

## An Analysis of User Behavior Toward the SIPD-RI Application at the BKAD of Malang Regency Using the UTAUT-3 Model

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### ABSTRACT

This research employs the UTAUT-3 model to investigate the factors driving the adoption of the SIPD-RI application among employees at the Regional Finance and Asset Agency (BKAD) of Malang Regency. The study evaluated seven key variables: Performance Expectancy, Effort Expectancy, Facilitating Conditions, Habit, Personal Innovativeness, Behavioral Intention, and Use Behavior. Utilizing a quantitative methodology, data was gathered from 104 civil servants through a comprehensive census sampling method. Questionnaire responses were analyzed with SEM-PLS from June to October 2025. The findings confirm that Performance Expectancy, Effort Expectancy, Facilitating Conditions, Habit, Personal Innovativeness, and Behavioral Intention all have a substantial impact on Use Behavior, highlighting the critical roles of user flexibility and institutional support in the digitalization of public services.

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## **INTRODUCTION**

The shift towards digitalization is now crucial for enhancing efficiency, transparency, and accountability in public sector management, particularly in regional financial governance. In response to this need, Indonesia's Ministry of Home Affairs launched the SIPD-RI (Regional Government Information System of Indonesia), an integrated platform designed to streamline planning, budgeting, and financial administration. A highly relevant context for studying this system's adoption is the Regional Finance and Asset Agency (BKAD) of Malang Regency. This agency functions within a intricate bureaucratic setting where the success of digital tool implementation directly influences public financial outcomes. However, the migration from the legacy SIPD system to SIPD-RI has encountered obstacles, including insufficient user training, a wide spectrum of technological proficiency among staff, and inconsistent acceptance of the new platform. These challenges underscore the necessity to investigate the drivers of user acceptance and actual usage within governmental bodies.

This study expands the current body of knowledge by utilizing the UTAUT-3 model, an evolved version of the Unified Theory of Acceptance and Use of Technology that incorporates Personal Innovativeness as a fundamental factor. This theoretical enhancement provides a more complete picture of technology uptake among civil servants, a demographic often defined by inflexible hierarchies and varying levels of digital preparedness. The research offers a novel perspective by gathering behavioral data from the entire population of SIPD-RI users in a specific regional agency, allowing for an empirical test of the UTAUT-3 framework within the unique environment of Indonesia's public financial management system.

The primary objective of this research is to examine the behavioral determinants affecting the acceptance and utilization of SIPD-RI at BKAD Malang Regency. It focuses on key constructs including Performance Expectancy, Effort Expectancy, Facilitating Conditions, Habit, Personal Innovativeness, Behavioral Intention, and Use Behavior. More specifically, the study endeavors to pinpoint which of these factors have a significant impact on the users' intentions and their subsequent use of the system. The findings are expected to contribute both theoretical insights and practical recommendations for the effective implementation of e-government initiatives in regional financial management.

## **LITERATURE REVIEW**

### **1. Information Systems**

An information system is made up of people, processes, hardware, software, and data that are intended to gather, process, store, and disseminate information in order to facilitate organizational control and decision-making. According to Whitten and Bentley (2007), an information system integrates technology and human activity to ensure the effective flow of information within an organization. Laudon and Laudon (2018) further emphasize that modern information systems form the backbone of organizational operations, providing real-time data for managerial decisions and improving coordination across departments.

In the public sector, information systems are essential for achieving transparency, efficiency, and accountability. They facilitate data-driven decision-making, reduce manual errors, and support the management of resources. Effective implementation of information systems in government institutions also strengthens public trust and enables compliance with good governance principles.

## **2. Regional Finance and Asset Agency (BKAD)**

BKAD is a local government institution responsible for managing regional finances and assets efficiently and transparently. It ensures the proper planning, budgeting, and accountability of public funds in accordance with national regulations. BKAD of Malang Regency plays a strategic role in maintaining fiscal discipline and integrating financial management through the use of digital systems.

In practice, BKAD handles complex administrative processes that involve budget formulation, financial disbursement, asset tracking, and reporting. The agency's effectiveness heavily depends on the integration of reliable information systems and the competence of civil servants in using them. Hence, digital innovation such as SIPD-RI becomes crucial to optimize public financial governance.

## **3. The SIPD-RI Application**

The Regional Government Information System of Indonesia (SIPD-RI) was introduced by the Ministry of Home Affairs as part of Indonesia's e-government strategy, in accordance with Government Regulation No. 12 of 2019 and the Presidential Regulation No. 95 of 2018 concerning Electronic-Based Government Systems (SPBE). SIPD-RI is designed to integrate data related to regional planning, budgeting, accounting, reporting, and evaluation.

The system represents an evolution from the previous SIPD version, addressing issues such as lack of intergovernmental integration and limited responsiveness. SIPD-RI aims to establish a unified platform that connects central and regional governments, improving data accuracy and decision-making processes. Its successful adoption, however, depends largely on users' behavioral acceptance and the institutional support available during implementation.

## **4. Unified Theory of Acceptance and Use of Technology (UTAUT)**

Model UTAUT was formulated by Venkatesh et al. (2003) by integrating eight foundational models of technology adoption, such as the Technology Acceptance Model (TAM), the Theory of Reasoned Action (TRA), and the Theory of Planned Behavior (TPB). This consolidated framework posits four core constructs Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions that serve as direct antecedents to both Behavioral Intention and Use Behavior.

Fundamentally, the UTAUT model proposes that a person's decision to use a technology is driven by their belief that it will enhance their performance, their perception of its ease of use, the influence of their peers and social circle, and the availability of organizational and technical support. Due to its robust

explanatory power, UTAUT has been extensively applied in diverse fields to analyze user acceptance of various technologies, ranging from e-government platforms and mobile apps to corporate information systems.

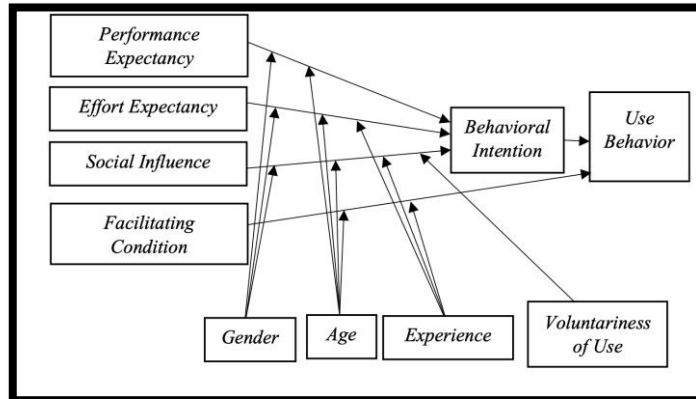


Figure 1. UTAUT-1 Model

### 5. UTAUT-2 and UTAUT-3 Development

In order to better capture consumer technology behavior, Venkatesh, Thong, and Xu (2012) expanded the original UTAUT into UTAUT-2 by including three constructs: Hedonic Motivation, Price Value, and Habit. Habit, in particular, reflects users' automatic tendency to use technology based on repeated experience. This addition strengthened the explanatory power of the model for voluntary use contexts.

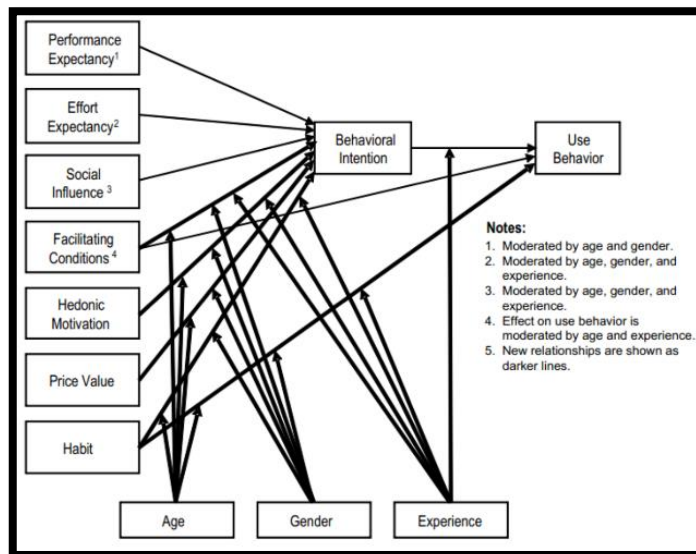


Figure 2. UTAUT-2 Model

Later, Farooq et al. (2017) refined the model into UTAUT-3 by introducing Personal Innovativeness in Information Technology (PIIT) as an additional construct while removing demographic moderators (age, gender, and experience). UTAUT-3 emphasizes the psychological dimension of user behavior, particularly how individual innovation tendencies affect both Behavioral Intention and Use Behavior. This makes UTAUT-3 highly suitable for analyzing technology adoption in professional and bureaucratic settings.

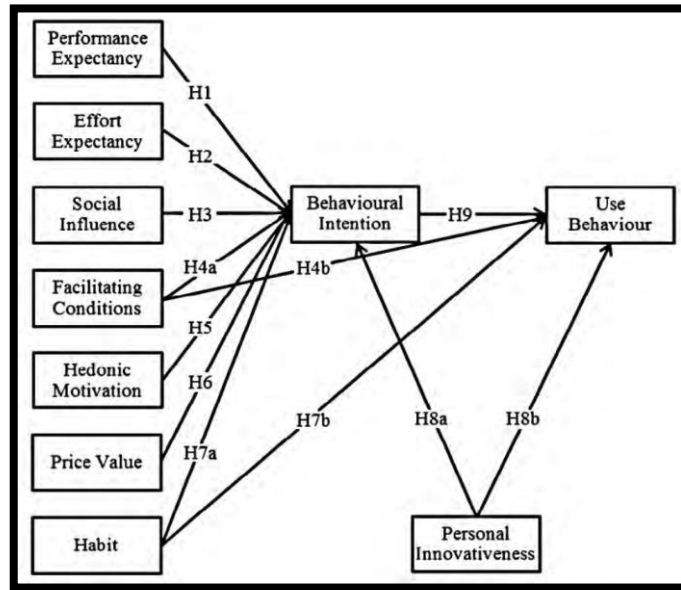


Figure 3. UTAUT-3 Model

## 6. Performance Expectancy

The degree to which a person thinks that utilizing a system will enhance their ability to perform their job is known as their performance expectation. (Venkatesh et al., 2003). This concept is rooted in the perceived usefulness theory from TAM (Davis, 1989). Users tend to adopt technology when they perceive it as beneficial and capable of enhancing their productivity or efficiency.

In the context of SIPD-RI, performance expectancy reflects users' belief that the system can simplify budget management, reporting, and financial evaluation. High performance expectancy leads to stronger behavioral intention, as users recognize the tangible benefits of the technology in their daily tasks.

## 7. Effort Expectancy

Effort Expectancy describes the perceived ease of use of a system, including how simple it is to learn and operate. This factor closely aligns with the "Perceived Ease of Use" construct in TAM and the "Complexity" dimension in the Model of PC Utilization. Venkatesh et al. (2003) argue that users are more likely to adopt technology that minimizes cognitive effort.

For civil servants using SIPD-RI, effort expectancy is particularly relevant because varying levels of digital literacy exist across employees. Systems that are intuitive and user-friendly promote higher engagement and satisfaction, which in turn increase adoption rates.

## 8. Facilitating Conditions

The term facilitating conditions describes how users view the availability of technical and organizational resources that support system use. (Venkatesh et al., 2003). These include access to infrastructure, technical assistance, and managerial support. Strong facilitating conditions reduce barriers to adoption and ensure sustained usage.

In government institutions like BKAD, adequate technical training, reliable internet connectivity, and helpdesk support are essential for ensuring that users

can operate SIPD-RI effectively. Lack of support infrastructure often results in resistance or low utilization rates.

## **9. Habit**

Habit represents the extent to which behavior has become automatic due to prior learning and repetition (Limayem et al., 2007; Venkatesh et al., 2012). In the UTAUT-3 model, habit captures the behavioral tendency of users to continue using a system out of routine or familiarity rather than conscious motivation.

In the public sector, habitual use of SIPD-RI can be an indicator of successful system internalization. When system usage becomes part of daily workflow, it reflects both user competence and institutional integration of technology.

## **10. Personal Innovativeness**

Personal Innovativeness in Information Technology is defined as the individual's willingness to try out new technologies (Agarwal & Prasad, 1998). This psychological trait affects how quickly users adopt and explore unfamiliar systems. High innovativeness individuals are more open to experimentation and adapt better to technological change.

In the SIPD-RI implementation, personal innovativeness helps explain why some civil servants adapt quickly while others resist. Employees with strong innovativeness not only adopt new tools faster but often act as change agents within their institutions, influencing peers to embrace the system.

## **11. Behavioral Intention and Use Behavior**

Behavioral Intention refers to the individual's readiness or intention to use a technology, while Use Behavior represents the actual act of usage (Ajzen, 1991; Venkatesh et al., 2003). Behavioral Intention is a strong predictor of Use Behavior, implying that positive attitudes and motivation toward a system lead to frequent and consistent usage.

In the context of SIPD-RI, understanding both Behavioral Intention and Use Behavior allows researchers to identify motivational and environmental factors influencing technology adoption among government employees. These insights provide valuable implications for designing effective e-government training and policy strategies.

### **Hypotheses :**

H1 : Performance Expectancy has a significant influence on the Behavioral Intention of SIPD-RI application users.

H2 : Effort Expectancy has a significant influence on the Behavioral Intention of SIPD-RI application users.

H3 : Facilitating Conditions has a significant influence on the Behavioral Intention of SIPD-RI application users.

H4 : Habit is presumed to has a significant influence on the Behavioral Intention of SIPD-RI application users.

H5 : Personal Innovativeness has a significant influence on the Behavioral Intention of SIPD-RI application users.

H6 : Facilitating Conditions has a significant influence on the Use Behavior of SIPD-RI application users.

H7 : Habit has a significant influence on the Use Behavior of SIPD-RI application users.

H8 : Personal Innovativeness has a significant influence on the Use Behavior of SIPD-RI application users.

H9 : Behavioral Intention has a significant influence on the Use Behavior of SIPD-RI application users.

H10 : Facilitating Conditions has a significant influence on the Use Behavior through Behavioral Intention of SIPD-RI application users.

H11 : Habit has a significant influence on the Use Behavior through Behavioral Intention of SIPD-RI application users.

H12 : Personal Innovativeness has a significant influence on the Use Behavior through Behavioral Intention of SIPD-RI application users.

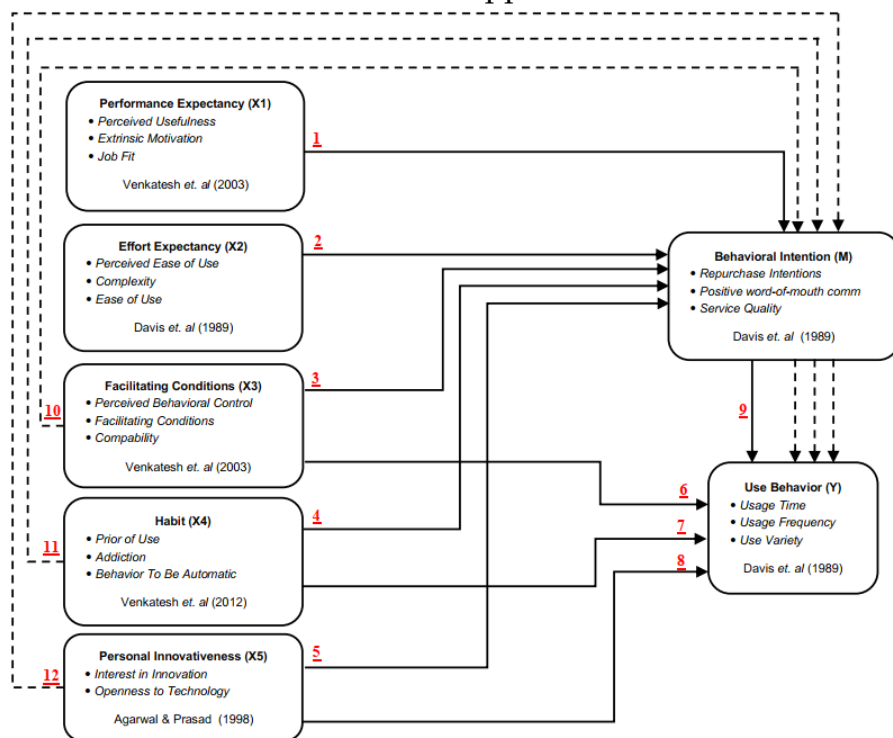


Figure 4. Conceptual Framework

## METHODOLOGY

This study applied a quantitative approach to investigate the factors driving the acceptance and utilization of the SIPD-RI application at BKAD, Malang Regency. The UTAUT-3 framework guided the research, encompassing seven constructs Performance Expectancy, Effort Expectancy, Facilitating Conditions, Habit, Personal Innovativeness, Behavioral Intention, and Use Behavior. The design specifically sought to measure the causal relationships between these variables through hypothesis testing via structural modeling.

The population of this study consisted of all civil servants (Aparatur Sipil Negara) who actively used the SIPD-RI application at BKAD Malang Regency. Given the relatively small population size, the research applied a saturated sampling technique, in which all 104 SIPD-RI users were included as

respondents. Data were collected through a structured questionnaire distributed directly to the participants, with each item measured using a five-point Likert scale ranging from strongly disagree to strongly agree. This approach ensured comprehensive data representation across all variables.

Data were analyzed using Structural Equation Modeling–Partial Least Squares (SEM-PLS) with the SmartPLS 4.0 software. The analysis included two main stages: assessment of the measurement model (outer model) to evaluate validity and reliability, followed by the structural model (inner model) to test hypotheses and determine path coefficients among variables. This analytical method was chosen for its ability to handle complex models and reflective constructs efficiently, providing robust statistical evidence of the determinants influencing the behavioral intention and actual use of the SIPD-RI application.

## RESEARCH RESULT

This section reports the PLS-SEM results for the measurement (outer) model, the structural (inner) model, and hypothesis testing. The analysis uses SmartPLS (SEM-PLS) on a saturated sample of 104 SIPD-RI users at BKAD Malang Regency. All tables below summarize the key output (loadings, validity, reliability,  $R^2$ , effect sizes, path coefficients, and mediation tests).

### 1. Outer Model Testing

The reliability, discriminant validity, and convergent validity of the outer model were evaluated. Indicators were reflective; threshold criteria applied is loading  $> 0.70$ , AVE  $> 0.50$ , Cronbach’s alpha & CR  $> 0.70$ .

Table 1. Outer Loading, Composite Reliability dan AVE

Variable	Indicator	Loading Factor	Composite Reliability	AVE
X1. Performance Expectancy	X1.1	0.843	0.916	0.784
	X1.2	0.927		
	X1.3	0.884		
X2. Effort Expectancy	X2.1	0.860	0.911	0.773
	X2.2	0.911		
	X2.3	0.865		
X3. Facilitating Conditions	X3.1	0.832	0.917	0.786
	X3.2	0.922		
	X3.3	0.903		
X4. Habit	X4.1	0.893	0.906	0.762
	X4.2	0.875		
	X4.3	0.850		
X5. Personal Innovativeness	X5.1	0.927	0.935	0.878
	X5.2	0.947		
M. Behavioral Intention	M.1	0.859	0.892	0.733
	M.2	0.828		
	M.3	0.881		
Y. Use Behavior	Y.1	0.845	0.893	0.737
	Y.2	0.892		
	Y.3	0.837		

The results presented in Table 1 demonstrate that all constructs meet the recommended thresholds for validity and reliability in the measurement model. All indicator loading values exceed 0.70, confirming strong item correlations with their respective constructs and satisfying the criterion for convergent validity. The Composite Reliability (CR) values, which range from 0.892 to 0.935, are well above the minimum requirement of 0.70, indicating excellent internal consistency among the items within each construct. Similarly, all Average Variance Extracted (AVE) values surpass the 0.50 benchmark, signifying that each construct explains more than half of the variance of its indicators. Together, these findings confirm that the measurement model offers a strong basis for additional structural model research.

Among all constructs, Personal Innovativeness recorded the highest reliability and validity (CR = 0.935; AVE = 0.878), suggesting that this construct is particularly robust in representing users' willingness to adopt new technologies. Performance Expectancy and Facilitating Conditions also demonstrate high reliability, highlighting their crucial role in explaining behavioral intention toward SIPD-RI usage. Overall, the results confirm that the model's latent variables are well-measured, with no issues of indicator weakness or inconsistency, thereby supporting the adequacy of the data for subsequent hypothesis testing using the structural model.

## 2. Inner Model Testing

The inner model evaluated explanatory power ( $R^2$ ), effect sizes ( $f^2$ ), and predictive relevance ( $Q^2$  via PLSpredict)

Table 2.  $R^2$  and  $Q^2$

Endogenous Variable	$R^2$	Adjusted $R^2$	$Q^2$ (Predictive Relevance)
Behavioral Intention (M)	0.512	0.488	0.447
Use Behavior (Y)	0.522	0.502	0.415

As presented in Table 2, the  $R^2$  values for the endogenous variables, Behavioral Intention and Use Behavior, fall within a moderate range based on the classifications established by Hair et al. (2016). The independent variables account for 51.2% of the variance in Behavioral Intention ( $R^2 = 0.512$ ). Concurrently, Behavioral Intention and its associated predictors explain 52.2% of the variance in Use Behavior ( $R^2 = 0.522$ ). These moderate  $R^2$  values demonstrate that the model possesses considerable explanatory power for analyzing user behavior within the public sector.

In addition to explanatory power, the  $Q^2$  values of 0.447 for Behavioral Intention and 0.415 for Use Behavior confirm that the model possesses good predictive relevance, as both exceed zero. This means that the model is capable of accurately predicting new or unseen data beyond the sample used for estimation. The combination of moderate  $R^2$  and high  $Q^2$  values indicates that the model not only explains the relationships among constructs effectively but also maintains strong predictive validity. Therefore, the proposed UTAUT-3 framework is proven to be both theoretically robust and empirically predictive

in assessing technology adoption behavior among civil servants in the context of SIPD-RI implementation.

Table 3.  $f^2$

<b>Relationship</b>	<b><math>f^2</math></b>	<b>Interpretation</b>
Behavioral Intention → Use Behavior	0.529	large
Effort Expectancy → Behavioral Intention	0.346	large
Personal Innovativeness → Behavioral Intention	0.254	moderate
Facilitating Conditions → Behavioral Intention	0.185	moderate
Performance Expectancy → Behavioral Intention	0.173	moderate
Facilitating Conditions → Use Behavior	0.080	small
Habit → Behavioral Intention	0.075	small
Habit → Use Behavior	0.041	small
Personal Innovativeness → Use Behavior	0.003	small

The results in Table 3 show that the effect size ( $f^2$ ) values vary from small to large, indicating differences in the magnitude of influence among the studied relationships. The Behavioral Intention → Use Behavior path has the largest effect ( $f^2 = 0.529$ ), categorized as large, signifying that behavioral intention is the most dominant factor influencing the actual use of the SIPD-RI application. Likewise, Effort Expectancy → Behavioral Intention exhibits a large effect ( $f^2 = 0.346$ ), emphasizing that the perceived ease of using the system substantially determines users' intention to adopt it. Meanwhile, Personal Innovativeness, Facilitating Conditions, and Performance Expectancy have moderate effects on Behavioral Intention, indicating that individual innovation, system support, and perceived usefulness all play important but secondary roles compared to ease of use.

Furthermore, several relationships, such as Facilitating Conditions → Use Behavior, Habit → Behavioral Intention, Habit → Use Behavior, and Personal Innovativeness → Use Behavior, display small effect sizes ( $f^2 < 0.10$ ). These small magnitudes imply that although these factors contribute to the model, their incremental impact on predicting the endogenous variables is relatively limited. The findings suggest that while environmental and habitual factors matter, the behavioral decision to use SIPD-RI is primarily driven by intention and perceived effort expectancy. Overall, the effect size analysis reinforces the importance of designing user-friendly systems and fostering user motivation to achieve higher levels of technology adoption in public sector organizations.

### 3. Hypotheses Testing (Direct and Indirect Effect)

Hypotheses testing were analyzed using bootstrapping to test the direct and indirect relationships. The following are the summarized results:

<b>Variable</b>	<b>Direct Effect</b>	<b>Sig.</b>	<b>Indirect Effect</b>	<b>Total Effect</b>	<b>Description</b>
X1 (Performance Expectancy) → M (Behavioral Intention)	0.296	0.000	-	-	Significant
X2 (Effort Expectancy) → M (Behavioral Intention)	0.421	0.000	-	-	Significant
X3 (Facilitating Conditions) → M (Behavioral Intention)	0.305	0.000	-	-	Significant

X4 (Habit) → M (Behavioral Intention)	0.195	0.008	-	-	Significant
X5 (Personal Innovativeness) → M (Behavioral Intention)	0.356	0.000	-	-	Significant
X3 (Facilitating Conditions) → Y (Use Behavior)	0.205	0.009	-	-	Significant
X4 (Habit) → Y (Use Behavior)	0.145	0.047	-	-	Significant
X5 (Personal Innovativeness) → Y (Use Behavior)	0.044	0.540	-	-	Not Significant
M (Behavioral Intention) → Y (Use Behavior)	0.588	0.000	-	-	Significant
X3 (Facilitating Conditions) → M (Behavioral Intention) → Y (Use Behavior)	-	0.000	0.179	0.793	Partial Mediation
X4 (Habit) → M (Behavioral Intention) → Y (Use Behavior)	-	0.016	0.115	0.733	Partial Mediation
X5 (Personal Innovativeness) → M (Behavioral Intention) → Y (Use Behavior)	-	0.000	0.209	0.712	Full Mediation

The results in Table 4 show that most direct relationships in the model are statistically significant, except for the path Personal Innovativeness → Use Behavior, which is not significant ( $p = 0.540$ ). This finding indicates that Performance Expectancy, Effort Expectancy, Facilitating Conditions, Habit, and Personal Innovativeness significantly affect Behavioral Intention to use the SIPD-RI application, while Behavioral Intention itself is the strongest predictor of actual system use ( $\beta = 0.588$ ). The significant direct effects of Facilitating Conditions ( $\beta = 0.205$ ) and Habit ( $\beta = 0.145$ ) on Use Behavior also suggest that environmental support and user familiarity contribute to usage beyond motivational intention. These results confirm that users' behavioral intention acts as a key mechanism translating perceived ease, usefulness, and support into actual technology usage behavior.

In addition, the mediation analysis provides deeper insights into how behavioral intention functions within the model. The partial mediation observed in Facilitating Conditions → Behavioral Intention → Use Behavior and Habit → Behavioral Intention → Use Behavior means that these constructs influence Use Behavior both directly and indirectly through Behavioral Intention. This implies that users who have access to adequate technical support or strong habitual tendencies are more likely to use the system even without high intention, but intention still strengthens that effect. Conversely, Personal Innovativeness shows full mediation, meaning that its influence on Use Behavior operates entirely through Behavioral Intention; innovative individuals adopt SIPD-RI only when their intention is formed. Overall, these findings emphasize that while external and personal factors play important roles, Behavioral Intention is the central psychological pathway driving technology adoption among civil servants.

## **DISCUSSION**

The results of this study confirm that the behavioral adoption of the SIPD-RI application among civil servants at BKAD Malang Regency is significantly influenced by multiple determinants from the UTAUT-3 framework. The findings highlight that Performance Expectancy, Effort Expectancy, Facilitating Conditions, Habit, and Personal Innovativeness have strong and meaningful effects on Behavioral Intention, while Behavioral Intention itself is the most powerful predictor of actual Use Behavior. These results are consistent with prior research in technology acceptance models (Venkatesh et al., 2003; Venkatesh et al., 2012; Farooq et al., 2017), which emphasize that individuals' perceptions of usefulness and ease of use are critical in shaping their willingness to adopt and continue using new digital systems. In the context of SIPD-RI, this reflects the importance of designing government information systems that are not only functionally effective but also user-friendly and well-integrated into employees' daily administrative routines.

The significant influence of Effort Expectancy and Performance Expectancy implies that users are more motivated to use SIPD-RI when they perceive it as beneficial for improving job performance and when it is easy to operate. This aligns with findings from Davis (1989) in the Technology Acceptance Model (TAM), which suggests that perceived usefulness and ease of use are primary motivators of system adoption. Meanwhile, the role of Facilitating Conditions further supports Venkatesh et al. (2003), emphasizing that adequate technical infrastructure, training, and institutional support are essential for maintaining continuous system usage. In public institutions such as BKAD, where hierarchical and procedural structures often dominate, this factor becomes a crucial enabler of digital transformation, reducing barriers to technology acceptance among employees with varying digital competencies.

The construct of Habit also demonstrates both direct and indirect effects on Use Behavior, suggesting that repeated use of SIPD-RI over time fosters familiarity and automaticity in performing work tasks. This supports the argument of Limayem et al. (2007) that habitual usage reflects not only behavioral intention but also the internalization of technology into daily workflow. Moreover, Personal Innovativeness shows a significant effect on Behavioral Intention but not directly on Use Behavior, indicating that individual tendencies to explore new technology influence system adoption primarily through the formation of intention. This pattern of full mediation suggests that innovative individuals are more likely to adopt SIPD-RI only when they develop a conscious intention to do so, consistent with the findings of Agarwal and Prasad (1998), who identified innovativeness as an antecedent of intention rather than direct behavior.

These findings collectively underscore the critical role of Behavioral Intention as a central psychological mechanism in the UTAUT-3 model. It functions as a bridge connecting individual perceptions (usefulness, ease, innovativeness) and environmental factors (facilitating conditions, habits) to actual behavior. The results also confirm that UTAUT-3 provides a robust theoretical lens for analyzing technology adoption in public sector contexts,

extending the applicability of this framework beyond private or consumer environments. From a managerial perspective, this study implies that policymakers and IT administrators should prioritize user training, system usability, and supportive infrastructures to strengthen both intention and actual usage. By doing so, the implementation of SIPD-RI can achieve its objectives of efficiency, transparency, and accountability in regional financial management, aligning with Indonesia's broader e-government transformation agenda.

## **CONCLUSIONS AND RECOMMENDATIONS**

The findings of this study conclude that the behavioral adoption of the SIPD-RI application among civil servants at BKAD Malang Regency is strongly influenced by key constructs of the UTAUT-3 framework Performance Expectancy, Effort Expectancy, Facilitating Conditions, Habit, and Personal Innovativeness which significantly affect Behavioral Intention, while Behavioral Intention itself serves as the strongest determinant of Use Behavior. These results affirm that user motivation, system usability, and institutional support are critical in shaping employees' willingness and consistency in using the SIPD-RI system. Furthermore, the mediation analysis reveals that Behavioral Intention acts as a crucial intermediary variable, where Facilitating Conditions and Habit partially mediate, while Personal Innovativeness fully mediates its effect on actual system use. Thus, the success of SIPD-RI implementation largely depends on how effectively organizations can strengthen users' intentions through supportive environments and user-friendly system design.

Based on these conclusions, several recommendations can be made for future implementation and policy development. Government institutions, particularly regional financial agencies, should focus on improving training programs, technical assistance, and system accessibility to enhance user confidence and ease of use. Developers should continuously refine SIPD-RI features to ensure operational simplicity and compatibility with user needs. Additionally, fostering a culture of digital innovation among civil servants will encourage proactive engagement with new systems, promoting long-term sustainability of e-government initiatives. Future research is recommended to explore other contextual variables such as organizational culture, leadership support, or technological readiness to provide a more comprehensive understanding of technology adoption behavior in the public sector.

## **ADVANCED RESEARCH**

This study provides valuable insights into the behavioral adoption of the SIPD-RI application using the UTAUT-3 framework; however, it also has several limitations that open opportunities for future research. First, the study was limited to civil servants within the BKAD of Malang Regency, which may restrict the generalizability of the findings to other regional government institutions with different administrative structures or levels of digital maturity. Second, the research employed a cross-sectional design, capturing perceptions and behaviors at a single point in time. As a result, it does not fully account for potential changes in user attitudes or system usage patterns that may evolve as the SIPD-RI platform matures and users gain more experience.

For future studies, it is recommended to conduct longitudinal research to observe how user behavior, system familiarity, and technology acceptance evolve over time. Expanding the research sample to include multiple regional agencies or provinces would also strengthen external validity and enable comparative analysis across different organizational contexts. Moreover, integrating additional variables such as organizational culture, leadership support, or technological readiness could enrich the explanatory power of the model. Future research could also employ mixed-method approaches, combining quantitative modeling with qualitative interviews to provide a deeper understanding of the psychological and organizational dynamics influencing SIPD-RI adoption. Such advancements would contribute to the refinement of technology acceptance theory in the public sector and offer more practical guidance for e-government policy development in Indonesia.

## REFERENCES

- Agarwal, R., & Prasad, J. (1998). A conceptual and operational definition of personal innovativeness in the domain of information technology. *Information Systems Research*, 9(2), 204–215. <https://doi.org/10.1287/isre.9.2.204>
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>
- Farooq, M. S., Salam, M., Fayolle, A., Jaafar, N., & Ayupp, K. (2017). Impact of service quality on customer satisfaction in Malaysia airlines: A PLS-SEM approach. *Journal of Air Transport Management*, 67, 169–180. <https://doi.org/10.1016/j.jairtraman.2017.12.008>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2019). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). Sage Publications.
- Laudon, K. C., & Laudon, J. P. (2018). *Management information systems: Managing the digital firm* (16th ed.). Pearson Education.
- Limayem, M., Hirt, S. G., & Cheung, C. M. K. (2007). How habit limits the predictive power of intention: The case of information systems continuance. *MIS Quarterly*, 31(4), 705–737. <https://doi.org/10.2307/25148817>
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478. <https://doi.org/10.2307/30036540>
- Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. *MIS Quarterly*, 36(1), 157–178. <https://doi.org/10.2307/41410412>
- Whitten, J. L., & Bentley, L. D. (2007). *Systems analysis and design methods* (7th ed.). McGraw-Hill Education.