



Analyzing the Influence of Gopay on Spending Behaviour Insights from a Gojek Users in Indonesia

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ABSTRACT

In today's rapidly evolving digital landscape, technological innovations are fundamentally reshaping conventional practices many across sectors. This digital transformation integrates advanced technologies into operations, enhancing efficiency and accessibility. From e-commerce to communication, these advancements are altering business operations and individual interactions, creating both opportunities and challenges in this dynamic digital paradigm. The focus of this research is to delve into the impact of Gopay on spending behaviour among Gojek users in Indonesia. By examining the usage patterns and financial decisions influenced by Gopay, this study aims to uncover the factors of how digital payment methods shape consumer behaviour in the Indonesian market. Through a comprehensive analysis of data collected from an expert Interview and a client survey, this research sheds light on the intricate relationship between Gopay and spending habits, providing valuable insights for businesses, and researchers interested in understanding the dynamics of digital payment adoption and its implications on consumer financial behaviour.

Keywords: Gopay, Digital wallet, Spending behaviour, Technology Acceptance Model.

INTRODUCTION

1.1 Research Background

In every aspect of human life, innovation, technology, and progress in information and communication technologies have exerted a profound influence by introducing gradual modifications to the economy, the financial sector particularly, has witnessed transformative shifts as a result of these disruptive advancements (Setiawan et al., 2021). Within those disruptive advancement, one of the emerging and significant financial service development is Fintech. By definition Fintech as stated by Altan et al. (2022) is short for financial technology, and denotes the merging of contemporary technologies, particularly those related to the internet, such as cloud computing and mobile internet, with conventional financial services industry operations like lending and transaction banking.

Fintech plays a pivotal role in increasing the reach of financial services and inclusions for a mass unbanked population who reside in rural areas in Indonesia, which predominantly are quite distant from formal financial institutions (Setiawan et al., 2021). With that, some of the focus of Fintech in developing countries has been Internet payment and mobile communication (Giglio, 2021). One of the instruments for an Internet-based payment system is electronic wallet or E-wallet. In the opinion of Iradianty and Aditya (2020) due to benefits such as convenience, availability, discounts, and reward points offered by digital payment, there has been a noticeable increase in awareness and usage among various students in Indonesia. Based on a news article by Kompas (2022) the number one choice of e-wallet as stated by the Youth Choice Award (YCA), 2022 is Gopay.

Gopay, a digital currency or e-wallet developed by PT. Aplikasi Karya Anak Bangsa, widely known as Gojek, has gained considerable popularity among the public. Functioning as an electronic payment method, Gopay enables seamless transactions for a broad range of services provided by Gojek and its collaborative partners (Aditiansyah et al., 2023). Gojek is Southeast Asia's leading on-demand, multi-service tech platform which offers services such as GoRide (ride-

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sharing transportation service), GoSend (delivery service), GoFood (food delivery service), and many more (Gojek, 2023).

1.2 Research Question

To understand the Influence of Gopay on the spending behaviour of Gojek users in Indonesia;

the main research question for this research is:

“What factors influence the spending behaviour of Gopay’s users in Indonesia?”

Based on the main research questions, the sub-questions include:

1. How does *perceived usefulness* influence the spending behaviour of Go-Pay users?
2. How does *perceived ease of use* influence the spending behaviour of Go-Pay users?
3. How does *perceived security* influence the spending behaviour of Go-Pay users?

1.3 Research Objective

Prior efforts to understand the influence of digital wallets or e-wallets on spending behaviour, consumptive behaviour, and many other similar topics have been made by a few researchers. Furthermore, the ever-growing technological advancement in digital payment has made it clearer that we should seek to unravel more of its implications on various factors of human life. According to Tan & Renata (2023), it’s also important to understand mental accounting knowledge such as promotion, expenditure budgeting, and consumptive behaviour to avoid unnecessary expenses on new transaction solutions caused by unavoidable technological advancement.

THEORETICAL FRAMEWORK

2.1 Definitions

2.1.1 Gopay as a digital wallet

With the development of technology around the world, it emerged several types of communication technology and a revolutionary electronic payment system, an electronic wallet or E-wallet is digital payment instrument which utilize an electronic media such as computer, laptop or cell phone (Liswanty et al., 2023). According to Liswanty et al (2023) there are a noticeable increase of digital business which brought changes into their business model, in order to adopt e-wallets as it gave a profound impact on conventional banking by providing convenient, cost-effective and time saving payment services in order to ensure effectiveness and efficiency.

2.1.2 Spending Behaviour and Gopay

In this research, spending behaviour is the main key variables we would like to conduct our research into. According to UKEssays (2015) spending behaviours refer as the act to pay out money in response to an action, environment, or person with the purpose to satisfy the needs and wants. An individual spending behaviour can be varied among each people depending on race, religion, family background, ethnicity and place of living (Kumar et al., 2022).

2.2 Theories

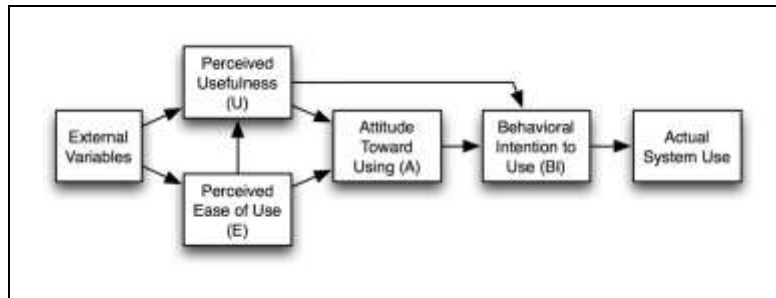
2.2.1 Technology Acceptance Model (TAM)

Understanding the behavioural impact of a new or an established technology requires a model of analysis, one of the prominent theoretical models for research is the *Technology Acceptance Model* or *TAM*.

TAM’s core variables, perceived usefulness which is defined as the degree to which an individual believes that using a specific system would improve his job performance and perceived ease of use which is defined as the degree to which an individual believes that using a specific system would be free from effort (as cited in Davis & Venkatesh , 1995)), have been proven to be early factors affecting acceptance associated with learning technology.

The final version of this model (Figure 2.1), was finalized by Davis & Venkatesh in 1996 after discovering that perceived usefulness and perceive ease of use had clear impact on behaviour attention (Tan & Renata, 2023)

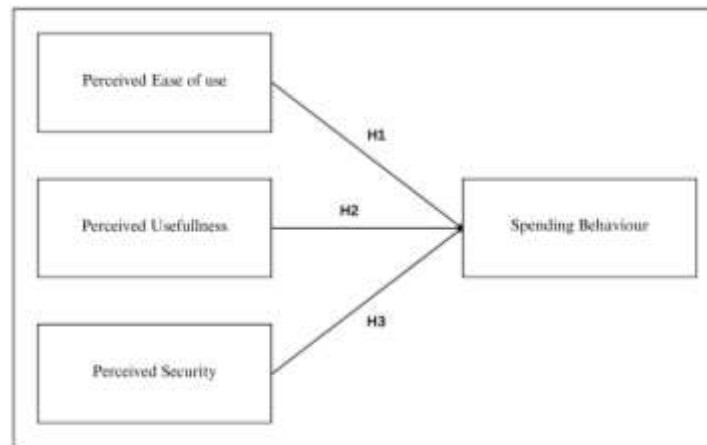
Image 2.1
Final 1996 Model



Source: Wikipedia (2024)

2.3 Conceptual framework

Image 2.3
Conceptual framework



Source: Researcher (2024)

2.3.1 Perceived Usefulness

According to Davis (1989) Perceived usefulness is defined as the degree to which an individual would believe that utilizing a particular system would enhance his or her job performance. It can also be defined as the subjective perspective of users which perceive that utilizing a particular technology will enhance their ability to accomplish their jobs and whose benefits are felt by the user system in order to meet their needs (Agustin et al., 2023).

2.3.2 Perceived Ease of Use

Perceived ease of use is defined by Davis (1989) as the degree to which an individual believes that using a particular system would be free of physical and mental effort. With that in mind, users can simplify their tasks when they believe technology is easier to apply, therefore, they will demand a quick and convenient payment method. As a result, people expect digital wallet services to be simple to learn and use (Agustin et al., 2023).

2.3.3 Perceived Security

Perceived security is the subjective belief or understanding of an individual in regard to the safety and protection of their personal and financial information when using a particular service or technology (Ling et al., 2023). Based on the finding by (Raninda et al., 2023) Perceived security has an apparent positive and significant effect on behavioral intention toward the e-wallet within the people in Yogyakarta.

2.3.4 Spending Behaviour

According to Llona (2022) Spending behavior is the act of spending money in response to an action, an environment, or a person to satisfy needs and wants. Studies have shown that spending behavior can be inferred from transaction records, reflecting psychological characteristics caused by a few factors such as age, gender, and payment methods (Sorooshian & Teck, 2013).

METHODOLOGY

3.1 Research design

This paper will be based on descriptive research method as it seeks to analyse the impact of key factors Perceived Usefulness, Perceived Ease of Use, and Perceived Security and its influence on the spending behaviour of Gojek's users in Indonesia. To analyse the impact, we seek an understanding from an *interview* with an expert which used to work with Gopay and Gojek, and provide a supporting client-based data on a *survey* which is conducted on students and teachers of Insan Rabbany secondary school. For addressing the main research questions and following sub-questions, an Interview, survey and an extensive literature review will be conducted, drawing insights via both primary and secondary data.

3.2 Data Research Methodology

3.6.1 Data collection

This research would perform a mixed method of *Interview* and *survey-based* data collection method, the interview method is chosen as it can provide an in-depth and detailed understanding for our research topic which would be obtained by the conversation with an expert interview of a former Gopay and Gojek staff member. While the survey-based approach has been chosen concerning the benefit of attaining a client-based perspective from Gopay users. By engaging through interview and surveying of questions with individuals across different criteria, we focus on retrieving a variative *qualitative* and *quantitative* data.

3.6.2 Population

According to Australian Bureau of Statistics (2023) The population is the aggregate or collection of units such as people, households, schools, hospitals, businesses which the survey would be conducted. For the interview method, the population comprises of two individuals with an expertise and experience in Gojek and Gopay, which is why the researcher interview both experts within those company. below are some of the expert's characteristic:

The research population for survey comprises of students and teachers of Insan Rabbany secondary school, spanning both Junior and high school level of education. During the time of research, the number of students and teachers are 529 individuals.

3.6.3 Sampling

This research would employ a *non-probability sampling method* which is sampling method which uses non-random criteria like the availability, geographical proximity, expert knowledge of the individuals or when the population parameters are either unknown or not possible to individually identify to answer the research questions (Nikolopoulou, 2023b). The non-probabilistic sampling method technique which would be used is *convenience sampling* which is a way of selecting participants from the target population based on ease of access, which aims to yield several inherent benefits such as being cost-effective, less time-consuming, simple operation. Although it also has its drawbacks with being subjected to sample biases, systematic errors, not being representative enough, and no generalizability of the research findings (Golzar et al., 2022).

3.8 Data analysis

The data analysis method which we would use to test the hypothesis which reflect each sub-questions is *Partial Least Squares (PLS)*, which is a *multivariate* statistical technique that provides comparison between multiple response variables and multiple explanatory variables to which it was designed to deal with multiple regression when data has a small sample, missing values, or multicollinearity (Pirouz, 2006). The choice of PLS method is mainly focused on the consideration that in this study, there are three latent variables formed with *formative* indicators. Which according to Hanafiah (2020) in a *formative* measurement model the latent variable is considered a result of its respective indicators, and because the latent variable is defined by its indicators, changing or replacing a formative indicator will change the meaning of the latent

variable. Furthermore, in the formative model, it is not essential for all measurement items to be highly correlated

RESULTS AND ANALYSIS

4.1 Interview result and analysis

4.1.1 Expert 1 – Gopay

Perceived Usefulness

In order to demonstrate Gopay's usefulness and convenience, the Gopay team starts by designing Gopay as the primary e-wallet for all Gojek services and partnered merchants, which aimed to integrate Gopay as the main e-wallet of choice for users' everyday transactions. Furthermore, by focusing on expanding its acceptance and discoverability by partnering with major food and beverage merchants, it accommodates users' spending habits as identified through their internal research which they have found significant spending factor caused by food and beverage transaction. Furthermore, Gopay also introduces features like money storing and integrated financial services to encourage users to manage their funds within the Gopay ecosystem. Promotional offers and cashback were offered to increase usage frequency and stimulate spending by offering discounts and promotions, which was initially on a daily basis and then eventually only on paydays to build habitual usage. The main goal was to increase the frequency of use, such as encouraging users who typically used Go-Ride once or twice to also use Go-Food multiple times a day. Moreover, by requiring users to add more items to their basket to qualify for discounts, Gopay aimed to significantly increase spending and usage.

Perceived Ease of Use

To ensure ease of use within Gopay, they employed user research and testing methods such as *mystery shopping*, where team members would act as a user's and tested the system's ease of use in all aspects of Gopay especially small food vendors. This process aimed to identify and address any apparent issues or barriers to user-friendliness. Some specific UI/UX elements were incorporated to ensure flexibility and control over transactions for their users, and one example of that is the apparent Gopay widget at the top of the Gojek app which was designed to so Gopay would be the in the top of their user mind. Based on user research findings which they have done, simplicity and understandability were crucial for user acceptance.

Therefore, Gopay's wallet-like design and simple feature naming such as "Payment" and "Borrow" was aimed to create a familiar and intuitive experience. Additionally, the introduction of a dedicated Gopay app would streamline user flows for common tasks like checking balances, payments, and transfer of funds. Within the app, users could access various features like balance top-up, balance request, savings, borrowing, and bank transfers, all designed to enhance the ease of use and control over financial transactions without the use of the Gojek app, this conveys a prominent pattern of Gopay which focuses to deliver as ease to use experience for their user.

Perceived Security

For Gopay to protect users' personal and financial information, they implement an industry-standard security protocols such as encryption methods and multi-factor authentication (OTP) which is imposed by financial regulations such as OJK (Otoritas Jasa Keuangan) and Bank Indonesia. These measures we aimed to safeguard user data and instill trust between the user and the system. Gopay also runs some awareness campaigns such as "Kang Tipu" to educate users about security practices and potential scams in the form of fraudsters attempting to obtain OTPs under false claim. The app's design and communications transparently conveyed security measures like PIN requirements which they can change preferably, and the option to connect accounts with Google email and phone numbers. The objective of these efforts aimed to instill trust and confidence in Gopay's security practices among users.

Spending Behaviors

Through user research, the Gopay team identified factors that may have influenced unplanned, impulsive, or increased spending behaviors among different user characteristics. For an example: Students tend to have a more impulsive spending behaviour after receiving money from

parents at the beginning of the month, often spending on expensive foods initially and then resorting to micro-merchants like small stalls and cafes towards the end of the month. Housewives typically had a planned monthly budget for groceries, housing needs, and personal leisure/shopping. White-collar workers, such as teachers, were more organized and conscious about using Gopay only when discounts and promotions were available.

Features like one-stop payment, and promotional offers potentially impacted users' spending levels. The convenience of an all-in-one payment method for Gojek services and partnered merchants, combined with incentives like discounts and cashback offers, aimed to increase interest and usage of Gopay, potentially leading to higher spending.

Despite all of that, the company does acknowledge some ethical considerations around optimizing spending against enabling conscious and deliberate spending by users. To address this, Gopay introduced the "Gopay Diary" feature, which allowed users to track their Gopay spending, manage their finances, and ensure sufficient balances for future transactions. This feature aimed to promote mindful spending habits while still providing convenience and incentives for using Gopay.

4.1.2 Expert 2 - Gojek

Perceived Usefulness

Gojek aims to provide useful services that address some common pain points in people's daily lives, such as transportation, food delivery, and more. Their main e-wallet Gopay were designed to be the primary payment method across all Gojek services like Go-ride, Go-food, and Go-send which allows users to conveniently purchase these services. Overtime, Gopay continuously adds new features like split payment, savings/investment options, and exclusive discounts to incentivize long-term usage and spending. By offering a comprehensive suite of practical services combined with an integrated e-wallet full of appealing features and promotions, Gojek strives to maximize perceived usefulness for users and influence habitual spending behavior within their ecosystem.

Perceived Ease of Use

Gojek has consistently worked to improve the functionality of its app and services. This can be seen in terms of their app's user interface which designed purposely for a clear navigation and quick access to frequently used features right on the main screen. Gopay as a digital wallet, can be used for payments outside the app with partnered merchants such as cafes, restaurants, and stores, allowing users to integrate it seamlessly into their daily transactions. One the prominent project the experts did was aimed to let users order Gojek services like GoFood or GoSend for others in different locations, despite the fact that this feature was a minor improvement, this feature have significantly increased user spending especially during the month of Ramadhan when there is a tradition of giving to loved ones. By prioritizing intuitive design and expanding use cases, Gojek has purposely designed its app and services highly accessible and easy to adopt into users' daily lives.

Perceived Security

Gojek puts a strong emphasis on security for both their app and various services they offer. They prioritize data security to protect users' personal information, such as hiding phone numbers when drivers and customers need to contact each other for food delivery. Gopay, Gojek's digital wallet, has a robust safety measures including requiring a PIN to access funds, ensuring users feel their Gopay balance is secure from theft or unauthorized access. By implementing features like data encryption, concealing sensitive details, and adding authentication steps, Gojek aims to provide a secure and trustworthy experience across their ride-hailing, food delivery, digital payments, and other services. Maintaining rigorous security protocols helps build confidence that users' data and transactions remain safe when utilizing Gojek's platform.

Spending Behaviour

According to the interviewee, which worked in GoFood Marketing, the marketing initiatives at Gojek are planned on a monthly basis, allowing for 4-6 major projects per year. The focus is primarily on promotional campaigns, with a growth marketing team experimenting with

different types of promotions and discounts to understand user behavior. They run smaller targeted projects to identify effective promotions, which are then scaled into larger promotional campaigns. Tech companies generally employ two strategies which are targeted promotions catered to individual user behavior to drive consumerism, or non-targeted promotions offering the same discounts to all users, with the data feeding back into optimizing future targeted campaigns. Gojek's approach combines both methods, first using targeted experiments to determine successful promotions before delivering them out broadly.

4.2 Survey result and analysis

The research result is based on the PLS method utilizing an analysis tool SmartPLS 4.0. SmartPLS is a user-friendly software for PLS-SEM analysis in marketing research, which offers a graphical interface and comprehensive features for modelling relationships between variables (Sarstedt & Cheah, 2019). The process of this analysis stems from a series of tests. Beginning with the presentation of respondent characteristics, Validity tests which include Convergent Validity, Discriminant Validity and Average Variance Extracted (AVE), followed by Reliability test, and lastly Evaluation of Inner model.

4.2.1 Respondent characteristics

The researcher was able to gather a total of 141 respondent from the distributed survey on Insan Rabbany secondary school. The result of the survey was characterized by several characteristics which include gender, age, working status, Gopay as main e-wallet, and monthly Gopay usage. For further understanding of the respondent characteristics refer to Table 4.6.

Table 4.6
Respondent Characteristics

No	Profile	Characteristic	Total	%
1).	Gender	Male	49	34.8%
		Female	92	65.2%
2).	Age	12 - 15	45	31.9%
		16 - 18	60	42.6%
		19 -24	2	1.4%
		25 - 30	10	7.1%
		31 - 35	6	4.3%
		36 - 40	6	4.3%
		> 40	12	8.5%
3).	Working status	Junior Student	32	22.7%
		Senior Student	74	52.5%
		Junior Teacher	19	13.5%
		Senior Teacher	16	11.3%
4).	Gopay as the main E-wallet	Yes	100	70.9%
		No	41	29.1%
5).	Gopay monthly usage	< 3 times	46	32.6%
		3 - 6 times	36	25.5%
		6 - 9 times	15	10.6%
		> 9 times	44	31.2%

Source: Researcher (2024)

4.2.2 Validity test

Convergent Validity

A convergent validity based on SmartPLS 4.0 can be determined by the outer loading or the loading factor, and according to Garson, (2016) In PLS-SEM, an outer loading of 0.7 or higher is generally regarded as acceptable when evaluating the measurement model for reflective constructs. Convergent validity refers to how closely a test is related to other tests that measure the same or similar constructs (behavior, attitude, or concept, particularly one that is not directly observable). A two tests measuring the same construct should have a moderate to high correlation, where high correlation is due to a convergent validity, which in turn is an indication of construct validity (Nikolopoulou, 2023a).

Measuring the convergent validity using the SmartPLS 4.0 can be sourced from the *Outer loading* or *Loading factor*. The result of the test can be viewed from the Table 4.7.

Table 4.7
Outer Loading

	Perceived Ease of Use	Perceived Security	Perceived Usefulness	Spending Behaviour
PEOU1	0.817			
PEOU2	0.813			
PEOU3	0.770			
PEOU4	0.816			
PEOU5	0.842			
PEOU6	0.825			
PS1		0.765		
PS2		0.794		
PS3		0.802		
PS4		0.816		
PS5		0.760		
PU1			0.816	
PU2			0.792	
PU3			0.817	
PU4			0.866	
PU5			0.796	
PU6			0.795	
SB1				0.824
SB2				0.805
SB3				0.818
SB4				0.793
SB5				0.783

Description: (PEOU: *Perceived Ease of Use*, PU: *Perceived Usefulness*, PS: *Perceived Security*, SB: *Spending behaviour*).

Source: *Researcher (2024)*

In this research, the indicator PEOU1, PEOU2, PEOU3, PEOU4, PEOU5 which is obtained from Perceived Ease of Use has a *loading factor* of (0,817, 0,813, 0,770, 0,816, 0,842, 0,825).The indicator PS1, PS2, PS3, PS4, PS5 which is obtained from Perceived Security has a *loading factor* of (0,765, 0,794, 0,802, 0,816, 0,760). The indicator PU1, PU2, PU3, PU4, PU5, PU6 which is obtained from Perceived Usefulness has the *loading factor* of (0,816, 0,792, 0,817, 0,866, 0,796, 0,795). The indicator SB1, SB2, SB3, SB4, SB5 which is obtained from Spending Behaviour has the *loading factor* of (0,824, 0,805, 0,818, 0,793, 0,783). All indicators have a *loading factor* of more than 0.7, which means that all indicators of each construct in this study are valid and meet convergent validity.

Discriminant Validity

Other form of validation can be performed with *Discriminant Validity* which is frequently used to identify to describe combinations of discriminant variables or the differences among test groups of individuals (Kuligowski et al., 1970). There are two forms of test performed which are Heterotrait-monotrait ratio (HTMT) seen in Table 4.8 and Fornell-Larcker criterion seen on Table 4.9.

Table 4.8
Heterotrait-monotrait ratio (HTMT) – Matrix

	Perceived Ease of Use	Perceived Security	Perceived Usefulness	Spending Behaviour
Perceived Ease of Use				
Perceived Security	0.733			
Perceived Usefulness	0.666	0.649		
Spending Behaviour	0.755	0.755	0.832	

Source: Researcher (2024)

Within the discriminant validity, the value of the Heterotrait-Monotrait Ratio (HTMT) which is presented in Table 4.6 provided a value which is below 0.85 (<0.85), which means that the construct validity test in this study to test the measurement of the PLS-SEM model has been achieved because it meets the predetermined requirements.

Table 4.9
Fornell-Larcker criterion

	Perceived Ease of Use	Perceived Security	Perceived Usefulness	Spending Behaviour
Perceived Ease of Use	0.814			
Perceived Security	0.650	0.788		
Perceived Usefulness	0.602	0.576	0.814	
Spending Behaviour	0.671	0.660	0.736	0.805

Source: Researcher (2024)

The Fornell-Larcker criterion which is presented in Table 4.9 shows a value of where each construct is greater than the correlation between the construct and other constructs, in this case, the value for the Perceived Ease of Use construct indicator has the highest value in the construct block compared to other construct blocks. it can be concluded that it meets the requirements of Fornell-Lacker discriminant validity.

Average Variance Extracted (AVE)

Other methods to test on the data reliability is *Average Variance Extracted* (AVE).

Table 4.10

Average Variance Extracted (AVE)

	Average variance extracted (AVE)
Perceived Ease of Use	0.663
Perceived Security	0.620
Perceived Usefulness	0.663
Spending Behaviour	0.647

Source: Researcher (2024)

Based on the table, the construct for Perceived Ease of Use has an AVE of 0,663, Perceived Security has a value of 0,620, Perceived Usefulness has a value of 0,663, and Spending Behaviour has a value of 0,647. Since the general value of AVE is above 0,5 (>0,5) it can be concluded that the construct has passed the validity test.

4.2.3 Reliability test

The reliability test is carried out to prove that an instrument is accurate, consistent, and precise in measuring a construct. In the analysis using SmartPLS, there are two criteria for measuring reliability, namely composite reliability and Cronbachs alpha from the indicator block that measures the construct. If the composite reliability value is above 0.7, the construct can be declared to have high reliability.

The test would be carried out in order to prove it's accurate, consistent and precise when measing the construct. Utilizing SmartPLS 4.0 the reliability test can be measured by *Composite reliability* and *Cronbach's alpha* from indicator block that measures the construct. If the *composite reliability* and *Cronbach's alpha* value is above 0,7 (>0,7), the construct can be declared to have high reliability.

Table 4.11
Composite reliability & Cronbach's alpha

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)
Perceived Ease of Use	0.898	0.903	0.922
Perceived Security	0.848	0.857	0.891
Perceived Usefulness	0.898	0.899	0.922
Spending Behaviour	0.864	0.866	0.902

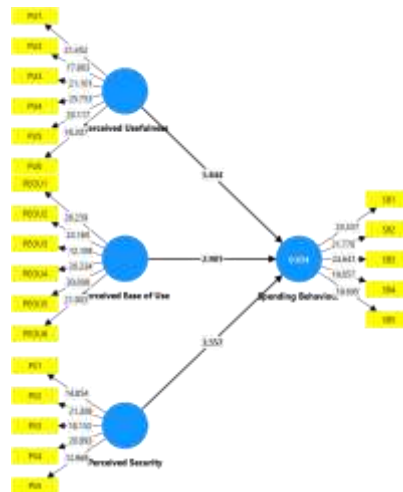
Source: Researcher (2024)

The result gain from the Table 4.11 shows that both the value of Composite reliability and Cronbach's alpha is well above the criteria of 0,7 (>0,7), which means that the Reliability test is valid.

4.2.4 Evaluation of Inner Model (Structural Model)

The inner model represents the structural relationships or paths between the latent variables. It specifies the relationships between the exogenous (independent) and endogenous (dependent) latent variables (Garson, 2016).

Image 4.1
Inner model



Source: Researcher (2024)

Based on Image 4.1 the latent variable which is presented by the circle is connected to by an arrow line with an indicator. The construct of Spending behaviour can be measure by three construct which include Perceived Usefulness, Perceived Ease of Use, and Perceived Security.

The use of this model with PLS is assessed by looking at the score of the R-square (R2) for the endogenous variable which is Spending behaviour. The value of R2 itself is used to assess how certain exogenous variables affect existing endogenous variables. According to Chin & Marcoulides (1998) the criteria for interpreting R-squared values in structural equation modelling are that R2 of 0.67 indicates the endogenous variable structural model is substantial or good, R2 of 0.33 indicates the model is moderate, R2 of 0.19 indicates the model is weak. The test results of the R2 value using the SmartPLS 4.0 analysis tool can be seen in the Table 4.12

Table 4.12
R-Square value (R2)

	R-square	R-square adjusted
Spending Behaviour	0.654	0.647

Researcher (2024)

Table 4.12 states that the value of R-Square in the Spending Behaviour variable is 0.654, which means that the structural model used is good enough. The greater the value of R2, it indicates that the greater the ability of the exogenous variables used can be explained by the endogenous variables. The endogenous variable, namely spending behaviour is able to explain the exogenous variables namely perceived usefulness, perceived ease of use and perceived security by 65.4%.

4.2.5 Survey results

Presented below in table 4.13 is the path coefficient which present a set of data such as original sample (O), Sample mean (M), Standard deviation (STDEV), T Statistics ($|O/STDEV|$), and P value. The result of this data would be used to measure the direct effects of one variable on another in a causal model by quantifying the strength and direction of the relationships between the variables of perceived usefulness, ease of use, security, and their impact on spending behavior.

Table 4.13
Path Coefficients

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ($ O/STDEV $)	P values
PEOU -> SB	0.243	0.242	0.084	2.901	0.004
PS -> SB	0.243	0.247	0.068	3.557	0.000
PU -> SB	0.450	0.447	0.077	5.844	0.000

Source: Researcher (2024)

Description: PU: Perceived Usefulness, PEOU: Perceived Ease Of Use, SE: Security, SB: Spending Behaviour.

Perceived Ease of Use and Spending Behaviour

The result of PEOU (Perceived Ease of Use) towards SB (Spending Behaviour) has a coefficient value of 0,243, T statistic of 2,901 and P value of 0,004. The value of T statistics is higher than 1,64 ($>1,64$) and a P value which is lower than 0,05 ($<0,05$).

The results of the data analysis show that perceived ease of use has a positive effect on spending behaviour in using Go-Pay as an E-money, this is an indication that perceived ease of use applied by the Gojek has an impact on the spending behaviour of Gopay users in Indonesia.

Perceived Security and Spending Behaviour

The result of PS (Perceived Security towards SB (Spending Behaviour) has a coefficient value of 0,243, T statistic of 3,557 and P value of 0,000. The value of T statistics is higher than 1,64 ($>1,64$) and a P value which is lower than 0,05 ($<0,05$).

The results of the data analysis show that perceived security has a positive effect on spending behaviour in using Go-Pay as an E-money, this is an indication that perceived security applied by the Gojek has an impact on the spending behaviour of Gopay users in Indonesia.

Perceived Usefulness and Spending Behaviour

The result of PU (Perceived Usefulness) towards SB (Spending Behaviour) has a coefficient value of 0,450, T statistic of 5,844 and P value of 0,000. The value of T statistics is higher than 1,64 ($>1,64$) and a P value which is lower than 0,05 ($<0,05$).

The results of the data analysis show that perceived usefulness has a positive effect on spending behaviour in using Go-Pay as an E-money, this is an indication that perceived usefulness applied by the Gojek has an impact on the spending behaviour of Gopay users in Indonesia.

CONCLUSION AND LIMITATION

5.1 Conclusion

Based on the analysis and discussion, understanding the factors which influence the spending behaviour of Gopay's users in Indonesia based on three aspect Perceived Usefulness, Perceived Ease of Use, and Perceived security can be explain as follows:

1. How does perceived usefulness influence the spending behaviour of Go-Pay users?

Gopay have implemented various strategies designed to integrate Gopay into daily transactions and enhance their value proposition. By partnering with major food and beverage merchants, Gopay expands its acceptance and focuses into users' existing spending habits. With the introduction of features such as money storing, integrated financial services, and split payment options, it made managing finances within the Gopay ecosystem convenient and beneficial for Gopay user. Promotional offers, cashback, and exclusive discounts offered would further increases uses frequency and spending. Some of these strategies aim to build habitual usage, encouraging users to utilize Gopay for various Gojek services, such as Go-Ride and Go-Food, thereby embedding Gopay into their daily lives and maximizing its perceived usefulness. This comprehensive approach drives users to increase both the frequency and amount of their spending within the Gopay ecosystem. Based on the statement, the data is supported by the result gained from the survey which suggest that perceived usefulness does has a positive effect on spending behaviour in using Gopay.

2. How does perceived ease of use influence the spending behaviour of Go-Pay users?

The design and implementation of Gopay were purposely made to ensure transactions to be straightforward and intuitive. Gopay conduct user research and testing methods, such as *mystery shopping* to identify and resolve any usability issues, especially for small food vendors. UI/UX elements, like the prominent Gopay widget on the Gojek app were made to ensure ease of access and keep Gopay in the "top of mind" for users. Simple and familiar design choices of Gopay such as the wallet-like logo and straightforward feature names like "Payment" and "Borrow," enhance user acceptance by ensuring simplicity and understandability. Supporting that effort, Gojek also focuses on improving app functionality with a clear, navigable interface and quick access to frequently used features also plays a crucial role. Furthermore, Gopay's usability extends beyond the app, allowing payments at partnered merchants, which would seamlessly integrate into their daily transactions. Additionally, features like ordering Gojek services for others, particularly useful during special occasions like Ramadhan, have increased user spending. By prioritizing intuitive design and expanding use cases, Gojek ensures its app and services are accessible and easily adopted into daily routines, thereby enhancing spending behavior through perceived ease of use. Based on the statement, the data is supported by the result gained from the survey which suggest that perceived ease of use does has a positive effect on spending behaviour in using Gopay.

3. How does perceived Security influence the spending behaviour of Go-Pay users?



Gopay implements industry-standard security protocols like encryption and multi-factor authentication which adhere with regulations from OJK and Bank Indonesia. Gopay enhances user trust through awareness campaigns such as "Kang Tipu" and many more, with the purpose of educating users on security practices and potential scams. Features such as PIN requirements, the ability to change PINs, and linking accounts with email and phone numbers further reinforce security. Moreover, Gojek's emphasis on security, including data encryption and concealing sensitive details in various services, ensures a trustworthy experience. These tremendous security measures and transparent communication instil confidence in users, encouraging them to use Gopay more frequently and for higher-value transactions. Based on the statement, the data is supported by the result gained from the survey which suggest that perceived security does has a positive effect on spending behaviour in using Gopay.

5.2 Limitation

Some of the limitation of this research mainly focuses on the fact that the respondent of survey only resides in a singular private school in South Tangerang and does not reflect the whole Indonesian Gopay users in Indonesia. Moreover, the respondent amount did not achieved the 95% confidence interval which was proposed in chapter 2. Other limitation also stems from the fact that the sampling method uses convenience sampling, which is known to have some limitation in terms of data accuracy and quality.



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