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# Factors Influencing the Adoption of E-Payments among the consumer in Malaysia

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### **Abstract**

Back in the early 2000s, electronic payments (e-payments) were divided into cash and cheques like traditional payment systems. Both are direct payment systems, meaning payments require communication between the seller and the buyer. As e-payments evolve, so do the definitions. Payment is the component of the transaction that is executed while making payment. As E-commerce has evolved, electronic payment systems have been implemented. The study aims at defining the impact of perceived compatibility, social influence, personal innovation, and facilitating conditions for customer intention who use mobile phones to make payments in Malaysia. This research shows that the UTAUT model is helpful for academicians and advertisers as a means of understanding consumers' intentions to adopt new technologies such as e-payments when used in conjunction with other research purposes. The result of the study shows that there is a relationship between dependent variables (social influence, perceived compatibility, and facilitating condition) and independent variables (adoption of e-payment). However, there is no relationship between personal innovativeness and customers' intention to use mobile phones for e-payment in Malaysia. Therefore, the study approves that effort expectancy and social influence have a significant relationship with the adoption of e-payment. The methodology of this study was to provide quantitative data by distributing online questionnaires among 150 targeted respondents. Three data analysis models were used in this study: Data Analysis Descriptive Analysis (DADA), Multiple Linear Regression (MLRB), and Pearson Correlation Coefficient Analysis (PCCA). The survey was conducted using SPSS Version 27.

**Keywords:** UTAUT Model, Personal Innovativeness, Social Influence, Perceived Compatibility, and Facilitating Condition

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# Introduction

As we all know, technology and innovation have taken a huge leap forward in the past 20 years. Bank Negara Malaysia (BNM) has implemented several policies to keep Malaysia at the forefront of e-payment adoption. According to Digital News Asia (2023), these include the development of an e-payment roadmap back in 2011, followed by the publication of the Financial Sector Blueprint (FSBP) 2022-2026 in 2022. The most recent FSBP has set a more ambitious target. Since the previous goal of 221 E-payment transactions per person in 2021 has been met, the new goal is to increase E-payment transactions by a minimum of 15% per year, which will result in more than 400 E-Payments per person by 2026. Mobile payment refers to the process of making payments through electronic devices, such as mobile phones. It also includes the transfer of funds to relatives and friends with the help of payment technology applications (Grant, 2021). Funds are transferred out of the bank account using debit cards, credit cards, or Internet banking to pay individuals using an electronic wallet, providing a convenient cashless payment option.

According to (Green, 2018), there are a few things that make e-payment systems more popular. First, they're much easier to use than cash, cheques, credit, and debit cards. You can send and receive payments in just a few seconds. Secondly, by using the QR codes. Refer to the study conducted by (Smith, 2022), QR codes are also convenient for businesses. You can use them to promote your website directly to customers, and they can also be added to other offline media like flyers, cards, posters, pamphlets, and signs. That way, customers can scan the QR codes to find out more about your business. Salimon et al (2017), state that the use of Internet technologies has improved business performance. E-commerce sites have increased sales with the improvement of the way businesses work once they start to expand their business in local and international markets and can improve their relations with their existing customers. More than that, Jung et al (2020), state that to make products available to larger customers through electronic payment systems, existing mail-order services will be extended to other potential customers, and local businesses will benefit from increased visibility. In addition, QR codes can easily be added to offline media like flyers, company cards, posters, brochures, and signs so that customers can scan the QR codes to learn more about your company's information. QR codes can also help the company in creating or building trust and reputation of your brand. E-payment is one of the most convenient ways for customers to allocate or transfer money, make payments, and process account requests 24/7, 365 days a year. In addition, e-payment can help you reduce your business and personal expenses.

Bank Negara Malaysia data shows that the total amount of e-payment transactions amounted to RM 5 billion in 2021, comprising 233,6 million transactions. This is the highest number of e-payments compared to the year 2016. The reason behind the high number of transactions for e-wallets is that there are a lot of e-wallets to choose from. As a result of the Central Bank's license issues, there are 42 e-wallets for non-bank electronic money parties. In Malaysia, there is a wide range of digital wallet platforms available to individuals who wish to use their mobile phones for electronic payments, including but not limited to Touch and Go, Grab Pay, Boost, Big Pay, Five Pay, and others. In addition to e-wallets, plastic money, such as debit cards, credit cards, or prepaid cards, is also considered an electronic form of payment.

The purpose of this study is to determine the factors that influence the intention of customers to use their mobile phones for electronic payments in Malaysia. Although mobile banking and electronic payment transactions are increasing in Malaysia, the country is still far from being cashless. Several articles by (Aslam et al. 2017; Imran, 2018; Madhu et al., 2017; Shrikala, 2017) have explored the challenges of implementing e-wallet payment schemes, and

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the factors that discourage customers from using mobile payments, such as safety, trust, and awareness. The purpose of this research is to investigate the factors that influence customers' intention to pay with their mobile phones in Malaysia. In this case study, we will consider 4 factors of customers' intention to make electronic payments using their mobile phones in Malaysia.

# **Problem Statements**

The issue with the research highlighted is that the pandemic had clearly improved and by the change forced many people to start using e-payments even though they still didn't believe in the process. At the same time, many brands and merchandisers had also changed their payment methods and some people stopped receiving cash and instead needed an e-payment system under their account to buy their product. The reason why e-payment is not fully utilized is that they have low intention to use it as they still rely on physical cash and the existing online system that they have been using for a long time (Widayat et al., 2020). Malaysians are still reluctant to use e-payments because of challenges such as a lack of internet knowledge which leads to a lack of trust in the e-payments system (Wei L. et al. 2017). Many students don't get enough education and knowledge about e-payments and how to use them. The level of intention is low because students get false information that when using e-payments their personal information has been used for some other purpose.

Yang et al (2021) argues that due to the new technological era, the conventional method is no longer convenient and an option during COVID-19. Even during or before COVID-19, consumers still considered e-payments, and the possibility was there. Acheampong et al (2020) argue that there is a gender gap in the use of e-payments. It supports that different ages and genders have different skills and understanding of mobile usage and features. Jung et al (2020c) argue that the specific requirements of mobile applications affect the use and use of mobile payment towards consumer adoption. Specification requirements are social impact, privacy protection, and mobility, which consumers consider important because failure to meet these requirements creates a dubious option for consumers at the time when electronic payment was introduced.

From now on, this study will help the government to understand more about the factors that motivate people to accept e-payments. For example, governments know the concept of compatibility, where people believe that e-payments should be adapted to meet their convenience or security, which makes them more likely to accept them. The surge of DutiNow registration for retail shops meant that many businesses started accepting e-payments. Today, businesses that don't accept e-payments will be left behind and face extinction. To drive customer intent toward e-payments, this study from Subaramaniam (2020)) benefits retailers by identifying the factor affecting customers.

# **Research Objective**

The purpose of the study is to determine the impact of the perception of compatibility, social influence, personal innovation, and enabling conditions on customer intent among working adults who utilize mobile phones for electronic payments in Malaysia. The following are the objectives of the study as we progress to the fourth research question by examining the four components of factors that influence customers' acceptance of e-payment.

**RO1:** To identify the effect of personal innovativeness on customers' intention to use mobile phones for e-payment in Malaysia.

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- **RO2:** To identify the effect of social influence on customers' intention to use mobile phones for e-payment in Malaysia.
- **RO3:** To identify the effect of perceived compatibility on customers' intention to use mobile phones for e-payment in Malaysia.
- **RO4:** To identify the effect of facilitating conditions on customers' intention to use mobile phones for e-payment in Malaysia.

### **Literature Review**

Many studies have been conducted on the factors that affect user acceptance of a cashless society among consumers in Malaysia. The shift from financial technology to digital payment has ushered in a new era of cashless society. As the world continues to move towards a cashless society, the Government of Malaysia has been working to strengthen the cashless society agenda by actively promoting e-wallets with the implementation of the Interoperable Credit Transfer Framework (ICTF) policy in 2018. In the early 2000's, electronic payments (e-payments) were divided into cash payments and cheques like traditional payment systems. Both are direct payment systems, which means payments need to be made through communication between the buyer and seller. As technology advances, the definition of e-payments changes. Kabir et al (2015) defines e-payments as a set of components and processes by which two or more parties execute a transaction and exchange monetary values electronically.

An e-wallet is an electronic card used to pay for goods and services online through a computer or smartphone. E-wallets are like credit cards or debit cards and must be linked to the individual's bank account in order to make payments. Electronic payment systems allow users to pay for goods or services without the need for cash. One of the reasons for this study is to give technical service providers (TSP) an idea of what factors they need to think about when creating a new tech service. Soegoto and Tampubolon (2020) for example, consider the factor of enabling conditions. They argue that the TSP may put in the effort to offer more tech support for the services, such as a customer technical support team in place, 24/7 live chat, and so on. This expanded the model by adding another construct of personal innovation and perceived compatibility. Both elements are beneficial for marketers to reach the right target audience and also emphasize the key point when marketing. For instance, marketers know that people with high personal innovation can be the first adopters and use their experiences to promote through social influence. In a marketing campaign, according to Komlan et al (2019) marketers can focus on this factor to motivate the customer to make the shift from physical to online payments. When it comes to performance expectations, it's the first independent variable. In a study by Venkatesh and colleagues, they found that there was a big connection between performance expectations and people's intention to use e-payment. So, it looks like performance expectations had an impact on people's willingness to use epayments. But when it comes to the study by Karim et al (2021) they found no connection between performance expectations and people's willingness to adopt e-payments either.

In addition, previous research has shown that customer behavioral intent can be influenced by a number of elements. Personal innovation, perception of compatibility, social impact, and ease of access are cited as the most influential factors influencing customers' intent to use mobile for e-payments in previous research. For example, according to a study by Komlan (2019), there is a strong correlation between personal innovation and intent to use mobile money services among consumers. In another study by Tiong et al (2020), Tiong found that perception of compatibility and social impact positively impacted the intention of

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consumers to use mobile banking services among Gen Y in Malaysia. Chandran et al (2020) found that there are several studies on intentions and determinations of e-payment usage related to speed, accessibility, security, design, privacy, content, seemingly useful, ease of use, trust, and confrontation. Only a few limited studies have focused on e-wallet user behavioral intention in relation to influencers.

The e-payment intention was significantly influenced by user perception of compatibility and facilitating conditions of e-payment in an empirical study conducted in Saudi Arabia by (Noha et al., 2021). Similarly, in a study conducted in Malaysia by Shafie et Al., in 2020, social influence was found to be a major predictor of e-payment intention. Furthermore, in another study conducted in Jordan by Sitorus et al (2019), it was found that social influence, as well as facilitating conditions, had a considerable influence on behavioral intention in a financial software information system. In addition, a limitation of the sample size study, as identified in the study by Sobti (2019), is that the sample is sampled from a single state due to budgetary and temporal constraints. The findings of the study are limited to a centralized sample representing a specific place, as a larger sample size may alter the precision of the result, and the alteration will also result in changes in the outcome.

Our research focuses on personal innovation, social impact, perception of compatibility, and facilitation conditions on customer intent. Since our study also concentrates on one domain and the precision of sample size and outcome is collected from the focus group of working adults in Malaysia, the underlying theories involved in this study relate to the Unified theory of acceptance and use of technology (UTAUT). UTAUT stands for Unified Theory of Acceptance and Use of Technology, and it's a way of thinking about how people use technology. It's been developed by Venkatesh et al (2003). Basically, UTAUT tries to explain how people plan to use information systems and how they'll use them in the future. It says there are four main things that affect how people use information systems such as how long they'll use it, how long they'll try to use it, how hard they'll work to use it, and how easy it'll be for them to use it. It also says that people who are gender, age, have experience, and are willing to use it can help balance out the four main things that influence how people use it. This theory was created by looking at eight different models that have been used in the past to explain how people use information systems. These include the theory of reasoned action, the technology acceptance model, the motivational model, the planned behaviors theory, a combination of the planned behaviors and technology acceptance models, the personal computer use model, the theory of diffusion of innovations, and the social cognitive theory.

This theory model has been used to investigate customer intentions. This chapter's focus is on the dependent variable, customers' intention, and the independent variable, perceived compatibility, personal innovativeness, facilitating conditions, and social influence. In relation to this study, the framework has been presented and explored. The dependent and independent variables have been thoroughly studied in the related literature to explore the link and its influence. UTAUT theory is also being applied to previous studies that looked at four variables: performance expectancy; effort expectancy; social influence; and facilitating conditions influencing the intent to use new technology. In this study, however, the model was augmented by the addition of a new construct of personal innovation. As mentioned in the text of the paper from Haidar (2020), the rationale for personal innovation was added because it was found that personal innovation was predictive of consumer adoption of new technologies.

Research Model Framework

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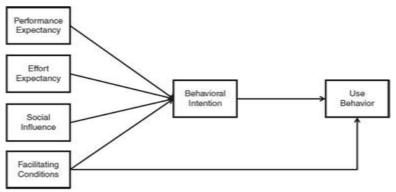


Figure 1: The Underpinning Theory

The figure shown above is based on the research conducted by Kirti (2021) and supported and applied in the study conducted by (Patel et al., 2021). It is an extension of Davis' (1921) technology acceptance model (TAM). It is used to determine the motivation to use technology based on the customer's behavior and intent. According to Bo et al (2022), UTAUT is composed of four variables: performance expectancy; effort expectancy; social influence; and facilitating conditions, which influence the intention to use new technology. Momami (2020) points out that technology acceptance theories and models focus on people's behaviors and their willingness to accept new technology in relation to variables and constructs from a theoretical point of view.

The UTAUT model is based on the research conducted by (Ida et al., 2018). The UTAUT model was used to study the attitudes of the millennial generation toward e-payments in the study. The study has derived from the variable that influences behavioral intention. In our study, the associated variable, facilitating condition, had a positive relationship with user behavior, and the associated variable, social impact, had less relationship with behavior. When compared to our variable, the variables such as social influence and facilitating condition, as well as personal innovativeness, show from the research that there is a significant positive effect on behavioral intention in the adoption of e-payments. The reason for the lower relationship on social influence is that technology infrastructure is more important in daily use because of technological advances compared to social factors.

The dependent variable in this study is customer intention. Customer intention is a sequence of actions an individual aims to achieve. Wong et al (2022) define intention as a set of steps that an individual intends to take. Customer Intention also defines behavioral intention as the willingness of users to use an electronic payment method. The UTAUT model shows that customer behavioral intention is directly related to user behavior. In other words, consumers who are more likely to adopt new technology are more likely to do so than other consumers. Mapeshoane and Pather (2016) found that compatibility plays an important role in influencing customers' intention to adopt e-payment. Marketing departments benefit from promoting this so that they can attract customers who find e-payment services that fit their lifestyles well.

This argument was supported by (Ngoc and Thi, 2020). They found that compatibility had a significant effect on the adoption of electronic wallets among Gen Z in Vietnam. Similarly, Malik et al (2019) for example, indicated that social influence was a significant determinant of customers' intention to use the e-wallet app. Similarly, Puspitasari and Salehudin (2022), for example, suggested that the advantage of targeting the innovative individual was that the marketer could equip the customer with the characteristics of an early adopter to influence the customer's intention to use QRIS' cashless payment service. In

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addition, a study by Intan et al (2018) on the intention to accept electronic payments in Malaysia found that social influence significantly influenced the intention to accept e-payments. Another study by Cacas et al (2022) found that social influence positively influenced customers' intention to accept cash services among Filipino citizens.

Then, move to the independent variables. One of the first independent variables is personal innovation. One factor that has been previously studied as a potential factor in the adoption of different technologies is personal innovation. Lui et al (2021) for example, defined personal innovation as the willingness of the individual to try out a particular innovation. Tsai et al (2019) for example, define personal innovation as the prevalence of an individual's willingness to try out a new information technology, which can be used as an independent measure of the individual's innovativeness. David et al (2017) discovered that there are two kinds of personal innovation that can influence people's willingness to use a new tech system. The first type is called Consumer Innate Innovation, which means people are ready to use new tech if they don't have to connect with other people or have a lot of previous experience with it. The second kind is Domain Specific Innovation, which is people's tendency to learn or experiment with things related to something they're passionate about.

Social influence is the second independent variable. Social influence, as defined by Jayashree et al (2022), refers to the impact of the social context on a consumer's intention to utilize a linked system, such as a family, leader, co-worker, or friend. In other words, the alteration of an individual's behavior, regardless of whether it is the result of close contact. According to previous research conducted by Khanra et al (2021) users' intentions will be influenced by the thoughts, beliefs, and opinions of others. Yeow et al (2017) define the social effect as the context in which an individual makes a choice to adopt or reject a technology, particularly in the early stages of development. Furthermore, the assumption that an individual is more likely to trust the opinion of others, especially those who are important to them and have a stronger relationship with them, will affect a user's acceptance of technology. As demonstrated by Hashimz et al (2018), social influence has a beneficial impact on e-payment. When individuals participate in technological innovation, social influence will influence their commitment to the changing innovations.

As highlighted by Flavian et al (2022), customers gain more information when they utilize the new technologies. This in turn will raise their awareness among their peers and family members through endorsement and word of mouth. In addition, according to Daniel (2017), social influence through advertising has a strong impact on customers' willingness to use their mobile phones for electronic payments. For instance, there is an electronic payment method in Japan called Mobile Suica. This method is introduced and promoted by famous singers. Social media users will be directly attracted to Mobile Suica through persuasive marketing. According to Jonathan et al (2022), there are positive impacts on mobile phone users to adopt electronic payment systems in Brazil. In Sri Lanka, Dissanayake et al (2022) found that there was a positive impact on customer intention as well as social influence to use electronic payment in life insurance. Most people have started to adopt electronic payment as part of health-protection activities.

The third independent variable is perceived compatibility. Cherinet (2019) defines compatibility as the extent to which an innovation is perceived as being in line with people's current needs, values, and past experiences. Compatibility is frequently used as a measure of attitude development during the adoption phase. Hong et al (2017) found that when innovation is introduced, it is more likely to be adopted as it is well-aligned with the value systems and work commitments of potential users. Compatibility plays a significant role in

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the adoption of innovation. Individuals who are well-equipped with high compatibility result in the immediate adoption of emerging technologies (Tasnim et al., 2021). The more compatible an innovation is, the fewer changes it necessitates and the quicker it is adopted by users. The implementation of new technologies necessitates modifications to existing processes and procedures to maximize the utilization of the technology.

If users feel like the new product doesn't match their past experiences, wants, and lifestyle, they're more likely to turn it down. Tim (2019), for example, found that when users experience incompatibility with innovation, they'll reject it without looking at how it works and how useful it is. So, seeing incompatibility between a product and a a user won't change the adoption process, but it will break down at the knowledge stage. Uzairi et al (2020) found that perceived compatibility is strongly linked to QR e-payment practice intention. They suggested that service providers highlight and relate the system's compatibility to their prospective consumers' characteristics, like buying habits. Singh and Sinha (2020) found that there's a strong connection between perceived compatibility and customer's intention to e-pay, which ultimately impacts retailers' behavior intention. They found that retailers saw the value of the new technology when it was compatible and simple to use.

The final independent variable is the facilitating condition. In the opinion of Widayat et al (2020b), facilitating conditions define a person's perception of the accessibility of technical infrastructure capable of providing assistance when using new technology. These conditions facilitate the use of technology more easily and influence the adoption of mobile technology. In the absence of facilitating conditions, a customer's intention is a barrier to their action. For example, if a customer has the intention to engage in a certain behavior, but no facilitating conditions are present, the behavior will not take place. Despite the evolution of e-payment and its gradual implementation, the user experience should be enhanced in order to achieve user satisfaction. This is because most individuals, particularly baby boomers, are not proficient in e-payment systems. Additionally, there are a variety of e-payment systems on the market with varying payment methods, which can lead to misapprehension.

Rural communities face a lot of challenges when it comes to using e-payments, especially if they don't have access to technical features, don't have the right tools, don't have telecommunication or software systems, don't have enough support, don't have proper data, and don't have enough resources. This can stop people from using the technology. For example, in a paper from Kamaghe et al (2020); Foo-Wah et al (2020), they said that users need a set of easy-to-use tutorials to help them understand the payment system. This could be online tutorials or live support chat. This can help users get used to the system and make them more interested in using it. It looks like customers will be more likely to use e-payments if they have access to better resources and have more fun with tech. This is based on a study done by Singh and Sinha (2020); Chen et al (2019) showed that there's a big connection between how easy it is to use something and how likely customers are to use it again. It's also in line with a study done by Seesuk (2020), which said that making things easier for customers meant they'd reuse it more often.

# Methodology

For this study, a quantitative statistical series technique is employed to investigate the drivers of consumer intent toward e-payments in Malaysia. As Ming and Jais (2022) explain, quantitative research uses targeted survey questionnaires and quantitatively evaluates the data using empirical analysis to investigate the interlinkages. The methodology used to aggregate the data includes a self-administered questionnaire sent to the working adult

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population in Malaysia within the scope of the study. They also used a convenient sampling approach to collect data from 150 consumer respondents in Malaysia. The statistical population survey (SPS) version 27 is used to assess the data of this study. The sampling technique used for this study is probabilistic sampling. Probabilistic sampling is applied as simple random sampling. This means that all the qualified subjects from the population have equal chances of being selected. The questionnaire was adopted as the research tool. The questionnaire makes it easier to collect the data into systematic spreadsheets for data analysis, reduces data entry errors, and accelerates hypothesis testing.

# Hypothesis Generation

The following hypothesis has been generated in context with the theoretical framework:

**H1:** There is a significant relationship that personal innovativeness affects customers' intention to accept mobile payments in Malaysia.

**H2:** There is a positive relationship that causes social influences to affect customers' intention to accept mobile payments in Malaysia.

**H3:** There is a positive relationship that causes perceived compatibility to affect customers' intention to accept mobile payments in Malaysia.

**H4:** There is a positive relationship that causes facilitating conditions to affect customers' intention to accept mobile payments in Malaysia.

# **Data Analysis**

Characteristics of the Respondents

This study was done using a correlational approach. This approach is used to figure out how two variables, an independent variable, and a dependent variable, relate to each other using a set of statistics. The research design was chosen to measure the relationship between the factors that affect e-payment adoption among Malaysian consumers. We also used a convenient sampling technique to get data from 150 consumers. This method is used because it's fast, cheap, and easy for researchers to get the data they need. The data needed for this study was collected using a survey instrument and was coded and analyzed with SPSS version 27.

# **Demographic Analysis**

# A. Demographic Profile of Respondents

Table 1. Respondent's Profile.

		Frequency	Percentage
Gender	Male	45	30.0
	Female	105	70.0
Marital Status	Single	54	36.0
	Married	96	64.0
Age	<20 years old	21	14.0
	>21 years old	129	86.0
Income level	<rm2,000< td=""><td>90</td><td>60.0</td></rm2,000<>	90	60.0
	RM 2,001 - RM 4,000	54	36.0
	>RM 4,001	6	4.0

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The table above shows the data collected for the study. The sample consists of 150 sets of questionnaires with 105 female respondents and the remaining 45 male respondents. Most respondents (64.0%) are married. The age distribution of respondents is as follows: 86.0% are over 21 years old and 14.0% are under 20 years of age. The income level is as follows: 90% of respondents earn less than RM 2,000/month for their job followed by those who earn between RM 2,001/month and RM 4,000/month (54), with only 6 respondents earning more than RM 4,000.

# Descriptive Analysis

Table 2 shows the mean values, maximum values, standard deviations, and mean values of each variable that influences customers' e-payment acceptance in Malaysia: Perceived Compatibility: Mean score 4.26, SD 0.81. Meanwhile, Facilitating Condition: Mean 4.06, SD 0.90. then, Social Influence: Mean 4.03, SD 0.93. move to Personal Innovativeness: Mean 3.97, SD 0.95. Lastly, Customers' Intent to Accept e-payments: Mean 4.24, SD 0.80. The result shows all the mean variables range from 3.70 - 4.26 indicating that the respondents agree with all the statements in the questionnaire. Since the questionnaires have been tested with a five-point Likert scale (3.0+), the higher the Likert value, the higher the level of agreeableness. In this study, the highest mean is found in PC-4. "E-payment makes it easy for me to make payments." This indicates that respondents agree with this statement the most, where e-payments improve the performance of daily payments.

Table 2
Summary of Descriptive Statistics

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	
PI	150	1.00	5.00	3.97	0.95	
SI	150	1.00	5.00	4.03	0.93	
PC	150	1.00	5.00	4.26	0.81	
FC	150	1.00	5.00	4.06	0.90	
BI	150	1.00	5.00	4.24	0.80	
Valid N (listwise)	150					

# Pearson Correlation

Table 3 shows the correlation analysis for PI, social impact (SI), PC, facilitating condition (FC), and BI. All variables tested had data results above zero, with values ranging from 0.481-0.754 indicating a positive relationship between variables. The correlation between perceived compatibility (PC) and customer intention (BI) showed a very high positive relationship between these two variables, with a value of 0.754 or greater. All independent variables showed positive and significant correlations/directions toward the dependent variable.

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Table 3
Pearson Correlation Test Results

	PI		SI	PC	FC	BI	
PI	Pearson Correlation	1	.539**	.470**	.565**	.481**	
	Sig. (2-tailed)		.000	.000	.000	.000	
	N	150	150	150	150	150	
SI	Pearson Correlation	.539**	1	.553**	.607**	.549**	
	Sig. (2-tailed)	.000		.000	.000	.000	
	N	150	150	150	150	150	
PC	Pearson Correlation	.470**	.553**	1	.592**	.754**	
	Sig. (2-tailed)	.000	.000		.000	.000	
	N	150	150	150	150	150	
FC	Pearson Correlation	.565**	.607**	.592**	1	.611**	
	Sig. (2-tailed)	.000	.000	.000		.000	
	N	150	150	150	150	150	
BI	Pearson Correlation	.481**	.549**	.754**	.611**	1	
	Sig. (2-tailed)	.000	.000	.000	.000		
	N	150	150	150	150	150	

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

Coefficient Analysis

Table 4

**Coefficient Results** 

	Unstandardize		Standardiz	e		95.0%		Collinearity		
	d Coefficients		d			Confidenc		Statistics		
			Coefficients			e Interval				
			t		Sig.	for B				
							Lowe	Upper		
N	∕lodel	В	Std.	Beta			r	Bound	Toleranc	VIF
			Erro				Boun		е	
			r				d			
1	(Constan	1.54	.657		2.356	.01	.257	2.842		
	t)	9				9				
	PI	.063	.041	.062	1.524	.12	018	.145	.611	1.63
						8				7
	SI	.083	.040	.091	2.106	.03	.006	.161	.537	1.86
						6				3
	PC	.571	.042	.564	13.58	.00	.488	.653	.581	1.72
					1	0				0
	FC	.205	.050	.187	4.137	.00	.108	.303	.491	2.03
						0				5

<sup>\*\*\*</sup>Dependent Variable: BI

The coefficient analysis describes the relationship of the dependent variables to each independent variable. P-values for the dependent variables specify whether the relationship is significant. If the p-value is greater than 0.05 it is non-significant and indicates strong support for the null hypothesis, in other words, it does not support the hypothesis. On the other hand, a p-value less than 0.05 is considered significant and indicates weak support against the null hypothesis, thus supporting the hypothesis. In Table 4, the Sig column indicates that the only variable with a P-value greater than 0.05 is personal innovation (p-value 0.128), while the remaining variables have p-values below 0.05. These variables include facilitating condition (P-value 0.000), social influence (P-value 0.036), and perceived

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compatibility (PV 0.000). It can be concluded that SI, PC, and FC are significant for customers' intention to accept electronic payments, while PI is not significant.

- 1. **The p-value for PI:** personal innovation is 0.128 (p>0.05). There's no significant relationship between personal innovation and whether customers want to accept e-payments in Malaysia.
- 2. **The p-value for SI:** Social Influence has a p-value of 0.036 with a p-value < 0.05. This means there's a strong significant relationship between how much social influence a company has and how likely customers are to accept online payments in Malaysia. Beta is also 0.083, meaning that if the increase in social influence by 1, it will result in an increase of 0.083 in customers' willingness to accept online payments.
- 3. The p-value for PC: perceived compatibility is 0.000 with a p < 0.05. The relationship between perceived compatibility and e-payment intention in Malaysia is significant. The beta value for PC is 0.571. This means that for every unit increase in perceived compatibility, there will be an increase of 0.571 in e-payment intent in Malaysia. This is the most influential variable as it has the strongest beta.
- 4. **The p-value for FC:** Facilitating Conditions is 0.000 (p<0.05). There is a significant relationship between the number of Facilitating Conditions and the likelihood of customers' willingness to accept electronic payments in Malaysia. Beta is 0.205, meaning that a one-unit increment in Facilitating Conditions leads to an increase of 0.205 in the likelihood of e-payments being accepted by customers in Malaysia.

# Summary Result

As a summary, based on the results in Table 5, three variables, social influence, perceived compatibility, and facilitating condition are significant towards the intention to accept e-Payments in Malaysia.

Table 5
Summary Results

Hypotheses	P-Value	Decision
H1: There is a relationship between personal innovativeness and	P=0.128	Not
customers' intention to use mobile phones for e-payment in	p>0.05	Supported
Malaysia.		
<b>H2:</b> There is a relationship between social influence and	P=0.036	Supported
customers' intention to use mobile phones for e-payment in	P<0.05	
Malaysia.		
H3: There is a relationship between perceived compatibility and	P=0.000	Supported
customers' intention to use mobile phones for e-payment in	P<0.05	
Malaysia.		
H4: There is a relationship between facilitating conditions and	P=0.000	Supported
customers' intention to use mobile phones for e-payment in	P<0.05	
Malaysia.		

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# **Discussion & Recommendations**

**Discussions** 

This study examined the prerequisites that lead customers to adopt an electronic payment system when making payments. The four main factors of adoption were personal innovation, social influence, facilitating conditions, and perceived compatibility. Payment is the primary element to complete a transaction when making a payment. As E-commerce has grown, electronic payment systems have become increasingly popular, allowing individuals to complete their tasks quickly and efficiently. Based on the finding of the first dependent variable of personal innovativeness, the results obtained where p=0.128, p>0.05 show that there is no relationship between personal innovativeness and the customers' intention to use mobile phones for e-payment in Malaysia. It was consistent with the previous studies conducted by past researchers Lui et al (2021), that personal innovativeness is associated with the acceptance of the latest technology. It is, however, worth noting that in a world where electronic payments have become the new normal, especially in the post-pandemic era where many people have turned to online shopping to cut down on physical contact, this is not a new entry into the market, where the first adopters will be the ones with positive attitudes to adopt electronic payments. In fact, it has become almost a part of the way consumers make their daily purchases in Malaysia, especially when the government has been promoting the use of electronic wallets in the country.

The second variable has also been confirmed by previous research by Wei et al (2017); Chinnasami et al (2022); Sayantan et al (2020) mention that people are influenced by their peers when making decisions to adopt technology. This is especially true in Malaysia, where the society is highly collectivist. Therefore, people are more inclined to seek advice from their peers or are influenced by their own actions when making decisions. It is also because nobody is an island, and they may want to feel like part of a group, so they are able to satisfy their sense of belonging. A strong recommendation from their social circle, such as good reviews, will also increase their confidence in adopting, especially if they are hesitating about the advantages and disadvantages of adopting. Thus, the results obtained in this study where p = 0.036 < 0.05 indicates a positive significance of social influence on the customers' intention to adopt mobile phones as e-payments in Malaysia.

Let's move on to the next variable: Compatibility. Compatibility is important because if it aligns with your value system, then you'll adopt new technologies with little constraint (Cherinet, 2019; Tasnim et al., 2021; Benson et al., 2019). In a sense, this makes sense, because if the new technology is compatible with your existing devices, then you won't need to make as many changes or fuss to adopt the new gadget. In the same way, if compatibility enables the user to get the maximum benefit with the minimum effort on the user's end, it doesn't mean that the user has a reason to resist or a reason to turn down the new technology. For example, the government of Malaysia has been enforcing the need for physical distancing during the pandemic. In order to implement this policy, cashless payments have been used as a means of payment and when the consumers can easily download compatible apps based on their mobile phone's operating system, it will enhance their experience with technology. In this case, where p = 0.000 and p < 0.05, there is a positive relationship between perceived compatibility and the customer's intention to use mobile phones for e-payments in Malaysia.

Last, but not least, is facilitating conditions. According to the literature review, past academic researchers agree that facilitating conditions play an important role in increasing the consumer's intention to adopt new technology. This is because, if there are enough

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resources (e.g., tutorial, support, high-quality, and efficient design) provided to the consumer to make the new technology seem easy to use, this will also increase the consumer's interest in adopting the technology. If, on the other hand, people are busy with their responsibilities in the busy world of today, it may discourage them from adopting the new technology if they have to put in a lot of effort on their part to understand how the technology works. Therefore, it shows that when flexibility, usability, and strong incentives are provided to the consumer, they will be more inclined to adopt the new technology. This is especially true if the consumer comes from an older generation where they may be less exposed to new technology than the younger generation of consumers. As such, the results shown in this research where p-0.00, p<0.05 show that there is a positive significance between facilitating conditions with the customers' intention to use mobile phones for e-payment in Malaysia.

From the results of this research, e-payment is becoming more and more important. Therefore, it is important for marketers to understand the factors that will trigger the consumer's intent to adopt new technology in order to ease the transition in their outlets from traditional payment methods to the new method of cashless transactions. This is important because it will allow marketers to continue to retain their current customers and attract new customers when they can convince their customers that adopting e-payments will be easy and convenient for them. In a sense, it also reduces the risk of transmission and helps retail stores reduce the need for human resources in the stores.

To sum up, this research demonstrates that the utilization of the University of Technology, The UTAUT model is useful to assist academics and marketers in comprehending the consumer's intention to adopt a new technology, which is electronic payments. The results of this research demonstrate a positive significance across independent variables such as social influence, perception of compatibility, and facilitative condition. Although personal innovation has been tested in previous literature reviews concerning the adoption of various types of innovation, no significance has been tested in this study. This is likely due to the consumers in Malaysia attempting to adopt electronic payments due to the pandemic, which is an external factor that cannot be controlled. Furthermore, the newer generations of consumers, who are raised in a technologically sophisticated world, are no longer unaware of the need to adopt new technology, and instead seek to embrace it as part of their daily lives.

# Contribution of the Research

This study is of great significance to those involved in the e-payment industry, as it outlines the four key factors that influence the intention to adopt an e-payment system such as performance expectations, effort expectations, social impact, and facilitating conditions. Despite a rapidly developing market, Malaysian users are beginning to embrace the e-payment scheme as a convenient and efficient way to complete a payment transaction. Specifically, the focus is on consumers in Malaysia, who are more interested in technical and electronic components. This study has enabled the development of a new model that can predict the intention to use e-payment systems among consumers. This will also improve the impact towards the acceptance of e-payment systems by other institution students, as the current result indicates a positive behavior towards adoption.

The findings of this study also allow e-money issuing companies to be more cognizant of potential areas that could be improved upon in order to promote or implement effective marketing initiatives to foster community interest in the potential use of electronic money for micropayments in the future. Additionally, the research may provide consumers with a better understanding of the benefits of e-payments. For example, e-payments may provide

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consumers with the flexibility to complete a transaction at any point in time, regardless of their location. Furthermore, consumers may be able to more easily manage their expenses due to the fact that e-payment systems would record all transactions on their accounts, allowing e-payment users to check for expenses against their transaction history. This may make it more convenient for consumers to pay with e-payments rather than cash, as they would not be able to view all their transaction history if they do not keep track of their daily expenses.

The e-payment system can also be used by government bodies and business organizations to supplement existing payment methods and improve consumer payment behavior. It is important for managers and marketers to recognize the impact of cultural values on the intention to use the electronic money system. The research sample is spread across Malaysia, so it would be very helpful to understand how the intention to adopt an e-payment system varies by location and how culture affects the usage intention. In addition, we could also understand whether the location of students plays a role in their intention to adopt the electronic money system, as there are always places that don't offer e-payment systems. Based on the results of this study, practical implications were obtained about the factors that affect the intention to use e-money.

# Recommendations for Future Research

Extending the scope of the study to include urban and rural areas across Malaysia will help to gather clearer information to better understand customer intent towards mobile payments in Malaysia. Future research can also look at other factors such as perceived safety, perceived value, perceived speed, and performance expectancy to get more accurate factors. Encouraging to expand the sample to a larger number of respondents will help to illustrate the result and represent a valid population. A larger sample size reflects a higher response rate, which helps researchers gain a more inclusive understanding of market research. Further research can expand the data collection method rather than focusing on a single method. Various data collection methods are available in future research as alternatives to the questionnaire survey, such as interviews, observations, ethnography, archival research, etc. Other than that, make the questionnaire available in multi-language versions such as English, Malay, and Chinese to increase the degree of understanding. The respondents are more likely to answer truthfully when they know the language that they apply in their daily lives.

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