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THE UTILIZATION OF STRUCTURAL EQUATION MODELLING TO DETERMINE CASUALITY ON CONSUMER DECISION OF E-WALLET

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ABSTRACT

One of the technological innovations that exemplifies transactional innovation is the use of an E-Wallet as a means of carrying out financial transactions. This invention enhances transactional ease and quickness. The E-Wallet is the most popular means of financial transaction among the general population. The traditional marketing mix has developed into the product, price, place, promotion, personalization, privacy, customer service, community, site, security, and sales promotion (4Ps+P2C2S3). These criteria are used to evaluate their efficacy in persuading customers to adopt an E-Wallet. Structural Equation Modeling (SEM) is used to assess the causal link between e-marketing mix items and customer decisions to use E-Wallet. SEM provides the core capability of validating the validity and reliability of procedures such as Confirmatory Factor Analysis (CFA). by investigating the pattern of linkages between latent variables and showing them with route diagrams. This study employed 200 E-Wallet users in Palembang for modeling. with the criterion of having one of the E-Wallet programs on a smartphone and having used the application at least once. According to the results of the consumer response processing. all constructs have Cronbach's Alpha (CA) > 0.60, indicating that all constructs are valid for use in measurement. As do the Average Variance Extracted (AVE) and Composite Reliability (CR) values > 0.70, indicating that the construct explains more than half of the variance coming from the indicators. Furthermore, we show the results of evaluating the causal relationship between endogenous construct elements that influence customer decisions, such as location, security, and sales promotion.

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1. INTRODUCTION

With the increasingly rapid progress of technology today, more and more discoveries are emerging. An E-Wallet is one of the alternatives for transactions. E-Wallets, also known as Digital Wallets, make it easier for users to make payments. E-Wallets are gaining popularity among Palembang locals, both workers and non-workers. Before E-Wallet, individuals completed transactions utilizing bank transfers, ATMs, and mobile banking, but with the availability of the E-Wallet application in Palembang. Palembang residents now have more options for new transaction tools. According to previous research in Palembang, the most widely used E-Wallets include OVO, Gopay, Shopeepay, Dana, i-Saku, and LinkAja [1].

Several variables can impact Palembang residents' decision to utilize an E-Wallet. To impact client decisions, e-wallet companies will provide stimulation by combining the proper marketing mix strategy with a digital idea. The marketing mix concept has evolved into a digital marketing mix known as the e-marketing mix, which consists of 4Ps+P2C2S3, namely Product, Price, Place, Promotion, Personalization, Privacy, Customer Service, Community, Site, Security, and Sales Promotion [2][3]. This e-marketing mix component extends on the 4P paradigm by introducing an e-commerce environmental component. [3].

The e-marketing mix concept of [2], has been historically used to analyze the success of e-commerce in influencing customer behavior. And it will be empirically demonstrated in this study if this approach can also be used to the E-Wallet application. Previous research employed an e-marketing mix to examine consumer behavior in online meal delivery apps like GoFood, Grab meal, and ShopeeFood. This concept of e-marketing mix was developed through research that included aspects such as price, product, place, promotion, community, site and customer service [4]. All elements, including pricing, product, place, marketing, community, site, and customer service, have a significant influence on customers' decisions to use the application, according to the study's findings.

There have been discrepancies in the study's conclusions [5] in the form of several inconsistencies in the study's results, where the e-marketing mix is used to measure its usefulness in influencing client decisions using online meal delivery apps with four variables: e-price, e-product, e-place, and e-promotion. According to the study's findings, e-products have no significant influence on customers' decisions to use online meal delivery services [5]. Aside from items, price is another factor that determines research outcomes. The cost of Go-Jek was assessed to be modest in terms of influencing user interest in using it [6].

Variations in study results show that variations occur. allowing variables to be retested by developing an e-marketing mix concept matched to the context of the E-Wallet application. The factors employed in this study expand on the idea of e-marketing mix [2][3] where the variables used are Product, Price, Place, Promotion, Personalization, Privacy, Customer Service, Community, Site, Security, and Sales Promotion. These variables are compared to see how effectively they impact users' decisions to utilize the E-Wallet application rather than pay by bank transfer.

To determine the causal relationship between e-marketing mix elements and customer decisions to use E-Wallets. Structural Equation Modeling (SEM) can be employed. SEM provides the core capability of validating the validity and reliability of procedures such as Confirmatory Factor Analysis (CFA). by investigating the pattern of linkages between latent variables and showing them with route diagrams.

SEM is becoming a popular instrument in management research [7] because SEM may examine correlations ranging from basic to complicated. When a researcher wants to measure the quantity or degree of influence between components from given dimensions. SEM is one of the possible solutions [8]. Consequently, SEM is employed in this study to help provide answers in analyzing the portions of the e-marketing mix. which features effect decisions the most when compared to other criteria. SEM analysis may be used to discover the factors that most influence customers' decisions to use E-Wallets versus bank transfers. This study was conducted by mailing questionnaires to Palembang e-Wallet program users. SEM is utilized in combination with the SEM PLS statistical tool to examine the data in this investigation.

The current focus of the e-marketing mix idea is on concepts that encourage the use of various digital marketing features to achieve the objectives of a company. The e-marketing mix strategy is a strategy or effort carried out through digital product strategy, distribution methods or media. how to promote online, personalize, protect consumer privacy, provide customer service, design an effective website, secure digital transactions, and promote purchases. The concept of e-marketing mix developed by [9] from 4P (Product, Price, Place and Promotion) becomes 4P+P2C2S3 consists of Product, Price, Place, Promotion, Personalization, Privacy, Customer Service, Community, Site, Security, and Sales Promotion.

In the digital sense, products (e-products) are all the advantages that users obtain over time through trade [5]. Products under this digital concept include the creation of things or services that are delivered to customers online/digitally. Customers may instantly obtain product information from the internet [5]. When creating new products on the internet, speed is crucial [5].

Prices with a digital notion are used to price digital items or services that are made available to customers. The digital price (e-price) represents all the customer foregoes in terms of money, time, and effort in order to get the products [5]. Pricing in the context of digital marketing must include factors such as production costs, market demand, and competitor strategies. Online pricing can employ standard price, real-time pricing, and ties or bundling [5].

Place in the digital concept includes how digital products or services are distributed to customers via online channels, In the e-marketing mix, digital platforms and online distribution channels used to reach target markets are prioritized. In a digital context, *place* is defined as everything done to facilitate the transaction process [5].

In the e-marketing mix, digital platforms and online distribution channels used to reach target markets are prioritized. In a digital context, location is defined as everything done to facilitate the transaction process [5]. Digital promotion encompasses a wide range of methods and approaches used to promote digital products or services to specific audiences [10]. Digital promotion includes online advertising. content marketing, email marketing. and other digital promotional efforts.

Personalization in digital concepts refers to the use of consumer data obtained through monitoring. information mining, and data analysis to adapt a person's interactions with a company's goods, services, websites, and personnel [11]. This customization may include the use of consumer data and technology to offer appropriate communications, information, and experiences based on the customer's inclinations or preferences.

Privacy in digital services refers to the protection of customer data privacy and security in the context of digital marketing. Companies must ensure that their clients' personal information is safely protected and maintained in accordance with acceptable privacy regulations.

In the context of digital marketing. customer service refers to interactions and assistance offered to customers. Businesses must ensure that their digital customer service is timely, knowledgeable, and satisfies the expectations of their customers.

Community. in this digital sense. comprises developing and using online communities to connect with consumers, promote engagement, and improve relationships with businesses. These forums may include discussions about consumer products, user ratings and reviews, as well as registries and wish lists [3].

Websites are the design, functionality, and user experience that a website or, in this case, the company's apps provide. A business website or app should be easy to use, responsive, and provide useful information to visitors. A home page, navigation and search, as well as page design and style, may be included in this website or application [3].

Digital security relates to how to protect customer data and transactions in a digital environment. Security must be prioritized in digital marketing, and organizations must implement appropriate security measures to protect clients from security concerns. This security may involve the security of the application [3].

This sales promotion in the context of digital marketing is comprised of several promotional tactics and strategies designed to promote customer purchases or activities. Sales promotions include e-coupons, discounts, refunds, and other sales incentives [3].

2. RESEARCH METHODS

2.1 Population dan Sample

Researchers gathered information by sending a survey link to users in Palembang who utilized non-bank E-Wallet programs. Because the population is big and unknown, and the researchers have limited time, this study solely uses samples gathered from the population. Non-probability sampling with purposive sampling is used in this study. The following conditions were met by respondents in this poll: they had one of the E-Wallet applications on their smartphone, had used it at least once, and lived in Palembang. Consumers who used an E-Wallet completed 200 surveys via an internet connection. Eleven surveys were deemed unsuitable (never having used an E-Wallet. missing data. and not knowing the answers), and as a result, they were forbidden from processing data in financial transactions.

Table 1. Respondent Demographic Profile Statistics

Demographic Questions	Categories	Total	Statistics (%)
Gender	Male	61	30.5
	Female	139	69.5
Age	< 15	2	1
	$15 - 26$	76	38
	$27 - 42$	82	41
	$43 - 58$	37	18.5
	$59 - 64$	3	1.5
Occupation	Civil Servants/Lecturers/Army/Police/Teacher	69	34.5
	Private sector employee	38	19
	Honorary/Freelancer/Contract workers	12	6
	Housewives	10	5
	BUMN/BUMD/BANK employees	8	4
	Independent Entrepreneurs	5	2.5
	Students	56	28
	Unemployed	2	1
Education	Secondary School	1	0.5
	High School	61	30.5
	Diploma I/Diploma III	13	6.5
	Undergraduate	65	32.5
	Master Degree	54	27
	Doctorate Degree	6	3
E-Wallet which is often used by the consumers	Gopay	67	33.5
	Dana	87	43.5
	Shopeepay	31	15.5
	OVO	15	7.5

Table 1 shows the demographics of respondents who use E-Wallet to execute financial transactions. According to data processing results, nearly 70% of users are women. with an age range of 27-42 years, with a percentage of 41 being the productive age in using smartphones, the type of work is civil servants/lecturers/army/teachers with a percentage of 34.5, the most users with a percentage of 32.5 being undergraduate graduates, and the most popular application is Dana with a percentage of 43.5 being in Dana.

2.2 Measurement of Instruments

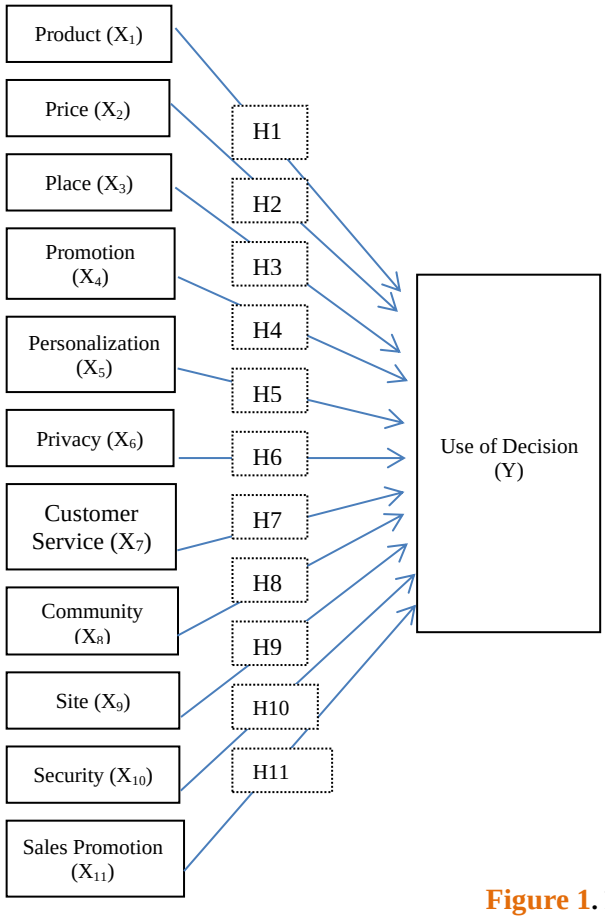
The e-marketing mix concept is centered on the idea of encouraging the usage of multiple digital marketing aspects to fulfill a company's objectives. The e-marketing mix strategy is an effort made through digital product strategy, setting appropriate digital prices, distribution media, online promotion, personalization, protecting consumer privacy, providing customer service, designing an effective website, securing digital transactions, and promoting purchases. The e-marketing mix concept was developed from 4P (Product, Price, Place and Promotion) to 4P+P2C2S3 which consists of Product, Price, Place, Promotion, Personalization, Privacy, Customer Service, Community, Site, Security, and Sales Promotion.

The replies of respondents are measured by assigning scale levels or measurement values on a differential scale ranging from 1 to 5, with each pole having a consistent positive and negative pole. Before putting the instrument to the test. it was assessed on 86 persons in this research.

2.3 Partial Least Square Structural Equation Model (PLS SEM)

The data in this study is analyzed using PLS SEM, which is consistent with the research goals of building models, providing route analysis, estimating models, and avoiding the limitations of using covariance-based SEM, which is concerned with sample size and data distribution.

The diagram below represents the study structure. which is based on a literature review, conceptual foundations, and relevant previous research:



H1 : Price has a significant influence on the decision to use E-Wallet
H2 : Product has a significant influence on the decision to use E-Wallet
H3 : Promotion has a significant influence on the decision to use E-Wallet
H4 : Place has a significant influence on the decision to use E-Wallet
H5 : Personalization has a significant influence on the decision to use E-Wallet
H6 : Privacy has a significant influence on the decision to use E-Wallet
H7 : Customer service has a significant influence on the decision to use E-Wallet
H8 : Community has a significant influence on the decision to use E-Wallet
H9 : Site has a significant influence on the decision to use E-Wallet
H10 : Security has a significant influence on the decision to use E-Wallet
H11 : Sales promotion has a significant influence on the decision to use E-Wallet

Figure 1. Research Framework

According to Bollen. SEM typically consists of two models. A structural model is the initial model:

$$\eta_{(m\times 1)} = B_{(m\times m)}\eta_{(m\times 1)} + \Gamma_{(m\times n)}\xi_{(n\times 1)} + \zeta_{(m\times 1)} \quad (1)$$

This method uses simultaneous equation modeling (multiple regression analysis) in econometrics. In econometrics, all variables are measurable/observable/manifest variables (measured/observable/manifest variables); the variables under consideration in this model are constructs or latent variables or unmeasured or unobservable variables (latent variables/unobservable variables). The model's essential concept is confirmatory factor analysis (CFA), which specifies indicators or measurable variables in relation to the influence or reflection of latent variables. The second model is the measurement model:

$$y_{(p\times 1)} = \Lambda_{y(p\times m)}\eta_{(m\times 1)} + \varepsilon_{(p\times 1)} \quad (2)$$

$$x_{(q\times 1)} = \Lambda_{x(q\times n)}\eta_{(n\times 1)} + \varepsilon_{(q\times 1)} \quad (3)$$

2.4 Evaluation of PLS SEM

Model evaluation in PLS includes two stages, namely evaluation of the measurement model and evaluation of the structural model. Evaluation of the measurement model is carried out by the following criteria [11]:

1. Indicator reliability, shows how many indicator variants can be explained by the latent variable by paying attention to the loading value. Where if the loading value is smaller than 0.6 then the indicator must be eliminated from the model.
2. Internal consistency or construct reliability, which can be calculated through a composite reliability (CR) value of more than 0.6 with the following equation.

$$\hat{\rho} = \frac{\left(\sum_{i=1}^{n} \hat{\lambda}_i\right)^2}{\left(\sum_{i=1}^{n} \hat{\lambda}_i\right)^2 + \sum_{i=1}^{n} \mathrm{var}(\hat{\varepsilon}_i)} \quad (4)$$

3. Convergent validity. generally checked with average variance extracted (AVE) which is calculated based on the following equation.

$$\mathrm{AVE} = \frac{\sum_{i=1}^{n} \hat{\lambda}_i^{\,2}}{\sum_{i=1}^{n} \hat{\lambda}_i^{\,2} + \sum_{i=1}^{n} \mathrm{var}(\hat{\varepsilon}_i)} \quad (5)$$

The AVE value is at least 0.7 to indicate a good measure of convergent validity.

2. 5 Regression Analysis

Multiple regression analysis is a technique for explaining changes in one or more independent variables by changes in the dependent variable. This is expressed by the probability model in the following equation [12]:

$$Y_i = a + b_1X_1 + b_2X_2 + \cdots + b_kX_k + \varepsilon_i \quad (6)$$

The regression parameter estimates in this study were updated using the least squares approach. which is often used in multiple regression analysis.

3. RESULTS AND DISCUSSION

3.1 Designing Model

This investigation's model design outcomes are depicted in Figure 2.

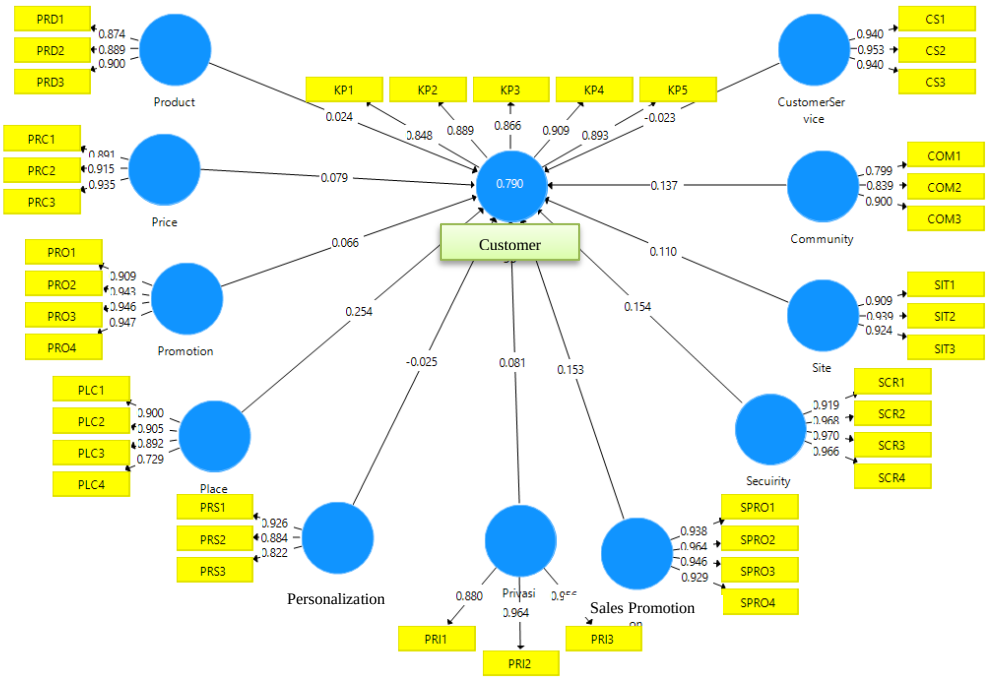


Figure 2. Instrument Test Design Model

There are two steps to the instrument test model. The first level shows a reflective relationship between constructs and indicators (outer model), whereas the second shows a reflective relationship between exogenous construct variables and user assessments on endogenous construct variables (inner model).

3.2 Convert Equation

The tool model testing results are then converted into mathematical equations so that the model's links may be properly understood. The indicator's measurement model (external model) is shown in **Table 2**:

Table 2. Mathematical Equations of Outer Model

Construct	Equations		
Product	$\text{Prd} = \Lambda_{\text{Prd1}}\text{Prd} + \varepsilon_{\text{Prd1}}$	⋯	$\text{Prd} = \Lambda_{\text{Prd3}}\text{Prd} + \varepsilon_{\text{Prd3}}$
Price	$\text{Prc} = \Lambda_{\text{Prc1}}\text{Prc} + \varepsilon_{\text{Prc1}}$	⋯	$\text{Prc} = \Lambda_{\text{Prc3}}\text{Prc} + \varepsilon_{\text{Prc3}}$
Promotion	$\text{Pro} = \Lambda_{\text{Pro1}}\text{Pro} + \varepsilon_{\text{Pro1}}$	⋯	$\text{Pro} = \Lambda_{\text{Pro4}}\text{Pro} + \varepsilon_{\text{Pro4}}$
Place	$\text{Plc} = \Lambda_{\text{Plc1}}\text{Plc} + \varepsilon_{\text{Plc1}}$	⋯	$\text{Plc} = \Lambda_{\text{Plc4}}\text{Plc} + \varepsilon_{\text{Plc4}}$
Personalization	$\text{Prs} = \Lambda_{\text{Prs1}}\text{Prs} + \varepsilon_{\text{Prs1}}$	⋯	$\text{Prs} = \Lambda_{\text{Prs3}}\text{Prs} + \varepsilon_{\text{Prs3}}$
Privacy	$\text{Pri} = \Lambda_{\text{Pri1}}\text{Pri} + \varepsilon_{\text{Pri1}}$	⋯	$\text{Pri} = \Lambda_{\text{Pri3}}\text{Pri} + \varepsilon_{\text{Pri3}}$
Customer Service	$\text{Cs} = \Lambda_{\text{Cs1}}\text{Cs} + \varepsilon_{\text{Cs1}}$	⋯	$\text{Cs} = \Lambda_{\text{Cs3}}\text{Cs} + \varepsilon_{\text{Cs3}}$
Community	$\text{Com} = \Lambda_{\text{Com1}}\text{Com} + \varepsilon_{\text{Com1}}$	⋯	$\text{Com} = \Lambda_{\text{Com3}}\text{Com} + \varepsilon_{\text{Com3}}$
Site	$\text{Sit} = \Lambda_{\text{Sit1}}\text{Sit} + \varepsilon_{\text{Sit1}}$	⋯	$\text{Sit} = \Lambda_{\text{Sit3}}\text{Sit} + \varepsilon_{\text{Sit3}}$
Security	$\text{Scr} = \Lambda_{\text{Scr1}}\text{Scr} + \varepsilon_{\text{Scr1}}$	⋯	$\text{Scr} = \Lambda_{\text{Scr4}}\text{Scr} + \varepsilon_{\text{Scr4}}$
Sales Promotion	$\text{Spro} = \Lambda_{\text{Spro1}}\text{Spro} + \varepsilon_{\text{Spro1}}$	⋯	$\text{Spr} = \Lambda_{\text{Spro3}}\text{Spro} + \varepsilon_{\text{Spro3}}$

Meanwhile. the following equation gives the structural model equation (inner model):

$$\text{KP} = \beta_0 + \beta\text{KP} + \Gamma\text{Prd} + \Gamma\text{Prc} + \Gamma\text{Pro} + \Gamma\text{Plc} + \Gamma\text{Prs} + \Gamma\text{Pri} + \Gamma\text{Cs} + \Gamma\text{Com} + \Gamma\text{Sit} + \Gamma\text{Scr} + \Gamma\text{Spro}$$

3.3 Evaluation of Model

Responses are evaluated by providing scale levels or measurement values on a 5-point difference scale with positive and negative poles. The outer model is assessed by focusing on the component with Loading, Cronbach's Alpha (CA), and Composite Reliability (CR) > 0.60 ; and Average Variance Extracted (AVE) > 0.70. the findings for the measurements using SMARTPLS 3.0 are shown in **Table 3**.

Table 3. Measure The Outer Model

Construct	Definition	Indicators	Loading	CA	AVE	CR
Product	E-Wallet services to consumers	Application display	0.874	0.866	0.788	0.918
		Application usability	0.889			
		Application uniqueness	0.900			
Price	Everything the acquirer provides in terms of money. time. and effort to utilize the E-Wallet	E-wallet is quite cheap	0.891	0.901	0.836	0.938
		E-wallet provide good value for money	0.915			
		E-wallet provide good value	0.935			
Promotion	All information provided to users by E-Wallet providers for marketing purposes	Attract attention	0.909	0.953	0.877	0.966
		Maintain interest	0.943			
		Inspire desire	0.946			
		Motivate action	0.947			
Place	Everything is done with E-Wallet to expedite the consumer transaction procedure.	Ease of obtaining applications	0.900	0.879	0.738	0.918
		Ease of menu/feature display design	0.905			
		Frequency of online visits	0.892			
		Duration of online visits	0.729			
Personalization	The capacity of an e-Wallet to give clients with tailored experiences	Purchase as required	0.926	0.851	0.771	0.910
		Consumer preferences are influenced by experience	0.884			
		Content of the application based on consumer preferences	0.822			
Privacy	E-Wallet providers must protect the privacy and security of their customers' personal information	Concerned about misused	0.880	0.926	0.873	0.954
		Concerned that someone might discover sensitive information	0.964			
		Concerned about disclosing my personal information	0.956			
Customer Service	E-Wallet provides customer service	Responsive	0.940	0.939	0.892	0.961
		Informative	0.953			
		Fulfilling customer's expectation	0.940			
Community	Creating and using online communities to communicate with consumers, increase engagement, and enhance relationships with E-Wallet providers	Product discusses among consumers	0.799	0.802	0.718	0.884
		Provides feedback and ratings	0.839			
		Favorite desired menus	0.900			
Site	Design. functionality. and user experience of e-wallets	Easy to use	0.909	0.914	0.854	0.946
		Responsive application	0.939			
		Provide appropriate information	0.924			
		Feel safe sending information	0.919			
Security	The security of E-Wallet	E-wallet a secure means to share sensitive information	0.968	0.968	0.914	0.977
		feel safe providing sensitive information	0.970			
		E-wallet is a secure method to share sensitive information	0.966			
Sales Promotion	Techniques and initiatives for encouraging the usage of E-Wallets.	Discount Offer	0.938	0.960	0.892	0.971
		Cashback Offer	0.964			
		Vouchers Offer	0.946			
		Direct gift Offer	0.929			
Consumer's Choices		Product Choices	0.848	0.928	0.777	0.946
		Brand Choices	0.889			
		E-wallet can be used with other application	0.866			
			0.909			
		Time/amount of use	0.893			

According to the measurement results presented in **Table 3**, all constructs have a CA value greater than 0.60, indicating that they are valid for use in measurement, as well as AVE and CR values greater than 0.70. indicating that the construct explains more than half of the variance attributable to the indicators. The next step is to evaluate discriminant validity to determine the relationship between indicators and latent variables. The Root Average Variance Extracted (AVE) value is compared to the correlation between latent variables/constructs for establishing discriminant validity. **Table 4** shows the results of data processing.

Table 4. Instrument Test Discriminant Validity

Indicator	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	X_9	X_{10}	X_{11}	Y
PRD1	0.874	0.599	0.599	0.651	0.636	0.608	0.565	0.643	0.640	0.563	0.565	0.603
PRD2	0.889	0.612	0.730	0.659	0.602	0.596	0.555	0.623	0.665	0.531	0.557	0.657
PRD3	0.900	0.769	0.726	0.729	0.664	0.620	0.602	0.660	0.690	0.613	0.632	0.691
PRC1	0.711	0.891	0.652	0.637	0.566	0.554	0.560	0.581	0.608	0.550	0.551	0.643
PRC2	0.669	0.915	0.662	0.676	0.635	0.621	0.579	0.629	0.645	0.611	0.580	0.672
PRC3	0.670	0.935	0.661	0.704	0.649	0.642	0.558	0.669	0.659	0.634	0.609	0.658
PLC1	0.696	0.671	0.900	0.683	0.701	0.617	0.632	0.653	0.827	0.613	0.622	0.721
PLC2	0.722	0.658	0.905	0.698	0.712	0.623	0.659	0.646	0.829	0.626	0.620	0.726
PLC3	0.685	0.562	0.892	0.692	0.662	0.581	0.576	0.656	0.715	0.581	0.629	0.710
PLC4	0.547	0.580	0.729	0.621	0.656	0.602	0.497	0.654	0.560	0.557	0.621	0.652
PRO1	0.679	0.681	0.700	0.909	0.643	0.650	0.597	0.702	0.650	0.594	0.659	0.686
PRO2	0.709	0.711	0.728	0.943	0.663	0.675	0.638	0.718	0.695	0.603	0.699	0.711
PRO3	0.720	0.671	0.743	0.946	0.698	0.666	0.641	0.735	0.702	0.687	0.724	0.751
PRO4	0.761	0.696	0.768	0.947	0.714	0.689	0.654	0.763	0.707	0.678	0.747	0.752
PRS1	0.630	0.598	0.703	0.650	0.926	0.665	0.623	0.736	0.698	0.692	0.636	0.685
PRS2	0.666	0.623	0.750	0.627	0.884	0.654	0.656	0.738	0.753	0.678	0.591	0.716
PRS3	0.581	0.554	0.635	0.641	0.822	0.725	0.637	0.716	0.605	0.611	0.693	0.617
PRI1	0.549	0.648	0.636	0.638	0.692	0.880	0.558	0.694	0.602	0.641	0.630	0.643
PRI2	0.668	0.599	0.660	0.677	0.737	0.964	0.718	0.774	0.666	0.702	0.693	0.717
PRI3	0.694	0.618	0.681	0.691	0.735	0.956	0.736	0.798	0.683	0.729	0.679	0.741
CS1	0.562	0.540	0.587	0.593	0.649	0.668	0.940	0.680	0.633	0.595	0.640	0.613
CS2	0.642	0.584	0.669	0.655	0.669	0.713	0.953	0.767	0.728	0.660	0.662	0.684
CS3	0.624	0.625	0.694	0.663	0.737	0.663	0.940	0.733	0.743	0.682	0.702	0.690
COM1	0.571	0.556	0.596	0.630	0.707	0.646	0.725	0.799	0.633	0.647	0.645	0.606
COM2	0.628	0.563	0.656	0.658	0.667	0.663	0.647	0.839	0.655	0.606	0.654	0.667
COM3	0.637	0.622	0.676	0.692	0.740	0.744	0.605	0.900	0.671	0.678	0.643	0.746
SIT1	0.706	0.613	0.796	0.628	0.684	0.608	0.630	0.678	0.909	0.603	0.647	0.732
SIT2	0.675	0.639	0.769	0.676	0.727	0.613	0.673	0.681	0.939	0.669	0.662	0.697
SIT3	0.696	0.679	0.810	0.731	0.761	0.706	0.758	0.770	0.924	0.719	0.693	0.773
SCR1	0.654	0.652	0.691	0.666	0.730	0.722	0.673	0.747	0.739	0.919	0.665	0.743
SCR2	0.588	0.612	0.641	0.646	0.715	0.689	0.636	0.731	0.673	0.968	0.644	0.717
SCR3	0.603	0.621	0.651	0.659	0.720	0.712	0.664	0.721	0.667	0.970	0.664	0.714
SCR4	0.605	0.617	0.664	0.647	0.712	0.707	0.647	0.699	0.668	0.966	0.658	0.715
SPRO1	0.664	0.634	0.722	0.730	0.700	0.690	0.677	0.722	0.706	0.672	0.938	0.739
SPRO2	0.634	0.597	0.683	0.725	0.686	0.683	0.665	0.708	0.683	0.668	0.964	0.706
SPRO3	0.607	0.588	0.697	0.712	0.664	0.676	0.662	0.729	0.692	0.631	0.946	0.752
SPRO4	0.585	0.577	0.633	0.688	0.690	0.650	0.672	0.718	0.649	0.630	0.929	0.694
KP1	0.578	0.646	0.617	0.645	0.620	0.643	0.599	0.676	0.642	0.653	0.656	0.848
KP2	0.606	0.617	0.706	0.683	0.697	0.678	0.639	0.713	0.693	0.675	0.708	0.889
KP3	0.645	0.646	0.707	0.689	0.701	0.664	0.637	0.742	0.697	0.680	0.707	0.866
KP4	0.686	0.623	0.792	0.706	0.703	0.672	0.613	0.717	0.730	0.673	0.664	0.909
KP5	0.715	0.640	0.778	0.690	0.661	0.653	0.611	0.667	0.743	0.652	0.643	0.893

Table 4 shows the original AVE value of each indicator because of discriminant validation analysis in terms of the correlation between latent variables/constructs. The Root Average Variance Extracted (AVE) is greater than the correlation between other latent variables in all green blocks in the table.

3.4 Hypothesis Testing

To carry out hypothesis testing. this research compares the SEM PLS model and regression analysis. The path coefficient's value and significance are the same as when doing a hypothesis test. The degree of significance must be decided before conducting a hypothesis test. In this study, a significance level of 0.05 was adopted. The hypothesis proposed is a one-tailed hypothesis. This research used 200 respondents, based on the student t table, the value of $t_{table} = 1.652$ was acquired, and based on the value of t_{table} the hypothesis test results table was obtained. Decision making by comparing the value of t_{count} and t_{table}, if the value of t_{count} is more than the t_{table}, the null hypothesis is rejected and the alternative hypothesis is accepted. **Table 5** displays the outcomes of hypothesis testing.

Table 5. Hypothesis Testing

Hypothesis	Relation	SEM PLS		Regression	
		t_{count}	conclusion	t_{count}	conclusion
H_1	Product → Customer Decision	0.017	accept	0.340	accept
H_2	Price → Customer Decision	0.001	accept	1.522	accept
H_3	Promotion → Customer Decision	0.000	accept	0.998	accept
H_4	Place → Customer Decision	0.001	accept	3.302	reject
H_5	Personalization → Customer Decision	0.057	accept	0.538	accept
H_6	Privacy → Customer Decision	0.010	accept	1.319	accept
H_7	Customer Service → Customer Decision	0.009	accept	0.245	accept
H_8	Community → Customer Decision	0.001	accept	1.521	accept
H_9	Site → Customer Decision	0.005	accept	1.589	accept
H_{10}	Security → Customer Decision	0.035	accept	2.731	reject
H_{11}	Sales Promotion → Customer Decision	0.037	accept	2.573	reject

Table 5. There are no endogenous construct variables that influence customer decisions for the SEM PLS model, while for the regression analysis they are place, security and sales promotion.

3.5 Discussion

According to the findings of data research, the factors Product, Price, Promotion, Personalization, Privacy, Customer Service, Community, and Site all have a substantial impact on customer decisions to use E-Wallet. Meanwhile, the factors such as Place, Security, and Sales Promotion were shown to have no significant influence on consumers' decisions to use E-Wallets in Palembang.

It has been demonstrated that the product influences consumer choices to use an E-Wallet. These findings corroborate previous research findings that the product influences the choice to implement the meal delivery service concept **[5]**. The benefits of E-Wallet products, such as the look of the application, its usability, and the originality of the E-Wallet application, might influence consumers' decisions to use E-Wallet rather than transfer via ATM.

Customers' decisions to use an E-Wallet have been found to be influenced by price. Respondents feel that the cost of utilizing an E-Wallet is quite inexpensive when compared to ATM transfers, which include transaction fees. They also feel that E-Wallets are the most cost-effective option. This study supports the findings of previous investigations **[13]**. These data indicate that there are price differences between the ideas of using E-Wallet services and using food delivery services. The price of the product has no bearing on the consumer's decision to use a meal delivery service.

The study's findings show that marketing can influence users' decisions to adopt E-Wallets in an experimental setting. To entice consumers to make a purchase, the campaign must attract their attention and keep them fascinated. This study's findings support previous findings that advertisements have a significant influence on the adoption of one of the E-Wallet systems, notably Gopay **[13]**.

The adoption of E-Wallets by consumers has not been impacted by distribution channels or regions. The ease with which programs may be accessed on both Android and iOS, the presentation of menus or features in the app, and the frequency and time with which consumers explore the app do not suggest that consumers want to use E-Wallet. This study's findings support prior findings on the usage of equities brokerage services for capital market products **[14]**.

The outcomes of the study suggest that personalization can influence users' decisions to use E-Wallets. The ability of an e-Wallet to provide a personalized experience depending on user preferences or inclinations. Content and delivery of product/service information that matches customer needs. This study's findings support previous findings **[15]**.

Privacy considerations impact consumers' decisions to use E-Wallets. Customers use e-wallets because they think their privacy and data are protected, and that their information is safe with the supplier. According to the conclusions of the survey, customers are not concerned that their information would be used or that their data will be accessed by others. This study's findings support prior research findings. which indicated that privacy supports previous research findings **[16]**.

Furthermore. it has been demonstrated that customer service influences consumers' decisions to use E-Wallet in Palembang. Customers prefer E-Wallet because customer service is rapid, competent, and tailored to their specific needs. This study supports previous research results that customer service influences consumer purchasing decisions **[16]**-**17]**.

It has been established that the community has an impact on customer decisions to use an E-Wallet. Consumers feel more a part of the community and more connected because of interactions that enhance their relationship with the E-Wallet provider. Consumers may get more active in the community by participating in product discussions, providing ratings and reviews, and keeping a list of favorite menus that they frequently use. This study's findings support previous research on the purchase of mobile phone equipment **[19]**.

The choices of consumers to use E-Wallet have been found to be influenced by the site or application site. Consumers may be convinced to use the application because it is easy to use/navigate, loads rapidly, and gives pertinent information. The outcomes of this study corroborate previous research on the concept of using the tiket.com application to purchase tickets **[20]**.

Security has been shown not to impact users' decisions to use E-Wallets in Palembang. The findings of this study back with earlier research findings that security has little influence on online shopping decisions **[21].**

Consumers' decisions to use an E-Wallet in Palembang have been found to be unaffected by sales promotion. This study's findings corroborate previous research on the concept of bank products **[22]**. Consequently, while acquiring financial items such as E-Wallets and bank products in Palembang, buyers do not consider whether the bank's sales campaign is enticing or not.

4. CONCLUSIONS

The results of research using the Structural Equation Modeling model can empirically prove the causal relationship between Product, Price, Place, Promotion, Personalization, Privacy, Customer Service, Community, Site, Security, and Sales Promotion with consumer decisions to use E-Wallets in Palembang. Based on the research results, it is proven that the decision of the people of Palembang city to use E-Wallet for SEM PLS is not influenced by elements influenced by the e-marketing mix, whereas by using regression analysis several elements of the e-marketing mix consist of Place. Security and Sales Promotion. Meanwhile, other e-marketing mix elements such as Product, Price, Promotion, Personalization, Privacy, Customer Service, Community and Site were proven to have no significant effect on consumers' decisions to use E-Wallets in the city of Palembang.

Future research is planned to be able to do more detailed research on individual aspects of the e-marketing mix explored in this study, particularly those with the highest influence. Future research can evaluate alternative commodities utilizing characteristics that have been shown to be significant.

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