	
	e) <i>Flexible</i>	
	f) <i>Easy to become skillful</i>	

The questionnaire was developed based on measurement indicators adopted from previous studies and subsequently refined through a preliminary instrument assessment, as can be seen Table 1. Responses were measured using a five-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), (Table 2). Secondary data were collected from books, scientific journal articles, official documents, and other relevant literature to support the theoretical framework and interpretation of the findings.

Table 2. Questionnaire Answer Point

Answer Choices	Score
Strongly Agree (SS)	5
Agree (S)	4
Neutral (R)	3
Disagree (TS)	2
Strongly Disagree (STS)	1

Prior to testing the structural model, the measurement model was evaluated to ensure its validity and reliability. Convergent validity was assessed using outer loading values, while discriminant validity was evaluated using the Fornell–Larcker criterion and the Heterotrait–Monotrait Ratio (HTMT). Instrument reliability was assessed through Cronbach's Alpha and Composite Reliability (CR). Following the recommendations of (Hair, 2022), constructs were considered reliable when Cronbach's Alpha and Composite Reliability values exceeded 0.70, whereas indicator validity was confirmed when outer loading values were greater than 0.70. The collected data were analyzed using Structural Equation Modeling–Partial Least Squares (SEM-PLS) with SmartPLS 4.0 software. SEM-PLS was selected because it is suitable for predictive research, models involving multiple latent constructs, and relatively small sample sizes while imposing fewer distributional assumptions than covariance-based SEM. The analysis consisted of two stages: evaluation of the measurement model (outer model) and evaluation of the structural model (inner model), followed by hypothesis testing using the bootstrapping procedure.

RESULTS AND DISCUSSION

Respondent Identity Description

The characteristics of respondents were analyzed based on gender to provide an overview of the demographic composition of the research participants (Table 3). The

distribution of respondents by gender is presented in Table 2. Based on the research findings, female respondents constituted the majority of the sample, accounting for 62 employees (53.45%), while male respondents totaled 54 employees (46.55%). The relatively balanced proportion of male and female respondents indicates that the implementation of the Personnel Management Information System (SIMPEG) is utilized by employees regardless of gender. Although female respondents slightly outnumbered male respondents, the difference is not substantial, suggesting that both groups are adequately represented in this study. This balanced distribution enhances the representativeness of the research sample in evaluating employees' perceptions of Simpeg. Overall, the gender composition reflects that the use of Simpeg has been widely adopted across employees within Basarnas Jakarta. Consequently, the findings regarding Perceived Usefulness, Perceived Ease of Use, and Intention to Use are expected to represent users from both male and female employee groups.

Table 3. Gender Percentage Distribution

Respondent Profile	Category	Amount	Percentage
Gender	Male	54	46,55%
	Woman	62	53,45%
Total		116	100%

Respondent Profile by Division

The characteristics of respondents were also classified based on their organizational division to describe the distribution of Simpeg users across different work units within Basarnas Jakarta (Table 4). The frequency distribution of respondents by division is presented in Table 3. Based on Table 3, respondents originated from four divisions, namely the General Bureau, Planning Bureau, Legal Bureau, and Human Resources Bureau. The largest proportion of respondents came from the General Bureau, consisting of 34 employees (29.31%), followed by the Planning Bureau with 30 employees (25.86%), the Human Resources Bureau with 27 employees (23.28%), and the Legal Bureau with 25 employees (21.55%). The relatively even distribution of respondents across all divisions indicates that the research successfully captured employees' perceptions from different organizational functions. Since Simpeg is implemented as an integrated personnel information system, employees from each division interact with the system to support various administrative processes, including personnel data management, employee administration, and human resource services. Therefore, involving respondents from multiple divisions provides a more comprehensive understanding of user acceptance toward Simpeg within Basarnas Jakarta. Overall, the respondent distribution demonstrates that the research sample represents users from the principal organizational units responsible for personnel administration. This diversity strengthens the validity of the study by ensuring that the evaluation of Perceived Usefulness, Perceived Ease of Use, and Intention to Use reflects the perspectives of employees with different work responsibilities while using the same information system.

Table 4. Respondent Profile by Class

Respondent Profile	Category	Amount	Percentage (%)
Division	General Bureau	34	29,31%
	Planning Bureau	30	25,86%
	Legal Bureau	25	21,55%
	Human Resources Bureau	27	23,28%
Total		116	100%

SEM-PLS Results

The outer model test, conducted as part of the convergent validity assessment, is used to determine the extent to which an indicator reflects the construct it measures. An indicator is considered to satisfy convergent validity if it possesses an adequate outer loading value. According to (Hair, 2022), an outer loading value of ≥ 0.70 indicates that the indicator has a strong ability to explain the latent construct being measured. When the loading factor exceeds this threshold, the indicator is deemed valid, signifying a strong and significant relationship with the measured construct.

Table 5. Outer Loading Results After Calculation

	<i>Perceived Usefulness (X1)</i>	<i>Perceived Ease Of Use (X2)</i>	<i>Intention To Use (Y)</i>
X1.1	0.859		
X1.2	0.852		
X1.3	0.838		
X1.4	0.815		
X1.5	0.878		
X1.6	0.866		
X1.7	0.842		
X1.8	0.803		
X1.9	0.846		
X1.10	0.743		
X1.11	0.856		
X2.1		0.876	
X2.2		0.797	
X2.3		0.834	
X2.4		0.755	
X2.5		0.860	
X2.6		0.815	
X2.7		0.868	
X2.8		0.775	
X2.9		0.837	
X2.10		0.879	
X2.11		0.836	
X2.12		0.908	
Y.1			0.890
Y.2			0.880
Y.3			0.868
Y.4			0.852
Y.5			0.893
Y.6			0.903

Based on the outer loading test results in Table 5, all indicators for the variables Perceived Usefulness, Perceived Ease of Use, and Intention to Use exhibited outer loading values above 0.70. Consequently, all indicators met the criteria for convergent validity and effectively represented their respective constructs, making them suitable for retention in the research model. The following table presents the calculated Cronbach's Alpha values for each variable used in this study.

Table 6. Cronbach Alpha

	<i>Cronbach's Alpha</i>
<i>Perceived Usefulness (X1)</i>	0.957
<i>Perceived Ease Of Use (X2)</i>	0.961
<i>Intention To Use (Y)</i>	0.942

The reliability test results, displayed through the Cronbach's Alpha values in the previous Table 6, indicate that all constructs in this study have values higher than the recommended minimum threshold of 0.70. This finding indicates that each variable exhibits an adequate level of internal consistency, thus meeting instrument reliability standards.

Table 7. Discriminant Validity HTMT

	<i>Intention To Use (Y)</i>	<i>Perceived Usefulness (X1)</i>	<i>Perceived Ease Of Use (X2)</i>
Y			
X1	0.626		
X2	0.764	0.647	

In the HTMT discriminant validity in Table 7, all variable pairs yielded scores below 0.9 variables X1 and X2 (score 0.647), variables X1 and Y (score 0.626), and variables X2 and Y (score 0.764). Consequently, the researcher can conclude that none of these variable pairs exhibit strong correlation, and the HTMT discriminant validity requirement is met.

Table 8. Discriminant Validity Fornell Larcker

	<i>Intention To Use (Y)</i>	<i>Perceived Usefulness (X1)</i>	<i>Perceived Ease Of Use (X2)</i>
Y	0.881		
X1	0.597	0.837	
X2	0.729	0.623	0.838

Based on the data presented in Table 8, it can be concluded that all square root values of the Average Variance Extracted (AVE) listed on the main diagonal are higher than the correlation values between constructs located off-diagonal. This is visually indicated by the green highlighting of the highest values for each indicator relative to its assigned construct. Thus, the requirement for discriminant validity via the cross-loading test is met, as each indicator consistently measures its intended construct and does not contribute more significantly to other constructs.

Table 9. Composite Reliability

	Cronbach's alpha	Composite reliability	Average variance extracted (AVE)
<i>Perceived Usefulness (X1)</i>	0.957	0.959	0.700
<i>Perceived Ease Of Use (X2)</i>	0.961	0.963	0.702
<i>Intention To Use (Y)</i>	0.942	0.943	0.776

Based on the data in Table 9, all constructs in this study have composite reliability values exceeding 0.70 and AVE values exceeding 0.50. Thus, it can be concluded that each variable has met the standards of convergent validity and construct reliability, making it suitable for use in the next stage of structural model analysis.

Table 10. R-Square

	R-square	R-square adjusted	Information
Perceived Usefulness (X1)	0.389	0.383	Moderate
Intention To Use (Y)	0.564	0.556	Moderate

The Table 10 shows that the perceived usefulness variable has an R-square value of 0.389, meaning that 38.9% of the variation in perceived usefulness can be explained by the perceived ease of use variable. The remaining 61.1% is explained by other variables not included in this study. Furthermore, the intention of use variable has an R-square value of 0.564, indicating that 56.4% of the variation in intention of use can be explained by the perceived usefulness and perceived ease of use variables. The remaining 43.6% is explained by other variables not included in this study. Based on the interpretation classification by (Hair, 2022), these R^2 values fall into the moderate category indicating a moderate level of influence as they lie within the 0.33 to 0.67 range. Thus, the two independent variables jointly exert a significant influence on intention to use.

Table 11. F-Square

	Perceived Usefulness (X1)	Intention To Use (Y)
Perceived Ease Of Use (X2)	0.636	0.476
Perceived Usefulness (X1)		0.077

The results of the analysis in the Table 11 show that the perceived ease of use variable has a large effect on perceived usefulness, this is indicated by an f-square value of 0.636. The perceived ease of use variable has a large effect on intention of use, this is indicated by an f-square value of 0.476. Then, it is known that perceived usefulness has a small effect on intention of use, this is indicated by an f-square value of 0.077. Thus, it can be concluded that Perceived Usefulness and Perceived Ease of Use each contribute to the influence of the endogenous construct according to the effect size (f^2) category obtained, although the intensity of the influence of perceived usefulness has not yet entered the strong category.

Hypothesis Testing

In quantitative research using the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach, hypothesis testing focuses on evaluating the significant influence between latent variables in the developed model. The primary method in this testing utilizes the P-value generated from the bootstrapping procedure using SmartPLS software. In general, the decision making criteria for hypotheses are based on the significance value (P-value). If the P-value is <0.05 , the hypothesis is accepted, indicating that the relationship between the variables in the model is considered statistically significant. Conversely, if the P-value is >0.05 , the hypothesis is rejected, as the relationship between the exogenous and endogenous variables in the model does not demonstrate statistical significance. The use of P-values as an indicator of significance is crucial in ensuring the empirical validity of the causal relationships formulated in the research model.

Table 12. Hypothesis Testing with Bootstrapping

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ((O/STDEV))	P values
Perceived Usefulness (X1) -> Intention to Use (Y)	0.234	0.230	0.085	2.756	0.006
Perceived Ease Of Use (X2) -> Intention to Use (Y)	0.583	0.587	0.086	6.794	0.000
Perceived Ease Of Use (X2) -> Perceived Usefulness (X1)	0.623	0.625	0.058	10.840	0.000

Based on Table 12, the results of hypothesis testing using the bootstrapping method yielded a P-value of 0.006 for the first hypothesis, concerning the relationship between Perceived Usefulness (X1) and Intention to Use (Y). Because this value is lower than the 0.05 significance threshold, the first hypothesis is accepted, indicating that Perceived Usefulness has a significant effect on Intention to Use. Furthermore, testing the second hypothesis, concerning the effect of Job Perceived Ease Of Use (X2) on Intention to Use (Y), yielded a P-value of 0.000. Because this value is lower than the 0.05 significance threshold, the second hypothesis is passed. These findings indicate that Perceived Ease Of Use has a significant effect on Intention to Use. And last hypothesis is passed, these findings indicate that Perceived Ease Of Use has a significant effect on Perceived Usefulness.

Discussion

The direct effect of Perceived Usefulness on the Intention to Use SIMPEG BASARNAS

Based on the hypothesis testing results, it is evident that the Perceived Usefulness variable has a direct effect on Intention to Use. This is supported by a path coefficient (Original Sample/ β) of 0.234, a T-statistic of 2.756 (>1.96), and a P-value of 0.006 (<0.05). Consequently, H1 is accepted, confirming the hypothesis that Perceived Usefulness directly influences the Intention to Use the Simpeg system. These results indicate that the higher the employees' perception of the benefits of using Simpeg, the stronger their intention to use the system. Employees who perceive Simpeg as a tool that accelerates task completion, enhances work effectiveness, and simplifies personnel information management are more likely to want to continue using the system in their work activities. In other words, the perception of the system's benefits is a key factor driving the intention to use Simpeg within Basarnas. These findings align with research by (Pradana & Yolanda, 2024), (Mulyaa & Mulyati, 2023), (C. Y. Setyawati & Polar, 2022), and (Hakeem & Ratnasari, 2021), all of which demonstrate a direct relationship between Perceived Usefulness and Intention to Use. These results reinforce the notion that the perception of technological benefits is a crucial factor in boosting user intention to utilize an information system. Therefore, Basarnas should continue to enhance the benefits perceived by employees specifically those that support work effectiveness, efficiency, and productivity to encourage the sustained use of Simpeg. Thus, it can be concluded that H1 is accepted.

The direct effect of Perceived Ease of Use on the Intention to Use SIMPEG

Based on the results of the hypothesis testing that has been conducted, it is known that Perceived Ease of Use has a direct effect on Intention to Use. This is evidenced by the path coefficient value (Original Sample/ β) of 0.583, the T-Statistics value of 6.794 (>1.96), and the P-Value value of 0.000 (<0.05). Thus, H2 is accepted, which means the hypothesis stating that Perceived Ease of Use has a direct effect on Intention to Use Simpeg is proven in this study. The results of this study indicate that the easier SIMPEG is to understand, learn, and operate by employees, the higher the employee's desire to use the system. The ease of accessing SIMPEG features and the uncomplicated usage process provide a better user experience, thus encouraging employees to utilize the system continuously to support personnel administration work. The results of this study are also in line with research by Hidayati and Karim (2024), (Tanujaya, 2020), (R. E. Setyawati, 2020), and (Oktania & Indarwati, 2022), which stated that Perceived Ease of Use directly influences Intention to Use. Based on these research results and supported by theory and previous research, it can be concluded that Perceived Ease of Use is an important factor that can increase Intention to Use. Therefore, Basarnas needs to continue to improve the ease of use of the system by simplifying the interface display, ease of navigation,

and improving system quality to further encourage employees to use Simpeg. Thus, it can be concluded that H2 is accepted.

The direct effect of Perceived Ease of Use on Perceived Usefulness of the SIMPEG

Based on the hypothesis testing results, it is evident that Perceived Ease of Use has a direct effect on Perceived Usefulness. This is demonstrated by a path coefficient (Original Sample/ β) of 0.623, a T-Statistic of 10.840 (>1.96), and a P-Value of 0.000 (<0.05). Consequently, H3 is accepted, confirming the hypothesis that Perceived Ease of Use directly influences the Perceived Usefulness of the Simpeg system. The findings indicate that the easier Simpeg is for employees to use, the greater the perceived benefits derived from the system. Ease of operation enables employees to complete tasks more efficiently, thereby enhancing the perception that Simpeg provides tangible benefits in supporting their work duties. These results align with studies by (Naufaldi & Tjokrosaputro, 2020), (Hardianti et al., 2024), all of which found a direct relationship between Perceived Ease of Use and Perceived Usefulness. Supported by theory and prior research, it can be concluded that the ease of using Simpeg is a key factor in boosting employees' perceptions of the application's utility. Therefore, Basarnas should prioritize improving the interface quality and ease of use of Simpeg to ensure that all employees can fully realize the system's benefits. Thus, it is concluded that H3 is accepted.

The Effect of Perceived Ease of Use on Intention to Use via Perceived Usefulness of the SIMPEG

Based on the analysis of the indirect effect, it was found that Perceived Usefulness mediates the impact of Perceived Ease of Use on Intention to Use. This is evidenced by a T-Statistic value of 2.678 (>1.96) and a P-Value of 0.007 (<0.05). Consequently, H4 is accepted, confirming the hypothesis that Perceived Ease of Use influences Intention to Use through Perceived Usefulness. The findings indicate that the ease of using Simpeg not only directly boosts employees' intention to use the system but also enhances their perception of the application's benefits. When employees find Simpeg easy to use, they more readily recognize the benefits gained, thereby increasing their desire to continue using the system. These results align with studies by (Naufaldi & Tjokrosaputro, 2020) and (Hardianti et al., 2024), which demonstrate that Perceived Usefulness acts as a mediating variable in the relationship between Perceived Ease of Use and Intention to Use. Supported by theory and prior research, it can be concluded that Perceived Usefulness serves as a mediating variable that reinforces the effect of Perceived Ease of Use on Intention to Use. Therefore, in addition to enhancing the system's ease of use, Basarnas must ensure that any feature development within Simpeg delivers tangible benefits to employees, thereby fostering sustained application usage. Thus, it is concluded that H4 is accepted.

CONCLUSION AND RECOMMENDATION

This study aimed to analyze the effects of Perceived Usefulness and Perceived Ease of Use on employees' Intention to Use the Personnel Management Information System (SIMPEG) at Basarnas Jakarta by employing the Structural Equation Modeling Partial Least Squares (SEM-PLS) approach. Based on the findings, several important conclusions can be drawn. First, Perceived Usefulness has a positive and significant effect on Intention to Use. This finding indicates that employees are more likely to continue using Simpeg when they perceive that the system enhances their job performance, improves work efficiency, and facilitates personnel administration processes. Therefore, increasing the functional benefits and effectiveness of Simpeg can strengthen employees' willingness to use the system. Second, Perceived Ease of Use has a positive and significant effect on Intention to Use. This result

suggests that employees tend to adopt and continuously use Simpeg when the system is easy to understand, operate, and interact with. A user-friendly interface and simple operational procedures can reduce the effort required to use the system and encourage greater user acceptance. Third, Perceived Ease of Use has a positive and significant effect on Perceived Usefulness. This finding demonstrates that employees who perceive Simpeg as easy to use are more likely to recognize its usefulness in supporting their daily work activities. In other words, ease of use contributes not only to the usability of the system but also enhances employees' perceptions of its practical value in improving work performance.

Finally, the indirect effect analysis reveals that Perceived Usefulness significantly mediates the relationship between Perceived Ease of Use and Intention to Use. This result indicates that employees' perceptions of the ease of using Simpeg indirectly increase their intention to use the system through enhanced perceptions of its usefulness. Consequently, improving system usability is expected to strengthen employees' intention to use Simpeg both directly and indirectly by increasing the perceived benefits of the system. Overall, the findings confirm that Perceived Usefulness and Perceived Ease of Use are key determinants of employees' intention to use Simpeg at Basarnas Jakarta, consistent with the Technology Acceptance Model (TAM). Among the relationships examined, Perceived Ease of Use demonstrates the strongest influence on employees' intention to use the system, both directly and indirectly through Perceived Usefulness. The practical implication of this study is that Basarnas Jakarta should continuously improve the usability and functionality of Simpeg by simplifying system navigation, enhancing system performance, ensuring reliable access, and providing regular training for employees. These efforts are expected to increase employees' perceptions of both the usefulness and ease of use of the system, thereby strengthening their intention to utilize Simpeg in supporting personnel administration. For future research, it is recommended to incorporate additional variables within the Technology Acceptance Model, such as Attitude Toward Using, Behavioral Intention, Subjective Norm, Facilitating Conditions, System Quality, or User Satisfaction, to provide a more comprehensive understanding of technology acceptance in government institutions. Furthermore, expanding the research to other Basarnas regional offices or public sector organizations with different organizational characteristics may improve the generalizability of the findings and provide broader insights into the implementation of personnel information system.

REFERENCES

- Ali, H., Hamdan, H., & Mahaputra, M. R. (2022). Faktor Eksternal Perceived Ease of Use dan Perceived Usefulness pada Aplikasi Belanja Online : Adopsi Technology Accepted Model. *Jurnal Ilmu Multidisiplin*, 1(3), 587–604.
- Authors, F. (2014). *Perceived usefulness , perceived ease-of-use and faculty acceptance of electronic books An empirical investigation of Sultan Qaboos*. <https://doi.org/10.1108/LR-05-2013-0062>
- Febriyanti, B. N. (2023). *Teknik pengambilan sampel*. 1–17.
- Hair, J. (2022). *Research Methods in Applied Linguistics*.
- Hakeem, G., & Ratnasari, R. T. (2021). Pengaruh Perceived Ease of Use Pada Aplikasi M-Banking Bank Umum Syariah Dengan Trust Sebagai Variabel Intervening. *Jurnal Ekonomi Syariah Teori Dan Terapan*, 8(6), 696. <https://doi.org/10.20473/vol8iss20216pp696-705>
- Handayani, S. W., Gunaningrat, R., & Suyatno, A. (2023). Behavioral Intention To Use Flip.Id Oleh Perceived Ease Of Use Melalui Attitude Towards Using. *Maeswara : Jurnal Riset Ilmu Manajemen Dan Kewirausahaan*, 1(5), 13–25. <https://doi.org/10.61132/maeswara.v1i5.134>

- Hardianti, Kartini, Y., & Sarnawiah. (2024). Economics and Digital Business Review Pengaruh Perceived Usefulness dan Perceived Ease of Use Terhadap Kinerja melalui Intention To Use Dalam Menggunakan Sistem Informasi Laboratorium. *Economics and Digital Business Review*, 5(1), 262–275.
- Kudus, K., Masyarakat, P., & Desa, B. (2025). *Implementasi Sistem Informasi Pengaduan Masyarakat (Simas) Berbasis Website : Studi Kasus Balai Desa Pedawang Kudus*. 5, 236–247.
- Liébana-Cabanillas, F., Japutra, A., Molinillo, S., Singh, N., & Sinha, N. (2020). Assessment of mobile technology use in the emerging market: Analyzing intention to use m-payment services in India. *Telecommunications Policy*, 44(9), 102009. <https://doi.org/https://doi.org/10.1016/j.telpol.2020.102009>
- Migueli, I., Lukitaningsih, A., & Ningrum, N. K. (2024). Pengaruh perceived usefulness dan perceived ease of use terhadap intention to use dengan attitude sebagai variabel intervening pada e-commerce Tokopedia di Yogyakarta. *Journal of Management and Digital Business*, 4(3), 665–680.
- Monica, F., & Japariato, E. (2022). Analisa Pengaruh Perceived Ease of Use Dan Melalui Perceived Enjoyment Terhadap Behavior Intention Pada Digital Payment. *Jurnal Manajemen Pemasaran*, 16(1), 9–15. <https://doi.org/10.9744/pemasaran.16.1.9-15>
- Mulyaa, S., & Mulyati, Y. (2023). Pengaruh Perceived Usefulness Terhadap Behavioral Intention To Use Aplikasi Gojek Dengan Attitude Towards Using Sebagai Variabel Intervening Pada Pengguna Layanan Aplikasi Gojek Di Kota Padang. *Jurnal Ekonomika Dan Bisnis (JEBS)*, 3(3), 439–448. <https://doi.org/10.47233/jebis.v3i3.1274>
- Naufaldi, I., & Tjokrosaputro, M. (2020). Pengaruh Perceived Ease Of Use, Perceived Usefulness, dan Trust terhadap Intention To Use. *Jurnal Manajerial Dan Kewirausahaan*, 2(3), 715. <https://doi.org/10.24912/jmk.v2i3.9584>
- Oktania, D. E., & Indarwati, T. A. (2022). Pengaruh Perceived Usefulness, Perceived Ease of Use, dan Compatibility With Lifestyle Terhadap Niat Beli Di Social Commerce. *Jurusan Manajemen Fakultas Ekonomika Dan Bisnis Universitas Negeri Surabaya*, 10, 255–267. <https://journal.inspirasi.or.id/nomicpedia/article/view/138/53>
- Pradana, W. Y., & Yolanda, M. (2024). Pengaruh Perceived Usefulness Terhadap Continuance Intention To Use Pada Pengguna Mobile Payment Dana Dengan Satisfaction Sebagai Variabel Mediasi. *Jurnal Ilmu Manajemen Retail Universitas Muhammadiyah Sukabumi*, 5(1), 1–12. <https://doi.org/10.37150/jimat.v5i1.2615>
- Septia, N., Anggraini, R., Kurniawan, D., & Hasanah, A. (2024). Ease of Use , Usefulness , Quality of Information Systems and Culture on the Behavioral Intention of Users of Digital Tax Education Services. *Journal of Applied Accounting and Taxation*, 9(2), 196–204.
- Setyawati, C. Y., & Polar, D. C. (2022). Pengaruh Perceived Usefulness Terhadap Behavior Intention To Use E-Wallet Gopay Melalui Mediasi Attitude Toward Using Di Kota Ternate. *Jurnal Akuntansi Dan Pajak*, 22(2), 1–14. <https://doi.org/10.1134/s0320972519100129>
- Setyawati, R. E. (2020). Pengaruh Perceived Usefulness, Perceived Ease of Use Terhadap Behavioral Intention To Use dengan Attitude Towards Using sebagai Variabel Intervening (Studi Kasus Pada Gopay Dikota Yogyakarta). *Jurnal Ekobis Dewantara*, 3(1), 39–51. https://doi.org/10.26460/ed_en.v3i1.1470
- Tanujaya, A. (2020). Pengaruh Perceived Ease Of Use Dan Perceived Usefulness Terhadap Intention To Use Aplikasi M-Tix Di Surabaya. *AGORA*, 8(2), 1–12.
- Wulandari, R., & Susanti, D. N. (2023). Pengaruh Perceived Usefulness, Perceived Ease of Use, Product Features dan Reference Group Terhadap Keputusan Penggunaan. *Jurnal*

This is an open access article under the [Creative Commons CC BY-NC-SA License](#)

