

Analysis of Self-Efficacy and User Satisfaction in Sustainable Use of The GOBIS Surabaya Application through PLS-SEM Approach

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Abstract

This study aims to examine the factors influencing the sustained usage of the GoBis e-government application in Surabaya, Indonesia. By investigating constructs such as Information Quality (IQ), Personal Outcome Expectation (POE), Self-Efficacy (SE), Satisfaction (SAT), Service Quality (SQ), Social Influence (SI), and Prior Experience (PE), the research utilizes Structural Equation Modeling - Partial Least Squares (SEM-PLS) to analyze user engagement and behavior. The analysis, based on a sample of 409 respondents, reveals that Information Quality, Personal Outcome Expectation, Self-Efficacy, and Satisfaction significantly impact users' intention to continue using the application. Specifically, Information Quality was identified as a crucial determinant, influencing Continuance Intention, Self-Efficacy, and Satisfaction, highlighting the importance of high-quality information in building user confidence and satisfaction. In contrast, Service Quality and Social Influence were found to have a limited effect on Continuance Intention, suggesting that these factors contribute to user satisfaction but are not primary drivers of long-term engagement. The findings emphasize the need for improving user experiences by enhancing information quality, promoting self-efficacy programs, and providing regular user-centered updates. The study concludes with recommendations for stakeholders to focus on continuous service improvements and regular user feedback evaluations to meet evolving public service standards and foster higher community engagement.

Keywords: Self-efficacy; User Satisfaction; E-government; GoBis; Surabaya

1. Introduction

Digital transformation has become a global trend, revolutionizing various sectors, including government services. In Indonesia, the city of Surabaya has taken strategic steps by developing electronic-based applications such as GoBis (Golek Bis), a public bus reservation service designed to provide convenience for citizens in accessing transportation. Earlier studies have emphasized the importance of sustained usage for the success of information and communication technology (ICT) applications (Jasperson et al., 2005; Venkatesh et al., 2011). Factors such as self-efficacy and user satisfaction have been identified as critical determinants influencing both initial acceptance and long-term engagement with technology (Bhattacherjee, 2001; Hsu et al., 2004). However, in eveloping countries like Indonesia, there is a lack of empirical research exploring the combined impact of these factors on the sustained use of e-government applications.

Most existing studies on e-government focus on initial adoption rather than long-term engagement. Previous research has highlighted that citizen satisfaction, which is significantly influenced by

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perceived ease of use, serves as a key predictor of continued e-government usage (Napitupulu et al., 2024). Additionally, models such as the DeLone and McLean Information Systems Success Model have been employed to assess user satisfaction and its impact on sustained engagement ("The DeLone and McLean Model of Information Systems Success," 2003). However, e-government applications in Surabaya, such as GoBis, have yet to be extensively studied from the perspective of sustained engagement. Existing solutions primarily measure the initial effectiveness of applications without addressing the factors that influence their continued usage over time.

This study aims to address this research gap by examining how self-efficacy and user satisfaction influence the continued use of the GoBis application in Surabaya. Specifically, the objectives of this study are to: (1) measure the level of user satisfaction with GoBis services; (2) evaluate the differences between user expectations and perceptions of various aspects of GoBis services; and (3) determine the factors shaping the quality of GoBis services from the user's perspective, emphasizing self-efficacy and user satisfaction as primary metrics.

By exploring these factors, this study aims to deepen the understanding of user behavior within the e-government application context. The findings are expected to provide meaningful recommendations for policymakers and practitioners, enhancing the planning and implementation of such applications to foster their sustained utilization. Furthermore, this research aims to bridge the knowledge gap in the literature regarding sustained engagement with e-government services in developing nations, offering a foundation for future studies in similar contexts.

To achieve these objectives, this study employs a quantitative research design, utilizing surveys to collect data from GoBis users in Surabaya. The analysis involves measuring user satisfaction levels, assessing self-efficacy in relation to the use of GoBis, and examining the relationship between these factors and the continuous use of the application. The proposed hypotheses are tested, and the conceptual model is validated using the Structural Equation Model-Partial Least Square (SEM PLS) approach, which enables robust analysis of the relationships between variables.

This paper's remainder is organized as follows: An outline of the theoretical background is given in Section 2 and reviews relevant literature on self-efficacy, user satisfaction, and continuous use in e-government applications. The method of research, including the study design, data gathering techniques, and analytical approaches, is presented in Section 3. Section 4 presents the outcomes of the data analysis.

2. Literatur Review

E-government initiatives aim to enhance public service delivery by leveraging digital technology, and the success of these initiatives is often determined by the continuous use of the provided applications (Jasperson et al., 2005). Applications like GoBis in Surabaya represent efforts to make transportation services more accessible through technology. However, the sustained use of these applications depends on several factors, including perceived ease of use (PEOU), perceived usefulness (PU), and the overall user experience (Venkatesh et al., 2011). Studies show that seamless interaction fosters positive user experiences, leading to higher adoption rates and continued usage (GALGOTIAS UNIVERSITY & Anand, 2024). This aligns with findings in various egovernment contexts where service quality and ease of use significantly impact user satisfaction and engagement (Siwi & Nawawi, 2023).

Various models, including the Technology Acceptance Model (TAM), Expectation-Confirmation Theory (ECT), and DeLone and McLean's IS Success Model, have been developed to explain the sustained use of technology. TAM highlights the role of PEOU and PU in influencing technology adoption and sustained engagement (Davis, 1989). ECT, on the

other hand, emphasizes the alignment between user expectations and actual experiences; when users' experiences with e-services meet or exceed their expectations, their level of happiness and desire to keep using the service rises (Bhattacherjee, 2001). Additionally, the IS The Success Model highlights essential dimensions, including system quality, user satisfaction and the continued usage of e-government services are strongly influenced by the quality of the information and services provided ("The DeLone and McLean Model of Information Systems Success," 2003).

Social Cognitive Theory (SCT) defines selfefficacy as a person's confidence in their capacity to complete activities successfully, and it is a key component of technology adoption (Bandura, 1997). Self-efficacious users are more inclined to use technology efficiently, as self-efficacy significantly enhances technology adoption and continued use (Al-Dwairi et al., 2024). Research indicates that enhancing self-efficacy through training and support significantly improves users' competence (Poh & Kanesan Abdullah, 2019). Self-efficacy is essential for promoting sustained engagement in this context of e-government, as it helps users navigate and utilize digital platforms such as GoBis effectively (Mushi, 2024).

User satisfaction serves as a critical factor in the sustained use of technology, commonly assessed by comparing user expectations and the performance of the service (Bhattacherjee, 2001). High-quality information and services have a direct impact on the satisfaction of users and encourage continued use, according to the DeLone and McLean IS Success Model ("The DeLone and McLean Model of Information Systems Success," 2003). In government contexts, studies emphasize that imensions of service quality include ease of interaction, fulfillment, and trustworthiness, which directly impact user satisfaction and loyalty (Pham et al., 2023). Empirical evidence shows that tailoring services to meet the specific needs of distinct user demographics and travel purposes can significantly improve user satisfaction. This approach emphasizes the importance of adopting user-centered designs for applications like GoBis to ensure they cater effectively to diverse user profiles (Chen et al., 2022).

Research shows that self-efficacy and user satisfaction are interconnected in influencing continuous technology use. Users with high self-efficacy are often more satisfied because they feel confident and competent in using the service, which enhances their overall experience (Hsu et al., 2004). Additionally, studies indicate that when e-government services align with user expectations (ECT), satisfaction levels increase, leading to higher usage intentions (Bhattacherjee, 2001). In GoBis's context, focusing on enhancing users' self-efficacy and ensuring that their expectations are met could be

critical for promoting sustained use. This relationship between self-efficacy and satisfaction suggests that interventions aimed at improving one aspect could positively impact the other, thereby boosting longterm engagement with the application.

Despite extensive studies on initial technology acceptance, limited empirical research exists on longterm engagement with e-government applications, especially in developing countries like Indonesia. Most studies focus on developed contexts, overlooking the unique challenges faced by users in developing regions, such as varying digital literacy levels and inconsistent access to technology (Venkatesh et al., 2011). In Surabaya, for instance, while GoBis aims to streamline transportation access, understanding the factors that influence its continuous use remains underexplored. The identified gap underscores the role of user satisfaction as a mediator between overall quality and self-efficacy, which in turn affects the use of information systems. This relationship is particularly relevant in the context of developing countries, where addressing user needs through enhanced system quality and self-efficacy can significantly improve adoption and sustained use (Kusuma et al., 2023).

In summary, the combination of the IS Success Model, Expectation-Confirmation Theory (the ECT), and Social Cognitive Theory (SCT) creates a strong framework for comprehending the elements that affect the long-term use of e-government applications like GoBis. Self-efficacy, service quality, and user satisfaction emerge as critical variables. By measuring these dimensions and examining their interrelations, this work seeks to fill the knowledge gap and contribute to practical solutions for enhancing user retention in e-government services. The conceptual model proposed in this study is anticipated to inform future empirical research and offer policymakers practical insights for enhancing the design and implementation of digital public services.

3. Methodology

3.1 Research Design

This research employs a quantitative approach, using survey methodology. The research design as shown in Figure 1 adopts a descriptive and explanatory framework to examine the influence of self-efficacy and user satisfaction on the sustained use of the GoBis application in Surabaya. The selected approach is consistent with the positivist paradigm, emphasizing hypothesis testing and the generalization of findings from a sample to the larger population, as proposed by Hussey and Collis (Collis & Hussey, 2014).

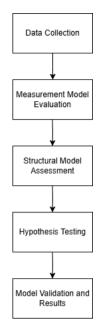


Figure 1. Research Method

This study utilizes Structural Equation Modeling (SEM) with Partial Least Squares (PLS) to analyze the data, as it is well-suited for verifying conceptual models and analyzing complex interactions between latent variables. SEM-PLS allows for the evaluation of both measurement and structural models, ensuring the robustness of the findings.

3.2 Conceptual Framework and Hypotheses

The conceptual framework of this study, which illustrates the relationships between self-efficacy, user satisfaction, and the intention for continuous use of egovernment applications, is shown in Figure 2 below. This framework is developed based on an extensive literature review, highlighting the interplay between key variables such as prior experience, social influence, information quality, and service quality. The following hypotheses guide the analysis:

- 1. H1a: Prior Experience (PE) is positively impacted by Personal Outcome Expectation (POE).
- 2. H1b: Prior Experience (PE) is positively impacted by Self-Efficacy (SE).
- 3. H1c: Prior Experience (PE) is positively impacted by Satisfaction (SAT).
- 4. H2a: Social Influence (SI) is positively impacted by Personal Outcome Expectation (POE).
- 5. H2b: Social Influence (SI) is positively impacted by Self-Efficacy (SE).
- 6. H2c: Social Influence (SI) is positively impacted by Satisfaction (SAT).
- H3a: Information Quality (IQ) is positively impacted by Personal Outcome Expectation (POE).
- 8. H3b: Information Quality (IQ) is positively impacted by Self-Efficacy (SE).

- 9. H3c: Information Quality (IQ) is positively impacted by Satisfaction (SAT).
- H4a: Service Quality (SQ) is positively impacted by Personal Outcome Expectation (POE).
- 11. H4b: Service Quality (SQ) is positively impacted by Self-Efficacy (SE).
- 12. H4c: Service Quality (SQ) is positively impacted by Satisfaction (SAT).
- 13. H5: Personal Outcome Expectation (POE) is positively impacted by Self-Efficacy (SE).

- 14. H6: Self-Efficacy (SE) is positively impacted by Satisfaction (SAT).
- 15. H7: Satisfaction (SAT) is positively impacted by Continuance Intention (CI).

The model posits that these constructs interact to influence users' Continuance Intention (CI), which serves as the outcome variable. This model captures the dynamics of user engagement and satisfaction in using e-government services like GoBis.

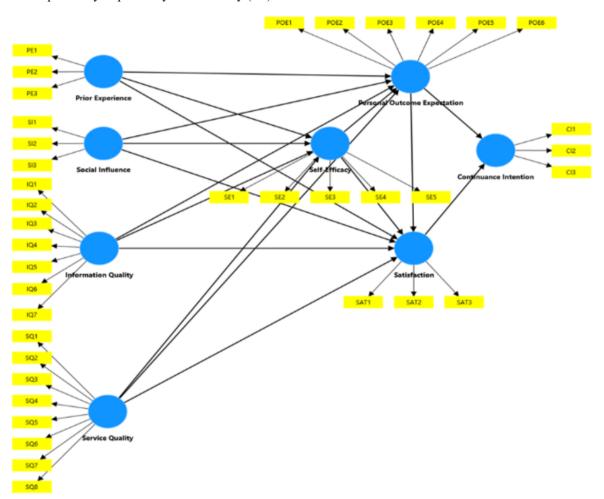


Figure 2. Conceptual Framework

3.3 Population and Sample

The study focuses on GoBis application users living in Surabaya. The required sample size of around 400 respondents was determined by applying Slovin's algorithm with a 5% margin of error. A total of 409 valid responses were collected, providing sufficient data for the SEM-PLS analysis. Sampling was conducted using convenience sampling due to accessibility and time constraints. Future studies may consider using random sampling for more generalizable results.

3.4 Data Collection Instrument

A structured questionnaire was created using validated scales from existing literature. It includes sections aimed at measuring:

- Prior Experience (PE): Users' perceptions of their previous experience with the GoBis application.
- Social Influence (SI): The extent to which others' opinions impact users' decision to use GoBis.
- Information Quality (IQ): The perceived quality of information provided by GoBis.

On-line: http://ejournal.undip.ac.id/index.php/jsinbis/article/view/69011

- Service Quality (SQ): Users' perceptions of the quality of services offered through GoBis
- Personal Outcome Expectation (POE): How much consumers believe GoBis will assist them in reaching their objectives.
- Self-Efficacy (SE): Users' confidence in their ability to operate the GoBis application.
- User Satisfaction (SAT): Evaluating users' overall satisfaction with GoBis services.
- Continuance Intention (CI): Users' intentions to continue using the GoBis application.

All constructs were assessed using a 5-point Likert scale, with responses ranging from 1 ('Strongly Disagree') to 5 ('Strongly Agree'), ensuring consistency and clarity in the responses.

3.5 Validity and Reliability Testing

To ensure content validity, a pre-test and a pilot test were conducted with a small group of users (n = 3) who have experience using GoBis. The feedback from these tests helped improve the clarity and structure of the questions. Reliability and validity were then assessed using Cronbach's alpha and Average Variance Extracted (AVE). A Cronbach's alpha value above 0.7 indicated acceptable internal consistency, while an AVE value exceeding 0.5 confirmed sufficient convergent validity (Fornell & Larcker, 1981). Discriminant validity was also tested using the Fornell-Larcker criterion to ensure that each construct was distinct from the others.

3.6 Data Collection

Data were collected over a one-month period to capture a diverse range of responses from active GoBis users. The survey was distributed through online platforms like WhatsApp and Instagram to reach a wide audience efficiently. Additionally, researchers conducted in-person surveys at GoBis transit points (e.g., bus stops) to engage users directly and gather responses.

Ethical Considerations were implemented to ensure respondent anonymity and data confidentiality. Respondents were informed about the study's purpose, their rights, and the voluntary nature of participation. No email addresses or personal identifiers were collected, ensuring anonymity.

3.6 Data Analysis Method

The data collected will be analyzed using SEM-PLS, with software such as SmartPLS to test the hypotheses. The analysis will follow these steps:

 Measurement Model Evaluation: Assessing reliability using Cronbach's alpha, convergent validity through Average Variance Extracted (AVE), and discriminant validity. Structural Model Assessment: Testing path coefficients, R-squared values, and other model fit indices to validate the conceptual framework.

The analysis aims to validate the conceptual model and provide insights into how self-efficacy, satisfaction, and other factors influence the continuous use of GoBis. The findings will guide practical recommendations for improving egovernment services. This structured approach provides a comprehensive and methodologically sound framework for exploring the determinants of continuous use of GoBis, ensuring that the findings are valid, reliable, and applicable to both theory and practice.

4. Result and Discussion

4.1 Sample Characteristics

The sample consisted of 409 respondents, primarily from Surabaya Barat (67%) and Surabaya Pusat (19.6%), with a slight majority being female (56%). The most represented group was students or university students (41.6%), primarily within the 16-20 years age group (31.3%). The majority of respondents had completed high school (SMA) (82.4%) and identified as Javanese (83.1%). Over half reported using their smartphones and the internet for more than 2 hours per day, indicating high engagement with digital platforms—an essential factor for understanding behavior and preferences related to e-government services like GoBis. This demographic composition aligns well with the target users of GoBis, providing a representative basis for the study's analysis.

Table 1. Sample Survey Characteristics

•	•		
Measure	Option	Frequency	Per
			cent
			(%)
Surabaya	North	9	2.2
Region	Surabaya		
	East	17	4.2
	Surabaya		
	South	29	7.1
	Surabaya		
	Central	80	19.6
	Surabaya		
	West	274	67
	Surabaya		
Gender	Male	180	44
	Woman	229	56
Age Range	10 - 15 years	27	6.6
	16 - 20 years	128	31.3
	21 - 30 years	111	27.1
	31 - 35 years	119	29.1
	Other	24	5.3

Measure	Option	Frequency	Per cent (%)
Last	SD	11	2.7
Education	SMP	33	8.1
	SMA	337	82.4
	Bachelor	28	6.8
Employment	Not Working	28	6.8
Status	Students / Students at University	170	41.6
	Taking Care of the Household	53	13
	PNS	1	0.2
	Private Employees	137	33.5
	Entrepreneur	17	4.2
	Other	3	0.8
Ethnic group	Javanese	340	83.1
	Sundanese	53	13
	Madurese	13	3.2
	Other	3	0.7
Marital	Unmarried	227	55.5
Status	Married	181	44.3
	Other	1	0.2
Monthly	None	216	52.8
Revenue	1.000.000 - 2.000.000	43	10.5
	3.000.000 - 4.000.000	131	32
	Other	19	4.7
Average	< 1 hour/day	18	4.4
Smartphone Usage	1 - 2 hours/day	164	40.1
	> 2 hours/day	227	55.5
Average	< 1 hour/day	17	4.2
Internet	1 - 2	158	38.6
Usage	hours/day > 2 hours/day	234	57.2

4.2 Reliability and Validity Testing

The evaluation of the measurement model revealed strong reliability and validity across all constructs, such as Continuance Intention (CI), Information Quality (IQ), Personal Outcome Expectation (POE), Prior Experience (PE), Satisfaction (SAT), Self-Efficacy (SE), Service Quality (SQ), and Social Influence (SI). Cronbach's alpha and Composite Reliability (rho_a and rho_c) were used to assess reliability; all values were higher

than the 0.7 threshold. The range from 0.868 (Satisfaction) to 0.937 (Information Quality) confirms high internal consistency across constructs.

If each construct's Average Variance Extracted (AVE) exceeded the 0.5 cutoff, convergent validity was confirmed, with values ranging from 0.677 (Service Quality) to 0.865 (Continuance Intention). These results affirm that the constructs are measured consistently and validly, supporting their suitability for further structural model analysis.

Table 2. Reliability and Validity Testing

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Continuance Intention (CI)	0.922	0.924	0.951	0.865
Information Quality (IQ)	0.937	0.937	0.948	0.725
Personal Outcome Expectation (POE)	0.928	0.929	0.944	0.736
Prior Experience (PE)	0.910	0.910	0.944	0.848
Satisfaction (SAT)	0.868	0.872	0.920	0.793
Self- Efficacy (SE)	0.919	0.919	0.939	0.755
Service Quality (SQ)	0.932	0.933	0.944	0.677
Social Influence (SI)	0.911	0.914	0.944	0.848

Discriminant validity, as presented in Table 3, was confirmed by examining the square roots of the AVE for each construct and comparing them with inter-construct correlations. The results demonstrated that all AVE square roots exceeded the corresponding inter-construct correlations, ensuring that each construct is unique and captures distinct variance within the model. For example, the AVE for Self-Efficacy (SE) was higher than its correlations with Satisfaction (SAT) and Personal Outcome Expectation (POE), verifying the model's discriminant validity.

Table 3. Discriminant Validity

	CI	IQ	P	PE	SA	SE	SQ	S
			O		T			I
			\mathbf{E}					
CI								
IQ	0.9							
	25							
P	0.8	0.9						
O	94	30						
\mathbf{E}								

	CI	IQ	P	PE	SA	SE	SQ	S
			O		T			I
			\mathbf{E}					
P	0.8	0.8	0.9					
\mathbf{E}	82	84	34					
S	0.9	0.9	0.9	0.8				
\mathbf{A}	40	71	65	92				
T								
SE	0.9	0.9	0.9	0.9	0.9			
	04	28	89	53	66			
S	0.8	0.9	0.8	0.8	0.9	0.8		
Q	57	27	78	71	12	93		
SI	0.8	0.8	0.8	0.8	0.9	0.9	0.8	
	30	87	86	85	16	38	58	

4.3 Research Model Testing

The SEM-PLS analysis confirmed the robustness of the proposed model, integrating constructs such as Prior Experience (PE), Social Influence (SI), Information Quality (IQ), and others. The analysis revealed that Prior Experience significantly impacts Personal Outcome Expectation (POE), Self-Efficacy (SE), and Satisfaction (SAT), with a path coefficient of 0.184 (PE \rightarrow POE) indicating a moderate This relationship highlights influence. importance of enhancing users' initial interactions with GoBis, as positive experiences build their confidence and satisfaction, ultimately leading to higher engagement. Furthermore, the path from PE to SE demonstrates the crucial role of familiarity in developing confidence in using the application effectively.

Social Influence (SI) also significantly impacts POE, SE, and SAT, with a moderate coefficient of 0.268 from SI to SE, emphasizing the role of social endorsements in building user confidence. Users who receive positive feedback about GoBis from their networks are more likely to have higher expectations and satisfaction levels. This finding highlights the potential of leveraging social influence through peer endorsements and marketing strategies to enhance user perception and adoption.

In terms of quality dimensions, both Information Quality (IQ) and Service Quality (SQ) demonstrate positive relationships with POE, SE, and SAT. The path coefficient from IQ to SE is 0.094, indicating a smaller yet positive influence of information accuracy and reliability on users' confidence levels. While the relationship between SQ and SAT is relatively weak (0.100), it still suggests that maintaining service standards and providing accurate information can contribute to enhancing user confidence and satisfaction. These findings underscore the need for continuous improvements in information delivery and service interactions to meet user expectations and drive satisfaction.

The model also establishes that Personal Outcome Expectation (POE) significantly influences

Self-Efficacy (SE), with a path coefficient of 0.522, suggesting that when users believe GoBis aligns with their goals, they feel more confident using the application. This aligns with the theoretical foundation of expectation-confirmation models, where users' belief in achieving desired outcomes boosts their motivation and perceived ability to engage with the service.

The analysis further highlights the strong influence of Self-Efficacy (SE) on Satisfaction (SAT), with a 0.497 path coefficient, indicating that confidence in using GoBis is a key determinant of user satisfaction. Continuance Intention (CI) is significantly impacted by SAT, suggesting that satisfied users are more inclined to keep using the service (path coefficient = 0.399). This underscores the importance of enhancing user satisfaction through targeted efforts that build confidence and maintain consistent service quality.

The model fit indices support these findings, with an SRMR value of 0.050, which is well below the 0.08 threshold, indicating a good fit. Additionally, the d_ULS and d_G values (1.830 and 1.426, respectively) are relatively low, confirming the model's fit. The Chi-square value of 3332.804 and an NFI score of 0.814 (above the 0.80 benchmark) affirm the model's adequacy in capturing the relationships within the dataset. Collectively, these fit indices demonstrate that the structural model accurately depicts the variables affecting the sustained usage of GoBis, providing a reliable basis for understanding user behavior.

Table 4. SEM Score Result

Index	SEM	Explanation
	Score	_
SRMR	0.050	A threshold value of 0.05 or less is generally accepted, meaning that the lower the value, the better the model fit (Dash & Paul, 2021).
d_ULS	1.830	The d_ULS fit index is affected by sample size and model complexity, with smaller values generally indicating better model fit (Fan et al., 1999).
d_G	1.426	Smaller models are often easier to interpret, as seen in decision trees where a depth of 5 is more comprehensible than a depth of 50 (Ghose & Ravindran, 2020).
Chi-	3332.804	The results are significant
square		and the model fits well.

Index	SEM Score	Explanation	Index	SEM Score		Expla	nation	
		The chi-square statistic is very useful in SEM, where	NFI	0.814		model's olain a siza	ble amour	
		it can reveal differences between the model and the data, guiding researchers			an	variance is NFI great ich boost	er than 0	.80,
		in model refinement (Zheng & Bentler, 2024).				nfidence unak, 2019	(&

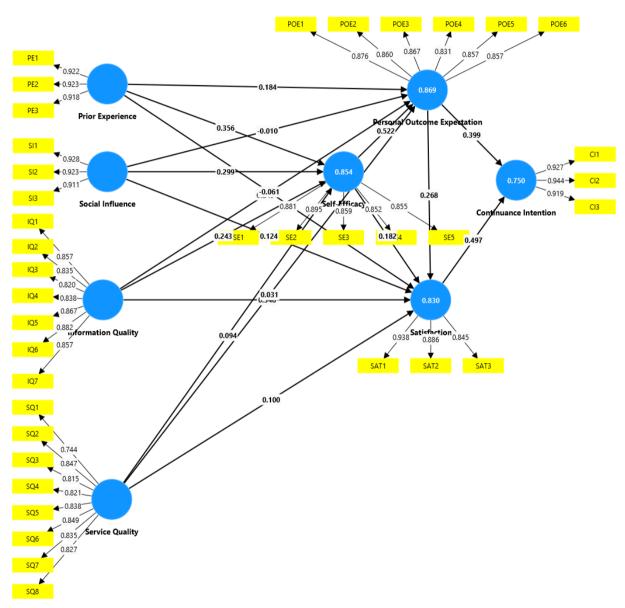


Figure 3. Constructs Hyphothesis

4.4 Hypothesis Testing

The hypotheses testing results provide insight into the significance and strength of relationships among the constructs. Several hypothesized paths are supported with total effects exceeding the 0.2 threshold, which, according to (Cohen, 2013), is considered a practically significant effect size in

SEM. Information Quality (IQ) showed a consistent and substantial impact across multiple pathways, significantly influencing Continuance Intention (total effect = 0.395), Personal Outcome Expectation (total effect = 0.376), Satisfaction (total effect = 0.493), and Self-Efficacy (total effect = 0.243). These results emphasize the critical role of

maintaining high information quality to foster user confidence, satisfaction, and engagement.

Personal Outcome Expectation (POE) also showed significant effects on key variables, positively impacting Continuance Intention (total effect = 0.532) and Satisfaction (total effect = 0.268). This finding underscores that when users perceive GoBis as beneficial for achieving their goals, continued use of the service is driven by their satisfaction. Self-Efficacy (SE) exhibited strong beneficial effects on the intention to continue (total effect = 0.368), POE (total effect = 0.522), and Satisfaction (total effect = 0.322). These effects validate the central role of self-efficacy in the model, where users' confidence directly enhances their satisfaction and long-term engagement with GoBis.

However, some paths did not meet significance, such as those from Service Quality (SQ) and Social Influence (SI) to Continuance Intention and POE, with total effects below the 0.2 threshold. These findings indicate that while these factors may have some influence, they are not the primary drivers of continued use or user expectations in the context of GoBis. Addressing these weaker relationships could be an area for future development.

Overall, the results confirm the centrality of Information Ouality, Self-Efficacy, and Personal Outcome Expectations. These constructs consistently show meaningful effects, highlighting them as key levers for improving user satisfaction and ensuring continued use of GoBis. The findings suggest that strategies focused on enhancing information quality and building user confidence are essential for promoting sustained engagement and positive user experiences. Additionally, these results align with previous studies, which also found that high-quality information significantly enhances user satisfaction and continued usage of digital platforms (Pitri & Abdillah, 2022). Conversely, the lack of significant effects from Service Quality and Social Influence may be attributed to the specific context of GoBis in Surabaya, where other factors may play a more prominent role in driving user engagement. This discrepancy highlights the importance of contextual factors in shaping user behavior and expectations. Furthermore, while this study confirms the importance of Information Quality, Self-Efficacy, and POE, it is limited by its focus on a single platform and location. Future research should explore these relationships in different contexts and consider additional factors such as user experience and trust in the platform.

Table 5. Hypothesis Result

Hypothesis	Total	Supported?
31	Effect	11
Information Quality →	0.395	Yes
Continuance Intention		
Information Quality \rightarrow	0.376	Yes
Personal Outcome		
Expectation		
Information Quality →	0.493	Yes
Satisfaction		
Information Quality → Self-	0.243	Yes
Efficacy		
Personal Outcome	0.532	Yes
Expectation → Continuance		
Intention		
Personal Outcome	0.268	Yes
Expectation → Satisfaction		
Prior Experience →	0.199	No
Continuance Intention		
Prior Experience → Personal	0.37	Yes
Outcome Expectation		
Prior Experience →	0.103	No
Satisfaction		
Prior Experience → Self-	0.356	Yes
Efficacy		
Satisfaction → Continuance	0.497	Yes
Intention		
Self-Efficacy →	0.368	Yes
Continuance Intention		
Self-Efficacy \rightarrow Personal	0.522	Yes
Outcome Expectation		
Self-Efficacy → Satisfaction	0.322	Yes
Service Quality →	0.101	No
Continuance Intention		
Service Quality → Personal	0.08	No
Outcome Expectation		
Service Quality →	0.138	No
Satisfaction		
Service Quality → Self-	0.094	No
Efficacy		
Social Influence →	0.166	No
Continuance Intention		
Social Influence → Personal	0.146	No
Outcome Expectation		
Social Influence →	0.218	Yes
Satisfaction		
Social Influence → Self-	0.299	Yes
Efficacy		

5. Conclusion

The results of this study confirm that Information Quality (IQ), Personal Outcome Expectation (POE), Satisfaction (SAT), and Self-Efficacy (SE) are key drivers of Continuance Intention (CI) for the GoBis application in Surabaya. These factors emphasize the importance of ensuring high-quality information,

aligning the application with users' goals, and fostering user confidence to enhance satisfaction and long-term engagement. While Prior Experience (PE) and Social Influence (SI) show some positive effects, they are not as significant in driving continued use, suggesting that ongoing service improvements and user-centric updates are critical for retaining users. Moreover, Service Quality (SQ), though important for satisfaction, does not significantly influence Continuance Intention, indicating that usability and ease of use are more critical in maintaining longterm engagement. To improve sustained usage, developers should focus on enhancing the application's usability, incorporating user feedback, and providing support to strengthen user confidence satisfaction. Regular user experience assessments will help the application remain relevant and address the evolving expectations of its users, driving higher engagement ultimately encouraging continued use of the application.

Reference

- Adnan, M., Ghazali, M., & Othman, N. Z. S. (2022).

 E-participation within the context of e-government initiatives: A comprehensive systematic review. *Telematics and Informatics Reports*, 8, 100015. https://doi.org/10.1016/j.teler.2022.100015
- Al-Dwairi, R. M., Al-Khataybeh, M., Najadat, D., & Rawashdeh, A. (2024). User self-efficacy enhances business intelligence tools for organizational agility. *Indonesian Journal of Electrical Engineering and Computer Science*, 36(1), 592. https://doi.org/10.11591/ijeecs.v36.i1.pp592-602
- Alkraiji, A. I. (2020). Citizen Satisfaction With Mandatory E-Government Services: A Conceptual Framework and an Empirical Validation. *IEEE Access*, 8, 117253–117265. https://doi.org/10.1109/ACCESS.2020.300454
- Alruwaie, M., El-Haddadeh, R., & Weerakkody, V. (2020). Citizens' continuous use of eGovernment services: The role of self-efficacy, outcome expectations and satisfaction. *Government Information Quarterly*, 37(3), 101485.
 - https://doi.org/10.1016/j.giq.2020.101485
- Bandura, A. (1997). Self-efficacy: The exercise of control. W.H. Freeman.
- Bhattacherjee, A. (2001). Understanding Information Systems Continuance: An Expectation-Confirmation Model. *MIS Quarterly*, 25(3), 351. https://doi.org/10.2307/3250921
- Chen, M., Sun, Y., Waygood, E. O. D., Yu, J., & Zhu, K. (2022). User characteristics and service

- satisfaction of car sharing systems: Evidence from Hangzhou, China. *PLOS ONE*, 17(2), e0263476.
- https://doi.org/10.1371/journal.pone.0263476
- Cohen, J. (2013). Statistical Power Analysis for the Behavioral Sciences (0 ed.). Routledge. https://doi.org/10.4324/9780203771587
- Collis, J., & Hussey, R. (2014). Business research: A practical guide for undergraduate & postgraduate students (1. Publ.; 4. ed). Palgrave Macmillan.
- Dash, G., & Paul, J. (2021). CB-SEM vs PLS-SEM methods for research in social sciences and technology forecasting. *Technological Forecasting and Social Change*, *173*, 121092. https://doi.org/10.1016/j.techfore.2021.121092
- Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, *13*(3), 319. https://doi.org/10.2307/249008
- Fan, X., Thompson, B., & Wang, L. (1999). Effects of sample size, estimation methods, and model specification on structural equation modeling fit indexes. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 56–83. https://doi.org/10.1080/10705519909540119
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39–50. https://doi.org/10.1177/002224378101800104
- GALGOTIAS UNIVERSITY, & Anand, D. (2024).

 CUSTOMER PERCEPTION TOWARDS

 DIGITAL TRANSACTION.

 INTERANTIONAL JOURNAL OF SCIENTIFIC

 RESEARCH IN ENGINEERING AND

 MANAGEMENT, 08(05), 1–5.

 https://doi.org/10.55041/IJSREM34339
- Ghose, A., & Ravindran, B. (2020). Interpretability With Accurate Small Models. *Frontiers in Artificial Intelligence*, 3, 3. https://doi.org/10.3389/frai.2020.00003
- Hsu, M. H., Chiu, C. M., & Ju, T. L. (2004).

 Determinants of continued use of the WWW:
 An integration of two theoretical models.

 Industrial Management & Data Systems,
 104(9), 766–775.

 https://doi.org/10.1108/02635570410567757
- Jasperson, Carter, & Zmud. (2005).Comprehensive Conceptualization of Post-Adoptive Behaviors Associated with Information Technology Enabled Work Systems. MIS Quarterly, *29*(3), 525. https://doi.org/10.2307/25148694
- Kusuma, G. D., Rosidi, & Iqbal, S. (2023). THE IMPACT OF OVERALL QUALITY AND SELF-EFFICACY ON CONATIVE USE WITH USER'S SATISFACTION AS A MEDIATION VARIABLE. Russian Journal of

- Agricultural and Socio-Economic Sciences, 139(7), 85–97. https://doi.org/10.18551/rjoas.2023-07.10
- Li, Y., & Shang, H. (2020). Service quality, perceived value, and citizens' continuous-use intention regarding e-government: Empirical evidence from China. *Information & Management*, 57(3), 103197. https://doi.org/10.1016/j.im.2019.103197
- Lin, F., Fofanah, S. S., & Liang, D. (2011).

 Assessing citizen adoption of e-Government initiatives in Gambia: A validation of the technology acceptance model in information systems success. *Government Information Quarterly*, 28(2), 271–279. https://doi.org/10.1016/j.giq.2010.09.004
- Lin, J.-C., Chen, Z.-H., Chen, X.-D., & Wang, S.-B. (2021). Circulating sFasL Levels Predict the Severity and Outcome of Burn Injury: A Prospective Observational Study. *Journal of Surgical Research*, 265, 1–10. https://doi.org/10.1016/j.jss.2021.01.012
- MacLean, D., & Titah, R. (2022). A Systematic Literature Review of Empirical Research on the Impacts of e-Government: A Public Value Perspective. *Public Administration Review*, 82(1), 23–38. https://doi.org/10.1111/puar.13413
- Mushi, R. (2024). INVESTIGATING THE ROLE OF SELF-EFFICACY ON ACCEPTANCE OF E-GOVERNMENT IN TANZANIA. Journal of Engineering, Management and Information
 - Technology, 2(3), 139–146. https://doi.org/10.61552/JEMIT.2024.03.005
- Nadhira, R., Hamdi, H., Putri, S. A. E., & Shakilla Ervi, T. (2024). Enhancing citizen satisfaction and loyalty in e-government: Lessons learned from Jakarta COVID-19 website. *Information Services & Use*, 44(2), 121–138. https://doi.org/10.3233/ISU-240229
- Nafi'ah, B. A. (2023). Local Government Expansion of Mobile Governance during the Pandemic. *Jurnal Borneo Administrator*, *19*(2), 191–204. https://doi.org/10.24258/jba.v19i2.1129
- Napitupulu, D., Usino, W., Azmi, N. A., Kartika, R. S., Supratikta, H., Suhendra, A., Yohanitas, W. A., Saksono, H., Halik, A., & Suhandojo, S. (2024). Understanding the key driver of egovernment services continuance usage intention: An integrated model of Expectation Confirmation Model and Technology Acceptance Model. Journal of Infrastructure, Policy and Development, 8(12), https://doi.org/10.24294/jipd.v8i12.7957
- NGUYEN, T. T., PHAN, D. M., LE, A. H., & NGUYEN, L. T. N. (2020). The Determinants of Citizens' Satisfaction of E-Government: An Empirical Study in Vietnam. *The Journal of Asian Finance, Economics and Business*, 7(8),

- 519–531. https://doi.org/10.13106/JAFEB.2020.VOL7.N O8.519
- Olsen, M., & Raunak, M. (2019). Quantitative Measurements of Model Credibility. In *Model Engineering for Simulation* (pp. 163–187). Elsevier. https://doi.org/10.1016/B978-0-12-813543-3.00008-1
- Pham, L., Limbu, Y. B., Le, M. T. T., & Nguyen, N. L. (2023). E-government service quality, perceived value, satisfaction, and loyalty: Evidence from a newly emerging country. *Journal of Public Policy*, 43(4), 812–833. https://doi.org/10.1017/S0143814X23000296
- Pitri, A., & Abdillah, L. A. (2022). *Usability Testing untuk Mengukur Kepuasaan Pengguna Website Mailo Store* (Version 1). arXiv.
 https://doi.org/10.48550/ARXIV.2207.00006
- Poh, R., & Kanesan Abdullah, A. G. B. (2019). Factors Influencing Students' Research Self-Efficacy: A Case Study of University Students in Malaysia. *Eurasian Journal of Educational Research*, 19(82), 1–32. https://doi.org/10.14689/ejer.2019.82.8
- Santa, R., MacDonald, J. B., & Ferrer, M. (2019). The role of trust in e-Government effectiveness, operational effectiveness and user satisfaction: Lessons from Saudi Arabia in e-G2B. *Government Information Quarterly*, 36(1), 39–50. https://doi.org/10.1016/j.giq.2018.10.007
- Shibambu, A. (2024). Transformation of digital government services in the public sector in South Africa. *Africa's Public Service Delivery and Performance Review*, 12(1). https://doi.org/10.4102/apsdpr.v12i1.753
- Siwi, T. P. U., & Nawawi, Z. (2023). Building Citizen Satisfaction Towards E-Government Services: A Conceptual Framework. *Jurnal Manajemen Pelayanan Publik*, 6(2), 253. https://doi.org/10.24198/jmpp.v6i2.46471
- Tegethoff, T. M., Santa, R., Granobles, D. F. M., & Hoyos, J. C. V. (2019). Does trust have an impact on system and operational effectiveness The implementation of e-government in Colombia. *Electronic Government, an International Journal*, 15(3), 241. https://doi.org/10.1504/EG.2019.100516
- The DeLone and McLean Model of Information Systems Success: A Ten-Year Update. (2003). Journal of Management Information Systems, 19(4), 9–30. https://doi.org/10.1080/07421222.2003.110457
- Venkatesh, V., Thong, J. Y. L., Chan, F. K. Y., Hu, P. J.-H., & Brown, S. A. (2011). Extending the two-stage information systems continuance model: Incorporating UTAUT predictors and the role of context: Context, expectations and IS continuance. *Information Systems Journal*,

On-line: http://ejournal.undip.ac.id/index.php/jsinbis/article/view/69011

21(6), 527–555. https://doi.org/10.1111/j.1365-2575.2011.00373.x

Zhao, F., Wallis, J., & Singh, M. (2015). E-government development and the digital economy: A reciprocal relationship.

Internet Research, 25(5), 734–766. https://doi.org/10.1108/IntR-02-2014-0055

Zheng, B. Q., & Bentler, P. M. (2024). Enhancing Model Fit Evaluation in SEM: Practical Tips for Optimizing Chi-Square Tests. Structural Equation Modeling: A Multidisciplinary Journal, 1–6. https://doi.org/10.1080/10705511.2024.23 54802