
Determinant Factors of Personal Innovativeness in Information Technology of Ride-Hailing New Brand: The Role of Gender

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Abstract

The objective of this study is to examine the influence of electronic word of mouth (E-WOM), social influence (SI), and perceived system and service quality (PSSQ) on personal innovativeness in information technology (PIIT) with respect to the adoption of a novel ride-hailing application brand. The research object selected for this study is the MAXIM and InDriver application, which represents a new brand in the market. The present study employed a questionnaire-based survey to gather data from a sample of 553 individuals who identified as users of either MAXIM or InDriver and who belong to the Z generation. This is motivated by the fact that Generation Z is known to have openness to engage in new experiences and tends to make rational decisions about their experience using new technology. The study employed the use of structural equation modeling (SEM) techniques, specifically utilizing the SMART-PLS software version 3. The findings of the study indicate that electronic word-of-mouth (E-WOM), social influence, and perceived system and service quality have a positive impact on an individual's inclination to adopt a new brand of ride-hailing application. Furthermore, the findings indicate that gender impacts the propensity to adopt a new brand of ride-hailing application, with men exhibiting a greater inclination towards innovative experimentation than women.

Keywords: E-WOM; Generation Z; Personal Innovativeness In Information Technology; Ride-Hailing Apps.

INTRODUCTION

The inception of the ride-hailing sector in Indonesia can be traced back to the establishment of a call center for shuttle services by GO-JEK in 2010 (Salim et al., 2021). In the year 2014, Uber, an American corporation, launched a mobile-centric ride-hailing service in the country of Indonesia. The ride-hailing is a platform that makes it easier for drivers and passengers to communicate effectively in a three-way driver-passenger and application service provider where the request of the passenger and the availability of the driver revolves (He & Shen, 2015). It can be filled through online shipping service providers. According to Almunawar et al. (2020), GO-JEK implemented a mobile application in 2015 to facilitate utilizing its services in Jakarta. According to Fauzi (2018), the ride-hailing industry in Indonesia is experiencing rapid expansion due to the increasing number of young individuals and the growing prevalence of smartphone usage.

According to research conducted by Google, TEMASEK, and Bain & Company in 2019, it is projected that the internet economy of Indonesia will attain a value of approximately \$40 billion in the same year. This growth is attributed to four prominent sectors within Indonesia that substantially influence the expansion of the Internet economy. Ride-hailing, following e-commerce, holds a market share of 57%. During the initial stage of this sector's development, a total of over 15 ride-hailing service providers engaged in fierce competition to gain market dominance within major urban areas in Indonesia. Regrettably, the number of ride-hailing service providers operating in various cities in Indonesia remains limited, with only five to six companies, including Maxim and InDriver, being active until 2022. The closure of Uber's ride-hailing operations in Indonesia in 2018 intensified the competition within the ride-hailing industry in the country. The closure of Uber's business activities and other ride-hailing service providers in Indonesia can be attributed to many intricate factors. It is widely acknowledged that individuals in Indonesia frequently utilize multiple ride-hailing applications for their daily transportation needs. The rational behavior exhibited by

consumers in the ride-hailing industry can be attributed to the competitive nature of the market, where a winner-takes-all dynamic is prevalent. Overcoming the formidable market dominance of Gojek and Grab poses a considerable challenge, owing to their formidable capacity to leverage travel subsidies and promotional offers as a means to exploit market rationality. According to Alananto and Wahyudi (2021), the competitors of these prominent start-ups must possess the capacity to formulate an appropriate strategy that will be embraced by ride-hailing consumers in Indonesia.

Prior research has examined the factors influencing individuals' intentions to continue using various technological applications and products. Personal innovativeness in information technology is considered to be a crucial determinant. The study conducted by Fauzi and Sheng (2021) examined the relationship between personal innovativeness, perceived value, and continuance intentions in the context of ride-hailing applications. Additionally, the researchers investigated the differences in customer behavior between consumers residing in metropolitan and non-metropolitan areas. The study conducted by Sair and Danish (2018) aimed to examine the associations among performance expectancy, effort expectancy, personal innovativeness, and behavioral intentions within the consumer market of Pakistan. The researchers also noted the role of personal innovativeness in mediating the association between performance, effort expectancy, and behavioral intentions (Achiriani & Hasbi, 2021). Furthermore, Lu (2014) reported on a study that examined the effects of personal innovativeness in information technology (PIIT) on user retention intentions for mobile commerce (m-commerce) in the United States.

Besides, the existing literature primarily focuses on examining generation-specific market objects, with limited attention given to the Z generation's ride-hailing app continuance intentions. The Z generation is recognized for its propensity for openness, willingness to engage in novel experiences, and inclination toward rational decision-making. They exhibit a high degree of receptiveness toward change. The Z generation possesses the most significant market share within the ride-hailing industry. According to Petro (2020), they are strongly inclined toward innovation and are closely associated with the ongoing technological revolution. The ability to captivate and engage Generation Z in order to foster their adoption and sustained usage of the ride-hailing application is crucial for the ongoing growth and expansion of the business.

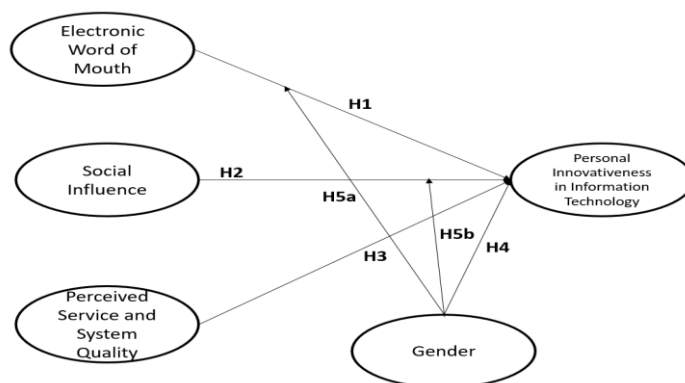
Based on the aforementioned explanation, the primary objective of this study is to investigate essential factors that determine the personal innovativeness of the Z generation to use a new brand of ride-hailing brand application. There are three determinant factors proposed in this model, including social influence, electronic word-of-mouth, and perceived service and system quality. In addition, this study also investigates the role of gender as a moderating variable that may moderate the relationship between the three predicting factors on personal innovativeness.

Young users purportedly prioritize the primary factors of perceived quality of system and service. They seek simplicity, compactness, and usability in their desired products or services. Given the prevalence of the internet era, individuals exhibit a profound enthusiasm for technology and possess a high level of proficiency in its utilization. They possess a high level of cognitive abilities and efficiently assimilate information through electronic word-of-mouth. Individuals are easily influenced by their environment by seeking high-quality products and valuing personal autonomy and opportunities for personal development. Therefore, the impact of social influence on individuals' perception of innovation will be highly significant.

Understanding the determinants of the Z generation's personal innovativeness to use a new brand of ride-hailing applications holds significant importance. This comprehension enables these companies to gain market acceptance and establish a favorable initial impression among application users. Prior research on this matter has primarily concentrated on prominent ride-hailing platforms such as Gojek, Grab, Uber, and Didi Chuxing. The present study aimed to address the existing research gap by examining Generation Z individuals' personal innovativeness towards a novel ride-hailing app brand. The research subject for this study comprises the MAXIM and InDriver applications. For the past three years, these two super app companies of Russian origin have

emerged as formidable competitors to Gojek and Grab, the established players in the ride-hailing industry in Indonesia. Therefore, to address the research question above, the authors have proposed four hypotheses below:

- H1: electronic word-of-mouth significantly influence the personal innovativeness of the Z generation to try MAXIM/InDriver App as a new brand of ride-hailing
- H2: Social influence significantly influences the personal innovativeness of the Z generation to try MAXIM/InDriver App as a new brand of ride-hailing
- H3: Perceived system and service quality significantly influence the personal innovativeness of the Z generation to try MAXIM/InDriver App as a new brand of ride-hailing
- H4: Gender significantly influences the personal innovativeness of the Z generation to try MAXIM/InDriver App as a new brand of ride-hailing
- H5a: Gender significantly moderates the relationship between E-WOM and personal innovativeness
- H5b: Gender significantly moderates the relationship between social influence and personal innovativeness



RESEARCH METHODS

The present study utilizes primary data obtained through the administration of online self-reported questionnaires. The surveys were disseminated in Bahasa Indonesia over a span of two weeks, specifically from August 12th to August 26th, 2022. A total of 553 responses were collected from individuals belonging to the Generation Z demographic. Google Forms are utilized to streamline the process of conducting surveys. The authors formulated the inquiries succinctly, directly, and unambiguously. Participants were instructed to utilize initials instead of their complete names to ensure anonymity and promote a sense of comfort while accurately completing the questionnaire. The present study employed purposeful sampling, which involved the establishment of essential criteria to align with the objectives of the study (Gozali, 2018). The selection criteria utilized by the respondents are as follows:

- 1) Individuals falling within the age range of 12 to 26, encompassing those born between 1996 and 2010.
- 2) Possessing a personal mobile device for telecommunication purposes.
- 3) Using either the MAXIM or InDriver application.
- 4) Frequently engaging in the utilization of online ride-hailing services through the MAXIM or InDriver application.

The variable indicators were evaluated using a Likert scale ranging from one to five, where a score of one represented strong disagreement and a score of five represented strong agreement. Table 1 explained the variable definition used in this study along with the references and questionnaire items. The data was examined using a combination of partial least squares and structural equation modelling, commonly called PLS-SEM. The PLS-SEM analysis is conducted

using SMART PLS 3rd version. The study employed the Confirmatory Factor Analysis (CFA) approach due to the fact that the model for each latent variable and its corresponding indicators were based on well-established theoretical frameworks from previous research.

Table 1. Questionnaire Item and References

Construct	Code	Items	References
Electronic Word of Mouth	EWOM 5	Reviews, comments, and recommendations on social media (youtube/WA/IG/Tiktok) give me input to make decisions when I want to use/buy the latest technology products or applications.	(Almunawar et al., 2020; Ghalandari, 2012; S. A. Sair & Danish, 2018)
	EWOM 6	Reviews, comments, and recommendations on social media have made me more confident to use or buy the latest technology applications/products.	
	EWOM 7	Reviews, comments, and recommendations from social media regarding the latest technology in social media (youtube/WA/IG/Tiktok) can be trusted.	
	EWOM 8	I often get positive reviews, comments, and recommendations regarding the MAXIM/InDriver online motorcycle taxi feature from social media.	
	EWOM 9	I often get information on social media regarding MAXIM/InDriver service features.	
Social Influence	SI1	People/characters who influence my life behavior advise me to use the MAXIM/InDriver online motorcycle taxi application	Ghalandari, 2012; Lu, 2014)
	SI2	Important people in my life (friends, family, lovers, etc.) ask me to use the MAXIM/InDriver online motorcycle taxi application	
	SI3	Mass media influences me to use the MAXIM/InDriver online motorcycle taxi application	
	SI4	Because my friends use the MAXIM/InDriver online motorcycle taxi application, I'm going to use it too	
Personal Innovativeness in Information Technology	PIIT2	I often follow the latest technology application/product developments, including new branded online motorcycle taxi applications, with great interest	Fauzi & Sheng, 2020; Jackson et al., 2013; Yusra & Agus, 2020)
	PIIT3	Sometimes, I'm one of those people who is always the first among my colleagues to try the latest technology applications/products, including online motorcycle taxi applications	
	PIIT4	If I hear information about the latest technology applications and products, I always try to try and get experience using them, including online motorcycle taxi applications	
	PIIT5	I am always interested in using technology applications/products that have complex and varied new features	
	PIIT6	I will not hesitate to try the latest technology applications/products, including online motorcycle taxi applications	
	PIIT7	I often follow the latest technology application/product developments, including new branded online motorcycle taxi applications, with great interest	
	Perceived System and Service Quality	PSSQ1	

	application.	2020;
PSSQ2	The MAXIM/InDriver online motorcycle taxi application provides a friendly and fast response when we encounter problems with services and systems.	Jackson et al., 2013; Yusra & Agus, 2020)
PSSQ6	MAXIM/InDriver drivers carry the vehicle safely.	
PSSQ7	The MAXIM/InDriver online motorcycle taxi application features have met my activity and lifestyle needs	
PSSQ9	MAXIM/InDriver drivers are friendly, polite, and fun.	
PSSQ10	In general, the quality of the MAXIM/InDriver motorcycle taxi application system and services is very good.	

The PLS-SEM analysis consists of two distinct stages: the outer or measurement model assessment and the inner or structural model evaluation. The outer model test employed two methods to ascertain the instrument's validity: convergent and discriminant validity. According to Gozali (2018), to establish convergence validity, it is necessary for the Average Variance Extracted (AVE) value to exceed 0.50. Instrumental reliability was determined by utilizing the Composite Reliability (CR) and Cronbach's alpha (CA) scores. According to the CFA approach, latent variables that possess a composite reliability (CR) and convergent validity (CA) value exceeding 0.70 are deemed reliable. The discriminant validity assessment was conducted using the Heterotrait-Monotrait (HTMT) value. In order for an instrument to be considered valid, it is necessary for the heterotrait-monotrait (HTMT) ratio to be below the threshold of 0.90. According to Henseler, Ringle, and Sinkovics (2009), the HTMT ratio is considered a more dependable measure for assessing discriminant validity in the context of partial least squares structural equation modeling (PLS-SEM) analysis.

The inner model underwent four measurement evaluations. The R² value is computed to assess the coefficient determination. Furthermore, the researchers utilized the bootstrapping technique on a subsample of 5000 observations to assess the significance of the coefficients associated with direct and indirect routes. Examining the t-statistic or p-value is necessary to determine the significance of a path connection between latent variables. For a path connection to be considered significant, the p-value must be less than 0.05/0.10. Additionally, the analysis included assessments of model fit, specifically examining goodness of fit and testing for multicollinearity assumptions. The goodness of fit was assessed by calculating the SRMR, NFI, and Chi-Square ratios. The outcome of the inner VIF test is employed to evaluate the multicollinearity assumption. In addition, determining predictive relevance is accomplished by utilizing a blindfolding technique that relies on cross-validated redundancy, as outlined by J. F. Hair et al. (2018) and Henseler et al. (2009).

RESULTS AND DISCUSSION

Table 2 presents an overview of the characteristics of the participants. The survey achieved a balanced representation of both male and female respondents. The gender distribution exhibited a ratio of 24.4:75.6, consisting of 135 males and 418 females. The survey results indicate that 84.60% of the participants are currently enrolled as undergraduate students, while 11.90% have already obtained a diploma or bachelor's degree and are currently pursuing a master's degree. In the study, it was found that a proportion of 2.20% of the participants had successfully completed their education at the junior high school level, whereas a smaller percentage of 0.4% were currently engaged in the pursuit of a doctoral degree. The focus of this study pertained to individuals belonging to the Z generation who were pursuing a bachelor's degree. It was found that a majority of the participants

(72.90%) reported having a monthly expenditure range between 500,000 and 1,000,000 rupiah. Out of the total sample size of 120 respondents, 21.70% reported a monthly expenditure ranging from 1,500,000 to 3,000,000 rupiah. The term commonly used to describe this is the "budget allocated for students." Among the surveyed participants, it was found that 28 individuals reported a monthly expenditure ranging from 3,500,000 to 10,000,000 rupiah. However, a mere two respondents indicated a monthly expense exceeding 10,000,000 rupiah.

Furthermore, it is noteworthy that a significant majority of the participants, specifically 393 individuals accounting for 71.1% of the total respondents, reported utilising multiple ride-hailing applications. Simultaneously, a total of 160 participants, accounting for 28.90% of the sample, reported utilising only a single application. In addition, it should be noted that out of the total sample size of 321 participants, a significant proportion reported ownership of a vehicle or possession of belongings that were entrusted to them by their parent or guardian. Simultaneously, a total of 232 participants, accounting for 42% of the sample, do not possess a personal automobile. The majority of participants (73.68%) reported a duration of 1-2 years in their utilisation of ride-hailing applications. Out of the total number of respondents, 181 individuals (17.01%) reported using ride-hailing apps for a duration of 3-4 years, while the remaining participants indicated that they have been utilising these apps for a period exceeding four years. Based on an analysis of the respondents' profiles, it can be inferred that the research survey adequately encompasses all the defining characteristics of Generation Z.

Table 2. Respondent Profile

Profile	Frequency	Percentage (%)	Profile	Frequency	Percentage (%)
Expenses per Month (in Rupiah)			Gender		
500,000 – 1,000,000	403	72.9%	Male	135	24.4%
1,500,000 – 3,000,000	120	21.7%	Female	418	75.6%
3,500,000 – 10,000,000	28	5.1%	Experience Using Ride-Hailing App		
>10,000,000	2	0.4%	1 – 2 years	272	73.68%
Education			3 – 4 years	181	17.01%
Junior High School	11	2.20%	4 – 5 years	58	5.26%
Senior High School / College Student	468	84.60%	> 5 years	42	3.95%
Diploma/ Bachelor	66	11.90%	Vehicle Ownership		
Master – Doctor	7	1.30%	Yes	321	58%
			No	232	42%
			The Number of Ride-Hailing Apps Used		
			Only 1	160	28.9%
			> 1	393	71.1%

Source: The result of the data analysis

In the context of Structural Equation Modeling-Partial Least Squares (SEM-PLS), it is imperative that the construct variables and indicators exhibit multicollinearity. The fulfilment of this requirement can be achieved through the utilisation of the Partial Least Squares (PLS) technique for the computation of the inner Variance Inflation Factor (VIF) value. According to Hair et al. (2017), if the Variance Inflation Factor (VIF) exceeds a threshold of 3, it is generally inferred that the indicators exhibit multicollinearity. The VIF values for the variables and indicators in Table 3 are all below three. Consequently, this study concludes that the multicollinearity assumption is not present.

Table 3. Inner V.I.F. Test Result

	Personal Innovativeness in Information Technology
Electronic Word of Mouth	1.755
Gender	1.020
Gender*E-WOM (Moderating Variable)	1.506
Personal Innovativeness in Information technology	
Perceived Service and System Quality	1.171
Social Influence	1.668
SI*Gender (Moderating Variable)	1.508

Source: The result of the data analysis

The overall performance evaluated of both the outer/measurement and structural/inner models when assessing the model fit (Hair et al., 2018). The official website of SMART PLS provides a comprehensive description of the various threshold value requirements. According to Henseler et al. (2014), it is indicated that the RMS (Root Mean Square) Theta value should be below 0.102, the SRMR (Standardized Root Mean Square) value should be below 0.10 or 0.08, and the NFI value should be above 0.9 or approaching one. The NFI value of the calculated model is 0.843, indicating a close proximity to 1. Additionally, the SRMR value is 0.0660, below the threshold of 0.10. These results are presented in Table 4. As a result, the model developed in this study successfully met the assumption of Goodness of Fit (GoF).

Table 4. Model Fit Test Result

	Saturated Model	Estimated Model
SRMR	0.0540	0.0660
d_ ULS	1.2000	1.3670
d_ G	0.3600	0.3700
Chi-Square	1097.1180	1120.3270
NFI	0.8740	0.843

Source: The result of the data analysis

The utilization of CA, CR, AVE, and HTMT scores is recommended to assess instrument reliability, convergent validity, and discriminant validity. The results presented in Table 5 demonstrate that each indicator item examined in this study exhibits an outer loading value exceeding 0.70. This finding suggests that all indicators effectively capture and represent the underlying construct. Based on the data presented in the table, it can be observed that the composite reliability (CR) and convergent validity (CA) coefficients for each latent variable in this study exceed the threshold of 0.70. Every concealed variable has an average variance extracted (AVE) value exceeding 0.50. The findings suggest that the instrument constructed using the latent variables and indicators exhibits reliability and validity.

Table 5. Convergent Validity and Reliability

Variable	Code	Outer Loading	Cronbach's Alpha	Composite Reliability	AVE	VIF
Moderating Variable	EWOM	*	1.000	1.000	1.000	1.000
	Gender	0.966				
Electronic Word of Mouth	EWOM5	0.741	0.814	0.87	0.573	1.877
	EWOM6	0.771				2.136
	EWOM7	0.773				1.732

	EWOM8	0.755				1.713
	EWOM9	0.745				1.645
	Gender	1.000	1.000	1.000	1.000	1.000
Personal Innovativeness in Information Technology	PIIT2	0.725				1.572
	PIIT3	0.757				1.874
	PIIT4	0.815	0.87	0.902	0.606	2.048
	PIIT5	0.776				1.882
	PIIT6	0.800				1.916
	PIIT7	0.792				1.857
	PSSQ1	0.824				2.846
Perceived Service and System Quality	PSSQ10	0.816				2.604
	PSSQ2	0.823				2.779
	PSSQ3	0.739				1.930
	PSSQ4	0.777	0.931	0.942	0.62	2.184
	PSSQ5	0.774				2.263
	PSSQ6	0.781				2.221
	PSSQ7	0.809				2.370
	PSSQ8	0.708				1.760
	PSSQ9	0.813				2.607
Moderating Variable	SI * Gender	1.057	1.000	1.000	1.000	1.000
	SI1	0.794				1.863
Social Influence	SI2	0.811	0.801	0.869	0.624	1.887
	SI3	0.825				1.527
	SI4	0.725				1.433

Source: The result of the data analysis

The Heterotrait-Monotrait (HTMT) value was employed to assess the instrument's discriminant validity. For a tool to be considered valid, it is necessary for the HTMT ratio to be below the threshold of 0.90, as established by Henseler et al. (2009). The HTMT ratios for each latent variable in Table 6 exhibit values below 0.90, indicating that this study's research instrument is satisfactory and valid in assessing the constructed model.

Table 6. Discriminant Validity (HTMT Ratio)

	EWOM	Gender	Gender*EWOM	PIIT	PSSQ	SI
Electronic Word of Mouth						
Gender	0.06					
Gender*EWOM	0.065	0.046				
Personal Innovativeness in Information Technology	0.699	0.101	0.080			
Perceived System and Service Quality	0.657	0.053	0.042	0.608		
Social Influence	0.672	0.077	0.050	0.552	0.637	
SI*Gender	0.029	0.052	0.569	0.081	0.085	0.110

Source: The result of the data analysis

Structural / Inner Model Test Result

The first step in the analysis of a structural model involves the determination of the coefficients. The determination of the R^2 value is contingent upon the stages of the PLS algorithm. According to J. F. Hair et al. (2018), R^2 values are classified into three distinct categories: strong (0.75), moderate (0.50), and weak (0.25). Based on the findings presented in Table 7, it can be observed that the R^2 values for PIIT (0.440) exhibit a weak relationship, as they fall below the

threshold of 0.50. However, it is worth noting that these values are still statistically significant, surpassing the minimum threshold of 0.25. Consequently, the influence of independent factors on the dependent variable is minimal. The study on continuance intentions to utilize ride-hailing applications provides a comprehensive elucidation of the underlying factors and driving forces. The R² coefficient indicates that the variables of Social Influence (SI), Perceived System and Service Quality (PSSQ), and Electronic Word-of-Mouth (EWOM) collectively account for 44% of the variance in influencing of personal innovativeness of the Z generation to use a new brand of ride-hailing app. Simultaneously, the remaining portion (56%) of the variance is accounted for by exogenous factors not included in the model.

Table 7. R² Results

	R Square	R Square Adjusted
Personal Innovativeness in Information Technology	0.440	0.433

Source: The result of the data analysis

The evaluation of the outcome of blindfolding in the second part is conducted through the inner model test. Blindfolding is used to assess the degree of predictive relevance in a construct model by evaluating the value of Q². If the p-value for Q² is greater than 0.05, it can be inferred that the construct model exhibits statistical significance. According to Table 8, the Q² value for the endogenous variable (PIIT) exceeds the threshold of 0.05. (0.258). Therefore, the exogenous variables utilized in this study to predict endogenous variables are precise.

Table 8. Blindfolding Test Results

	SSO	SSE	Q ²
Electronic Word of Mouth	2630	2630	
Gender	526	526	
Gender*EWOM	526	526	
Personal Innovativeness in Information Technology	3156	2342.236	0.258
Perceived System and Service Quality	5260	5260	
Social Influence	2104	2104	
SI*Gender	526	526	

Source: Result Analysis Data (2022)

The procedure of inner model analysis culminates in hypothesis testing through the utilization of the bootstrapping approach. The stability level of the data was assessed by the researcher through the utilization of 5,000 sub-samples, in order to evaluate the applicability of the structural model (J. F. Hair et al., 2017). The study employed a significance threshold of 10%. The degree holds considerable importance within the fields of economics and management sciences.

The results of the direct connection are presented in Table 9. The variable of E-WOM has a significant and positive impact on PIIT. In a similar vein, it can be observed that SI has a significant and positive influence on (PIIT). The finding shows that PSSQ supports the same conclusion, indicating a statistically significant positive influence on PIIT. In addition, gender also influences PIIT in a significant way. The result indicates that a man is more likely to create personal innovativeness to use a new brand of ride-hailing app. Conversely, Table 9 shows that gender has no moderating effect on the relationship between E-WOM and SI on PIIT. Judging by the coefficient effect, E-WOM is the most significant determinant of personal innovativeness among the Z generation to try to use a new brand of ride-hailing. It is followed consecutively by the perceived system and service quality and social influence.

Table 9. Direct Effect Test Results

Hypothesis	Path	Coefficient	Standard Deviation	T Statistics	P Values	Decision
H1	EWOM -> PIIT	0.382	0.049	7.729	0.000	Supported*

H2	SI -> PIIT	0.129	0.051	2.501	0.012	Supported*
H3	PSSQ -> PIIT	0.254	0.049	5.173	0.000	Supported*
H4	Gender -> PIIT	0.054	0.032	1.696	0.090	Supported**
H5a	Gender*EWOM -> PIIT	0.062	0.053	1.174	0.241	Not Supported
H5b	SI*Gender -> PIIT	0.006	0.051	0.124	0.901	Not Supported

*5% significant level

**10% significant level

Discussion

The results indicate that E-WOM emerged as the most influential factor in shaping individuals' personal innovativeness using a newly introduced brand of ride-hailing app. The present study has provided robust evidence in support of prior research findings. The findings of previous studies have demonstrated that the factor of E-WOM plays a crucial role in influencing individuals' personal innovativeness to adopt various technologies, such as mobile commerce (S. Sair & Danish, 2018), mobile learning (Onalapo & Oyewole, 2018), and ride-hailing apps (Rahi et al., 2019). Similar to previous research, this study has also demonstrated that the perceived system and service quality substantially impacts the inclination of Generation Z individuals to try a novel ride-hailing application. The current finding is consistent with the previous research conducted by S. Sair and Danish (2018) on mobile commerce adoption.

The ride-hailing services offered by MAXIM and InDriver have garnered the attention of Gen Z users due to their notable attributes of flexibility, user-friendliness, and comfort. The level of user-friendliness of an application positively correlates with the likelihood of Gen Z individuals expressing interest in utilizing said application. Once individuals have gained firsthand experience and verified the application's usability, they decide to persist in its usage. The aforementioned observation by Froehlich (2022) aligns with the results of the IBM study, further confirming that mobile applications designed for Generation Z should prioritize friendly systems and service quality, particularly regarding one-handed operation. The optimal placement for crucial buttons is close to the lower portion of the screen, facilitating convenient access for the user through a single thumb. This suggests that the perceived system and service quality significantly predicts personal innovativeness using a new brand of ride-hailing.

Similar findings have been observed in the context of social influence. This research demonstrates a significant influence on the personal innovativeness of Generation Z. The influence of social factors on cognition and information processing notably impacts the formation and development of cognitive personality traits. Individuals who utilize ride-hailing applications disseminate crucial information and personal evaluations through various social media platforms. According to (Lu, 2014), the level of confidence and preparedness to adapt to changes in the mobile setting is ultimately influenced by feedback received from others regarding the potential utilization of specific new or updated services and brands.

The abundance of information available on social networks, encompassing both real-life interactions and online social platforms, has the potential to stimulate the personal innovativeness of Generation Z users in adopting a novel ride-hailing application. In conjunction with favorable performance and effort expectations, individuals ultimately opt to persist in its utilization. The present findings provide theoretical support for the prior research conducted by Ghalandari (2012) and (Lu, 2014), who also observed similar outcomes in the domain of mobile commerce and E-banking services.

CONCLUSION

The heightened rivalry among super app companies in Indonesia, as they strive to offer online motorcycle taxi services, has spurred numerous researchers to examine the determinants that drive users to develop loyalty towards a particular application. The investigative findings pertaining to this matter hold practical value for digital companies engaged in providing online motorcycle taxi services. Understanding the key determinants behind adopting novel brand applications is crucial for emerging enterprises as it enables them to devise potent marketing and market penetration strategies that resonate with the target audience. Established companies can utilize the research findings to develop strategic approaches to retain their loyal customer base and prevent them from transitioning to alternative brands.

The primary focus of this study is to investigate the determinants of personal innovativeness in information technology of Z generations in Indonesia to use the MAXIM / InDriver application. The findings of this study have provided insights into the research inquiries, indicating that the three predictor variables, namely SI, E-WOM, and PSSQ, have exerted a positive and statistically significant impact on the Z generation's personal innovativeness using the newly introduced ride-hailing application. The primary determinant of users' inclination to adopt and engage with new branded online motorcycle taxi applications, known as PIIT (Perceived Innovation and Intention to Try), is E-WOM. This factor holds the greatest significance in influencing users' desire to experiment with and embrace these applications. Subsequently, social influence and the perceived system and service quality associated with the application also shape the Z generation's personal innovativeness.

When users are influenced by their surrounding environment and have personally witnessed the advantages, convenience, and efficacy of the novel online motorcycle taxi application, as attested by others and their own experiences, their inclination towards innovation and curiosity will prompt them to adopt its usage. Once individuals have had firsthand experience with the new brand of online motorcycle taxis, their inclination toward becoming loyal patrons is likely to be piqued. This study makes a valuable contribution to the existing body of theory by elucidating the role of personal innovativeness as a key determinant in explaining individuals' intentions to continue using a newly introduced brand of ride-hailing application.

REFERENCES

- Achiriani, M., & Hasbi, I. (2021). Pengaruh Performance Expectancy, Effort Expectancy, Social Influence, Perceived Risk, Perceived Cost Terhadap Behavioral Intention Pada Pengguna Dompot Digital Dana Di Indonesia. *E-Proceeding of Management*, 376–388.
- Alananto, D., & Wahyudi, T. (2021). *Determinants of Consumer Preference on Ride-Hailing Platforms in Southeast Asia* *JMSAB* 199. 4(1), 207–216. <https://doi.org/10.36407/jmsab.v4i1.380>
- Almunawar, M. N., Anshari, M., & Ariff Lim, S. (2020). Customer acceptance of ride-hailing in Indonesia. *Journal of Science and Technology Policy Management*, 12(3), 443–462. <https://doi.org/10.1108/JSTPM-09-2019-0082>
- Almunawar, M. N., Anshari, M., & Ariff Lim, S. (2021). Customer acceptance of ride-hailing in Indonesia. *Journal of Science and Technology Policy Management*, 12(3), 443–462. <https://doi.org/10.1108/JSTPM-09-2019-0082>
- Chen, C.-C., Liao, C.-C., Chen, H.-H., Wang, H.-W. M., & Zhuo, W.-X. (2019). The Effect of Personal Innovativeness on Mobile Payment to Behavioral Intentions Perceived Enjoyment as a Moderator. *2019 IEEE International Conference on Consumer Electronics - Taiwan (ICCE-TW)*, 1–2. <https://doi.org/10.1109/ICCE-TW46550.2019.8992013>

- Fauzi, A. A. (2018). *Electronic Service Quality On Mobile Application Of Online Transportation Services*. 13–27.
- Fauzi, A. A., & Sheng, M. L. (2020). Ride-hailing apps' continuance intention among different consumer groups in Indonesia: the role of personal innovativeness and perceived utilitarian and hedonic value. *Asia Pacific Journal of Marketing and Logistics*, 33(5), 1195–1219. <https://doi.org/10.1108/APJML-05-2019-0332>
- Fauzi, A. A., & Sheng, M. L. (2021). Ride-hailing apps' continuance intention among different consumer groups in Indonesia: the role of personal innovativeness and perceived utilitarian and hedonic value. *Asia Pacific Journal of Marketing and Logistics*, 33(5), 1195–1219. <https://doi.org/10.1108/APJML-05-2019-0332>
- Froehlich, N. (2022, January 12). *Understanding The Differences In Mobile App Use Across Generations*. Forbes. <https://www.forbes.com/sites/forbestechcouncil/2022/01/12/understanding-the-differences-in-mobile-app-use-across-generations/?sh=67e488651d18>
- Ghalandari, K. (2012a). The Effect of Performance Expectancy, Effort Expectancy, Social Influence and Facilitating Conditions on Acceptance of E-Banking Services in Iran: the Moderating Role of Age and Gender. *Middle-East Journal of Scientific Research*, 12(6), 801–807. <https://doi.org/10.5829/idosi.mejsr.2012.12.6.2536>
- Ghalandari, K. (2012b). The Effect of Performance Expectancy, Effort Expectancy, Social Influence and Facilitating Conditions on Acceptance of E-Banking Services in Iran: the Moderating Role of Age and Gender. *Middle-East Journal of Scientific Research*, 12(6), 801–807. <https://doi.org/10.5829/idosi.mejsr.2012.12.6.2536>
- Gozali, I. (2018). *Aplikasi analisis multivariate dengan program IBM SPSS 25* (9th ed.). Badan Penerbit Universitas Diponegoro.
- Hair, J. F., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: updated guidelines on which method to use "PLS-SEM or CB-SEM: updated guidelines on which method to use." In *Organizational Research Methods, MIS Quarterly, and International Journal* (Vol. 1, Issue 2).
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2018). The Result pf PLS-SEM. *Eur.Bus.Rev*, 31(1), 2–24.
- Hair, J., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. L. (2017). An updated and expanded assessment of PLS-SEM in information systems research. *Industrial Management and Data Systems*, 117(3), 442–458. <https://doi.org/10.1108/IMDS-04-2016-0130>
- He, F., & Shen, Z.-J. M. (2015). Modeling taxi services with smartphone-based e-hailing applications. *Transportation Research Part C: Emerging Technologies*, 58, 93–106. <https://doi.org/https://doi.org/10.1016/j.trc.2015.06.023>
- Henseler, J., Dijkstra, T. K., Sarstedt, M., Ringle, C. M., Diamantopoulos, A., Straub, D. W., Ketchen, D. J., Hair, J. F., Hult, G. T. M., & Calantone, R. J. (2014). Common Beliefs and Reality About PLS: Comments on Rönkkö and Evermann (2013). *Organizational Research Methods*, 17(2), 182–209. <https://doi.org/10.1177/1094428114526928>
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. *Advances in International Marketing*, 20, 277–319. [https://doi.org/10.1108/S1474-7979\(2009\)0000020014](https://doi.org/10.1108/S1474-7979(2009)0000020014)
- Hwang, Y. (2014). User experience and personal innovativeness: An empirical study on the Enterprise Resource Planning systems. *Computers in Human Behavior*, 34, 227–234.
- Lu, J. (2014). Are personal innovativeness and social influence critical to continue with mobile commerce? *Internet Research*, 24(2), 134–159. <https://doi.org/10.1108/IntR-05-2012-0100>
- Onaolapo, S. A., & Oyewole, O. K. (2018). Performance Expectancy, Effort Expectancy, and Facilitating Conditions as Factors Influencing Smart Phones Use for Mobile Learning by Postgraduate Students of the University of Ibadan, Nigeria. *Interdisciplinary Journal of E-Skills and Lifelong Learning*, 14, 95–115.

- Rahi, S., Othman Mansour, M. M., Alghizzawi, M., & Alnaser, F. M. (2019). Integration of UTAUT model in internet banking adoption context: The mediating role of performance expectancy and effort expectancy. *Journal of Research in Interactive Marketing*, 13(3), 411–435. <https://doi.org/10.1108/JRIM-02-2018-0032>
- Sair, S. A., & Danish, R. Q. (2018a). Effect of performance expectancy and effort expectancy on the mobile commerce adoption intention through personal innovativeness among Pakistani consumers. *Pakistan Journal of Commerce and Social Science*, 12(2), 501–520.
- Sair, S. A., & Danish, R. Q. (2018b). Effect of performance expectancy and effort expectancy on the mobile commerce adoption intention through personal innovativeness among Pakistani consumers. *Pakistan Journal of Commerce and Social Science*, 12(2), 501–520.
- Sair, S., & Danish, R. (2018). Effect of Performance Expectancy and Effort Expectancy on the Mobile Commerce Adoption Intention through Personal Innovativeness among Pakistani Consumers. *Pakistan Journal of Commerce and Social Sciences*, 12(2), 501–520.
- Salim, I., Ricardo, R., MZ, S. B., & Marisa, T. (2021). Faktor Yang Mempengaruhi Kepuasan Pelanggan Dalam Layanan Ride Hailing Di Indonesia. *Jurnal Aplikasi Bisnis Dan Manajemen*. <https://doi.org/10.17358/jabm.7.1.135>