

# Fintech Service Quality and Investment Literacy: Impacts on Banking Sustainability via Continuance Intention in a Regional Bank's Mobile App

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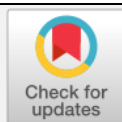
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## ABSTRACT

The development of digital technology in the banking sector has driven significant transformation, including in mobile banking services. West Java Regional Banks, a regional development bank, has responded to this trend by launching the Mobileby Bank BJB application. This study examines how Fintech Service Quality and Sustainable Investment Literacy influence Bank Sustainable Performance and the mediating role of Continuance Intention in this relationship. The research is motivated by the gap between user expectations, the quality of services received, and the generally low level of user understanding regarding sustainability concepts, particularly in sustainable investment literacy. Using a quantitative approach and data analysis through questionnaire distribution, this study is expected to provide a clearer picture of the importance of improving digital service quality and sustainability literacy education in supporting the performance of digital banking. The findings are anticipated to offer strategic input for the development of Digi by Bank West Java Regional Bank in Indonesia and digital banking services in general, to be more competitive and aligned with user needs in the digital era.

**Keywords:** Bank Sustainable Performance; Continuance Intention; Fintech Service Quality; Sustainable Investment Literacy

## 1. Introduction

Digital transformation in the banking sector brings new challenges regarding interbank competition and the rapid growth of technology-based financial services (fintech). Mobile banking has emerged as a key innovation, becoming a top choice for customers due to its flexibility and convenience.



**Figure 1. Internet User Data in 2024**

Source: (Kompasiana, 2024)

As of January 2024, global internet users reached 5.35 billion, or 64.9% of the total world population of 8.08 billion. In Indonesia, out of a population of 278.7 million, there are 185.3 million internet users, with an internet penetration rate of 66.5%. The country also recorded 353.3 million active mobile connections, equivalent to 126.8% of the population. In addition, Bank Indonesia reported that digital banking transactions reached IDR5,340.92 trillion or grew 19.08% annually (YoY) (Kompasiana, 2024).

**Kompetisi digital services baik dari perbankan maupun bank digital semakin hangat. Pelanggan tersebar di berbagai layanan bank digital dan mobile banking, dengan pola long-tail. Nampaknya tidak akan terjadi pola satu pemenang yang mengambil semuanya seperti halnya google dalam searching engine atau youtube dalam video platform**



SHARING VISION

Sumber: Sharing Vision Survey "eChannel, Fintech, eCommerce dan eLifestyle 2022," N = 6985

Sharing Vision IT Business Outlook 2022 7

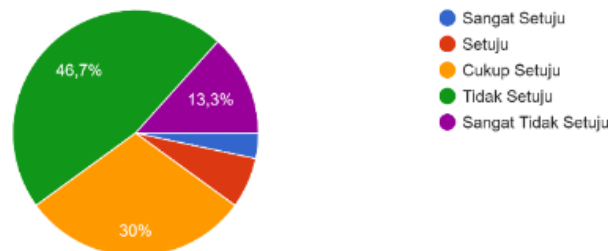
**Figure 2. Long Tail Pattern of Mobile Banking Services**

Source: (Sharing Vision, 2022)

This regional bank is a financial service provider and a regional economic driver. Its ability to compete with national banks and private fintech platforms indicates how effectively digital transformation has touched all levels of banking in Indonesia. As a leading regional bank, this Regional Bank launched a mobile app as a mobile banking solution. However, a Sharing Vision survey showed Digi ranked 15th out of 17 fintech apps in Indonesia (Sharing Vision, 2022). This

indicates a gap in service quality, including ease of use, transaction speed, and feature completeness.

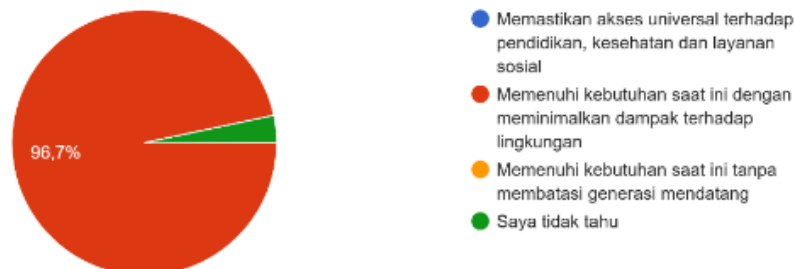
Fasilitas layanan pada aplikasi Digi by bank bjb sudah sesuai dengan standar transaksi yang dibutuhkan pengguna  
30 jawaban



**Figure 3. Pre-Survey Results on Fintech Service Quality Variables**  
Source: Author's Data Processing (2024)

The app is primarily used internally for salary disbursement, but funds are often directly transferred to other bank accounts or digital payment platforms, indicating low user retention. Based on the authors' survey in 2024, only 13.3% of respondents "Strongly Agree" that the app meets their transaction standards, while 46.7% only "Somewhat Agree", indicating room for significant improvement in user experience.

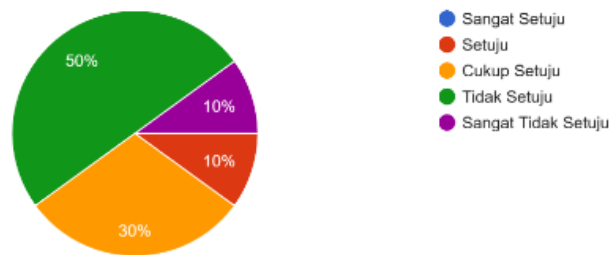
Pernyataan manakah yang paling tepat untuk menggambarkan pembangunan berkelanjutan?  
30 jawaban



**Figure 4. Pre-Survey Results on Sustainable Investment Literacy Variables**  
Source: Author's Data Processing (2024)

Regarding sustainable investment literacy, most respondents (96.7%) associate sustainable development with minimizing environmental impact, but understanding social and governance aspects is still limited. Meanwhile, 76.7% expressed a positive view of green financing, highlighting its potential as a reputation enhancement strategy and a way to build user loyalty.

Aplikasi Digi by bank bjb menjadi pilihan pertama saya untuk melakukan pembayaran kembali dimasa depan  
30 jawaban



**Figure 5. Pre-Survey Results on the Continuance Intention Variable**

Source: Author's Data Processing (2024)

The survey revealed major challenges regarding continuation intentions (users' willingness to continue using the app). Most users expressed disapproval of continuing to use the app in the future. However, there is a 30% opportunity to increase trust through relevant service improvements and feature development.

The mobile banking app launched by the Regional Bank has strong potential to compete in digital banking. To build lasting user trust and loyalty, the app needs to improve service quality, offer features that suit user needs, and provide better education on sustainable investment.

This research's theoretical benefit is contributing to the development of literature on the influence of Fintech Service Quality and Sustainable Investment Literacy on Continuance Intention and Bank Sustainable Performance, especially with the mediation model approach. Practically, the results of this study can be the basis of strategies for fintech and digital banking service providers in improving service quality and sustainable investment literacy to encourage loyalty and support the sustainable performance of banks in Indonesia.

The uniqueness of this research lies in its approach, which combines the analysis of fintech service quality and the level of sustainable investment literacy as factors that influence users' intention to continue using the application mediated by sustainable intention. The research focused on the mobile banking application of the Regional Bank because not many studies have examined these factors simultaneously.

## **2. Literature Review**

### **2.1. Resource-Based Theory (RBT)**

The Resource-Based View (RBV) explains that companies possessing valuable, rare, inimitable, and non-substitutable resources are more likely to achieve and sustain a competitive advantage. This theory highlights the importance of managing internal resources strategically to generate superior long-term performance (Barney, 1991). One of the crucial resources in this context is financial literacy, which is considered capable of adding value to the business and increasing the company's ability to compete competitively. Companies that can adaptively utilize innovation and entrepreneurial management will be better prepared to face market dynamics and changing consumer preferences. Companies that can keep up with technological developments, including financial technology or Fintech, and improve operational efficiency, tend to have superior performance (Hussain et al., 2018).

## 2.2. Fintech Service Quality

Fintech service quality is important in maintaining and increasing user loyalty to digital financial services. This service quality can be understood as the user's perception of how well the services can meet their expectations (Kotler, 2019). Fintech is a form of technological innovation in the financial sector, which includes various services such as digital payments, online loans, investments, and other financial solutions designed to increase efficiency and convenience in transactions (Goldstein, 2019). In the banking and financial industry context, talent mapping and identifying competencies needed in the future are critical in ensuring the quality of Fintech services remains superior. Good service quality will build user trust and satisfaction, and strengthen long-term relationships between users and service providers. Service dimensions such as reliability, responsiveness, security assurance, and empathy are important factors in shaping service quality perceptions and encouraging continued use of Fintech services.

## 2.3. Sustainable Investment Literacy

Sustainable Investment Literacy is a development of the concept of financial literacy that emphasizes the understanding and application of sustainability principles in investment decision making. This literacy includes understanding basic financial concepts, recognizing risks, and having the confidence and motivation to make wise and responsible financial decisions (Varmaz et al., 2021). According to Filippini, sustainable financial literacy is important for personal well-being and supports active participation in the broader economic system (Filippini et al., 2024). While there is no universal definition of the term, most studies agree that investments in financial literacy should be based on a balance between costs and benefits. Intrinsic and extrinsic factors, such as education level, access to information, and social environment, influence a person's literacy level. In Fintech, strong financial literacy is an important foundation for users to navigate the increasingly complex range of digital financial products and services.

## 2.4. Banking Sustainability Performance

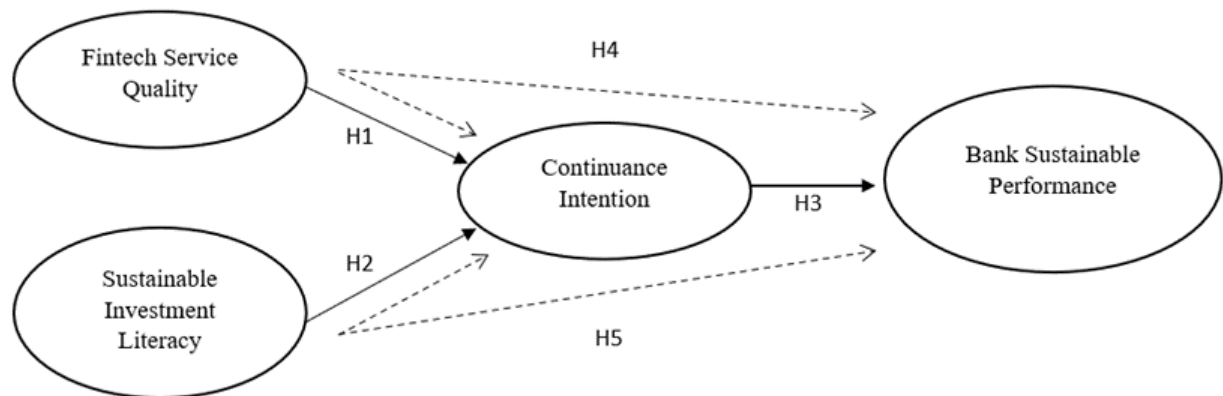
Banking Sustainability Performance refers to the ability of financial institutions to integrate sustainability principles into their business operations and strategies. This integration includes two main approaches, namely the implementation of social and environmental responsibility through various activities such as donations, social programs, and energy efficiency, as well as the integration of social and environmental considerations into product development and business strategy. Sustainability performance is measured through three main dimensions: economic, environmental, and social. The economic dimension assesses the organization's ability to maintain financial viability; the environmental dimension emphasizes the importance of building a culture of environmental care among employees; and the social dimension reflects how the organization establishes sustainable relationships with society. Adopting Fintech is an important driver in improving sustainability performance in the digital era. Digital transformation improves efficiency and expands access to inclusive financial services, improving financial institutions' competitiveness and long-term performance (Hidayat-ur-Rehman, 2024).

## 2.5. Continuance Intention

Continuance Intention is a concept that describes a user's intention or tendency to continue using a system or service after the initial experience. In the context of digital financial



applications or Fintech, continuance intention relates to the user's decision to continue using the service after the initial adoption stage, which is influenced by satisfaction, convenience, and perceptions of service quality. Satisfaction with the experience of using Fintech services has been shown to play a significant role in increasing users' intention to reuse the application (Aldaarmi, 2024). Users who feel that Fintech services provide convenience, security, and efficiency in financial transactions tend to have higher intentions to continue using these services. In addition, this intention to continue is also influenced by the perceived value obtained and the tendency to recommend the service to others (Goyal, 2024).



**Figure 6. Framework of Thought**

Source: Results of the Author's Data Processing (2025)

The framework in this study is based on the relationship between Fintech Service Quality, Sustainable Investment Literacy, Continuance Intention, and Banking Sustainability Performance. Fintech service quality and sustainable investment literacy drive banking sustainability performance. Good Fintech Service Quality increases user satisfaction and trust, strengthening continuance intention. Similarly, Sustainable Investment Literacy encourages wiser and more sustainable financial decision-making.

Continuance Intention is a mediator that bridges the influence between Fintech Service Quality and Sustainable Investment Literacy on Banking Sustainability Performance. This means that users who intend to continue using Fintech services consistently will strengthen the positive impact of these two factors on the sustainability of bank performance.

Users of fintech apps, such as LinkAja, consider service quality, reliability, convenience, and ease of access as key factors in determining whether they will continue using the app. An effective and reliable fintech service can increase users' perceived trust and customer satisfaction, creating a positive attitude towards the app and strengthening their intention to continue using it. Good user experience from service quality that meets expectations makes them feel comfortable and believe that fintech services can meet their needs consistently.

### **H1: There is a significant influence of Fintech Service Quality on Continuance Intention**

Sustainability provides individuals with information on investments that consider environmental, social, and economic sustainability. Such understanding encourages individuals to remain consistent in responsible investment practices, as good investment literacy helps them evaluate the risks and benefits of sustainable investments more effectively. In addition, individuals with high sustainable investment literacy tend to be more aware of the positive

impacts of such investments, which are financially beneficial and bring environmental and social benefits in the long run (Utami & Septivani, 2023).

## **H2: There is a significant influence of Sustainable Investment Literacy on Continuance Intention**

Based on the findings of Almaqtari, fintech reuse intentions directly affect banks' sustainability performance by increasing loyalty and encouraging continued use of digital services. This reduces long-term operational costs and strengthens customer relationships, supporting the bank's long-term sustainability. In addition, digital adoption and transformation reinforced by customers' intention to continue using services facilitate innovation and operational efficiency (Almaqtari, 2024). Therefore, Continuance Intention is one of the main factors in creating sustainable growth and ensuring banks can remain competitive in the digital era.

## **H3: There is a significant influence of Continuance Intention on Banking Sustainability Performance**

Fintech service quality affects customer satisfaction and significantly influences their intention to continue using the service, which ultimately supports the sustainability of the bank's performance. Aldaarmi states that aspects such as reliability, empathy, and tangibles of fintech services play a key role in increasing customer satisfaction, although assurance and responsiveness are less significant (Aldaarmi, 2024). Satisfied customers tend to have strong Continuance Intention, and this intention is directly related to the bank's sustainable performance improvement as fintech adoption can drive digital innovation and operational efficiency. In this case, Continuance Intention serves as a mediator, where the intention to continue using fintech plays an important role in bridging the relationship between customer satisfaction and sustainable performance (Aldaarmi, 2024; Naz et al., 2023).

## **H4: Fintech Service Quality's significant influence on Banking Sustainability Performance mediated by Continuance Intention.**

The effect of Sustainability Investment Literacy on Banking Sustainability Performance mediated by Continuance Intention illustrates the dynamic relationship between sustainability investment literacy, bank sustainability performance, and continuance intentions of consumers or other stakeholders. Sustainability Investment Literacy provides an understanding of socially, economically and environmentally responsible investment principles, which is important in improving the bank's sustainability performance. Banks with stakeholders with high sustainability investment literacy tend to achieve and maintain their sustainability performance more effectively. The role of Continuance Intention as a mediator is critical as it reflects the intention to maintain sustainability practices in the long term, which is influenced by understanding and concern for the impact of investments. Thus, when Sustainability Investment Literacy is high, stakeholders are more likely to continue to support the bank's sustainability efforts, ultimately improving Banking Sustainability Performance.

## **H5: There is a significant influence of Sustainable Investment Literacy on Banking Sustainability Performance mediated by Continuance Intention**

### 3. Research Methodology

This study uses a quantitative approach with descriptive analysis to evaluate the effect of Fintech Service Quality (X) on Continuance Intention (Y) with Sustainable Investment Literacy (Z) as a mediating variable on employees who use mobile applications by the Regional Bank (Sugiyono, 2024). Data were collected through questionnaires distributed online using Google Forms. Then, it was analyzed using SEM-PLS.

This research focuses on Regional Bank employees who use mobile banking applications and have direct experience in using fintech features, as well as an understanding of sustainable investment literacy. This mobile application provides digital transaction services such as fund transfers, payments, digital product purchases, access to account information, and sustainable investment education. In addition to primary data from the questionnaire, secondary data was also used to strengthen the theoretical and contextual basis of the research, which was obtained from various sources such as scientific journals, textbooks, academic articles, and relevant official websites.

In a quantitative approach, the relationship between variables is objective and measurable, where the independent variable acts as a causal factor and the dependent variable as an effect (Sugiyono, 2024). The variables in this study include:

- 1) Fintech Service Quality (X) as an independent variable
- 2) Continuance Intention (Y) as the dependent variable
- 3) Sustainable Investment Literacy (Z) as a mediator variable

Variable measurement uses a Likert scale of 1-5, with answer options from "Strongly Disagree" to "Strongly Agree" to assess respondents' perceptions. According to Sugiyono, the 1-5 Likert scale is effective for measuring a person's attitudes, opinions, and perceptions because of its simplicity and ease of data interpretation (Sugiyono, 2019).

**Table 1. Operational Definition of Variables**

No.	Variables	Dimensions	Indicator	Item No.	Measurement Scale
1	Fintech Service Quality (X1) (Almaqtari, 2024)	Reliability	Ability to provide services consistently	1	Ordinal
			Appropriate and accurate utilization of application features	2	Ordinal
		Guarantee	Guarantees that make customers feel safe and comfortable	3	Ordinal
		Responsiveness	The company's speed in responding to needs	4	Ordinal
		Reliability	The company's ability to provide consistent service	5	Ordinal
		Guarantee	Accuracy of information provided	6	Ordinal
		Reliability	The convenience of display when using the application	7	Ordinal
		Guarantee	Adjustments to services	8	Ordinal



No.	Variables	Dimensions	Indicator	Item No.	Measurement Scale
			provided		
			Comfort and convenience that various groups can use	9	Ordinal
			Adjustment of promised services	10	Ordinal
			User inconvenience when service problems occur	11	Ordinal
		Empathy	The company's ability to understand individual customer needs	12	Ordinal
		Guarantee	Convenience of legality for users	13	Ordinal
			User concerns on personal data security in apps	14	Ordinal
		Empathy	Personalized attention	15	Ordinal
		Reliability	Adjustments to display standards in the application	16	Ordinal
2	Sustainable Investment Literacy (X2) (Filippini et al., 2024)	Financial Knowledge	Ability to calculate compound interest over time.	17	Ratio
			Understanding the effect of inflation on the purchasing power of money	18	Ratio
			Knowledge of risk diversification in investment	19	Ratio
			Understanding of the Sustainable Development Goals (SDGs)	20	Ratio
			Knowledge of development concepts that meet the needs of the present without compromising the ability of future generations	21	Ratio
			Awareness of the factors that cause environmental pollution, especially in rivers.	22	Ratio
			Understanding of environmental factors and human activities that affect marine ecosystems.	23	Ratio
			Ability to understand and analyze macroeconomic	24	Ratio

No.	Variables	Dimensions	Indicator	Item No.	Measurement Scale
			data, such as GDP growth.		
			Knowledge of Environmental, Social, and Governance aspects of sustainable investment.	25	Ratio
			Awareness of the importance of compliance with sustainable financial product marketing standards	26	Ratio
			Knowledge of the role of certification and accreditation in demonstrating the credibility of financial products	27	Ratio
			Knowledge of the relationship between corporate social practices and viability as a sustainable investment	28	Ratio
			Ability to evaluate the impact of each ESG component on the company's sustainability	29	Ratio
			Understanding of the direct and indirect impacts of sustainable investments on the environment	30	Ratio
			An understanding of how financial institutions influence sustainability through advocacy and decision-making	31	Ratio
			Ability to differentiate sustainable investment approaches based on their objectives and impacts	32	Ratio
3	Bank Sustainable Performance (Almaqtari, 2024)	Economy Dimension	Benefits of green financing	33	Ordinal
			Improved economic performance	34	Ordinal
			Company compliance with a comprehensive tax policy	35	Ordinal
			Investment cost savings by	36	Ordinal

No.	Variables	Dimensions	Indicator	Item No.	Measurement Scale
			green financing		
			Green financing to reduce financial risk	37	Ordinal
		Environmental Dimension	Concern for the environmental impact of banking services.	38	Ordinal
			Belief in the contribution of sustainable services to environmental protection.	39	Ordinal
			Satisfaction with the bank's implementation of green technology.	40	Ordinal
			Protection against environmental risks	41	Ordinal
			Proportion of bank investment in green technology	42	Ordinal
		Social Dimension	Expansion of business market share for green financing.	43	Ordinal
			Operational cost efficiency through programs	44	Ordinal
			A decrease in the amount of paper used in business processes.	45	Ordinal
			Implementation of policies that support environmental health.	46	Ordinal
			Customer perception of businesses that support green financing.	47	Ordinal
			Customer engagement in sustainability programs.	48	Ordinal
4	Continuance Intention (Z) (Goyal, 2024)	Intention to reuse	The effect of transaction convenience on intention to reuse	49	Ordinal
			Long-term commitment to app use	50	Ordinal
			Loyalty to the app is based on the positive experience	51	Ordinal
			Ease of use of the application in certain transactions as a factor of intention to reuse	52	Ordinal

No.	Variables	Dimensions	Indicator	Item No.	Measurement Scale
			Optimal utilization of features as motivation for continued use	53	Ordinal
			Key preferences for apps in future financial transactions	54	Ordinal

### 3.1. Population and Sample

According to Sugiyono, a population is a generalization area consisting of objects or subjects with certain characteristics set by researchers to be studied and conclusions drawn (Sugiyono, 2024). The population in this study was all Main Branch employees who used the mobile banking application, with a total population of 154 people.

The sample was determined using Yamane's formula because the population size was known and relatively small. Yamane's formula is used with a significance level of 5% (sampling error 0.05), with the following calculation results:

$$n = \frac{154}{1 + 154(0,05)^2}$$

$$n = \frac{154}{1 + 0,38}$$

$$n = \frac{154}{1,38}$$

$$n = 111$$

The number of samples in this study was determined using the Yamane formula because the population was known and relatively small. The initial population of 154 people was determined because all employees at the Main Branch who used the mobile banking application totaled 154 people. Using the Yamane formula and a significance level of 5%, a sample size of 111 people was obtained. The decrease in the number of respondents from 154 to 111 aims to obtain representative data with an acceptable error rate while saving research time and resources without reducing the validity of the results.

### 3.2. Validity Test

In this study, validity indicates how accurate the data set out by the researcher is by the actual data on the research object. The Sustainable Investment Literacy (X2) variable is measured using a ratio scale, which does not require a validity test because it is an absolute scale with a true zero point; therefore, it is considered valid by definition (Sugiyono, 2024). Researchers can check the correlation between the scores from distributing questionnaires and the total of these items. The researcher has conducted a pre-questionnaire to 30 respondents. To identify the validity test, the researcher used the help of IBM SPSS statistics version 22 software in processing research data. This study used a significance level of 5% ( $\alpha = 0.05$ ) and obtained an rtable value of  $n = 30$  of 0.361. For this reason, researchers obtained a correlation value using the Pearson Product Moment formula, with the following criteria:

- If  $r \text{ count} \geq 0.361$ , the indicator can be considered valid or valid.
- If  $r \text{ count} \leq 0.361$ , the indicator is considered invalid or invalid.

### 3.3. Reliability Test

According to Sugiyono, reliability test is a method of measuring research objects that provides consistent measurement data results every time it is used (Sugiyono, 2024). The reliability test is measured if there is similar data at different times. Therefore, it is necessary to check the reliability test on the research questionnaire to ensure higher quality research results. To measure the reliability test in this study, testing was carried out on a sample of data from 30 respondents as a pre-test questionnaire using IBM SPSS Statistic 22 software with the criteria If the  $r$  coefficient reaches 0.7 or more. It shows high reliability consistency.

**Table 2. Reliability Test Results**

Variable	Cronbach's Alpha	Critical Value	Number of Items	Remark
Fintech Service Quality (X1)	0.891	> 0.60	16	Reliable
Bank Sustainable Performance (Y)	0.943		16	Reliable
Continuance Intention (Z)	0.890		6	Reliable

Source: Results of the Author's Data Processing (2025)

Based on the reliability test results in the table above, the three research variables have a *Cronbach Alpha* value that shows reliability, so this research can be continued because it has met the *Cronbach Alpha* criteria standard of  $> 0.60$ .

## 4. Results and Discussion

### 4.1. Respondent Characteristics

**Table 3. Respondent Characteristics**

No.	Age	Total	Percentage
1	22-25 years old	31	28%
2	26-35 years old	30	27%
3	36-45 years old	33	30%
4	>45 years	17	15%
Total		111	100%

The majority of respondents are in the age range of 36-45 years as many as 33 people (30%), followed by 22-25 years old as many as 31 people (28%), then 26-35 years old as many as 30 people (27%), and the least is the age group above 45 years old as many as 17 people (15%). The total respondents in this survey was 111 people, with an overall percentage of 100%. This shows that respondents are dominated by productive age groups, especially those aged 36-45 years.

### 4.2. Validity and Reliability

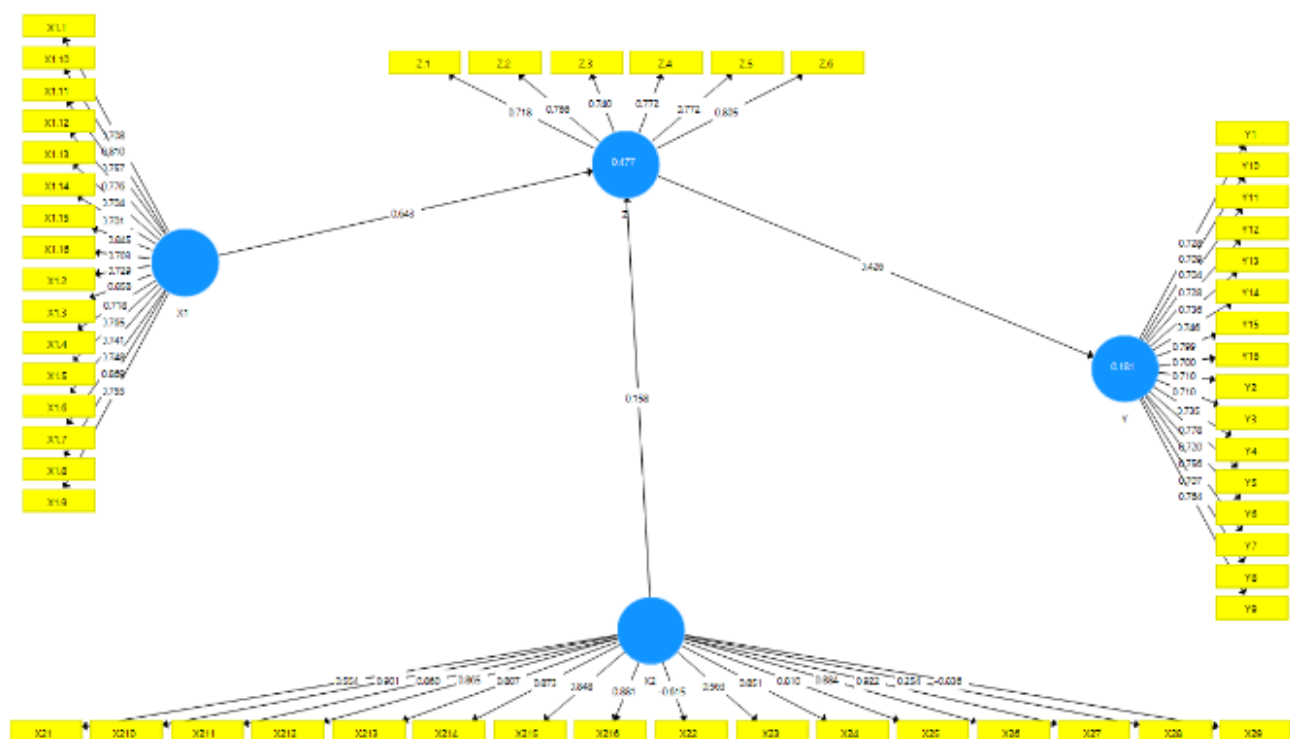
This study aimed to analyze the effect of Fintech Service Quality on Continuance Intention with Sustainable Investment Literacy as a mediating variable in users of mobile banking applications by Regional Banks. Primary data was obtained from distributing online questionnaires to 154 Main Branch Regional Bank employees, with 111 questionnaires returned and declared valid.



The respondents are all active users of the Digi app. Based on age, the 36-45 years group dominates with 29.7%, followed by the 22-25 years age group (27.9%), 26-35 years (27%), and above 45 years (15.3%). These characteristics show that most respondents are at a productive age and financially literate.

Data was processed using descriptive analysis and Structural Equation Modeling (SEM). A 5-point Likert scale was used to measure respondents' perceptions, while the Sustainable Investment Literacy variable was converted from ratio data using the MSI method. The Method of Successive Interval (MSI) converts ratio data into Sustainable Investment Literacy variables because MSI provides more accurate and relevant indicators in assessing financial capacity for sustainable investment (Filippini et al., 2024). The research results are expected to provide an overview of the role of sustainable investment literacy in encouraging the sustainable use of fintech applications.

### 4.3. Outer Model Measurement Results



**Figure 7. Model Measurement Test Results (Outer Model)**

Source: Results of the Author's Data Processing (2025)

The analysis results with SmartPLS show that all indicators tested in each dimension of this study have factor loading values  $> 0.7$ , indicating optimal convergent validity. The outer loadings for variables such as Fintech Service Quality, Sustainable Investment Literacy, Continuance Intention, and Bank Sustainable Performance are in a very good range (0.7-0.9).

Convergent validity tests on Fintech Service Quality (X1), Continuance Intention (Z), and Bank Sustainable Performance (Y) variables all meet the factor loading limit  $> 0.7$ . This ensures that each dimension in the variable validates the construct being measured. For example, in Fintech Service Quality, the indicator with the highest factor loading is X1.1 (Guarantee) with

a value of 0.869. Meanwhile, in Bank Sustainable Performance, indicator Y.15 (Customer Perception of Green Financing) obtained the highest value of 0.799.

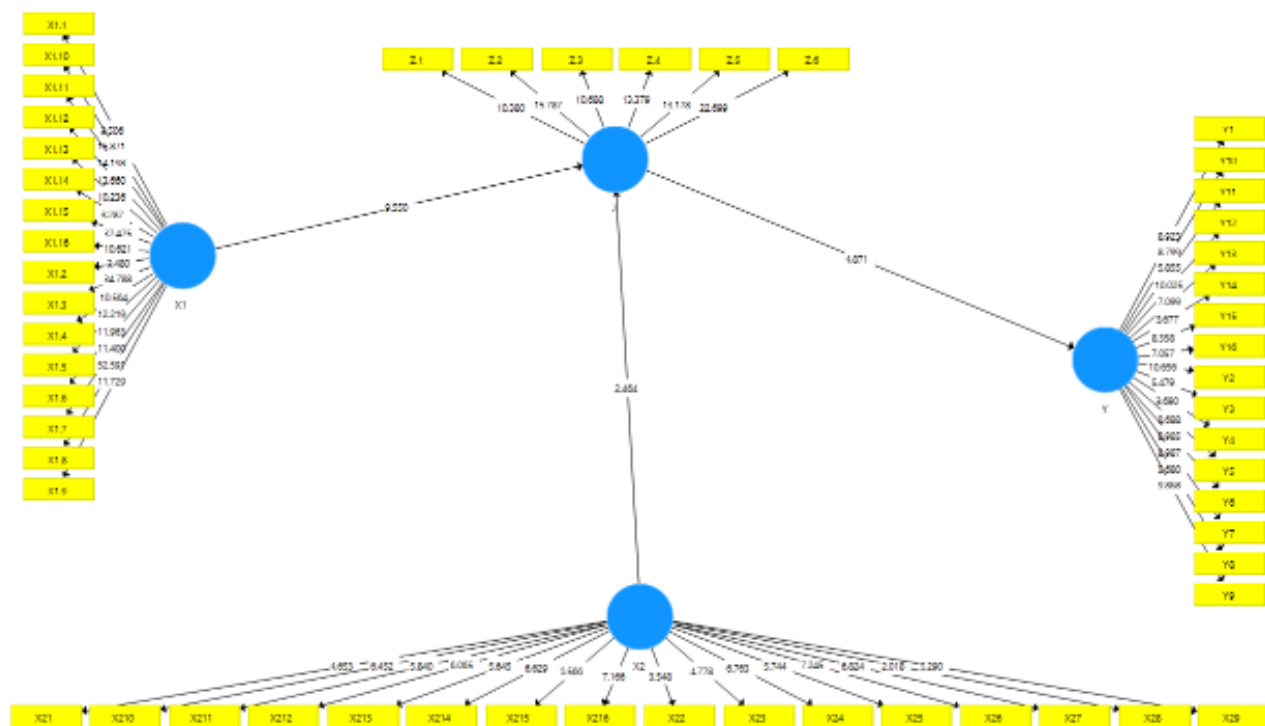
However, in the Sustainable Investment Literacy (X2) variable, several indicators do not meet the validity criteria (value  $<0.7$ ). However, they are still considered valid because they use a ratio scale that produces absolute answers.

The AVE values for all variables in this study show valid results because they are all  $> 0.5$ , as listed. This shows that each construct in this study can explain more than 50% of the variance of the measured indicators, so convergent validity has been met.

Discriminant validity tests are carried out through cross loading analysis and the Fornell-Larcker method. the loading value on each construct is higher than the loading value on other constructs. Therefore, each indicator meets the criteria for discriminant validity. Although there are indicators on Sustainable Investment Literacy that have values below the validity limit, these indicators are still accepted because the measurement is ratio.

Composite Reliability  $> 0.70$ , which indicates good reliability. Likewise, the Cronbach's Alpha values, which are all above 0.70, indicate that all variables tested have strong internal consistency and high reliability.

#### 4.4. Structural Model Measurement Results (Inner Model)



**Figure 8. Inner Model Results**

Source: Results of the Author's Data Processing (2025)

Based on the inner model analysis, each variable's influence in the structural model can be seen. Model evaluation is carried out by paying attention to the Coefficient of Determination ( $R^2$ ), t-value, and the effect size of the existing variables. The following are the analysis results obtained from this research model:

According to Ghozali, the coefficient of determination ( $R^2$ ) assesses how well the model can explain variations in the dependent variable (Ghozali, 2023). Based on existing guidelines, an  $R^2$

value above 0.75 is considered strong, between 0.50 and 0.75 is considered moderate, and less than 0.25 is considered weak.

Based on the results of data analysis, the  $R^2$  value for the Bank Sustainable Performance (Y) variable is 0.181, which indicates that the coefficient of determination is in the weak category, meaning that the independent variable can only explain 18.1% of changes in the dependent variable. Meanwhile, the  $R^2$  value for the Continuance Intention (Z) variable is 0.477, which is in the moderate category, indicating that the independent variable can explain 47.7% of the variation in the dependent variable.

Predictive relevance testing is carried out to assess whether the structural model has good predictive ability. A  $Q^2$  value of 0.278 was obtained based on the formula used, which is greater than 0. This indicates that this model has good predictive relevance with a fairly strong level of accuracy.

The f-square value is measured to determine how much effect the independent variable has on the dependent variable. Based on the analysis results, the effect of Fintech Service Quality (X1) on Continuance Intention (Z) has an f-square value of 0.763, which is included in the large category. The effect of Sustainable Investment Literacy (X2) on Continuance Intention (Z) has an f-square value of 0.046, which is in the small category. While the effect of Continuance Intention (Z) on Bank Sustainable Performance (Y) has an f-square value of 0.221, which is included in the medium category.

Effect size testing is conducted to evaluate the role of the moderator variable Continuance Intention (Z) in the relationship between the independent and dependent variables. Based on the calculation of Variance Accounted For (VAF), the value obtained for the effect of Fintech Service Quality (X1) on Bank Sustainable Performance (Y) through Continuance Intention (Z) is 99%, which indicates that Continuance Intention acts as a very significant mediator in the relationship. Similar results were also found for the effect of Sustainable Investment Literacy (X2) on Bank Sustainable Performance (Y), with the same VAF value of 99%.

#### 4.5. Hypothesis Testing

Hypothesis testing in this study was conducted using the SEM-PLS version 3.2.9 software, employing the path coefficient technique to assess the T-statistic and P-value. A hypothesis is considered statistically significant if the T-statistic exceeds 1.96, and it is accepted if the P-value is less than 0.05. The following table presents the results of the hypothesis testing conducted by the researchers.

**Table 4. Hypothesis Testing Results**

Hypothesis	Path	Original Sample (O)	T Statistics	P Values	Conclusion
H1	Fintech Service Quality (X1) → Continuance Intention (Z)	0.643	9.550	0.000	Accepted
H2	Sustainable Investment Literacy (X2) → Continuance Intention (Z)	0.158	2.564	0.014	Accepted
H3	Continuance Intention (Z) → Bank Sustainable Performance (Y)	0.426	4.871	0.000	Accepted

Hypothesis	Path	Original Sample (O)	T Statistics	P Values	Conclusion
<b>H4</b>	Fintech Service Quality (X1) → Continuance Intention (Z) → Bank Sustainable Performance (Y)	0.274	3.401	0.001	Accepted
<b>H5</b>	Sustainable Investment Literacy (X2) → Continuance Intention (Z) → Bank Sustainable Performance (Y)	0.067	2.127	0.034	Accepted

Source: Results of the Author's Data Processing (2025)

The first hypothesis (H1) shows a *p-value* of  $0.000 < 0.005$  and a *t-statistic* of  $92.574 > 1.96$ . The relationship between *service recovery* and *corporate image* is significant, according to the *path coefficient* value of 0.933. This shows that *Service recovery* positively affects *Corporate Image*, so the hypothesis is accepted. This effect indicates that an increase in *service recovery* will increase the *corporate image*.

Hypothesis One (H1): Fintech Service Quality significantly positively affects Continuance Intention. Based on the analysis, the *t-statistic* value for H1 was recorded at 9.550 ( $> 1.96$ ), and the *p-value* was 0.000 ( $< 0.05$ ). The *path coefficient* value of 0.712 indicates a significant relationship between Fintech Service Quality and Continuance Intention. This proves that increasing Fintech Service Quality will increase Continuance Intention. Therefore, the alternative hypothesis (Ha1) is accepted, while the null hypothesis (H01) is rejected.

The positive influence of Service Quality on Continuance Intention is supported by previous research. Service quality and features of mobile banking applications significantly increase interest in continuous use through user satisfaction as an intervening variable. Edo and Hendayani confirms that e-service quality positively affects Continuance Intention, where service quality builds trust and positive user attitudes (Edo & Hendayani, 2023). Service quality positively affects e-loyalty through user satisfaction, indicating that a good service experience encourages loyalty and continuous use intentions.

Second Hypothesis (H2): Sustainable Investment Literacy significantly positively affects Continuance Intention. The analysis results show a *t-statistic* value of 2.464 ( $> 1.96$ ) and a *p-value* of 0.014 ( $< 0.05$ ), with a *path coefficient* of 0.452. This shows that sustainable investment literacy has a significant effect on continuity intention. Therefore, the alternative hypothesis (Ha2) is accepted, and the null hypothesis (H02) is rejected.

Previous research supports the positive influence of Sustainable Investment Literacy on Continuity Intention. Financial literacy and environmental concerns significantly positively affect green investment decisions in Generation Z, which increases sustainable interest in using digital platforms such as mobile banking. Digital literacy strengthens the relationship between financial literacy and purchase intention. This suggests that individuals with high digital literacy are more likely to use mobile banking for sustainable investment.

Third Hypothesis (H3): Continuance Intention has a significant positive influence on Bank Sustainable Performance. Based on the analysis results, the *t-statistic* of 4.871 ( $> 1.96$ ) and *p-value* of 0.000 ( $< 0.05$ ) indicate a significant relationship. The *path coefficient* value of 0.536

indicates that Continuance Intention positively affects Bank Sustainable Performance. Thus, the alternative hypothesis (Ha3) is accepted, and the null hypothesis (H03) is rejected.

The positive influence of Continuance Intention on Bank Sustainable Performance is supported by previous research. Satisfaction, trust, and confirmation of expectations are the main factors that influence Continuance Intention in mobile banking applications. Satisfaction and trust increase loyalty and sustainable use, strengthening bank performance through efficiency and reduced operational costs. Service quality and customers' emotional attachment to Islamic banks in Indonesia influence satisfaction and continuance intention, where high satisfaction contributes to loyalty and continuance usage for sustainable bank performance.

Fourth Hypothesis (H4): Fintech Service Quality significantly influences Bank Sustainable Performance, mediated by Continuance Intention. Based on the analysis, the t-statistic is recorded at 3.401 ( $> 1.96$ ) and the p-value is 0.001 ( $< 0.05$ ). The path coefficient value of 0.612 indicates that Fintech Service Quality significantly affects Bank Sustainable Performance through the mediating effect of Continuance Intention. Therefore, the alternative hypothesis (Ha4) is accepted, and the null hypothesis (H04) is rejected.

The positive influence of Fintech Service Quality on Bank Sustainable Performance is supported by previous research. The study by Aldaarmi shows that fintech service quality significantly affects customer satisfaction, which increases the intention to continue using fintech services and impacts the bank's sustainable performance (Aldaarmi, 2024). Meanwhile, service quality is a key factor in controlling uncertainty and encouraging continued use, where system quality reduces perceived risk and information quality increases trust, all of which support Continuance Intention.

Fifth Hypothesis (H5): Sustainable Investment Literacy significantly positively affects Bank Sustainable Performance, mediated by Continuance Intention. The analysis results show a t-statistic value of 2.127 ( $> 1.96$ ) and a p-value of 0.034 ( $< 0.05$ ), with a path coefficient of 0.471. This shows that Sustainable Investment Literacy significantly affects Bank Sustainable Performance through the mediating role of Continuance Intention. Therefore, the alternative hypothesis (Ha5) is accepted, and the null hypothesis (H05) is rejected.

The positive influence of Fintech Service Quality on Bank Sustainable Performance is supported by previous research. Financial literacy and environmental awareness significantly positively affect green investment decisions among Generation Z, which encourages interest and sustainable intentions in using digital platforms such as mobile banking for investment. Good financial literacy supports wiser investment decision-making and supports the bank's sustainable performance. Financial literacy significantly positively affects investment decisions in the millennial generation.

All tested hypotheses show a significant positive effect. Fintech Service Quality and Sustainable Investment Literacy directly affect Continuity Intention, which in turn affects Bank Sustainability Performance. In addition, these two variables also affect Bank Sustainability Performance through the mediating effect of Continuity Intention.

## 5. Conclusion

This study aims to analyze the effect of fintech service quality and sustainable investment literacy on bank sustainable performance with mediation continuance intention on mobile applications by Regional Banks. Based on the results of the study, it can be concluded that fintech service quality has a positive effect on continuance intention, which means that good service quality will increase users' intention to continue using the mobile application by Regional Banks. In addition, sustainable investment literacy also has a positive effect on



continuance intention, where an understanding of sustainable investment encourages users to continue using digital services that are in line with ESG (environmental, social, governance) principles. Furthermore, continuance intention is shown to have a positive effect on bank sustainable performance, which indicates that the intention to reuse the application improves the bank's sustainability performance. In addition to the direct effect, fintech service quality also indirectly affects bank sustainable performance through the mediation of continuance intention. Similarly, sustainable investment literacy indirectly improves bank sustainable performance through users' desire to continue using the application. These findings support the Resource-Based View theory, which emphasizes the importance of service quality and sustainable investment knowledge as strategic assets to create long-term competitive advantage. This research still has room for further development. In the future, research can expand the conceptual model by including other variables that have not been studied previously.

Based on the findings in this study, several suggestions can be given. Companies, especially Regional Banks, need to continue to improve service quality, both in terms of system reliability, transaction security, and service speed, to strengthen user loyalty and increase their intention to continue using the Digi application. In addition, companies need to expand educational efforts regarding sustainable investment through educational features or ESG principle-based content in the application, so that users are more aware of the importance of sustainable investment. To improve user experience, this Regional Bank can also personalize services based on user behavior data to make them more relevant and attractive. Meanwhile, for future researchers, this research can be expanded by adding other variables such as trust satisfaction or digital literacy that may also affect continuance intention and bank sustainability performance. Comparative research between regions or banking institutions may also provide deeper insights into the influence of these variables in different demographic and organizational culture contexts.

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## References

- Aldaarmi, A. A. (2024). Fintech Service Quality of Saudi Banks: Digital Transformation and Awareness in Satisfaction, Re-Use Intentions, and the Sustainable Performance of Firms. *Sustainability*, 16(6), 2261. <https://doi.org/10.3390/su16062261>
- Almaqtari, F. A. (2024). The moderating role of IT governance on the relationship between FinTech and sustainability performance. *Journal of Open Innovation: Technology, Market, and Complexity*, 10(2). <https://doi.org/10.1016/j.joitmc.2024.100267>
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Edo, J. J. R., & Hendayani, R. (2023). Pengaruh E-Service Quality terhadap Continuance

- Intention Dengan Perceived Trust, Customer Satisfaction, Attitude, dan Effort Expectancy sebagai Variabel Intervening (Studi Pada Pengguna Aplikasi LinkAja di Kota Bandung). *Jurnal Mirai Management*, 8(1), 102–116. <https://www.journal.steamkop.ac.id/index.php/mirai/article/view/3714>
- Filippini, M., Leippold, M., & Wekhof, T. (2024). Sustainable finance literacy and the determinants of sustainable investing. *Journal of Banking & Finance*, 163, 107167. <https://doi.org/10.1016/j.jbankfin.2024.107167>
- Ghozali. (2023). *Partial Least Squares: Konsep, Teknik, dan Aplikasi Menggunakan SmartPLS 4*. Universitas Diponegoro.
- Goldstein, J. K. (2019). To FinTech and beyond. *Review of Financial Studies*, 32(5), 1647–1661. <https://doi.org/10.1093/rfs/hhz025>
- Goyal. (2024). Continuance intention of Fintech Peer-to-Peer (P2P) financing Shariah: Moderation role of brand schematicity and digital financial literacy. *Journal of Open Innovation: Technology, Markets, and Complexity*, 10(2). <https://doi.org/10.1016/j.joitmc.2024.100301>
- Hidayat-ur-Rehman, I. (2024). *The role of financial literacy in enhancing firm's sustainable performance through Fintech adoption: a moderated mediation analysis*. Emerald Insight. <https://www.emerald.com/insight/1757-2223.htm>
- Hussain, J., Salia, S., & Karim, A. (2018). Is knowledge that powerful? Financial literacy and access to finance. *Journal of Small Business and Enterprise Development*, 25(6), 985–1003. <https://doi.org/10.1108/JSBED-01-2018-0021>
- Kompasiana. (2024). *Indonesia Digital Data 2024 Based on DataReportal*. Kompasiana. <https://www.kompasiana.com/image/mallawa/65eda60814709376020e9a02/data-digital-indonesia-2024-berdasarkan-datareportal?page=1>
- Kotler, P. (2019). *Marketing management* (15th ed.). Pearson Education.
- Naz, S., Asif, M., & Hameed, S. (2023). Fintech'S Role in Sustainable Banking Performance: Are Green Banking Policies Driving Sustainability in Pakistan'S Banking System? *Gomal University Journal of Research*, 39(03), 294–312. <https://doi.org/10.51380/gujr-39-03-04>
- Sharing Vision. (2022). *Sharing Vision Business IT Outlook 2023 Survey: Mobile Banking is the Favorite*. Sharing Vision. <https://sharingvision.com/insight/survey-2022-sharing-vision-mobile-banking-menjadi-primadona/>
- Sugiyono. (2019). *Metode Penelitian dan Pengembangan (Research and Development)*. Alfabeta.
- Sugiyono. (2024). *Metode penelitian kuantitatif (Cetakan ke-4)*. Alfabeta.
- Utami, A. M., & Septivani, M. D. (2023). The Role of Digital Banking in Leading Sustainable Economic Development. *Telaah Bisnis*, 24(2), 173. <https://doi.org/10.35917/tb.v24i2.457>
- Varmaz, A., Riebe, K., & Hegner, S. (2021). Sustainable Financial Literacy and Preferences for Sustainable Investments among Young Adults. *Vierteljahrshefte Zur Wirtschaftsforschung*, 90(4), 43–69. <https://doi.org/10.3790/vjh.90.4.43>

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