FINTECH ADOPTION IN ACCOUNTING: A STUDY OF MILLENNIALS' AND GEN-ZS' READINESS IN MALAYSIA

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Abstract. The objective of this study is to examine the readiness of Malaysian millennials and Gen-Zs for fintech adoption in accounting. This study developed the conceptual framework based on the Unified Theory of Acceptance and Use of Technology (UTAUT)'s four key fundamental constructs: performance expectancy (PE), effort expectancy (EE), social influence (SI), and facilitating conditions (FC). The research utilized a quantitative method using an online survey to gather data from 108 respondents across Malaysia. The findings indicate that PE and FC are found to be key predictors of users' fintech adoption intention (AI). It was also discovered that EE and SI have no significance on users' fintech adoption intention (AI). Also, AI has a significant impact on users' loyalty to keep using Fintech services. It is observed that PE is the strongest predictor of fintech adoption intention followed by FC, and AI does have a positive influence on consumers' fintech loyalty due to the positive correlation between them. The result also demonstrates that adoption intention has a direct effect on users' fintech loyalty. To encourage consumers to further continue using fintech services in the future, it is necessary to build a consumer loyalty base. The presence of one may attract new users to adopt the fintech services hence forming loyalty. Overall, this study may help gauge a portion of Malaysian millennials and Gen-Z's awareness, adaptability, and acceptance of fintech in accounting.
Keywords: *fintech, UTAUT, fintech adoption, financial technology*

Introduction

Approaching the Fourth Industrial Revolution, also known as Industry 4.0, technology is gradually dominating significant industries, most notably the financial sector. Financial technology, popularly known as Fintech, is a ground-breaking field that has revolutionised the way that businesses handle their finances. The use of technology to deliver financial services has drastically modernised and improved traditional accounting methods. The shift towards a digital environment renders the physical processes of traditional bookkeeping obsolete, as Fintech offers the potential for faster, more secure, and more streamlined access to financial instruments. Fintech can provide automated functions and secure data management between businesses and their users, resulting in cost savings, secure information handling, and improved accuracy for a variety of financial activities. Furthermore, with access to real-time financial data, users can better analyse financial information and make educated decisions to streamline their accounting processes. As Fintech continues to evolve, its impact on accounting will become apparent to a greater degree, ensuring that accounting processes remain up-to-date and relevant to the changing financial sector. The scope of Fintech is broad; however, this study will explore the relationship between Fintech and accounting, its implications for businesses and individuals alike, including how the future might look like for the profession if they are ready for the changes that

Fintech brings upon. The application of Fintech in accounting has been researched in depth for a long time; unfortunately, it is restricted to unilateral and deep-rooted applications and risks (Wang, 2021). Due to the limited number of studies that have been conducted in this field, the notion of Fintech is still in its infancy stages, especially in ASEAN countries. Although developed countries present a considerable lead in the Fintech industry, Southeast Asia boasts a promising capability with its strong economic potential that draws investor interest.

In Malaysia, investors are interested in the potential of Fintech firms that were developing solutions in payments, finance, and accounting (United Overseas Bank, 2019). The highest Fintech adoption in money transfer and payments is led by China with 83%, followed by India at 72%, Brazil at 60%, Australia closely behind with 59%, and the United Kingdom at 57% (Khotinskay, 2019). In terms of financial planning, savings and investments, and borrowing and lending, China is also in the lead with a quite higher percentage. The high volume of Fintech adoption in those segments is most probably influenced by the COVID-19 pandemic, whereby Fintech applications aided in an online, risk- free and smooth financial transactions alternative amidst the lockdowns (Alkhwaldi et al., 2022). As a result, the significance of Fintech in people's daily lives is apparent. Fintech in accounting is still relatively new, however, a myriad of research is being conducted, particularly in the usage of blockchain technology, the method of triple-entry bookkeeping, and financial reporting to name a few. To further elaborate on the concept of blockchain in accounting, it is primarily a Fintech tool that acts as a digital distributed ledger on a decentralized database network (Bonyuet, 2020). The distinct characteristics of blockchain technology are that it records transactions of several parties in real-time, with no interference from any intermediaries, and is validated by its users thereby eliminating any chances of manipulation. The technology seeks to assure trust, transparency and accountability (traceability), automation in the form of smart contracts, and immutability (Faccia and Petratos, 2021).

Evidence from a study by Abdennadher et al. (2022) found that the interviewees agree that blockchain delivers authenticity and reduces fraudulent transactions. The transactions are encrypted by hashing technique links, which prevents data from being altered. Moreover, triple-entry bookkeeping is gaining traction in the accounting field as another efficient way to combat trust and transparency issues within current accounting systems. There are several definitions regarding triple-entry, the first one being coined by Yuji Ijiri in 1986, as a third entry named 'trebit' that explain the changes of income, and another by Ian Griggs in 2005 as a concept of transaction receipt (Cai, 2021). The generally accepted definition of triple-entry accounting is later associated with blockchain technology. The security and transparency that blockchain technology brings forth resolve current accounting systems issues. Additionally, artificial intelligence (AI) and big data are simultaneously disrupting the accounting industry. AI's automation capabilities have immensely reduced the time consumption and effort needed to complete tasks such as recording journals and ledgers, payroll, tax, banking, and audits. The accuracy of AI produces quality outcomes as human errors are minimised. Big data's role in accounting is mainly processing vast amounts of data and providing insights. Data analytics based on past accounting data may aid experts in predicting the company's future and encourage wiser decision-making (Herath and Woods, 2021).

As previously discussed, Fintech plays a noteworthy role in revolutionising accounting from traditional to digital, offering a more seamless and efficient method of financial services and procedures. The concept has been picked up by investors and

researchers alike, however, the question in this study points to the end users on whether they are ready or not for the implementation of Fintech in accounting, aiming especially towards millennials and Gen-Zs residing in Malaysia, a developing ASEAN country with growing interest in Fintech. The purpose of this research is to study millennials' and Gen-Z's readiness for Fintech adoption in accounting. The impact of an emerging digital era has pushed many industries towards digitalisation, especially the Fintech sector. Propelled by the surge of the COVID-19 pandemic, e-commerce global traffic skyrocketed to roughly 35.5% between January and June 2020 amidst lockdowns (Moreira-Santos et al., 2022). This prompted the industry to create solutions through innovations and speed up their creative and digital processes in order to address the new economic issues brought on by the pandemic. Fintech is increasingly growing as a trend that is expected to persist in the years to come since it promises to expand access beyond international financial markets and improve security for consumers, investors, and company owners alike. Therefore, every individual are required to be informed, aware, and ready for Fintech adoption in general, especially in accounting.

Fintech for the public mostly consists of financial services that concentrated on electronic payments, insurance, online banking, and wealth management to name a few. These solutions provide remote access, convenience, and security to its users hence explaining why many have flocked to embrace the technology. The majority of financial service organisations are aware of the value and significance of user experiences, and some have started to invest in or collaborate with Fintech start-ups to increase their core competitiveness and market share (Shahzad et al., 2022). Awareness and adaptability are the reasons why some companies can progress ahead of their competitors, indicating that it is important to stay on top of trends and be ready for future changes. On the other hand, Fintech in accounting comprises the implementation of artificial intelligence, big data, and blockchain. Technology advancements have ensured that industries stay competitive and innovative, by enhancing business operational efficiency through those solutions. Therefore, to assess the readiness of Fintech adoption in accounting amongst millennials and Gen-Zs in Malaysia, this research explores the relationship between their expectations and intentions of adopting Fintech as they approach employment whereby awareness and adaptability are essential skills if they wish to stay relevant in harsh competitive business environments. The recent boom of the digital age has created advantages as much as it has disadvantages. The digitalisation of financial services was revealed to be a brewing pot of severe problems of theft, fraud, and information leak. The issues mentioned affect businesses and individuals alike notably that it leads to a significant loss. In the United States, financial services firms had to fork out $3.25 in expenses for every dollar lost to fraud (Moreira-Santos et al., 2022). In addition to the fees and interest paid, fines and legal costs, labour costs for the inquiry, and external recovery costs, they are tied to the transaction's actual worth. Not to mention, this necessitates extensive investigation on the part of the institution, trader, and end user.

Furthermore, with artificial intelligence taking over the jobs of clerical accounting employees, it implies that a sizable amount of accountants' employment may be adversely affected. Computerised systems have transformed conventional accounting by autonomously compiling financial reports, tracking invoices, and distinguishing data. It greatly improves output quality due to AI's precision and accuracy, likely replacing entry-level accounting clerks (Zhang et al., 2020). Meanwhile, big data's role in the accounting of handling enormous amounts of internal and external data aids accounting

professionals in offering better value to firms. These machines enrich accounting information quality through accuracy, completeness, and availability for use in real-time decision-making. However, the costs and resources attached to it pose difficulties to firms as it requires a large server storage capacity to cope with the substantial amount of data. Moreover, the introduction of blockchain technology in accounting will transform the roles of auditors significantly in the form of a shift in how some activities are carried out and the creation of new ones (Desplebin et al., 2021). Some writers have even asserted that the audit role would be eliminated since blockchain technology guarantees that data cannot be changed. In the face of the challenges that Fintech brings in accounting, this research is needed to measure the readiness of millennials and Gen-Zs to tackle the arising issues. In addition, the present study also aims to evaluate the knowledge and understanding of millennials and Gen-Zs regarding Fintech's role in accounting. The unforeseen future holds many possibilities, thus it is wise to equip oneself with knowledge and skills, as well as be ready for any upcoming changes along the way.

In this research, there are five objectives to be achieved. Based on the Unified Theory of Acceptance and Use of Technology (UTAUT) developed by Venkatesh et al. (2012), the four core constructs and the two independent variables help determine the research objectives of this study. It aims to assess the impact of each key construct, whether it affects the dependent variables positively or negatively, thus formulating the research objectives. Firstly, this research aims to investigate whether performance influences the adoption intention of Fintech: (RO1) to examine the impact of performance expectancy on the adoption intention of Fintech. The second research objective aims to evaluate the impact of effort expectancy on adoption intention: (RO2) to investigate the influence of effort expectancy on Fintech adoption intention. Thirdly, the research objective is to examine the significance of social influence on adoption intention: (RO3) to examine the social influence significance regarding the adoption intention of Fintech. In addition, the fourth research objective is to understand the importance of facilitating conditions on adoption intention: (RO4) to analyse the effect of facilitating conditions on Fintech adoption intention. The fifth research objective seeks to examine the fintech adoption intention on fintech loyalty: (RO5) to determine the significance of Fintech adoption intention on loyalty towards Fintech.

The significance of this study lies in the need to equip millennials and Gen-Zs, especially fresh graduates who are about to enter employment, with the knowledge and necessary skills to take risks in and combat the challenges of Fintech in accounting. The majority of studies have touched on Fintech adoption in general, but this research seeks to examine Fintech adoption in a more specific field, which is accounting. The core element that shapes this study is accounting, with the application of Fintech depending on it. This study would shed light on the awareness and adaptability of millennials and Gen-Z's living in Malaysia regarding the extent of Fintech's role in the accounting sector. Fintech in Malaysia is steadily growing via digital payments and online banking, contributing to the country's increased technological productivity (Tun-Pin et al., 2019). Financial institutions' services continue to challenge and cater to the behaviour of consumers who are tolerant of new technological goods to acquire market prospects. For financial institutions to retain market share in reaction to new technology, modern developments, and millennium generation, they will need to implement new technology applications with promising market potential to stay on top of the competition. These firms would surely seek capable prospective employees with related skills and

knowledge. As a result, this research assesses millennials and Gen-Z's potential in a developing sector that contributes to the nation's economic growth.

Literature review

In this part of the research, past empirical studies on fintech adoption are discussed in a global context, in the ASEAN region, and also in Malaysia. In general, fintech is a topic that has gained scholars' and researchers' attention alike since the 2010s (Lu et al., 2020). The fintech revolution has created many opportunities for researchers and scholars to study new possibilities fintech can develop, such as AI, machine learning, big data, blockchain, and to name a few. In light of this, the rate of fintech adoption around the world, especially in developed countries, would increase, as recent studies conducted proved its benefits backed by credible and resourceful data. One closely related study by Alkhwaldi et al. (2022) regarding fintech adoption from a developing country's perspective managed to demonstrate by using the UTAUT model, fintech services are generally well accepted in Jordan. The study found that consumers' intentions to adopt fintech were statistically significant, in which the majority of the variables correlated with behavioural intentions. The results also indicated that with the significant fintech adoption intention, consumers would continue to utilise the technology in the future, indicating that loyalty is gradually established.

Empirical research on fintech readiness in the ASEAN region concluded that all six ASEAN nations exhibit an increasing trend in ASEAN-6 Fintech Index (AFI) from 2017 through 2019, indicating that the Fintech field is expanding in these nations (Zheng et al., 2022). The top-ranked country in AFI 2019 is Singapore, which is followed by Thailand, Malaysia, Vietnam, Indonesia, and the Philippines. This suggests that among the ASEAN-6 nations, Singapore is fully ready for fintech adoption and is equipped with the finest Fintech ecosystem, while the Philippines is the weakest. In Malaysia, a study by Tun-Pin et al. (2019) discovered that functionalities provided by technology are a crucial factor that consumers' decisions to use technology in the financial services industry. It also proved that innovative efforts of technology in the delivery of financial services benefit users. This study showed the highest coefficient level of 0.324 in the acceptance of financial technology as Malaysian internal motivations that express the usage of financial technology process, demonstrating the importance of consumer satisfaction as a factor of fintech adoption. Performance expectancy measures how much an individual considers that using cutting-edge technology will help them gain from task performance. In this study, PE shows that using Fintech services enhances performance and productivity in carrying out financial transactions and is very useful in people's daily lives.

Fintech services are said to provide increased convenience, making them a valuable asset in people's daily lives. Numerous past kinds of research have demonstrated a favourable correlation between PE and plan to utilize digital payments, mobile payments, Fintech services, and mobile banking. For instance, the researchers discovered that PE had a considerable impact on customers' aspirations to adopt Fintech (Alvesson and Kärreman, 2007). Effort expectancy measures how simple it is to use new technology. This component is anticipated to have a greater influence during the early stages of adoption, but it loses significance after adoption (Alkhwaldi et al., 2022). People who believe in EE accept that technology is easy to use and requires little effort. Consequently, using Fintech services is expected to make the EE less cumbersome and easier to master. Prior empirical studies have shown a favourable correlation between

EE and Fintech adoption. For instance, one study has proved that EE influences behavioural intentions to utilize Fintech services favourably (Senyo and Osabutey, 2020). This suggests that people are more likely to use these services if financial transactions require less effort. The ways that people modify their conduct to fit the expectations of a social setting are referred to as social influence. This phenomenon can be broken down into three distinct categories: internalisation, identification, and compliance. Internalisation and identification involve a person changing their ideas and beliefs based on societal norms or subjective standards, while compliance causes a person to alter their behaviour to fit in with the expectations of the group. All of these elements demonstrate how the people surrounding an individual can influence their decision to accept and use Fintech services.

In the context of this study, the people surrounding an individual have an influence on their decision to accept and use Fintech services. Moreover, it has been demonstrated through empirical research that SI affects consumers' intentions to use Fintech services (Xie et al., 2021). The definition of facilitating condition (FC) is the extent to which a person feels that an organisational and technological infrastructure exists to support the usage of the system. FC is anticipated to facilitate the adoption and usage of novel technologies in this research. As a result, the technology is fully prepared to provide consumers with sufficient experiences, including access to a help desk and/or troubleshooting in the event that a problem arises. Users' behavioural intentions regarding Fintech services are anticipated to be directly influenced by FC. A favourable correlation between FC and users' intent toward Fintech services, e-payment systems, mobile banking, and other technologies has been found through empirical studies (Yohanes et al., 2020).

This research seeks to explore the potential for continuous use of Fintech services in the future, the possibility of using Fintech in daily life, and the possibility of frequent usage of Fintech services. Adoption intention, which refers to an individual's intent on whether they would choose to adopt the technology or not, is an important factor in determining the success of Fintech services. AI is influenced by four independent variables, such as performance expectancy, effort expectancy, social influence, and facilitating conditions, and the correlation of these four variables on adoption intention is expected to be favourable. Research by Lu et al. (2011) concluded that consumers' intent to utilize mobile payment services is directly and indirectly influenced by their initial level of confidence, which is an important factor in determining the success of Fintech services. Therefore, this research seeks to further explore the relationship between adoption intention and the four independent variables to gain a better understanding of the potential for Fintech services in the future the concept of loyalty extends beyond the traditional understanding of brand loyalty to encompass consumer online behaviour, known as e-loyalty. This refers to a person's intention to return to an online portal, such as an e-commerce website, or to use the services again in the future, even when there are other options available. In the context of this research, customer loyalty is defined as a person's desire and behaviour to repeatedly use the same Fintech services, such as mobile applications or online services, following a positive user experience.

Materials and Methods

The data collection method was conducted via an online survey in the form of a questionnaire due to its ease of use and convenience. The questionnaire consists of items that help measure the respondents' adoption intention, and gauge their awareness, adaptability and acceptance regarding fintech. It was then promoted and distributed via email, social media platforms and word of mouth to encourage participation and a bigger data pool. The questionnaire was developed from the adaptation of the survey presented in a study conducted by Alkhwaldi et al. (2022). To maintain the reliability and validity of the used measures, the items and scales for this study were modified from UTAUT-related literature and past empirical research (Venkatesh et al., 2003). The questionnaire consists of PE and LO that are measured using 4 items, EE and SI utilising 3 items, and FC and AI measuring 2 items. Altogether, there are 6 sections and a total of 18 questions in the questionnaire. The questions for each aspect of the study's theoretical model were assessed using a 5-point Likert scale (1=strongly disagree; 5=strongly agree), which had been popular in prior studies that rely on questionnaires. Respondents' demographics were also recorded in the questionnaire using a nominal scale.

Millennials and Gen-Zs in Malaysia are the targeted group in this particular study. Specifically, millennials are those aged 26 to 35 years, while Gen-Zs are those aged 18 to 25 years. It is mainly because these two generations are known to be technologically savvy, thus they are more likely to adopt fintech in their daily lives. The questionnaire measures their readiness for fintech adoption approaching the digital age. Most importantly, their internet experience plays a huge role in the adoption intention, which is tested in the questionnaire. Although the proposed questionnaire's items were adapted from a robust theoretical model, a convenience sample of 20 respondents was used for a pilot test of the questionnaire to evaluate the format, response speed, and psychometric properties of the scales such as validity and reliability. Before the final data collection, specific adjustments to the design of several questions were made in response to feedback from the pre-test. Finally, the present study collected about 108 respondents. An accessibility issue might attribute to their limited knowledge of fintech. It is a relatively new concept, and some might have heard of it but has no further knowledge of its abilities and potential, hence the responses might just be answered nonchalantly and randomly. If just a tiny number of respondents participate, responder bias likely taints the results, making them unreliable (Andrade, 2020).

Results and Discussion

A total of 108 responses were gathered for this research (*Table 1*), whereby 46.3% of respondents were male and 53.7% were female. The majority of the respondents were aged 18 to 25 years at 73.15%, and 24.07% were 26 to 35 years, representing Gen-Zs and millennials age bracket. It is noteworthy that most respondents lived in big cities such as Kuala Lumpur 40.74% and Selangor at 39.81%. Roughly 80% of respondents have an undergraduate education. Most respondents' internet experience is measured at moderate with 52.78% and experienced at 44.44%.

Table 1. *Demographics analysis (N=108).*

Variable	Frequency [N] (Percentage [%])
Gender	

Male	50 (46.3)
Female	58 (53.7)
Age (years)	
18-25	79 (73.15)
26-35	26 (24.07)
36-45	1 (0.93)
>45	2 (1.85)
Location	
Johor	2 (1.85)
Kedah	1 (0.93)
Kelantan	3 (2.78)
Kuala Lumpur	44 (40.74)
Labuan	1 (0.93)
Malacca	2 (1.85)
Negeri Sembilan	2 (1.85)
Pahang	1 (0.93)
Penang	1 (0.93)
Perak	1 (0.93)
Perlis	1 (0.93)
Putrajaya	3 (2.78)
Sabah	1 (0.93)
Sarawak	1 (0.93)
Selangor	43 (39.81)
Terengganu	1 (0.93)
Education	
Secondary school	10 (9.26)
Undergraduate	87 (80.56)
Postgraduate	11 (10.19)
Internet experience	
Some experience	3 (2.78)
Moderate experience	57 (52.78)
Experienced	48 (44.44)

Table 2 displays the descriptive statistics of the mean for each construct in the proposed research model. It can be observed that the means for each variable scored above 4.0, implying that most participants responded favourably to the questionnaire provided. Among all four independent variables, social influence (SI) is proved to be the greatest influencer on adoption intention with the highest mean of 4.194, followed by performance expectancy (PE) with an average of 4.181, effort expectancy (EE) with a mean of 4.136, adoption intention (AI) with an average of 4.125, facilitating conditions (FC) with a mean of 4.12, and lastly, the lowest mean out of the variables is loyalty (LO) at 4.063. The average dispersion between each item and the mean is measured by the standard deviation, and it indicates how data are scattered around the mean. While a high standard deviation suggests that the data points are dispersed throughout a larger range of values, a low standard deviation suggests that the data points tend to be close to the data set's mean. According to *Table 2*, the standard deviation values of each variable scored 0.595 and above. To interpret, the values are closer to zero, demonstrating that it is near the mean, meaning that the data set is closely distributed.

Table 2. *Descriptive statistical analysis.*

Items	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
				Statistic	Std. Error	Statistic	Std. Error
PE	4.181	0.595	0.354	-0.409	0.233	-0.635	0.461
EE	4.136	0.611	0.374	-0.483	0.233	-0.667	0.461
SI	4.194	0.610	0.372	-0.518	0.233	-0.951	0.461
FC	4.120	0.662	0.439	-0.259	0.233	-1.092	0.461
AI	4.125	0.727	0.529	-0.466	0.233	-0.702	0.461
LO	4.063	0.625	0.390	-0.488	0.233	-0.732	0.461

Another measure of variability is the variance. Variance includes all the data points in its computations by comparing each value to the mean, as opposed to standard deviation. Variance illustrates the amount of variation that exists among the data set. The larger the variance, the higher the probability distribution will be. However, if the variance score is zero, it means that there is no variability in the sample. In *Table 2*, the variance for PE is the lowest at 0.354, followed by SI at 0.372, EE at 0.374, LO at 0.39, is at 0.439, and the highest is AI at 0.529. The variance is quite close to zero which means that there is little variability but is expected for a questionnaire data set. The degree of symmetry in a variable's distribution is measured by skewness. A distribution is said to be skewed if the answers for a given variable go toward the right or left tails of the distribution. A higher proportion of bigger values is indicated by a negative skewness, and a higher proportion of smaller values is indicated by a positive skewness. A skewness value between -1 and +1 is often regarded as desirable, while a number between -2 and +2 is generally seen as considerably adequate. Values between -2 and +2 are regarded as signs of significant nonnormality (Hair Jr et al., 2021). As observed from *Table 2*, the skewness for all variables is negative, which indicates that there are a lot of bigger values in the data set. Most respondents' answers are favourable as there are more high values recorded in the Likert scale answers, such as 2 and above, which would explain the negative skewness. The skewness also falls desirably between -1 and +1, the highest being FC at -0.259, followed by PE at -0.409, AI at -0.466, EE at -0.483, LO at -0.488, and the lowest by SI at -0.518. Kurtosis is a metric used to determine whether data are heavy-tailed or light-tailed concerning a normal distribution. A distribution that is more peaked than the standard implies a positive value for the kurtosis. On the other hand, a form that is flatter than usual suggests a negative kurtosis. Similar to the skewness, the general rule is that the distribution is excessively peaked if the kurtosis is more than +2. A too-flat distribution is also indicated by a kurtosis of less than 2. When skewness and kurtosis are both relatively low, the response pattern is regarded as having a normal distribution (George and Mallery, 2019). Referring to Table 2, it can be noted that the kurtosis values fall between -1 and +1.1, with the highest being PE at -0.635, followed by EE at -0.667, AI at -0.702, LO at -0.732, SI at -0.951, and the lowest being SI at -1.092. The negative kurtosis values suggest that the distribution is flat and not excessively peaked. Overall, the skewness and kurtosis of the data set in this research are considered to have a normal distribution due to their low values.

A reliability test is used to gauge how much confidence may be placed in test outcomes. If the results are consistent over several measurements of the same topic, and the variables being measured on the subject have not changed, the results can be accepted (Matondang, 2009). The Cronbach's Alpha value is used to determine whether or not the respondents' responses are dependable. The reliability of a respondent's response is determined by the consistency of the scores and Cronbach's Alpha value,

which must be more than 0.70. Otherwise, if Cronbach's Alpha value is less than 0.70, the respondents' responses are not considered to be credible (Ghozali, 2013). The test of reliability is computed to assess the degree of stability and consistency of the measurement outcomes. This research applies Cronbach's Alpha to evaluate the data's internal consistency. From Table 3, it is noted that all variables scored above 0.7, the lowest being facilitating conditions (FC) at 0.714, then performance expectancy (PE) at 0.722, followed by social influence (SI) at 0.744, loyalty (LO) at 0.745, effort expectancy (EE) at 0.75, and the most is adoption intention (AI) at 0.766 (*Table 3*). Cronbach's Alpha scores require the measurement outcome to be above 0.7 to be acceptable, the closer to 1 it is the better the internal consistency. This research thus found that all variables showed acceptable internal consistency.

Table 3. Reliability test.

Variables	Cronbach Alpha
PE	0.722
EE	0.750
SI	0.744
FC	0.714
AI	0.766
LO	0.745

To assess the discriminant validity of the presented constructs, correlation analysis was conducted. According to *Table 4*, the correlation coefficients for each construct varied from 0.032 to 0.344 and were all determined to be positively correlated. Discriminant validity is corroborated by the correlation coefficient, and judging by the positive correlation between the variables, it suggests that the research sample's discriminant validity is appropriate. Pearson's correlation gauges how strongly two variables are correlated linearly with each other. Its range of values is from -1 to 1, with -1 denoting a completely inverse linear correlation, 0 denoting no correlation, and 1 denoting a completely positive correlation (Williams et al., 2020). PE was found to have the highest correlation with AI at 0.344, followed by SI at 0.338, then LO at 0.304, EE at 0.242, and lastly FC at 0.149. The correlation between EE and other variables is the highest at 0.242 with PE, followed by LO at 0.204, then FC at 0.136, SI at 0.11, and AI at 0.074. SI's highest correlation is with PE at 0.338, followed by LO at 0.182, FC at 0.123, EE at 0.11, and AI at 0.054. FC correlates highly with AI at 0.211, followed by PE at 0.149, EE at 0.136, SI at 0.123, and LO at 0.032. Next, AI was found to correlate highest with PE at 0.344, then LO at 0.26, FC at 0.211, EE at 0.074, and SI at 0.054. Finally, the correlation between LO and other variables is the highest at 0.304 with PE, then AI at 0.26, EE at 0.204, SI at 0.182, and the least with FC at 0.032. This research's lowest correlation value is the relationship between FC and LO at just 0.032. Although it indicates a positive correlation as it scored more than 0, however, it is a very weak positive correlation. On the other hand, the highest correlation coefficient of 0.3444 indicates medium strength of positive association between the constructs of PE and AI. This proves that performance expectancy highly affects consumers' adoption intention.

Table 4. Correlation coefficient analysis.

	PE	EE	SI	FC	AI	LO
PE	1	-	-	-	-	-
EE	0.242	1	-	-	-	-

SI	0.338	0.110	1	-	-	-
FC	0.149	0.136	0.123	1	-	-
AI	0.344	0.074	0.054	0.211	1	-
LO	0.304	0.204	0.182	0.032	0.260	1

Multiple linear regression analysis is adopted in this study to determine the impacts of independent constructs on dependent constructs. From the *Table 5*, the four independent variables (PE, EE, SI, FC) are regressed against the independent variable of adoption intention (AI), and the results show that PE and FC have a positive coefficient meanwhile EE and SI have a negative coefficient respectively. To elaborate further, adoption intention (AI) will have a constant value of 2.089 if PE, EE, SI, and FC remain constant. EE has a slope (B) value of -0.031, which is a negative regression coefficient. It indicates that if EE drops by a certain amount while the other independent variables remain the same, AI will rise by -0.031. The same applies to SI, if the value decreases by a certain amount while others are constant, AI increases by -0.1. In contrast, PE has a slope (B) value of 0.432, indicating a positive regression coefficient. Accordingly, AI will increase by 0.432 if PE rises by one point if other independent variables remain. Similarly, FC specifies a positive regression coefficient with a slope (B) value of 0.189, meaning that one rise in a point will increase AI by 0.189, provided that other independent variables remain constant. The influence of the independent variables on the dependent variable is inferred by the independent variable's beta value. PE imposes the highest impact on AI with a beta value of 0.354, followed by FC with 0.172. Conversely, EE and SI resulted in a negative beta value of -0.026 and -0.084, respectively.

Table 5. *Multiple regression analysis.*

Model		Unstandardized coefficients		Standard coefficient	t	Sig.	Collinearity statistics	
		B	Std. Error				Tolerance	VIF
1	constant	2.089	0.717	-	2.913	0.004	-	-
	PE	0.432	0.121	0.354	3.563	0.001	0.836	1.196
	EE	-0.031	0.112	-0.026	-0.281	0.779	0.931	1.075
	SI	-0.100	0.115	-0.084	-0.871	0.386	0.880	1.137
	FC	0.189	0.102	0.172	1.862	0.065	0.962	1.040

Notes: a. Dependent variable: Adoption Intention (AI); b. Coefficients.

The *Table 6* measured the linear regression analysis of adoption intention (AI) as the independent variable against the dependent variable of loyalty (LO). The results indicate that adoption intention (AI) has a positive coefficient regarding loyalty (LO). It can be observed from the table that the constant value of 3.14 will remain unchanged if the adoption intention (AI) does not change. It is also noted that the slope (B) value of AI is 0.224, which means that it has a positive regression coefficient. It also means that if AI rises by one point, then LO will increase by 0.224 in a similar fashion. Additionally, AI's beta value of 0.26 implies the positive impact that the variable has on loyalty (LO) as the dependent variable. To summarise, the data in this research were analysed using SPSS software to determine the descriptive statistics, reliability analysis, correlation analysis, and regression analysis. Firstly, the descriptive statistics found that the average scores are above 4.0, with the highest of 4.194 for SI. The skewness and kurtosis were found to have a normal distribution across the data set. Cronbach's Alpha deduced that all variables are consistent and acceptable because it resulted at greater than 0.7, with the highest on AI at 0.766. Next, the correlation coefficients were computed, and all variables resulted in a positive correlation. The highest correlation of 0.344 is the

relationship between PE and AI, while the lowest is between FC and LO at 0.032. Furthermore, the first regression analysis found that PE and FC have a positive regression against AI at 0.354 and 0.172 respectively. However, EE and SI resulted in a negative regression at -0.026 and -0.083 respectively. Additionally, the second regression analysis found that AI has a positive regression against LO at 0.26.

Table 6. *Multiple regression analysis.*

Model		Unstandardized coefficients		Standard coefficient	t	Sig.	Collinearity statistics	
		B	Std. Error				Tolerance	VIF
1	Constant	3.140	0.337	-	9.303	0.000	-	-
	AI	0.224	0.081	0.260	2.777	0.006	1.000	1.000

Conclusion

To conclude, the majority of the constructs were revealed to be statistically significant except for the relationship between EE and AI, and also between SI and AI. The negative significant impact of EE on AI is aligned with evidence put forth by Alkhwaldi et al. (2022). One explanation might be that customers are growing less concerned about how to utilise web-based services and apps as the technology gets more user-friendly. Consequently, the consumers will primarily use those apps and services chosen above others based on perceived usefulness (or performance expectations) as opposed to usability (or effort expectancy). Therefore, it is advised that app developers create more approachable fintech user interfaces to entice those with lower technological abilities in embracing and utilising fintech in their daily transactions. Remarkably, this research found SI to be an insignificant predictor of users' fintech adoption intention. Most of the earlier research by various authors discovered that SI has a significant influence on AI. An explanation for this could be the low rate of technological awareness in Malaysia. The potentials of fintech have yet to reach the general public, hence why SI has little influence on AI. It is advised that service providers make it mandatory for early adopters of fintech to help spread awareness of the technology.

Positive word of mouth from friends, family, co-workers, and peers may also impact fintech usage. Service providers should also advertise their fintech services to draw in more customers. Consequently, this will affect people's decisions to adopt fintech. On the other hand, one of the significant predictors within the suggested model is performance expectancy (PE). The results of this study are in line with previous studies that also reached into similar conclusion (Al-Okaily et al., 2022). It is more likely that a fintech user would perceive and intend to employ technology favourable when they experience its benefits. To encourage more users and their requirements and expectations, developers must improve their quality according to user ideas and recommendations. They should also think about improving current financial services to provide consumers with better performance. Previous research has also revealed that FC has a big impact on how people behave when it comes to utilising technology (Yohanes et al., 2020). As a result, fintech service providers must make more investments in technological infrastructure and are encouraged to provide all user-friendly circumstances, such as support service centres that may improve users' technological proficiency and their ability to utilise fintech apps. People are more likely to have favourable attitudes toward accepting and using fintech if this is readily available.

Additionally, AI's positive significance on LO indicates that users who intend to adopt fintech will continue using it in the future. Building a loyal consumer base is essential for fintech service providers to continue to flourish. This is because if their users are loyal, they are more likely to use one application or service even if substitute applications are offered. Hence, service providers must respond to consumers' adoption intention to create a loyal fanbase, so that they can keep using the services going forward. This study identifies important variables that account for consumers' inclinations to embrace fintech and develop loyalty to such services. However, there are several limitations to the research that was done. First, there may have been a selection bias because most of the respondents had expertise with internet technology. Thus, data from individuals with various backgrounds and experiences might be gathered for future studies. Second, future research may focus on demographics and other environmental factors, such as the effect of governmental restrictions on the adoption and usage of fintech. Also, this research solely included data from Malaysia. To better understand the effects of cultural variations and determine if the same variables would affect fintech adoption, it is advised that participants be selected from other nations.

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Conflict of interest

The authors confirm that there is no conflict of interest involve with any parties in this research study.

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