The Determinant Factors of Research and Publication Information System Use Behavior in Private University at Surabaya: The Moderating Role of Service Quality

Liestya Padmawidjaja[1]; Ika Raharja Salim[2]*; Wirawan Endro Dwi Radianto[3]

[1]International Business Management, School of Business Management, Universitas Ciputra Surabaya
Jawa Timur, Indonesia 60219
[2]Research & Community Development, Universitas Ciputra Surabaya
Jawa Timur, Indonesia 60219
[3]Accounting, School of Business Management, Universitas Ciputra Surabaya
Jawa Timur, Indonesia 60219
[1]lpadmawidjaja@ciputra.ac.id; [2]ika.salim@ciputra.ac.id; [3]wirawan@ciputra.ac.id

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Abstract **-** The development of an information system in the Research and Community Development Department in one of the private universities in Surabaya, which has already been developed since 2020, has not yet undergone an evaluation of user acceptance, specifically among the faculty. Furthermore, the satisfaction survey conducted has been too general so far, making it essential to evaluate the service quality of the information system provided. The research aimed to analyze user acceptance of X information system from the Research and Community Development Department. Additionally, it seeked to assess its service quality. The empirical research was quantitative by design, and data were collected from 228 faculty members. The research model was analyzed using PLS-SEM. The data analysis results indicate that all items used in the research are valid and reliable, with cross-loading values ranging from 0.837 to 0.980. Then, the Cronbach's alpha values are greater than 0.6. It is found that out of six proposed hypotheses, four hypotheses are accepted and two hypotheses are rejected. The research finds that ease of use and usefulness influence intention to use, which increases usage behavior. The research also shows that service quality does not moderate the influence of perceived usefulness and ease of use on intention to use.

Keywords: research and publication information system, use behavior, service quality

I. INTRODUCTION

The rapid development of Industry 5.0 is marked by the era of digitization, emphasizing the integration of human competencies with technology (Mourtzis et al., 2021). In response to the rapid technological advancements accelerated by the COVID-19 pandemic, the education sector, particularly universities, is urged to continually enhance their digitalization efforts in both learning and administrative domains (Prasetyo, 2017). Educational institutions continuously strive to build robust information systems to facilitate online learning and management processes for the academic community (Zawacki-Richter, 2021). However, the implementation of information systems often falls short of expectations or fails to meet users' needs sustainably, underscoring the importance of evaluation and improvement (Benavides et al., 2020). The development of information systems in universities, especially in management, is crucial to support decision-making and long-term strategies (Shniekat et al., 2022). Furthermore, it is noted that the use of information systems is also critical in the development of operational plans, budget creation, and evaluation of expenditure (Shniekat et al., 2022).

*Corresponding Author

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The importance of information systems in managing higher education institutions has been recognized and implemented in Indonesia, from ministries to universities. Several examples of information systems for university management include SINTA as a platform for university portfolios and rankings, BIMA for research funding and community service proposal submissions, and SISTER for lecturer certification. The need for universities to gather data and information for these ministries is closely related to lecturers' performance. Comprehensive and accurate reporting can be achieved if lecturers report their entire performance. Recognizing this need, universities must prepare reporting mechanisms that facilitate lecturers. Interviews with lecturers at a university in Surabaya highlight that the performance reporting process is often cumbersome and repetitive. Lecturers are required to report their performance across multiple ministry platforms such as SINTA and SISTER (L. Yuliawati, personal communication, August 2023). Furthermore, it is suggested that lecturers hope the reporting process can be consolidated into the university's internal information system, which then will be integrated with the ministry's information system, enabling lecturers to report their performance only once (M. Wardaya, personal communication, August 2023).

The research focuses on one of the information systems in higher education, specifically research reporting managed by the Research and Community Development Department, known as Lembaga Penelitian dan Pengabdian kepada Masyarakat (LPPM). Managing research data is crucial for the Research and Community Development Department as it encompasses several key performance indicators of the department, categorized under customer and internal business processes in the balanced scorecard framework. In the initial stages of the research, interviews and identification processes have been conducted and documented in the empathy maps depicted. The empathy map illustrates that the research reporting process is lengthy and repetitive. Additionally, it depicts the need for an information system to manage faculty performance data.

The need for this information system is also experienced by several universities, where, based on interview results, the information system is crucial to support the university's performance reporting needs (personal communication, May 2024). The importance of information systems in managing research reporting makes it crucial to be designed and implemented. The research examines the information system at a university in Surabaya, where the design and implementation process has been ongoing from 2020 to 2023. However, so far, there has been no specific monitoring and evaluation of user effectiveness. This evaluation is crucial to detect implementation failures. According to Davis (1989), failure to implement an information system can stem from external and internal factors. Information system requirements may vary among companies and divisions, depending on staff responsibilities (Alsyouf et al., 2023; Puška et al., 2020). Continuous evaluation of the information system, both before and after its launch, is important to adapt to regulation changes and user demands. Although periodic improvements have been made to align with evolving reporting needs, a comprehensive evaluation of lecturer acceptance of the system in the Research and Community Development Department, particularly using the Technology Acceptance Model (TAM) framework developed by Davis, is still pending.

In addition to the availability and effectiveness of information systems, the service quality provided by the department owning the information system is also crucial. Several previous studies indicate that service quality can significantly influence the usage of an information system (Hami & Anggraini, 2022; Syahidah & Aransyah, 2023). It is further emphasized that better service quality enhances users' behavior using the information system (Syahidah & Aransyah, 2023). Interview results with staff from the Research and Community Development Department at one university also indicate that service excellence, such as consultation services for data input processes and the availability of guidelines or manuals, significantly increases the amount of entered data. This statement demonstrates an enhancement in the usage behavior of research information systems.

Previous research has predominantly focused on e-learning management systems (Dewi, 2022; Rughoobur-Seetah & Hosanoo, 2021). However, investigations into the management of information systems, particularly those tailored for research and community development databases, have yet to be conducted. TAM stems from the Theory of Reasoned Action (TRA), initiated by Martin Fishbein and Icek Ajzen in 1967. TAM is built upon TRA to examine individuals' perceptions of technology's usefulness

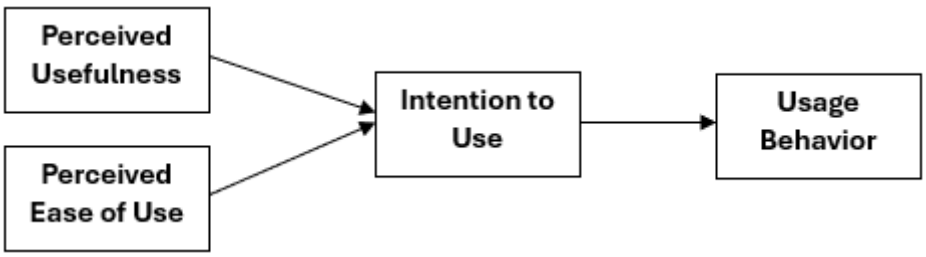

Figure 1 Technology Acceptance Model (TAM) Framework

and ease of use (Venkatesh & Davis, 2000). This model provides a framework for understanding the factors influencing technology acceptance, enabling researchers and practitioners to identify barriers and propose enhancements effectively. TAM, introduced by Fred Davis in 1989, encompasses four important indicators: perceived usefulness, perceived ease of use, intention to use, and usage behavior. The research adopts TAM to explore user acceptance within the Research and Community Development Department. The TAM framework is shown in Figure 1.

The ease of using an information system is believed to enhance users' perception that the system they use is beneficial in improving their performance, in accordance with previous research (Franque et al., 2021). Other studies also suggest the importance of ensuring that information systems are regularly evaluated to ensure that they are user-friendly, thereby enhancing users' perception that the information system is beneficial in improving their performance (Alsyouf et al., 2023). Therefore, in the research, the ease of operation of X information system will be evaluated to assess the extent to which the information system is perceived as beneficial to users. The first hypothesis is proposed.

H1: Perceived ease of use influences perceived usefulness.

The ease of use and usefulness of a system are also considered crucial in increasing users' intention to use an information system. Several previous studies have indicated that the ease of use and usefulness of a system enhance users' desire to use the information system provided (Venkatesh & Davis, 2000; Tahar et al., 2020). Therefore, in the research, the level of intention to use the system will be evaluated from the perspective of the ease of system use. The following hypotheses are suggested.

H2: Perceived ease of use influences intention to use.

H3: Perceived ease of use influences intention to use through perceived usefulness.

Next, the increasing desire or intention to use a system is considered to be in line with the behavior or actions that individuals will undertake. Several studies have suggested that the increasing desire to use aligns with the behavior of using the information system provided (Kamal et al., 2020; Tahar et al., 2020). Therefore, the research further investigates whether the intention to use a system aligns with the frequency of using the information system provided, as shown in the following hypothesis.

H4: Intention to use influences usage behavior.

Service quality, also referred to as Servqual, is characterized by the disparity between users' perspectives and their expectations of a service (Parasuraman et al., 1985). Service quality is the comparison between users' perspective and their ideal service performance expected from a company (Parasuraman et al., 1985). Moreover, service quality is said to represent a form of attitude, closely linked yet distinct from satisfaction, a result of evaluating performance against expectations and perceptions (Parasuraman et al., 1988, 1991). Similarly, previous research has defined service quality as the provider's capacity to align anticipated service with perceived service, ultimately leading to customer satisfaction (Seth et al., 2005).

The service quality model, introduced by Parasuraman in 1985, encompasses various dimensions elucidated in numerous studies. These dimensions include tangibles, reliability, responsiveness, assurance, and empathy (Parasuraman et al., 1985, 1994). Previous research has suggested a significant impact of service quality on enhancing perceptions of ease of use and usefulness of an information system. It is attributed to the correlation between good service quality and the information system provider's ability to effectively elucidate the system usage process (Syahidah & Aransyah, 2023). Additionally, other studies have mentioned that the service quality provided by the information system owner, coupled with the ability to instill trust in the utilized information system, can augment user satisfaction with the information system (Hakam et al., 2022). Hence, the research assesses the service quality and its impact on perceptions of ease of use and usefulness of the information system. The following hypotheses are suggested.

H5: Service quality moderates the influence between perceived usefulness and intention to use.

H6: Service quality moderates the influence between perceived ease of use and intention to use

II. METHODS

The primary objective of the research is to evaluate user satisfaction and acceptance of the information system at the Research and Community Development Department, employing the TAM methodology. Additionally, the research examines the service quality provided by the Research and Community Development Department and the users' trust levels of the X information system. The research methodology involves conducting a survey among various participants, including lecturers who utilize the X information system.

Population can be viewed as the entirety of all potential individuals, objects, or other elements studied (Sugiyono, 2019). A finite population is utilized in the research, where the total of respondents is known and

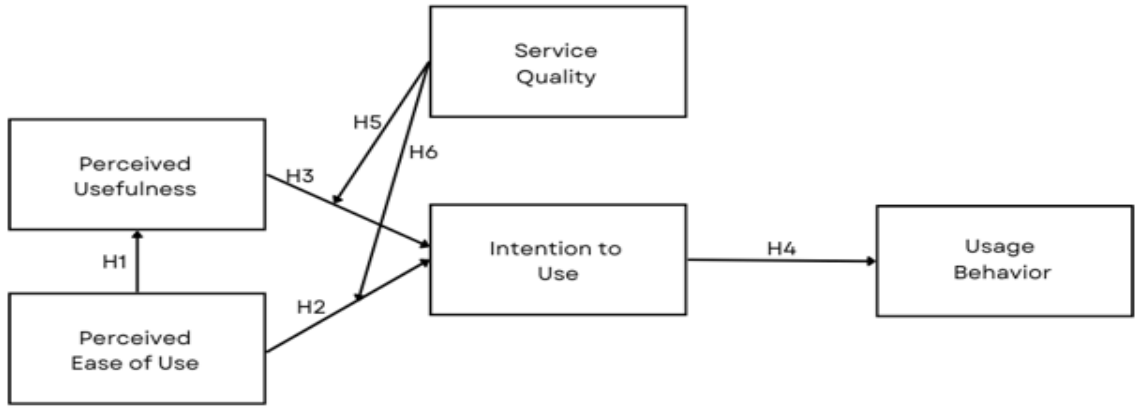

Figure 2 Research Model

countable (Hair & Alamer, 2022). The population in the research encompasses all 228 faculty members at the private university. As for the sample, it is defined as a subset of the population with specific characteristics (Sugiyono, 2019). The research employs a saturated or total sample, including all population members (Sugiyono, 2019). Thus, the sample comprises the entire 228 faculty members of the private university.

The data collection process is conducted with all lecturers at one university in Surabaya. It is possible because the researchers have obtained permission to include the questionnaire in an internal survey system that requires lecturers to complete it. The proposed model is shown in Figure 2. Next, the data are processed using SmartPLS 4. The data processing stages consist of convergent validity, discriminant validity, reliability testing, coefficient of determination, effect size, prediction relevance, and hypothesis testing.

III. RESULTS AND DISCUSSIONS

The convergence validity of the reflective measurement model becomes evident by examining the correlation between item scores and their corresponding constructs (loading factors), as indicated in the outer loadings output. During the initial factor testing, there is no item value below 0.6. The values are presented in Table 1.

Table 1 The Results of Convergent Validity

	Outer loadings
IU1 ← IU	0.980
IU2 ← IU	0.980
PEU1 ← PEU	0.939
PEU2 ← PEU	0.882
PEU3 ← PEU	0.938
PEU4 ← PEU	0.926
PU1 ← PU	0.898
PU2 ← PU	0.881

Table 1 The Results of Convergent Validity (Continued)

	Outer loadings
PU3 ← PU	0.905
PU4 ← PU	0.872
SQ1 ← SQ	0.661
SQ10 ← SQ	0.792
SQ11 ← SQ	0.913
SQ12 ← SQ	0.891
SQ13 ← SQ	0.905
SQ14 ← SQ	0.853
SQ15 ← SQ	0.792
SQ16 ← SQ	0.834
SQ17 ← SQ	0.876
SQ18 ← SQ	0.884
SQ19 ← SQ	0.846
SQ2 ← SQ	0.658
SQ20 ← SQ	0.888
SQ21 ← SQ	0.901
SQ22 ← SQ	0.914
SQ3 ← SQ	0.643
SQ4 ← SQ	0.664
SQ5 ← SQ	0.851
SQ6 ← SQ	0.875
SQ7 ← SQ	0.890
SQ8 ← SQ	0.894
SQ9 ← SQ	0.885
UB1 ← UB	0.948
UB2 ← UB	0.952
UB3 ← UB	0.957
SQ × PU → SQ × PU	1.000
SQ × PEU → SQ × PEU	1.000

Note: Perceived Usefulness (PU), Perceived Ease of Use (PEU), Intention to Use (IU), Usage Behavior (UB), Service Quality (SQ)

The outer loading output indicates that all indicators for each construct exhibit results that satisfy

convergent validity. The loading factor values for every indicator surpass 0.60. Besides outer loading, Average Variance Extracted (AVE) outputs from Table 2 also indicate that every indicator surpasses 0.5.

Meanwhile, the discriminant validity of reflective indicators becomes evident through the examination of cross-loadings between indicators and their respective constructs. The output from the PLS algorithm indicates cross-loading results ranging from 0.837 to 0.980. For discriminant validity, the results of cross-loading and the Fornell-Larcker criterion determine whether the indicators are valid or not.

Based on a cross-loading measurement shown in Table 2, all indicators and variables are valid because each has the highest value in its column of a variable. Besides cross-loading, the Fornell-Larcker measurement in Table 3 also shows that all variables are considered valid because the topmost values of each column are the highest compared with the numbers below. Then, the single one value in the rightmost column is the highest compared with the numbers on its left.

The reliability test result of Cronbach's alpha should be above 0.6. All indicators in the research have Cronbach's alpha above 0.9. The results indicate that the data output is reliable. Table 4 shows the results.

One way to test the inner models is by examining the R-square (R^2) values of dependent constructs. A structural model with an R^2 value above 0.19 indicates a "weak" model. If the R^2 value is above 0.33, it indicates a "moderate" model. Meanwhile, R^2 above 0.67 indicates a "good" model (Hair & Alamer, 2022). The R^2 values of each dependent construct from the model estimation can be seen in Table 5. It shows that the structural model of the research is moderate.

F-square is a measure used in Partial Least Squares-Structural Equation Modeling (PLS-SEM) analysis to evaluate the relative contribution of endogenous variables to the model. Intention to use has a high F-square (0.822), indicating significant importance in explaining variation within the model. Meanwhile, perceived ease of use shows a lower influence (F-square: 0.034). It shows a relatively minor contribution compared to the intention to use. Then, perceived usefulness demonstrates significant influence (F-square: 0.259), although it is not as strong as intention to use. Last, service quality has a low F-square (0.021), indicating a smaller contribution to the model. Table 6 shows the results of the F-square.

Table 2 The Results of cross-loading

	IU	PEU	PU	SQ	UB	SQ × PEU	SQ × PU
IU1	**0.980**	0.667	0.769	0.637	0.660	-0.383	-0.430
IU2	**0.980**	0.679	0.766	0.636	0.657	-0.363	-0.408
PEU1	0.613	**0.939**	0.664	0.574	0.716	-0.276	-0.276
PEU2	0.703	**0.882**	0.796	0.599	0.795	-0.334	-0.356
PEU3	0.578	**0.938**	0.654	0.578	0.728	-0.268	-0.248
PEU4	0.617	**0.926**	0.625	0.561	0.695	-0.266	-0.271
PU1	0.750	0.678	**0.898**	0.622	0.770	-0.322	-0.432
PU2	0.588	0.645	**0.881**	0.597	0.743	-0.276	-0.371
PU3	0.778	0.674	**0.905**	0.663	0.688	-0.374	-0.504
PU4	0.653	0.672	**0.872**	0.608	0.703	-0.260	-0.359
SQ1	0.584	0.417	0.596	**0.661**	0.466	-0.267	-0.393
SQ10	0.435	0.535	0.524	**0.792**	0.556	-0.354	-0.362
SQ11	0.558	0.540	0.614	**0.913**	0.574	-0.438	-0.477
SQ12	0.479	0.510	0.596	**0.891**	0.582	-0.380	-0.418
SQ13	0.532	0.535	0.567	**0.905**	0.592	-0.422	-0.406
SQ14	0.463	0.467	0.509	**0.853**	0.497	-0.337	-0.345
SQ15	0.531	0.460	0.584	**0.792**	0.467	-0.357	-0.486
SQ16	0.569	0.466	0.505	**0.834**	0.476	-0.455	-0.436
SQ17	0.562	0.489	0.573	**0.876**	0.512	-0.408	-0.459
SQ18	0.576	0.474	0.536	**0.884**	0.528	-0.443	-0.464
SQ19	0.563	0.464	0.497	**0.846**	0.481	-0.460	-0.446
SQ2	0.554	0.663	0.745	**0.658**	0.739	-0.251	-0.296
SQ20	0.594	0.498	0.597	**0.888**	0.566	-0.472	-0.499
SQ21	0.557	0.527	0.589	**0.901**	0.573	-0.456	-0.477
SQ22	0.531	0.450	0.550	**0.914**	0.524	-0.416	-0.435
SQ3	0.565	0.711	0.684	**0.643**	0.769	-0.239	-0.257

Table 2 The Results of cross-loading (Continued)

	IU	PEU	PU	SQ	UB	SQ × PEU	SQ × PU
SQ4	0.589	0.724	0.679	**0.664**	0.780	-0.247	-0.277
SQ5	0.483	0.513	0.518	**0.851**	0.544	-0.360	-0.376
SQ6	0.486	0.494	0.574	**0.875**	0.549	-0.368	-0.413
SQ7	0.558	0.496	0.593	**0.890**	0.566	-0.401	-0.469
SQ8	0.511	0.526	0.606	**0.894**	0.550	-0.392	-0.454
SQ9	0.516	0.517	0.534	**0.885**	0.549	-0.402	-0.409
UB1	0.653	0.720	0.802	0.665	**0.948**	-0.293	-0.321
UB2	0.616	0.766	0.766	0.617	**0.952**	-0.274	-0.277
UB3	0.649	0.803	0.760	0.666	**0.957**	-0.287	-0.315
SQ × PU	-0.428	-0.316	-0.472	-0.496	-0.320	0.877	1.000
SQ × PEU	-0.381	-0.313	-0.349	-0.456	-0.299	1.000	0.877

Note: Perceived Usefulness (PU), Perceived Ease of Use (PEU), Intention to Use (IU), Usage Behavior (UB), and Service Quality (SQ)

Table 3 The Results of the Fornell-Larcker Criterion

	IU	PEU	PU	SQ	UB
IU	0.980				
PEU	0.687	0.922			
PU	0.784	0.750	0.889		
SQ	0.650	0.629	0.701	0.837	
UB	0.672	0.801	0.815	0.683	0.952

Note: Perceived Usefulness (PU), Perceived Ease of Use (PEU), Intention to Use (IU), Usage Behavior (UB), and Service Quality (SQ)

Table 4 The Results of Reliability Analysis

	Cronbach's Alpha	Composite Reliability (rho_a)	Composite Reliability (rho_c)	Average Variance Extracted (AVE)
IU	0.958	0.958	0.980	0.960
PEU	0.941	0.946	0.958	0.850
PU	0.912	0.916	0.938	0.791
SQ	0.979	0.979	0.981	0.701
UB	0.949	0.950	0.967	0.907

Note: Perceived Usefulness (PU), Perceived Ease of Use (PEU), Intention to Use (IU), Usage Behavior (UB), and Service Quality (SQ)

Table 5 The Results of R-Square

	R-Square	Notes
IU	0.655	Moderate
PU	0.563	Moderate
UB	0.451	Moderate

Note: Perceived Usefulness (PU), Intention to Use (IU), and Usage Behavior (UB

Table 6 The Results of F-Square

	IU	PEU	PU	SQ	UB
IU					0.822
PEU	0.034		1.289		
PU	0.259				
SQ	0.021				
UB					

Note: Perceived Usefulness (PU), Perceived Ease of Use (PEU), Intention to Use (IU), Usage Behavior (UB), and Service Quality (SQ)

Table 7 presents prediction relevance metrics, including Q^2predict, Root Mean Square Error (RMSE), and Mean Absolute Error (MAE) for intention to use, perceived usefulness, and user behavior. Q^2predict measures the predictive relevance of each construct, where values closer to 1 indicate stronger predictive capability. Intention to use, perceived usefulness, and user behavior show Q^2predict values of 0.508, 0.557, and 0.547, respectively, indicating that these constructs have moderate to strong predictive relevance in the model. Additionally, RMSE and MAE provide measures of prediction accuracy. Lower RMSE and MAE values suggest better model performance in predicting the respective constructs. In this case, the intention to use has an RMSE of 0.712 and MAE of 0.491. Then, perceived usefulness has an RMSE of 0.674 and an MAE of 0.447. Meanwhile, user behavior has an RMSE of 0.682 and MAE of 0.564. These metrics collectively indicate that the model demonstrates reasonably good prediction capabilities for intention to use, perceived usefulness, and user behavior, with perceived usefulness showing the highest predictive relevance and intention to use exhibiting the lowest prediction errors among the constructs evaluated.

Table 7 The Results of Prediction Relevance

	Q^2predict	RMSE	MAE
IU	0.508	0.712	0.491
PU	0.557	0.674	0.447
UB	0.547	0.682	0.564

Note: Perceived Usefulness (PU), Intention to Use (IU), Usage Behavior (UB), Root Mean Square Error (RMSE), and Mean Absolute Error (MAE)

Table 8 provides a comparison of model fit between the saturated model and the estimated model using several fit indices. The saturated model, which represents an ideal fit, shows lower values for Standardized Root Mean Square Residual (SRMR) (0.090) compared to the estimated model (0.148). The result indicates a closer match between observed and predicted correlations in the saturated model. However, both models exhibit substantial differences in Displacement Under Loading Sequence (d_ULS) and Delta G (d_G) indices, with the estimated model showing higher values. The result suggests greater disparities between observed and predicted data. Then, the Chi-square values are significant in both models, reflecting notable differences in covariance matrices, which are common due to sensitivity to sample size. Normed Fit Index (NFI) values around 0.74 for both models indicate reasonable fit, implying potential areas for model refinement to improve overall fit to the data.

Table 8 The Results of Model Fit Summary

	Saturated Model	Estimated Model
SRMR	0.090	0.148
d_ULS	5.143	13.823
d_G	2.870	3.127
Chi-square	3540.612	3661.251
NFI	0.744	0.735

Note: Displacement Under Loading Sequence (d_ULS), Delta G (d_G), and Normed Fit Index (NFI)

Table 9 The Results of the Hypothesis Test

	Hypothesis	T-Statistics (|O/STDEV|)	P-Values
H1	PEU → PU	16.391	0.000
H2	PEU → PU → IU	4.688	0.000
H3	PEU → IU	4.688	0.000
H4	IU → UB	13.245	0.000
H5	SQ × PU → IU	0.317	0.751
H6	SQ × PEU → IU	0.668	0.504

Note: Perceived Usefulness (PU), Perceived Ease of Use (PEU), Intention to Use (IU), Usage Behavior (UB), and Service Quality (SQ)

From the results of hypothesis tests (Table 9), two hypotheses are rejected, and four hypotheses are accepted. First, perceived ease of use affects perceived usefulness. The result of the p-value is 0.000, which is below the significance level of 0.05. Meanwhile, the t-value at 16.391 exceeds the critical t-value. This result shows a significant influence of perceived ease of use on perceived usefulness. This finding is consistent with several previous studies (Tahar et al., 2020; Alsyouf et al., 2023), emphasizing that the ease of use within a system positively affects individuals' perceptions of its usefulness. The results of H3 indicate a significant relationship where perceived ease of use directly influences intention to use, with a t-value of 4.688 that exceeds the critical t-value and a

p-value of 0.000 below the significance level of 0.05. This finding underscores that users' perception of how easy the information system is to use directly impacts their intention to utilize it. This result aligns with prior research (Kamal et al., 2020; Tahar et al., 2020; Alsyouf et al., 2023), which consistently highlights the pivotal role of system usability in shaping user intentions. It emphasizes that enhancing the perceived ease of use of the system can lead to higher intentions among faculty members to engage with the information system developed by the Research and Community Development Department.

Second, perceived ease of use affects intention to use through perceived usefulness. The result of the p-value is 0.000, which is below the significance level of 0.05, and the t-value at 4.688 surpasses the critical t-value. This result indicates that perceived usefulness mediates the influence of perceived ease of use on intention to use. This finding is in line with several previous studies (Kamal et al., 2020; Tahar et al., 2020; Alsyouf et al., 2023), suggesting that the ease of system use, whether directly or through perceived usefulness, affects users' intention to utilize the system.

Third, intention to use affects usage behavior. The result of the p-value is 0.000, which is below the significance level of 0.05, and the t-value, measured at 13.245, surpasses the critical t-value. This result shows that the intention to use significantly affects usage behavior. It implies that a stronger intention to use the system is associated with increased actual system usage. This conclusion is consistent with findings from various prior studies (Tahar et al., 2020; Alsyouf et al., 2023).

Fourth, service quality does not moderate the relationship between perceived usefulness and intention to use. The result of the p-value is 0.751, which is greater than 0.05, and the t-value is 0.317. The results indicate that service quality does not moderate the influence of perceived usefulness on intention to use. The service quality provided to users does not alter users' perceptions of the usefulness of a system. This situation may occur because the service quality provided has not formed a perception that it is related to the information system used. It is explained by previous research that describes the formation of perceived service quality as crucial in enhancing user assessments (Wang et al., 2019).

Last, service quality does not moderate the relationship between perceived ease of use and intention to use. The result of the p-value is 0.504, which is greater than 0.05, and the t-value is 0.668. The results show that service quality does not moderate the influence of perceived ease of use on intention to use. Previous research also explains that service quality has the lowest influence on perceived system ease if it is compared to other factors such as perceived security and perceived enjoyment (Mostafa, 2020). This situation occurs because there is a possibility that information systems' ease of use is not considered the primary factor (Mostafa, 2020).

IV. CONCLUSIONS

The acceptance level of the information system can be effectively gauged through the collected datasets, comprising 228 responses. The survey demonstrates that a majority of respondents express agreement across all variables. The research underscores the significance of the Research and Community Development Department in upholding and enhancing services for lecturers. Hence, it can foster their inclination to document research and community service activities via the X information system from the Research and Community Development Department.

Improving the system's user-friendliness and enhancing research outputs, particularly in report generation, are vital for boosting its utilization in reporting. Furthermore, continuous enhancements to X information system from the Research and Community Development Department are imperative to adapt to evolving regulations and cater to lecturers' administrative reporting needs. Regular dissemination of information about X information system from the Research and Community Development Department is also essential to enhance lecturers' proficiency in utilizing the system as it provides a platform for feedback and suggestions for its ongoing enhancement.

The research on the acceptance of the X information system by faculty members at a private university in Surabaya has several limitations. Firstly, its focus solely on one institution limits the generalizability of findings to other settings. Despite a relatively large sample size of 228 faculty members, the cross-sectional design restricts the ability to establish causal relationships or observe changes over time. Moreover, reliance on self-reported data introduces potential biases such as social desirability bias. The study's evaluation of service quality was noted to be general, suggesting a need for more specific and detailed assessments in future research. Additionally, the finding that service quality does not moderate the relationship between perceived usefulness, ease of use, and intention to use prompts further exploration into other potential moderating factors. Addressing these limitations could enhance the validity and applicability of the study's conclusions in similar educational technology adoption contexts.

Future research can explore several avenues to enrich understanding of information system acceptance in academic settings. Firstly, adopting alternative acceptance measurement scales such as TAM 3, UTAUT, and UTAUT 2, can provide deeper insights into faculty perceptions and behaviors. Secondly, comparative studies across multiple universities will offer valuable comparative data to assess differences in system acceptance influenced by varying institutional contexts. Thirdly, incorporating demographic variables in future investigations can elucidate how factors such as age, tenure, or academic discipline influence acceptance patterns. Additionally, addressing non-significant variables identified in the research through focused Focus Group Discussions

(FGDs) uncover nuanced reasons behind acceptance trends. Lastly, given the relevance of subjective norms, future research can delve into how leadership styles within academic institutions impact information system acceptance, potentially uncovering critical leadership behaviors that foster positive adoption outcomes.

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