

Determinants of E-Hailing Service Adoption among University Students in Peninsular Malaysia

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Abstract

The rise of electronic hailing has transformed transportation globally, particularly in major cities. This research aims to identify the determinant factors influencing university students' intention to use e-hailing services, including attitude, subjective norm, perceived behavioral control, perceived usefulness, and perceived ease of use. A sample of 200 students from five different universities completed a questionnaire. Analysis with SPSS version 26.0 for Windows revealed significant correlations between the intention to use e-hailing services and attitude ($r = 0.938$, $p = 0.000$), subjective norm ($r = 0.964$, $p = 0.000$), perceived behavioral control ($r = 0.965$, $p = 0.000$), perceived usefulness ($r = 0.964$, $p = 0.000$), and perceived ease of use ($r = 0.958$, $p = 0.000$). Multiple Linear Regression analysis indicated that subjective norm ($B = 0.302$) was the most influential factor, followed by perceived behavioral control, perceived usefulness, and perceived ease of use. These findings suggest these factors are crucial in influencing students' decisions. E-hailing companies can develop more effective marketing strategies by focusing on these areas, enhancing adoption and usage among university students. This research also enriches the Theory of Planned Behavior (TPB) and the Technology Acceptance Model (TAM).

Keywords: Transportation, Consumers' Intention, E-Hailing Services, University Students, Potential Clients

Introduction

E-hailing, often referred to as electronic cab-hailing, involves the use of electronic devices, typically smartphones, to request transportation services (Dhawan & Yadav, 2018). E-hailing, is a manifestation of the shared mobility paradigm within the transportation sector, represents a notable shift in how people navigate urban environments, especially in densely populated areas (Shaheen et al., 2015; Malichová et al., 2020). According to the Malaysian Ministry of Transportation, e-hailing services allow consumers to reserve public transportation through digital applications, with the vehicle typically being a four-passenger capacity automobile (Yaacob et al., 2022). Smartphone apps provide a user-friendly interface

to book rides, leave feedback for drivers, and facilitate cashless transactions, revolutionizing the way people access transportation services.

The widespread adoption of e-hailing has significantly transformed transportation worldwide, particularly in urban centers. Users can easily request rides via smartphone applications, with options for customization such as choosing the destination, preferred vehicle type, and payment method (Cervero, 1997). This convenience has made consumer trips more accessible and efficient, leading to the increased popularity of e-hailing services over traditional taxicabs (Todd et al., 2018).

Moreover, e-hailing contributes to sustainability efforts by reducing greenhouse gas emissions and promoting more efficient resource utilization (Arnold et al., 2017). Statista (2019) projects a substantial increase in e-hailing service users in Malaysia by 2023, with a corresponding global market expansion (Ezdom Technology Sdn Bhd, n.d.). Notably, Uber was the first e-hailing service to go live internationally in 2009, followed by its entry into the Malaysian market in 2014, alongside other emerging e-hailing platforms such as Grab, Dascee, and MyCar (Tachet et al., 2017).

Despite the undeniable benefits of e-hailing, concerns regarding safety, regulation, and consumer protection persist (Roughton, 2020; Teo et al., 2018). Instances of criminal activities, price over-billing, and unprofessional conduct by drivers have been reported, underscoring the need for robust oversight mechanisms and accountability measures (Salim et al., 2020). Additionally, vulnerable populations such as the elderly face unique challenges in adapting to e-hailing platforms due to digital literacy gaps and privacy concerns (Pretorius, 2022).

Efforts to address these challenges are imperative to ensure the sustainable integration of e-hailing services into urban transportation ecosystems. Although the advent of e-hailing services has many benefits for users, like meeting Malaysians' demands and needs for private cars, shorter travel times, and simplicity, it also raised the risk of crime (Roughton, 2020). By prioritizing consumer safety, regulatory compliance, and equitable access, stakeholders can harness the transformative potential of e-hailing to create more efficient, inclusive, and sustainable urban transportation systems for the future (Feeney, 2019). Hence, the objective of the study is to identify the determinants of attitude, subjective norm, perceived behavioral control, perceived usefulness, perceived ease of use, and consumer intention towards e-hailing services among university students in Peninsular Malaysia.

Theories

Theory of Planned Behavior (TPB)

The theory of planned behavior (TPB) is a comprehensive framework rooted in social psychology, serving as an extension of the theory of reasoned action (TRA) to explain behaviors with partial conscious control (Ajzen, 1991; Fishbein & Ajzen, 1975). It emphasizes the importance of behavioral intentions, shaped by attitudes, subjective norms, and perceived control, in predicting human behavior (Ajzen, 1991). TPB offers insights into the factors driving consumer behavior, making it a valuable framework for understanding the adoption of e-hailing services among university students and in diverse social contexts (Arumugam et al., 2020). By considering attitudes, social norms, and perceived control, TPB

provides a robust basis for exploring the complexities of human behavior and predicting intentions with accuracy.

Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM), originating from the Theory of Reasoned Action (TRA), was first introduced by Fred Davis in 1985 to understand consumer acceptance of new technology (Legris et al., 2003). TAM assesses how perceived usefulness and ease of use influence user acceptance of a system, indicating its overall success (Benbasat & Barki, 2007). Perceived usefulness and ease of use are interconnected, shaping individuals' attitudes towards technology adoption (Wang et al., 2018). Previous studies, such as that of Fleischer & Wahlin (2016), have applied TAM to investigate consumer intention to use ride-hailing services. Given its widespread adoption and applicability, TAM serves as a valuable framework for understanding consumer acceptance and intention to use e-hailing services, particularly among university students (Joia & Altieri, 2018).

Conceptual Framework

The research framework will be used to implement the actions taken during the study. Researchers typically use it as a direction to assist them concentrate their research (Amiri et al., 2014).

By taking into account the research framework, the following hypothesis were given based on the variables of attitude, subjective norm, perceived behavioral control, perceived usefulness, and perceived ease of use on consumer's intention towards e-hailing services (Figure 1).

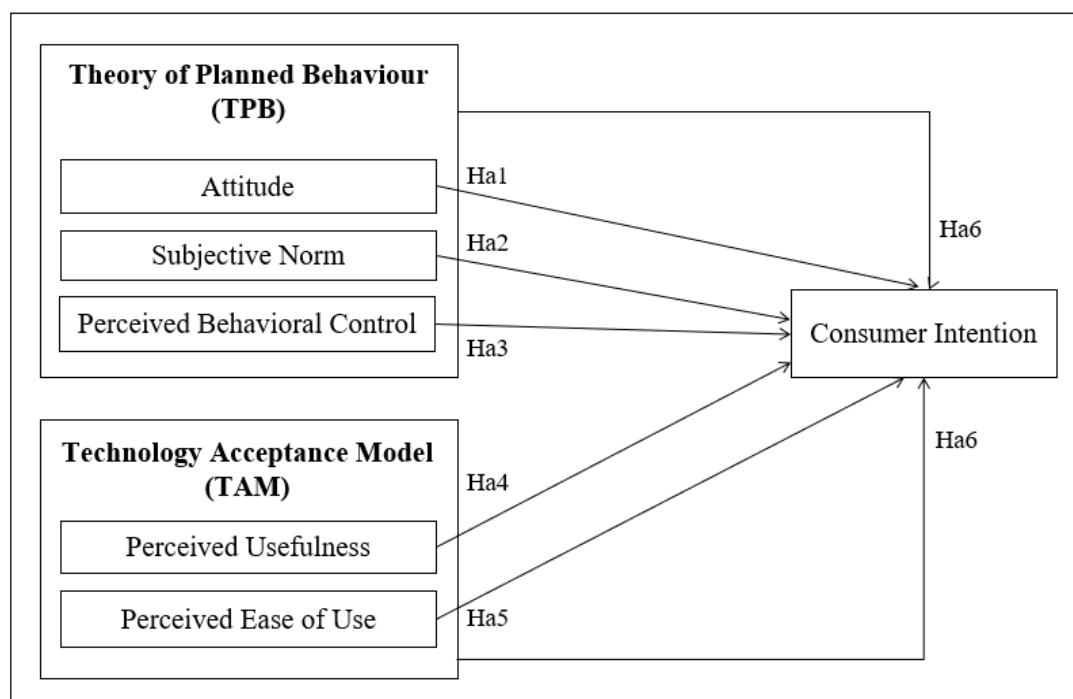


Figure 1: Research Framework

Literature Review

E-Hailing Services

E-hailing or "e-cab-hailing," was a phenomenon involves utilizing electronic devices like smartphones to request various forms of transportation, including taxis and private vehicles, for passenger pick-up. E-hailing platforms offer consumers numerous benefits, including increased convenience, diverse payment options, vehicle selection, and transparent fare estimation. Through smartphone apps, passengers can easily connect with nearby drivers, facilitated by GPS tracking and real-time matchmaking algorithms. Essential driver details, such as name, photo, vehicle description, and license plate number, are provided to passengers via the app, enhancing safety and accountability. Additionally, these platforms enable users to evaluate drivers, settle ride fares, and provide feedback, enhancing overall user experience and trust in e-hailing services (Fassbender, 2016).

Attitude

Attitude towards behavior, according to Ajzen (1985), reflects one's positive or negative response to an action based on outcome assessments, significantly influencing the likelihood of engaging in that behavior (Ajzen, 1991). This attitude encompasses affect, cognition, and behavior, representing feelings, beliefs, and inclinations towards a product or service (Wong et al., 2018; Solomon et al., 2017). Research by Amirkiaee and Evangelopoulos (2018) indicates that a positive attitude towards e-hailing correlates with a higher propensity to use such services, aligning with the theory of planned behavior (TPB) (Ajzen, 2005). Dhawan's (2018) findings suggest that households with fewer cars are more inclined to embrace e-hailing, illustrating how attitudes influence behavioral choices. Understanding consumer attitudes is crucial for predicting product adoption, especially regarding innovative services like e-hailing. Those with favorable attitudes towards e-hailing are more likely to utilize it, reflecting a preference for its benefits (Gunawan, 2015).

Ha1: Attitude has a positive relationship with consumers' intention to use e-hailing services among university students.

Subjective Norm

Subjective norms, influential in shaping behavioral decisions, reflect the social pressure individuals feel from significant others regarding a specific behavior (Ajzen, 1991). This concept, pivotal in the technology acceptance model (TAM), signifies individuals' beliefs about others' expectations and support for their engagement in a behavior (Venkatesh & Davis, 2000). Empirical studies affirm the positive impact of subjective norms on the intention to use e-hailing services (Peng et al., 2014; Joia & Altieri, 2018). These norms serve as valuable indicators for understanding factors influencing consumers' intention to adopt e-hailing services, especially among university students. Therefore, investigating the role of subjective norms in the context of e-hailing usage can provide insights into the social influences driving individuals' decisions to embrace this innovative mode of transportation.

Ha2: Subjective norm has a positive relationship with consumers' intention to use e-hailing services among university students.

Perceived Behavioral Control

Perceived behavioral control, an extension of the theory of reasoned action (TRA), addresses situations where individuals lack full awareness of their actions (Joia & Altieri, 2018). It reflects an individual's belief in their ability to control a specific behavior, shaped by their perception of resources versus challenges (Ajzen, 1985). This perception, influenced by belief systems (Ajzen, 1991), determines whether individuals find executing a behavior easy or challenging (Ajzen & Fishbein, 2000). Studies suggest that consumers are more likely to embrace e-hailing when they feel they have control and demand for it (Giang et al., 2017). Research reinforces the positive impact of perceived behavioral control on intention to use e-hailing, particularly among university students (Chin et al., 2019; Wu et al., 2022).

Ha3: Perceived behavioral control has a positive relationship with consumers' intention to use e-hailing services among university students.

Perceived Usefulness

Perceived usefulness, as defined by the Technology Acceptance Model (TAM), refers to an individual's perception of how employing a system can enhance task accomplishment (Davis et al., 1989). This concept significantly influences the decision to adopt innovative technology, including mobile taxi-hailing applications (Suhud et al., 2019). It denotes the perceived advantage, benefit, and helpfulness of modern technology application (Venkatesh & Davis, 2000; Legris et al., 2003). Perceived usefulness consistently emerges as a significant predictor of intention to use, with standardized regression coefficients typically around 0.6 (Venkatesh & Davis, 2000). Empirical studies confirm its positive impact on continued e-hailing service usage (Hsiao et al., 2016; Kaewkitipong et al., 2016). This connection underscores its role in analyzing factors influencing consumers' intention to use e-hailing services among university students (Lim et al., 2018). Thus, perceived usefulness serves as a reliable indicator in this context.

Ha4: Perceived usefulness has a positive relationship with consumers' intention to use e-hailing services among university students.

Perceived Ease of Use

Perceived ease of use, a crucial aspect of the Technology Acceptance Model (TAM), reflects a user's perception of how effortless it is to operate a particular technology (Davis, 1989). It signifies the level of simplicity in utilizing a system, influencing the individual's intent to engage with it (Davis et al., 1989). Perceived ease of use correlates strongly with intention, directly and through its impact on perceived usefulness (Venkatesh, 1999). Studies on ride-hailing services highlight its significant association with users' intention to use (Suhud et al., 2019). For university students, perceived ease of use pertains to the simplicity of modern technology, influencing their preference for convenient features like easy payment options in e-hailing services (Bezovski, 2016). Thus, perceived ease of use plays a vital role in determining consumers' intention to use e-hailing services among university students.

Ha5: Perceived ease of use has a positive relationship with consumers' intention to use e-hailing services among university students.

Intention

The concept of consumers' intention is based on Ajzen and Fishbein's (1975), the theory of reasoned action (TRA). The definition of intention given by Davis et al (1989), is that it is a measurement that is used to assess how well a person perceives his or her intentions in relation to the accomplishment of a desired behavior. According to Salazar (1991), a person's intention and behavior are related because it can be used to determine whether or not a person intends to carry out a particular action. In addition, according to the two theories of technology acceptance model (TAM) and theory of planned behavior (TPB), intention plays a significant role in how someone behaves while performing a task (Gunasinghe et al., 2019). The intention to behave is the outcome of an eventual inspection. Whenever an individual develops the desire to use it, positive as well as negative elements are required to be present (Irawan et al., 2020). The rationale behind the phrase "behavioral intention" entails that it describes the person's willingness to participate in the targeted behavior, with the presumption that this willingness must necessarily exist right before the targeted behavior takes place (Ajzen, 1991). The objective desire, target motivation, behavior hunger, behavior purpose, and action are the means by which the consumer fundamental may be conveyed to represent this particular set of intentions (Bagozzi, 2000).

The phrase "consumers' intention" describes how people feel about making a particular purchase and the signal that they are making that purchase (Zhang et al., 2020). Nguyen et al (2020), discovered that users' perceptions were generally favorable and their intention for using smartphone apps for booking cabs elevated as a consequence of the perceived utility and perceived ease of use related to such applications. When referring to ride-hailing, the meaning of "buying intention" outlines an individual's desire to make a reservation journey through the cab-hailing mobile app. As well, having an approval rating of a specific company, good, or service provider leads to the intention of purchasing it (Ofori et al., 2022). As a result, we notice that consumers' intention to use the e-hailing service will be influenced by a range of factors.

Factors Influencing Intention to Use E-Hailing Services

Consumers can be influenced by a number of factors when making a choice about an item, and substantial external factors eventually influence their decisions. However, there remains a number of other factors that could influence consumers' intention. Such factors consist of attitude, subjective norm, perceived behavioral control, perceived usefulness, and perceived ease of use. These factors could also be having an influence on consumers' intention regarding e-hailing services.

Previous study discovered that the rise of mobile commerce increased as using e-hailing applications. They employed the theory of planned behavior (TPB) and suggested an empirical framework that included certain external variables would influence consumer choices to use e-hailing applications (Razi et al., 2021; Utami et al., 2021). Besides, a study had previously suggested that attitude could affect consumers' booking intentions when it was related to e-hailing services; its findings had subsequently confirmed that trust and attitude had a favorable impact on consumers' booking intentions in that scenario (Sadom et al., 2022). Prior research additionally discovered and addressed that an individual's intention to utilize and reuse with an e-hailing service was greatly influenced by subjective norms (Lim et al., 2018). According to the research by Giang et al (2017), consumers' intention to use ride-

sharing apps is predicted primarily by the level of control that they perceive to possess over their behavior. In the research conducted by Fishbein and Cappella (2006), they developed an integrated framework which included self-efficacy as a determinant, as well as perceived behavioral control. Self-efficacy has resulted in an elementary impact on the manner in which consumers implement e-hailing apps (Arora et al., 2022).

Furthermore, numerous research studies have shown that the technology acceptance model (TAM) theory is the theoretical framework that is most frequently applied to examine how people embrace e-hailing technology (Ruangkanjanases & Techapoolphol, 2018; Dhawan & Yadav, 2018; Arumugam et al., 2020). Earlier studies upon the intention of individuals to use e-hailing has indicated that perceived usefulness possesses a positive effect on user satisfaction, resulting in a prediction of intention to use e-hailing services due to straightforward and simple to use apps. As a result, it provides a positive impact on the continued intention to use e-hailing services (Weng et al., 2017; Joia & Altieri, 2018; Arumugam et al., 2020). In addition, previous study results had discovered the fact that perceived ease of use encounters a positive impact upon the intention to use e-hailing, and this was supported by the study's research (Ruangkanjanases & Techapoolphol, 2018; Dhawan & Yadav, 2018; Suhud et al., 2019)

Ha6: The factor of attitude, subjective norm, perceived behavioral control, perceived usefulness, and perceived ease of use has a positive relationship with consumers' intention to use e-hailing services among university students.

Methodology

The research design adopts a quantitative approach aimed at comprehensively understanding the factors influencing consumers' intention to use e-hailing services among university students. In this research, a survey questionnaire is chosen as the primary data collection method due to its ability to efficiently reach a large number of participants in university settings while minimizing resource and time requirements. The questionnaire is carefully designed to capture relevant variables such as attitude, subjective norm, perceived behavioral control, perceived usefulness, perceived ease of use, and consumers' intention towards e-hailing services.

The survey is distributed among 200 university students randomly selected from 5 Malaysian public universities, including Kuala Lumpur (University of Malaya), Selangor (Universiti Putra Malaysia), Kedah (Universiti Utara Malaysia), Johor (Universiti Teknologi Malaysia), and Perak (Universiti Pendidikan Sultan Idris). Simple random sampling is employed to select participants, ensuring that each member of the population has an equal chance of being chosen. The combination of data from these five universities are capable of assembling a significant amount of information related to university students in terms of their ethnicities, genders, university, source of income, experience of e-hailing services and other cultural backgrounds.

The study employs a 5-point Likert scale for measuring variables, ranging from strongly disagree (1) to strongly agree (5), facilitating the assessment of factors influencing consumers' intentions regarding e-hailing services among university students. Additionally, nominal and ordinal scales are used for measurement. The nominal scale in section A involves separate

identification numbers for categories, while the ordinal scale in sections B through G captures ordered category information. However, the ordinal scale has limitations in assessing differences between each rating.

Cronbach's alpha, a measure of internal consistency reliability, is crucial for assessing the reliability of research instruments. Generally, a value above 0.7 is deemed acceptable. In this study, all six questionnaire items exhibit Cronbach's alpha values exceeding 0.7, indicating exceptionally high internal consistency and suitability for future data collection (Rouibah et al., 2009; Hair et al., 2014).

The data collection process includes both primary and secondary sources, with online surveys serving as the primary method for collecting primary data and literature review contributing to secondary data collection. Descriptive analysis, Pearson's correlation, and Multiple Linear Regression Analysis are employed for data analysis using SPSS version 26.0 to assess demographic information, relationships between variables, and influential factors on consumers' intention toward e-hailing services. This rigorous approach ensures a comprehensive understanding of the factors driving consumer intention in the context of e-hailing services among university students.

Findings

Respondents' Background

The data pertaining to respondents' profiles, encompassing gender, ethnicity, university, sources of income, and experience with e-hailing services, is presented in Table 1. The study includes a total of 200 respondents, with an equitable distribution of 50.0 percent male and 50.0 percent female participants. The university distribution is equally proportional, with each of the five universities such as University of Malaya (UM), Universiti Putra Malaysia (UPM), Universiti Utara Malaysia (UUM), Universiti Teknologi Malaysia (UTM), and Universiti Pendidikan Sultan Idris (UPSI), comprising 20 percent of the respondent pool, signifying 40 respondents from each university.

Noteworthy in the income source category is the prevalence of PTPTN, constituting 59.0 percent of respondents, while both scholarships and parental support share the same percentage, accounting for 20.5 percent each. Regarding the duration of experience with e-hailing services, every respondent has encountered these services, with 42.5 percent having more than 5 years of experience, 29.0 percent with 4-5 years, 18.0 percent having 2-3 years of experience, and 10.5 percent having less than 1 year of exposure to e-hailing services. This detailed analysis provides clear insight into the demographic details of the respondents and their diverse encounters within the sphere of e-hailing services.

Table 1
Demographic Information (N=200)

Characteristics	Frequency	Percentage (%)
Gender		
Male	100	50.0
Female	100	50.0
University		
University of Malaya (UM)	40	20.0
Universiti Putra Malaysia (UPM)	40	20.0
Universiti Utara Malaysia (UUM)	40	20.0
Universiti Teknologi Malaysia (UTM)	40	20.0
Universiti Pendidikan Sultan Idris (UPSI)	40	20.0
Sources of income		
PTPTN	118	59.0
Scholarship	41	20.5
Parents	41	20.5
Experience of e-hailing services		
Never	0	0.0
Less than 1 years	21	10.5
2-3 years	36	18.0
4-5 years	58	29.0
More than 5 years	85	42.5

Descriptive Analysis

Table 2 presents the mean and standard deviation for all variables. The highest mean is observed for subjective norm at 3.693, with a standard deviation of 1.369. Following closely is perceived ease of use, with a mean of 3.647 and a standard deviation of 1.397. Consumers' intention ranks third with a mean of 3.637 and a standard deviation of 1.376, while perceived behavioral control scores a mean of 3.632 with a standard deviation of 1.393. Additionally, perceived usefulness exhibits a mean and standard deviation of 3.624 and 1.395, respectively. Lastly, attitude shows a mean and standard deviation of 3.613 and 1.358.

Table 2
Descriptive Statistics

Variable	Mean	Standard Deviation
Attitude	3.613	1.358
Subjective Norm	3.693	1.369
Perceived Behavioral Control	3.632	1.393
Perceived Usefulness	3.624	1.395
Perceived Ease of Use	3.647	1.397
Consumers' Intention	3.637	1.376

Pearson Correlation Coefficient

Table 3 displays the outcomes of the Pearson Correlation Coefficient analysis in this study. This coefficient illuminates the relationships between the independent variables (attitude, subjective norm, perceived behavioral control, perceived usefulness, and perceived ease of use) and the dependent variable (consumers' intention).

The Pearson Correlation Coefficient between attitude and consumers' intention is 0.938, signifying that attitude towards e-hailing services positively influences consumers' intention towards e-hailing services. The high correlation observed between attitude towards e-hailing services and consumers' intention highlights a strong connection between the two variables. With a p-value of 0.000, which is less than 0.05, the analysis reveals a statistically significant relationship between attitude and consumers' intention towards e-hailing services. In line with Wu and Song's (2021) study, it is evident that a favorable attitude has a notable positive impact on consumers' intention. Therefore, hypothesis 1 in this research is accepted, confirming a significant positive relationship between attitude towards and intention to use e-hailing services (Yunoh & Ibrahim, 2020; Christina & Yasa, 2021; Sadom et al., 2022; Aiman & Rashid, 2023).

Besides, the Pearson Correlation Coefficient between subjective norm and consumers' intention towards e-hailing services is 0.964, indicating that subjective norm positively influences consumers' intention towards e-hailing services. The p-value, which equals 0.000 and is less than 0.05, is generally considered highly significant, suggesting a very low likelihood that the observed correlation is due to random chance. Therefore, it underscores the significant relationship between subjective norm and consumers' intention towards e-hailing services. Consequently, hypothesis 2 in this study is accepted, affirming the positive relationship between subjective norm and consumers' intention towards e-hailing services. Previous empirical studies have consistently demonstrated the significant impact of subjective norm on the intention to use e-hailing services (Joia & Altieri, 2018; Ubaidillah et al., 2019; Arumugam et al., 2020; Yunoh & Ibrahim, 2020).

Moreover, the Pearson Correlation Coefficient between perceived behavioral control and consumers' intention towards e-hailing services is 0.965. This indicates a strong positive influence of perceived behavioral control on consumers' intention to utilize e-hailing services. The findings demonstrate a highly robust positive linear association between perceived behavioral control and consumers' intention towards e-hailing services. Consequently, hypothesis 3 in this study is affirmed, signifying a positive correlation between perceived behavioral control and consumers' intention towards e-hailing services. Additionally, this hypothesis underscores that perceived behavioral control attains the highest score among the various variables examined. This outcome aligns with prior research, which similarly established a positive connection between perceived behavioral control and consumers' intention towards e-hailing services (Ubaidillah et al., 2019; Chin et al., 2019; Aiman & Rashid, 2023). Furthermore, the Pearson Correlation Coefficient between perceived usefulness and consumers' intention towards e-hailing services is 0.964, signifying that perceived usefulness will positively impact consumers' intention regarding e-hailing services. This outcome mirrors the findings for the subjective norm variable. Furthermore, the Pearson correlation coefficient (r-value) surpassing 0.950 underscores an exceptionally robust positive linear correlation between the two variables under scrutiny. Consequently, a highly robust

association exists between perceived usefulness and consumers' intention towards e-hailing services. Hence, hypothesis 4 in this study is validated, affirming a positive connection between perceived usefulness and consumers' intention towards e-hailing services. This conclusion aligns with previous research that similarly established the positive and significant influence of perceived usefulness on consumers' intention towards e-hailing services (Weng et al., 2017; Joia and Altieri, 2018; Arumugam et al., 2020; Aiman & Rashid, 2023).

The Pearson Correlation Coefficient between perceived ease of use and consumers' intention towards e-hailing services is 0.958, indicating that perceived ease of use positively impacts consumers' intention regarding e-hailing services. There exists a robust relationship between perceived ease of use and consumers' intention towards e-hailing services. A p-value of 0.000 (or nearing zero) is indicative of a highly significant result. In hypothesis testing, a smaller p-value signifies stronger evidence against the null hypothesis, and values below a selected significance level (commonly 0.05) are deemed statistically significant. Consequently, the outcome suggests a significant relationship between perceived ease of use and consumers' intention towards e-hailing services. Therefore, hypothesis 5 in this study is affirmed, confirming a positive association between perceived ease of use and consumers' intention towards e-hailing services. Previous empirical studies have similarly highlighted the significant impact of perceived ease of use on consumers' intention to use e-hailing services (Weng et al., 2017; Ruangkanjanases & Techapoolphol, 2018; Arumugam et al., 2020).

In summary, considering the findings, perceived behavioral control exhibits the highest correlation coefficient among the five independent variables. Additionally, all five independent variables demonstrate a positive association with consumers' intention towards e-hailing services. Consequently, all five hypotheses posited in this study are affirmed.

Table 3

Pearson Correlation Coefficient

Consumers' Intention		
Variables	Pearson Coefficient (r-value)	Sig. (2-tailed)
Attitude	0.938	0.000
Subjective Norm	0.964	0.000
Perceived Behavioral Control	0.965	0.000
Perceived Usefulness	0.964	0.000
Perceived Ease of Use	0.958	0.000

****.** Correlation is significant at the 0.01 level (2-tailed).

Independent variables: Attitude, Subjective Norm, Perceived Behavioral Control, Perceived Usefulness, Perceived Ease of Use

Dependent variable: Consumers' Intention

Multiple Linear Regression

Table 4 shows the results of the Multiple Linear Regression analysis in this study. The predictor factors influencing consumers' intention towards e-hailing services among university students can be examined from the table.

In hypothesis testing, particularly in regression analysis, the p-value indicates the significance of a variable. It is a metric used to evaluate the variable's importance in explaining the variation in the dependent variable. In this study, all variables, except attitude were demonstrated significance in the Multiple Linear Regression results. The p-values for attitude ($p = 0.119$), subjective norm ($p = 0.002$), perceived behavioral control ($p = 0.000$), perceived usefulness ($p = 0.005$), and perceived ease of use ($p = 0.000$) are reported. With the exception of attitude, all other variables have p-values below 0.05, indicating a significant relationship with consumers' intention. An analysis of multiple regression was conducted to identify the predominant predictor variable influencing consumers' intention towards e-hailing services among university students. The Beta value shows the strength and direction of the relationship between each independent variable and the dependent variable in a multiple regression analysis. The results highlight subjective norm as the primary predictor, with a substantial beta value of 0.302. Perceived behavioral control follows closely as the second most influential factor, with a beta value of 0.301. Additionally, perceived ease of use and perceived usefulness have beta values of 0.247 and -0.241, respectively. Among the factors, only attitude was found to be not significant.

Hence, addressing the third research question leads to the conclusion that subjective norm, perceived behavioral control, perceived usefulness, and perceived ease of use, functioning as independent variables, are the primary influential factors shaping university students' intentions towards e-hailing services. Previous studies consistently highlight that, within the frameworks of the Theory of Planned Behavior (TPB) and the Technology Acceptance Model (TAM), the components of subjective norm, perceived behavioral control, perceived usefulness, and perceived ease of use exert the most substantial influence on consumers' intention regarding e-hailing services. The inclination to use and consistently adopt e-hailing services, as evidenced in prior research (Weng et al., 2017; Lim et al., 2018; Joia & Altieri, 2018; Arumugam et al., 2020), is primarily shaped by these key components.

Table 4
Multiple Linear Regression Analysis

Variables	Unstandardized Coefficients		Standardized Coefficient	t	Sig. (p)
	B	Std. Error	Beta		
(Constant)	.048	.063		.753	.452
Attitude	-.109	.070	-.105	-1.564	.119
Subjective Norm	.309	.098	.302	3.149	.002
Perceived Behavioral Control	.301	.083	.301	3.631	.000
Perceived Usefulness	.240	.085	-.241	2.841	.005
Perceived Ease of Use	.245	.066	.247	3.701	.000

a. Dependent Variable: Consumers' Intention

Model Summary

The Model Summary helps to understand how well the regression model matches the data. It does this by giving a number called R-squared, which tells us how much of the change in the dependent variable is explained by the independent variables. A higher R-squared means the model fits the data better. As indicated in Table 5, the R value stands at 0.975, R Square at 0.951, and Adjusted R Square at 0.949. The R Square value of 95.1 percent indicates that the consumers' intention towards e-hailing services can be clarified by the variables of attitude, subjective norm, perceived behavioral control, perceived usefulness, and perceived ease of use.

The R-square value in regression analysis shows how well independent variables explain the dependent variable's variance. Values above 0.26 indicate strong explanatory power, around 0.13 suggest a moderate level, and approximately 0.02 signify weaker explanatory ability (Cohen, 1988, 2013; Janadari et al., 2016). Benchmarks like 0.75 for substantial, 0.50 for moderate, and 0.25 for weak help assess variable effectiveness (Janadari et al., 2016; Hair et al., 2014). Therefore, the R Square (0.949) in this research is considered as substantial. It was also stated that there is a statistically significant relationship of 94.9 percent between the independent and dependent variables.

Table 5
Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
				R Square Change	F Change	Df1	Df2	Sig. F Change
.975a	.951	.949	.27683	.951	748.537	5	194	.000

a. Predictor: (Constant), Attitude, Subjective Norm, Perceived Behavioral Control, Perceived Usefulness, Perceived Ease of Use

Conclusion

This study aims to scrutinize the factors influencing consumers' intention towards e-hailing services among university students, encompassing attitude, subjective norm, perceived behavioral control, perceived usefulness, and perceived ease of use. In conclusion, the strong correlations between attitude, social norms, perceived behavioral control, usefulness, ease of use, and the intention to use e-hailing services suggest that these factors are critical in influencing students' decisions.

The study concludes that, among the variables examined, subjective norm, perceived behavioral control, perceived usefulness, and perceived ease of use significantly influence university students' intention to use e-hailing services. The multiple regression analysis highlights subjective norm as the most influential predictor, with a substantial beta value of 0.302, followed closely by perceived behavioral control with a beta value of 0.301. Perceived ease of use and perceived usefulness also play significant roles, with beta values of 0.247 and -0.241, respectively. Attitude was the only variable found not to be significant ($p = 0.119$).

These findings support the Theory of Planned Behavior (TPB) and the Technology Acceptance Model (TAM), which emphasize the importance of subjective norm, perceived behavioral control, perceived usefulness, and perceived ease of use in shaping consumers' intentions. By focusing on these factors, e-hailing companies can develop more effective marketing strategies to enhance the adoption and usage of their services among university students.

Nevertheless, there is a need for future investigations to delve into other potential influencing factors, beyond the scope of the variables considered in this study. The results highlight the need for university students, as a growing demographic with a rising dependence on e-hailing services, to understand the intricate factors that shape their intention towards these services.

Theoretical Implication

The study contributes valuable insights into consumers' intention regarding e-hailing services, shedding light on the Theory of Planned Behavior (TPB) and the Technology Acceptance Model (TAM). The findings indicate a positive correlation between the five independent variables (attitude, subjective norm, perceived behavioral control, perceived usefulness, and perceived ease of use) and consumers' intention to use e-hailing services among university students. Ajzen's TPB is particularly effective in explaining how attitude, subjective norm, and perceived behavioral control positively influence consumers' intention. Additionally, the Technology Acceptance Model (TAM) supports the idea that perceived usefulness and perceived ease of use also impact consumers' intention towards e-hailing services. Therefore, both TPB and TAM can be applied in this research field to understand consumers' intention among university students.

Practical Implication

This study holds significant practical implications for university students, providing a nuanced understanding of the intricate factors that shape their intentions towards e-hailing services. Through a thorough exploration of attitudes, subjective norms, perceived behavioral control, perceived usefulness, and perceived ease of use, students can gain deeper insights into the rationale behind their decisions to engage with e-hailing services. This comprehensive understanding enables them to make more informed and thoughtful choices when selecting a specific e-hailing service, taking into account the various influencing variables.

Moreover, the broader consumer population stands to benefit from this research by acquiring a comprehensive knowledge base about e-hailing services and the underlying factors that influence consumer behavior in this context. The insights gained from this study empower consumers to make more well-rounded and rational decisions when opting for e-hailing services. They can weigh the various factors influencing their choices, contributing to a more informed and consumer-centric decision-making process.

On the marketing front, this research offers valuable insights for marketers looking to understand and navigate the factors influencing consumers' intention towards e-hailing services. Armed with this understanding, marketers can fine-tune their services, tailor marketing strategies, and design more effective promotional campaigns. The efficient gathering of information facilitated by this research allows marketers to build a strong and loyal customer base, identifying areas for improvement and ensuring that their services align

with consumer preferences. In essence, this study empowers marketers to not only attract more consumers in the long term but also to continually assess and enhance their offerings in comparison to competitors, fostering a dynamic and consumer-focused market landscape.

Lastly, the government significantly influences the practical implementation of factors impacting university students' intention to use e-hailing services. Through the establishment and enforcement of a regulatory framework, the government ensures safety standards and operational guidelines, instilling confidence in consumers. Legislative measures and policies, such as those related to data protection and pricing regulations, shape a favorable environment for e-hailing adoption. Additionally, the government's role in promoting technology adoption, ensuring infrastructure enhancements, and collaborating with universities directly impacts students' convenience and intention to utilize e-hailing services. Research initiatives on consumer behavior and support for innovation further contribute to a dynamic and user-friendly e-hailing landscape for university students.

Recommendation for Future Studies

Future research should consider expanding the study to include students from a wider range of universities, both public and private, to provide a more comprehensive understanding of consumer behavior regarding e-hailing services among university students in Malaysia. Additionally, researchers should explore additional factors beyond those examined in the current study, such as perceived price and satisfaction, to gain a more nuanced understanding of consumer behavior. Increasing the sample size beyond the current 200 students will enhance the reliability of research findings. Furthermore, future research should focus on assessing actual consumer behavior rather than just intention to gain more actionable insights.

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