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The Effect of Financial Technology (Fintech) and Service Providers on Customer Value: Case Study on Gas Station Services in Surabaya City

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ABSTRACT

This study aims to analyze the effect of financial technology and service providers on customer value in Surabaya City. The variables tested in this study include financial technology (X_1), service providers (X_2), and customer value (Y) as the dependent variable. The sample used in this study amounted to 87 respondents who are users of gas stations in Surabaya, with three types of fuel service providers, namely Pertamina, SHELL, and British Petroleum (BP). Sampling was done purposively by selecting respondents who actively use the gas station service. Hypothesis testing was conducted using multiple linear regression to analyze the effect of financial technology and service providers on customer value.

Hypothesis testing results show that financial technology significantly influences customer value, with a significance value of 0.001, smaller than 0.05. On the other hand, service providers also influence customer value, albeit with a significance value of 0.099, which is insignificant at the 5% significance level. Based on these results, financial technology contributes more to perceived customer value than service providers. These findings indicate the importance of innovation in Fintech as a key factor in improving customer satisfaction in the gas station service sector.

INTRODUCTION

Information technology (IT) supports various aspects of a company's operations, from data management and internal and external communication to driving product and service innovation. It enables companies to automate business processes that were previously manual, thereby increasing time efficiency and lowering the risk of human error. For example, an Enterprise Resource Planning (ERP) system can speed up the procurement process and real-time inventory management. In addition, IT also aids data-driven decision-making through advanced analytics. Various studies have shown that investment in IT contributes positively to organizational performance outcomes. One widely used approach is the Task-Technology Fit (TTF) evaluates the extent to which the fit between technology and the tasks individuals perform can affect work effectiveness (Hidayat et al., 2021; Kurniawati et al., 2021; Yodha et al., 2023).

In the context of effective IT adoption, companies must consider two critical dimensions, namely task-technology fit (TTF) and the level of technology utilization by users. Venkatesh and Davis (2000) explain that IT utilization includes how often and optimally technology is used to support the process of achieving organizational goals. A high level of use does not necessarily reflect effectiveness unless the technology is genuinely suited to the task's characteristics. Therefore, when TTF and utilization are analyzed simultaneously, companies can get a more accurate picture of how much impact IT has on operational and strategic excellence. Recent research confirms that the higher the level of TTF, the greater the user satisfaction and overall organizational performance (Hung et al., 2020; Khan et al., 2022; Kurniawati et al., 2021; Lin et al., 2022; Yodha et al., 2023).

As the digital era develops, digital transformation becomes the primary focus of companies in accelerating competitiveness and creating added value through IT. This transformation does not simply digitize processes but involves the dynamic ability of the organization to adapt, innovate, and respond to market changes. Companies that successfully carry out digital transformation can recognize and build key capabilities to make the most of IT potential. The emergence of Financial Technology (Fintech) in the Indonesian context shows how IT can bring innovative solutions to financial services, such as digital wallets, peer-to-peer lending, and micro-investment (Gangwar, 2020; Ngadiman et al., 2022). Data also shows that more than 50 per cent of the public is open to using Fintech for daily transactions, signalling the importance of adopting user-friendly technology in driving customer loyalty and satisfaction (Aldholay et al., 2021; Safarudin et al., 2023).

Despite the enormous benefits of IT, companies are still faced with various challenges in its implementation, especially regarding initial investment costs and the risk of system failure. Implementing new systems often requires retraining human resources, changes in work processes, and complex cybersecurity risk management. However, competitive pressures and higher customer expectations encourage companies to continue innovating through technology (Deng & Thoben, 2022; Elçi & Abubakar, 2021). In some cases, companies reluctant to adapt to IT developments stagnate and lose market relevance. Therefore, although risks remain, investment in IT is an unavoidable strategic move in this fast-paced digital era.

The rapid development of technology requires organizations to regularly update their operational systems and processes to stay relevant with the changing times. Organizations that are slow to respond to IT innovations will risk losing market share because they cannot meet the expectations of increasingly digital-savvy customers. Ho et al. (2023) and Seebacher et al. (2020) reminded us that IT is not just a supporting tool but a determining factor for the organization's long-term competitiveness. Analogously, if a company is a vehicle, then IT is the engine-without periodic maintenance and upgrades, the vehicle's performance will decline. Therefore, IT system updates should be part of a comprehensive sustainable business strategy, including developing HR digital competencies and integrating artificial intelligence and big data-based technologies.

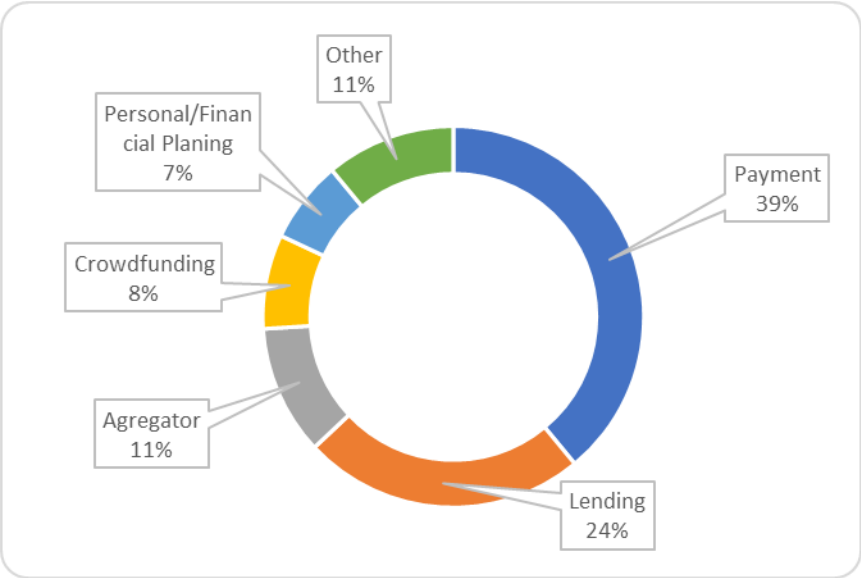

Figure 1 Financial Technology (FINTECH) User Data
(Source: CNBC Indonesia)

Technology Acceptance Model (TAM) theoretical framework is critical in understanding individual behaviour towards acceptance or rejection of new technology, especially in the context of information technology. This model explains that technology acceptance is influenced by two primary constructs, namely Perceived Ease of Use and Perceived Usefulness (Elnady et al., 2022; O. Poudel & Sapkota, 2022). Perceived Ease of Use refers to the individual belief that the technology is easy to learn and use without requiring significant effort. Meanwhile, perceived usefulness refers to how individuals believe technology will improve their performance or productivity (Budiarti et al., 2021; O. Poudel & Sapkota, 2022). The interaction between these two perceptions is important in influencing individuals' intentions and decisions to adopt technology, making TAM a relevant analytical tool for examining technology acceptance in various organizational contexts (Kamal et al., 2023).

In further developing the literature, Lufitasari et al. (2020) showed that services provided by service providers do not always directly influence customer satisfaction. However, in the growing digital era, especially in Fintech, ease of use and perceived usefulness are decisive elements in shaping customer satisfaction and loyalty (Amankwaa et al., 2020; H. K. Poudel et al., 2023). This indicates that customers are more receptive to intuitively designed services that provide tangible benefits in their daily lives. Research by Kamal et al. (2023) confirmed that adopting fintech services, especially in digital payments, is increasingly widespread among young consumers who value speed, convenience, and efficiency in transactions. Therefore, understanding user perceptions of technology is essential to optimize digital-based services and create a positive experience.

Customer value is a perception formed based on customers' evaluation of the benefits they receive compared to what they sacrifice in using a product or service. In digital technology, perceptions of security and privacy are two crucial aspects that significantly affect customer trust, as stated by Poudel et al. (2023) and Mahakittikun et al. (2020). This trust will ultimately impact customers' perceived value towards the services provided, especially in digital payment services. In addition, customer experience is important in creating sustainable value, as a pleasant experience will shape positive perceptions of the service. The study by Shree et al. (2021) supports this view by

highlighting how users' experiences in the Indian digital marketplace shape their perceptions of service value and quality (Shree et al., 2021).

Public service providers such as public fuel stations (SPBUs) in Indonesia face challenges aligning conventional services with digital technology innovations. Many users still rely on traditional payment methods such as cash, which makes the transaction process relatively slow and inefficient. However, the development of digital payment applications that have begun to be implemented by several service providers is a great opportunity to improve efficiency and convenience in transactions. This innovation can speed up the payment process and increase customer satisfaction by providing greater flexibility and convenience (Daud et al., 2022). If implemented consistently and accompanied by customer education, this technology has great potential to increase loyalty and create a sustainable competitive advantage.

Therefore, this study aims to explore how the utilization of technology, particularly fintech-based digital payment systems, impacts the experience and value perceived by gas station customers. The primary focus lies in understanding customer perceptions of the ease, usefulness, and security of the technology used in the service. This research also seeks to examine how the adoption of this technology can contribute to improving overall customer satisfaction. By taking the context of gas stations in Surabaya City, this study is expected to provide practical insights for public service managers in improving service quality through digital technology. More broadly, the findings of this study are also expected to contribute to developing policies and strategies for technological innovation in the public service sector in Indonesia.

RESEARCH METHOD

This research uses an objective and systematic quantitative approach to measure the effect of variables that have been determined statistically. This approach refers to collecting and analyzing quantitative data that can be processed with statistical software to test hypotheses (Fatihudin, 2020) empirically. Data were collected through an online questionnaire created with Google Forms and disseminated using social media such as WhatsApp and relevant online discussion groups. A *simple random sampling* method was used, considering that the total population of gas station service users in Surabaya City is not known with certainty. This allows each individual in the population to have an equal chance of being selected as a respondent. This research uses the SPSS (Statistical Product and Service Solutions) version 25 application as a data analysis tool.

The population in this study were all gas station consumers in Surabaya City, without distinguishing the type of vehicle used. The sample used consisted of 87 respondents divided into Pertamina service station users as many as 63 respondents (72.41%), SHELL users as many as 15 respondents (17.24%), and British Petroleum (BP) as many as nine respondents (10.34%). The selection of these respondents is based on the fuel they use most often in their daily lives.

This study involves three main variables. The first independent variable is *Financial Technology* (Fintech), which is defined as innovation in the financial sector by utilizing modern technology to improve efficiency and user convenience (Pribadiono, 2016). Fintech is measured through four primary indicators, namely: *Perceived Usefulness* (PU), *Perceived Ease of Use* (PEOU), *Attitude Toward Using* (ATU), and *Behavioral Intention to Use* (BIU). PU indicators include the perception that technology improves performance, is valuable and efficient, and makes work easier. PEOU refers to ease of use, practicality of time, and place flexibility. ATU assesses users' attitudes towards convenience and interest in using Fintech, while BIU describes the desire and intention to use Fintech in the future.

The second independent variable is *Service Provider*, which is measured using the SERVQUAL dimensions, namely *Tangible* (physical evidence), *Empathy* (Empathy), *Reliability* (reliability), *Responsiveness* (responsiveness), *Assurance* (guarantee), and *Communication* (communication).

Meanwhile, the dependent variable in this study is *Customer Value*, which reflects consumers' perceptions of the benefits they receive from using technology-based gas station services. Customer value is assessed from four leading indicators, namely *emotional value*, *social value*, *quality value*, and *product value*.

Data analysis begins with a classical assumption test to ensure the multiple linear regression model's validity. First, a normality test is performed using *Kolmogorov-Smirnov* or *Shapiro-Wilk* to ensure that the residual data is usually distributed. Data is normal if the significance value is greater than 0.05. Second, the multicollinearity test is carried out to see if there is a high correlation between the independent variables, which is assessed by the *Tolerance* value (> 0.10) and the *Variance Inflation Factor (VIF)* (< 10). Third, the heteroscedasticity test is carried out to test whether there is a residual variance that is not constant, using the *Glejser* test or looking at the pattern on the scatterplot graph. Data is considered to escape heteroscedasticity if no particular pattern is found or the significance value is above 0.05. Fourth, the autocorrelation test is performed using *Durbin-Watson*, with an ideal value close to 2, which indicates the absence of autocorrelation between residuals.

After all classical assumptions are met, multiple linear regression tests are carried out to determine the simultaneous and partial effects between fintech and service providers on customer value. The multiple linear regression equation used in this study is as follows:

$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$

Where:

Y	= Customer Value
X_1	= Financial Technology
X_2	= Service Provider
α	= Constant
β_1 and β_2	= Regression coefficient of each independent variable
ε	= Error term

With this equation, this study examines how much Fintech and service quality influence customer value for digital gas station users in Surabaya City. The test results are expected to provide a more comprehensive picture of consumer behaviour in accepting financial technology in the fuel sector and provide strategic input for companies in improving the quality of digital-based services.

RESULTS AND DISCUSSION

Results

Table 1 shows the distribution of respondents based on the type of gas station they use in Surabaya City. This study involved 87 respondents consisting of Pertamina, SHELL, and British Petroleum (BP) gas station users. This data was collected to understand consumers' preferences towards fuel providers, their relevance to using financial technology, and their perception of service quality. The majority of respondents in this study were Pertamina users with 63 people or 72.51%, followed by SHELL users with 15 people (17.53%), and BP users with nine people (9.95%).

The distribution of respondents in Table 1 indicates that Pertamina gas stations are still the leading choice of the Surabaya community in fulfilling their fuel needs. The dominance of Pertamina's use can reflect the public's perception of the availability of services, prices, and ease of access. Meanwhile, the presence of SHELL and BP as alternatives indicates that a market segment is beginning to consider quality factors and service innovation. These findings provide an important basis for analyzing how fintech and service quality from each gas station provider affect overall customer value.

Table 1 Distribution of Respondents

Name of gas station	Total	Percentage (%)
Pertamina	63	72,51%
SHELL	15	17,53%
British Petroleum	9	9,95%
Total	87	100,00%

Source: Results of data analysis

Classical Assumption Test:

Multicollinearity Test

Table 2 presents the results of the multicollinearity test to determine whether there is a strong relationship between the independent variables in the regression model used, namely *Financial Technology* and *Service Providers*. This test is important to ensure that each independent variable uniquely contributes to the dependent variable, namely *Customer Value*. Based on the analysis results, the *Tolerance* value for both variables is 0.579, and the *Variance Inflation Factor* (VIF) value is 1.727. These values are below the general threshold (VIF < 10 and Tolerance > 0.10), indicating no multicollinearity between the independent variables in the model. Thus, each independent variable can be interpreted independently of its effect on customer value.

Table 2 Multicollinearity Test Results

Coefficients								
		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model		B	Std. Error	Beta	T	Sig.	Tolerance	VIF
1	(Constant)	6.655	1.660		4.008	.000		
	Financial Technology	.103	.029	.416	3.517	.001	.579	1.727
	Service Provider	.151	.090	.198	1.669	.099	.579	1.727
a. Dependent Variable: Customer Value								

Source: Results of data analysis

From the multicollinearity test results shown in Table 2, it can be concluded that the regression model used in this study is free from multicollinearity problems. This indicates that both *Financial Technology* and *Service Provider* variables can be analyzed further without concerns regarding redundancy or high correlation between independent variables. This result strengthens the model's validity in explaining these factors' influence on perceived customer value. Thus, the regression results obtained will be more accurate and reliable in drawing conclusions and formulating strategic recommendations based on empirical findings.

Normality Test

Table 3 presents the normality test results using the *One-Sample Kolmogorov-Smirnov Test* method on the three main variables in this study, namely *Financial Technology*, *Service Providers*, and *Customer Value*. This normality test is used to determine whether the data from each variable is normally distributed, which is one of the prerequisites in linear regression analysis. Based on the

results shown, the *Financial Technology* variable has an *Asymp. Sig. (2-tailed)* value of 0.200 and a *Monte Carlo Sig.* Value of 0.620, both of which are well above the significance value of 0.05. This indicates that the data on these variables is usually distributed. Meanwhile, based on the Monte Carlo Sig, the *Service Provider* and *Customer Value* variables have significance values of 0.077 and 0.055, respectively. Although slightly below or close to the 0.05 threshold, results are still acceptable in the context of social research.

Table 3 Normality Test Results

One-Sample Kolmogorov-Smirnov Test					
			Financial Technology	Service Provider	Customer Value
N			87	87	87
Normal Parameters[a,b]	Mean		55.9885	23.6437	15.9885
	Std. Deviation		10.14946	3.29191	2.51273
Most Extreme Differences	Absolute		.079	.135	.142
	Positive		.053	.065	.142
	Negative		-.079	-.135	-.111
Test Statistic			.079	.135	.142
Asymp. Sig. (2-tailed)			.200[c,d]	.000[c]	.000[c]
Monte Carlo Sig. (2-tailed)	Sig.		.620[e]	.077[e]	.055[e]
	99% Confidence Interval	Lower Bound	.607	.071	.049
		Upper Bound	.633	.084	.061
a. Test distribution is Normal.					
b. Calculated from data.					
c. Lilliefors Significance Correction.					
d. This is a lower bound of the true significance.					
e. Based on 10000 sampled tables with starting seed 1502173562.					

Source: Results of data analysis

Overall, the normality test results in Table 3 show that the data on the *Financial Technology* variable satisfies the normality assumption conclusively. In contrast, the other two variables show results close to normal distribution. Although the significance values of *Asymp. Sig. Significance values* for *Service Provider* and *Customer Value* are below 0.05, the *Monte Carlo Sig.* The approach provides probability estimates that are more tolerant and indicate that the data do not suffer from extreme deviations from the normal distribution. Thus, the data in this study is still suitable for multiple linear regression analysis because the assumption of normality is not significantly violated.

Autocorrelation Test

Table 3 displays the results of the autocorrelation test through the *Durbin-Watson* statistic in the regression model that examines the effect of *Financial Technology* and *Service Providers* on *Customer Value*. The *Durbin-Watson* value of 1.854 falls within the general tolerance range of 1.5 to 2.5, indicating no significant autocorrelation in this regression model. In addition, the *R Square* value of 0.319 indicates that the two independent variables can explain approximately 31.9% of the variation in *Customer Value*. In contrast, the *Adjusted R Square* value of 0.303 indicates adjusting the model's predictive power to the number of independent variables used.

With a *Durbin-Watson* value of 1.854, this regression model fulfils the free autocorrelation assumption, which is an important requirement in multiple linear regression analysis. When residuals between observations are not correlated, the model is more reliable for making

predictions and drawing conclusions. These results support the feasibility of the model in explaining the relationship between *Financial Technology* and *Service Providers* to *Customer Value* so that it can be used for further analysis and data-based decision making.

Table 3 Autocorrelation Test Results

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error Of The Estimate	Durbin-Watson
1	.565[a]	.319	.303	2.09820	1.854
A. Predictors: (Constant), Service Provider, Financial Technology					
B. Dependent Variable: Customer Value					

Source: Results of data analysis

Heteroscedasticity Test

Table 4 presents the results of the heteroscedasticity test conducted using the Glejser regression method, where the dependent variable used is the *Absolute Residual (Abs_RES)*. This test aims to identify whether there is an inequality of variance from the residuals at each independent variable value. In the analysis results, the significance value (*Sig.*) for the *Financial Technology* variable is 0.984, and for the *Service Provider, it* is 0.511, well above the significance threshold of 0.05.

Table 4 Heteroscedasticity Test Results

Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1(Constant)	2.447	1.115		2.195	.031
Financial Technology	.000	.020	.003	.020	.984
Service Provider	-.040	.061	-.094	-.660	.511
a. Dependent Variable: Abs_RES					

Source: Results of data analysis

Validity Test

Table 5 shows the validity test results for the three variables used in this study: *Financial Technology*, *Service Providers*, and *Customer Value*. The validity test is conducted to measure the extent to which each item on the scale contributes to the overall measurement of the construct. The *Corrected Item-Total Correlation* value presented in this table provides an overview of the relationship between each item and the total scale score. The higher this correlation value, the more valid the item is in measuring the intended construct.

Reliability Test

Table 6 presents the reliability test results of the research instruments used to measure the three variables, namely *Financial Technology*, *Service Providers*, and *Customer Value*. This reliability test is conducted to determine the extent of the internal consistency of the items in the questionnaire, which is measured using *Cronbach's Alpha* value. The closer to 1, the higher the instrument's consistency and reliability level.

Table 6 Reliability Test Results

Reliability Statistics	
Cronbach's Alpha	N of Items
.594	3

Source: Results of data analysis

Based on the test results shown in the table, *Cronbach's Alpha* value of 0.594 indicates that the instrument's reliability is sufficient even though it is still below the ideal threshold of 0.7, which is commonly used as a minimum standard. This shows that although the instrument used is relatively consistent in measuring the intended construct, there is still room for improvement, such as adding or refining question items to increase reliability in future studies.

Table 5 Validity Test Results

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Financial Technology	39.6322	24.886	.702	.495	.622
Service Provider	71.9770	137.092	.663	.440	.405
Customer Value	79.6322	157.212	.563	.319	.552

Source: Results of data analysis

Based on the validity test results in the table, all items in the three variables show a reasonably high correlation with the scale's total score, with a *Corrected Item-Total Correlation* value of more than 0.5 each, indicating good validity. In addition, *Cronbach's Alpha if Item Deleted* value also supports that no items need to be deleted to improve the scale's reliability. Thus, the items used in this study have sufficient validity for further analysis.

Multiple Linear Regression Analysis

Multiple linear regression analysis was conducted to determine the effect of *Financial Technology* and *Service Provider* variables on *Customer Value*. The regression analysis results are shown in Table 7 below:

Table 7 Multiple linear regression analysis results

Coefficients								
		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model		B	Std. Error	Beta	T	Sig.	Tolerance	VIF
1	(Constant)	6.655	1.660		4.008	.000		
	Financial Technology	.103	.029	.416	3.517	.001	.579	1.727
	Service Provider	.151	.090	.198	1.669	.099	.579	1.727

A. Dependent Variable: Customer Value

Source: Results of data analysis

The multiple linear regression model used in this study aims to analyze the effect of *Financial Technology* (X_1) and *Service Provider* (X_2) variables on *Customer Value* (Y). This model is formulated in the form of an equation: $Y = 6{,}655 + 0.103X_1 + 0.151X_2 + e$, where e is the error component (residual). Based on this equation, it can be explained that the constant value of 6.655 indicates that if there is no change or contribution from the two independent variables, the value of *Customer*

Value remains at 6.655. The regression coefficient on the *Financial Technology* variable of 0.103 indicates that each one-unit increase in the use or utilization of financial technology will increase *Customer Value* by 0.103 units, assuming other variables remain constant. Meanwhile, the regression coefficient on the *Service Provider* variable of 0.151 means that a one-unit increase in the quality of service provided by the service provider can increase *Customer Value* by 0.151 units if other factors are held constant.

Furthermore, the partial significance test (t-test) results are used to assess the effect of each independent variable individually on the dependent variable. The test results show that the *Financial Technology* variable has a significance value of 0.001, smaller than the 0.05 significance level. This indicates that *Financial Technology* significantly influences *Customer Value*, so the null hypothesis (H_o) is rejected, and the alternative hypothesis (H_1) is accepted. In contrast, the *Service Provider* variable obtained a significance value of 0.099, which exceeds the significance limit of 0.05. This means that *the Service Provider* does not significantly affect *Customer Value*, so H_o is accepted, and H_1 is rejected. This finding suggests that in the context of this model, financial technology plays a more dominant role than service providers in increasing customer perceived value.

Simultaneous Significance Test (F-Statistic Test)

Table 8 presents the results of the F-test (ANOVA) to test the significance of the multiple linear regression model used in this study. The F test was conducted to determine whether the independent variables simultaneously significantly affect the dependent variable, namely *Customer Value*. The two predictor variables used in this model are *Financial Technology* and *Service Provider*.

Table 8 F Test Results

ANOVA[a]						
	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	173.184	2	86.592	19.669	.000[b]
	Residuals	369.805	84	4.402		
	Total	542.989	86			
A. Dependent Variable: Customer Value						
B. Predictors: (Constant), Service Provider, Financial Technology						

Source: Results of data analysis

Based on the analysis results, the calculated F value of 19.669 with a significance of 0.000 (smaller than 0.05) indicates that the overall regression model is significant. This means that *Financial Technology* and *Service Providers* together have a significant influence on *Customer Value*. Thus, this model is suitable for explaining variations in *Customer Value* based on these two independent variables.

Table 9. Results from Research Findings

No.	Hypothesis	T-test	F test	Results
1	FT -> NP	3,517 > 2,093		*Positive*, *Significant*
2	PL->NP	1,669 < 2,093		*Positive*, *Not Significant*
3	FT&PL Simultaneously with NP		19,669	*Positive*, *Significant*

Source: Summary of test results

Discussion

This study aims to analyze the effect of *Financial Technology* (FinTech) and Service Provider variables on Customer Value using multiple linear regression models. In this model, the analysis was conducted to examine the contribution of each variable to customers' perception of the value they receive from financial services. The results of the analysis show that both FinTech and Service Providers make a positive contribution to increasing Customer Value, although the level of significance is different. The regression equation obtained from the data processing results is: $Y = 6.655 + 0.103X_1 + 0.151X_2 + e$, where Y represents Customer Value, X_1 is FinTech, and X_2 is Service Provider (Iman et al., 2023; Suryono et al., 2020). This model shows that technological innovation and service quality are important factors in creating customer-perceived value in financial services.

The regression coefficient of the FinTech variable of 0.103 indicates a positive influence between the use of financial technology and Customer Value. This means that every one-unit increase in the application of financial technology will increase Customer Value by 0.103 units, assuming other variables are constant. This indicates that FinTech is strategically shaping customers' positive experiences and perceptions of the services provided. Application-based services, transaction speed, ease of access, and service personalization are important elements in building such value. Therefore, the development of FinTech solutions should be the primary focus of companies in creating added value and competitive advantage (Abdul-Rahim et al., 2022; Dananjayan et al., 2023; Iqbal et al., 2021).

Furthermore, the regression coefficient of the Service Provider variable of 0.151 also shows a positive effect on Customer Value. This means that an increase in service quality, such as speed of response, staff friendliness, and accuracy of information, can theoretically increase customer perceived value by 0.151 units (Barbu et al., 2021). However, based on the significance test, the contribution of this variable is not statistically substantial enough to be declared significant. This indicates that despite its importance, the influence of service providers on customer value may be influenced by other external factors, such as brand perceptions, customer preferences, or even digital interactions that are not directly measured in the model. Therefore, a deeper understanding of the dynamics of interactions between customers and service providers is still needed to clarify the contribution of this variable (Alkhazaleh & Haddad, 2021).

The t-test results for each variable show that FinTech has a t-value of 3.517 with a significance value of 0.001. This value is smaller than the significance threshold of 0.05, indicating that FinTech significantly affects Customer Value. This means that, statistically, the role of FinTech in shaping customer perceived value is decisive and cannot be ignored. In contrast, Service Provider has a t-value of 1.669 with a significance of 0.099, greater than the limit of significance set. This suggests that the contribution of Service Providers individually is not substantial enough to influence Customer Value significantly, despite the positive regression coefficient (“Financial Innovation and Banking Product Evolution: Potential Trends and Risks,” 2023; Wang et al., 2023).

In addition to partial testing, this study also conducted an F test (ANOVA) to determine the effect of the two independent variables simultaneously on the dependent variable. The analysis results show that the F value is 19.669 with a significance level 0.000, much smaller than the 0.05 threshold. This proves that the regression model used has a good level of reliability and can explain the variation in Customer Value as a whole. Thus, although not all variables have a significant effect partially, their combination has a meaningful effect simultaneously on perceived customer value. These findings prove that FinTech integration and service quality can simultaneously increase customer satisfaction and loyalty (Ghimire et al., 2022; Ozili, 2020).

The implications of these findings provide strategic direction for companies in the financial services sector. Companies need to pay greater attention to developing intuitive, efficient, and

secure FinTech systems and platforms to meet the expectations of modern customers who increasingly rely on digital services. Although the quality of service providers is statistically insignificant, their role remains critical as enablers of successful FinTech implementation. In this case, integrating technology and human touch can create a more complete and meaningful service experience. Thus, a collaboration between technological innovation and human service capacity building is key to creating sustainable customer value (Chitimira & Munedzi, 2022; Dananjayan et al., 2023).

Overall, the results of this study provide a deeper understanding of the importance of digital transformation in the financial services industry. While technology is a key driver of increased customer value, the quality of interactions and support from service providers still plays a strategic role that cannot be ignored. The regression model used has provided empirical evidence that the combination of these two factors can explain the dynamics of customer value in the context of today's digital finance. Therefore, future development strategies should balance technological improvements and strengthen human service capacity to respond to increasingly complex customer challenges and needs. These findings significantly contribute to the literature and practice of financial services management in the digital era.

CONCLUSION

Based on the multiple linear regression analysis results, this study shows that financial technology (FinTech) has a positive and significant influence on customer value. At the same time, service providers have a positive influence, but not statistically significant. With a significance value of 0.001 for the FinTech variable, it is evident that digital innovation is important in improving customer perceptions and experiences in financial services. In contrast, although the service provider has a positive regression coefficient, its significance value (0.099) indicates that individually, its contribution is not strong enough to influence customer value significantly. This indicates that customers today benefit more directly from the convenience and speed of technology than from traditional interactions with service providers.

However, when tested simultaneously through the F test, the two variables together significantly affect customer value, with a significance value of 0.000. Integrating FinTech utilization and service provider support is still relevant to creating higher customer value. The implications of these findings suggest that companies in the financial services sector need to develop reliable technology systems while ensuring humanized service support. With this integrated approach, companies can meet the expectations of modern digital customers and build long-term loyalty through the quality of meaningful service interactions.

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