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Factor Influencing the Adoption of FinTech in Investment among Malaysians: A Unified Theory of Acceptance and use of Technology (UTAUT) Perspectives

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ABSTRACT

The utilisation of technology has established itself as a strong management and administration platform for solving traditional problems, including managing digital financial services. Besides, it has been established as the superior distribution channel, encompassing goods, services, and digital investments. Nowadays, the consumer Internet segment has been thoroughly penetrated by technology, covering all businesses serving customers and financial technology companies. Industries such as banking, insurance/takaful, investment, asset management, and foreign exchange track their activities in providing financial services. However, investment services also need attention, especially regarding human intervention using FinTech. This paper examines the influence of adoption factors for FinTech on investment, and FinTech's potential to reduce costs, enhance human resource efficiency, increase customer satisfaction, and increase. This study employed the Unified Theory of Acceptance and Use of Technology (UTAUT) framework. This study assists the financial services industry players in aligning their organisational objectives with the development of digital financial ecosystems. The comprehensive development of FinTech is essential to investment management involving value aggregators, advisors, and competitive access facilitators in light of the increasingly challenging field of digital technologies. Effective and systematic investment services could be combined with internal capabilities in FinTech across the investment landscape for external innovations, service providers, and advice facilitators.

1. Introduction

Globally, the growth of financial technology (FinTech) does not endanger the presence of financial institutions, and authorities should guarantee that traditional lenders, policymakers, and regulators are prepared for the shift in the sector [1,2]. The emergence of FinTech as a platform for Internet and

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mobile consumers has sparked a debate [3,4]. Many unicorns in this industry are now endeavouring to streamline financial services to assist their primary business layers [5-7]. New technologies are disrupting the financial services sector, similar to their impact on various other markets. Peer-to-peer lending, robot advisors, and crowdfunding are examples of how FinTech is reshaping traditional business models and setting new standards in the digital landscape of financial services [8-10]. FinTech is valuable across various key industries, including banking, insurance/takaful, investing, asset management, and foreign exchange [11-13]. The financial services industry is one of the few business sectors that can withstand technological disruption [14,15].

FinTech, the cutting-edge technology in financial services, is streamlining office data processing and reducing the potential for human error [16,17]. FinTech aims to optimise and automate the predictions of human replacement that have occurred over time [18]. The advantages of automation and data handling are undeniable [19]. However, investment services also need attention, especially regarding human intervention using FinTech. FinTech encompasses a range of creative concepts that have the potential to improve customer service by utilising virtual assistants, chatbots, robot advisors, and various analytics tools. The integration of machine learning can further boost the effectiveness of these applications [20-22]. Providing good customer service and usage for FinTech is a focus of all financial services institutions [23-25]. Chatbots and voice bots are frequently used in the financial industry to engage with consumers and resolve simple issues, underscoring the importance of human intervention [26-28]. FinTech plays a significant role in assisting individuals with managing their day-to-day personal finances and offering the necessary advantages.

Adaptation of FinTech in Malaysia is closely related to the country's unique economic, regulatory, and technological factors. Malaysia has a rapidly growing economy, and FinTech adoption has the potential to enhance financial inclusion and promote economic growth [29]. In Malaysia, the government has been actively promoting the development of FinTech and fostering an innovative regulatory atmosphere [29]. Despite such initiatives, there are still hurdles to overcome in adopting FinTech in Malaysia, such as limited financial literacy and trust in digital financial services [30]. Therefore, understanding the linkages between FinTech adoption and financial development in Malaysia is an important area of research [29]. Examining the adoption of FinTech in Malaysia can provide valuable insights into the factors that shape the adoption of FinTech services and the implications of FinTech on financial development [30] and contribute to the broader literature on FinTech adoption and financial development of investment [29,31].

Notwithstanding these difficulties, the amplified dedication to innovation and the driving force behind FinTech with newcomers offer competitive alternatives in digital distribution and a better customer experience [32,33]. The role of financial services in FinTech has been reduced due to the growing consumer demand driven by the digital experience offered by technology leaders [32,33]. To adapt effectively to the rapid pace of change, financial institutions must increase their efforts in cultivating an innovative culture, which involves developing a mindset that embraces change and demonstrating a willingness to take risks and question established norms [34,35]. Such a campaign compels users to venture beyond their familiar territory and explore customer service methods that mirror the level of service offered by prominent technology alternatives [36-38]. Since the past decade, the financial services industry has faced the financial crisis, industry digitalisation and consumer mobilisation, the introduction of traditional and non-traditional competitors, new regulations, and continued margin pressure. Throughout these periods, there has been a substantial overhaul in financial service institutions, accompanied by a growing demand from customers for predictive, proactive, and proximate services [39,40].

The strategic approach is crucial for establishing a strong foothold in the industry's future landscape [39,40]. The emergence of FinTech drives traditional financial service companies to actively

reduce their dependence on outdated legacy technologies [39,40]. The core of this change involves discovering a novel approach to harnessing digital channels and data [41,42]. The financial services industry is constantly changing, and FinTech companies specialising in digital financial services are leveraging investment management to drive future revenue growth. In addition to their branches and offerings, the financial services industry is actively working towards digitalising their current products and services. The study aims to examine the factors that influence the adoption of FinTech in investment services. By addressing that, the study provides valuable insights for stakeholders in the financial services industry, such as value aggregators, advisors, and competitive access facilitators, to leverage their organisational goals toward a hub of financial digital ecosystems as technology advances. In light of the swift development of FinTech and its capacity to revolutionise investment services, it becomes imperative to grasp the elements that affect its adoption and devise strategies to foster its extensive adoption in the financial services industry.

2. Literature Review

2.1 The Factors Influencing FinTech Adoption

The growing ubiquity of FinTech has facilitated the emergence of digital innovations, like robo-advisors, which employ artificial intelligence to deliver customised financial guidance to individuals [43]. The trustworthiness of individuals is heavily influenced by various elements, including the psychological comfort experienced by clients, particularly due to the inherent uncertainties associated with financial outcomes [43]. Adopting digital payment systems, like the mobile payment system in Jordan, is prone to uncertainties due to cultural factors, as shown in a study conducted by Alkhwaldi *et al.*, [44]. The utilisation of investment applications among the younger population in Indonesia has been influenced by various elements of the Unified Theory of Acceptance and Use of Technology (UTAUT) model. This model also applies to the acceptance of robo-advisors, where attitudes mediate between the UTAUT factors and the intention to engage in related behaviours [45, 46]. In India, “the fear of missing out” impacts how individuals’ intentions to adopt cryptocurrencies translate into their investment behaviour. This result is especially noteworthy in the contemporary period characterised by the rapid rise of digital currencies. This insight was brought to light by Kala *et al.*, [47] in their study conducted in 2023. The adoption of extended reality visualisation tools from a design standpoint is determined by the UTAUT model, which highlights the importance of stakeholder and peer influence and the tool’s capacity to enhance performance [48]. In summary, the integration of digital technologies in finance and design is influenced by a combination of behavioural, psychological, and cultural elements. The UTAUT model could serve as a crucial analytical framework in various settings.

2.2 The Impact of Factors Influencing FinTech Adoption

The relationship between individuals’ behavioural intentions and their adoption of different technological platforms has been extensively studied. A study has been conducted to understand the behavioural intentions tied to adopting online capital market investing platforms in Indonesia. This aim was accomplished by integrating three notable theories: the Technology Acceptance Model (TAM), the Theory of Planned Behavior (TPB), and UTAUT. According to Nainggolan and Handayani [49], the study revealed that attitudes, perceived ease of use, and national pride substantially influenced these intentions. Behera *et al.*, [50] examined the implementation of a cognitive computing decision support system within the context of healthcare policymaking. This study’s findings showed that using a computing decision support system can yield more logical and informed

outcomes in health policies, particularly concerning the development of policies that promote and support health. In the study, Bozkurt and Akgül [51] investigated the underlying motivations driving cryptocurrency investments. Their findings revealed that performance expectation emerged as a crucial factor concerning cryptocurrency pricing news. A recent study by Dutta and Shivani [52] explored the topic of e-commerce adoption among female entrepreneurs in India. This research revealed that perceived usefulness and convenience were the key factors influencing the adaptation of female entrepreneurs to e-commerce platforms. According to Jou *et al.*, [53], individuals of lower-middle socio-economic status may not be the optimal target audience for digital financial literacy platforms, as their lack of technological proficiency could hinder their ability to engage with such platforms effectively. Moreover, Cheong *et al.*, [54] investigated the use of robo-advisors in the FinTech industry during the COVID-19 crisis, further underscoring the significance of possessing financial, digital, and information literacy skills. In a recent study, Joshi *et al.*, [55] examined the factors that motivate Generation Z females in India to engage in cryptocurrency investment. Sidhu *et al.*, [65] acknowledged the necessity for prompt measures to foster awareness among Generation Z, with the aim of enhancing their adoption and utilisation of this technology in their daily routines. The study's findings indicated that perceived utility was the key factor influencing behavioral intentions, whereas price value negatively impacted investment decisions among this demographic.

2.3 The Adoption and Continuance Intentions of Emerging Financial Technologies

This research encompasses a range of studies exploring the adoption and continuance intentions of emerging technologies and digital currencies, drawing primarily on the UTAUT model. Sham *et al.*, [56] investigated cryptocurrency adoption among Malaysians and identified performance expectancy, effort expectancy, social influence, and technology affinity as significant adoption predictors. They also extended the established UTAUT model, emphasising the importance of considering both technological attributes and individual characteristics. On the other hand, Kala and Chaubey [57] focused on the influence of perceived government control on cryptocurrency adoption among Indians, highlighting the roles of social influence, effort expectancy, and trust. They emphasised the significance of government regulations in influencing adoption and continuance intentions. Venturing into the agricultural domain, Scur *et al.*, [58] explored the integration of the Internet of Things in vegetable crop cultivation, emphasising the critical role of organisational factors in the producers' adoption of the Internet of Things. Lastly, Kaur *et al.*, [59] studied the post-adoptive behaviors of users toward the Unified Payments Interface applications in India. They underscored the direct influence of satisfaction on continuance intentions while spotlighting the cognitive factors influencing satisfaction. These studies offer comprehensive insights into the multifaceted dimensions of technology adoption and post-adoption behaviours, catering to academic and practical concerns [56-59]. Chi *et al.*, [66] demonstrates that the combination of many disciplines and cutting-edge technologies offers several benefits, such as promoting interdisciplinary abilities and merging theory with technology.

Furthermore, this study builds upon the UTAUT model, which Venkatesh [60] originally presented, as shown in Figure 1, which offers a comprehensive framework for comprehending the various elements that influence the acceptance and utilisation of FinTech within investment plans. The study finds four main key components of the UTAUT model: performance expectancy, effort expectancy, social influence, and facilitating conditions. Performance expectancy refers to the degree to which an individual believes that using the technology will help enhance their performance. In contrast, effort expectancy relates to the ease of the technology's use. Social influence encompasses the impact of social factors on the individual's intention to use the technology, and facilitating

conditions refer to the degree to which an individual believes that the organisational and technical infrastructure supports the technology's use. Various characteristics, including age, gender, experience, and voluntariness of use, highly influence investors' desire to use FinTech applications. Through applying the UTAUT framework, stakeholders can evaluate investor behaviour, tailor FinTech solutions to individual needs, and enhance the adoption rates of novel FinTech. UTAUT is a widely recognised model for predicting individuals' intention to adopt and use technology. The model integrates various factors influencing technology acceptance and use, providing a comprehensive framework for understanding user behaviour.

The UTAUT model has been widely applied in the context of FinTech adoption globally. The study on the behavioural intention to adopt FinTech services extended the UTAUT model to assess the adoption of FinTech services, highlighting its relevance in the FinTech domain [61]. Additionally, the UTAUT model has been used to understand the drivers of mobile banking adoption, demonstrating its applicability in the financial technology sector [62]. Furthermore, the model has been employed to predict the intention to adopt omnichannel services, indicating its versatility in capturing user behaviour across different technological domains [63]. Overall, the UTAUT model has proven to be a valuable tool for understanding and predicting the adoption of FinTech and other technology-related services, providing insights into the factors that influence user acceptance and use.

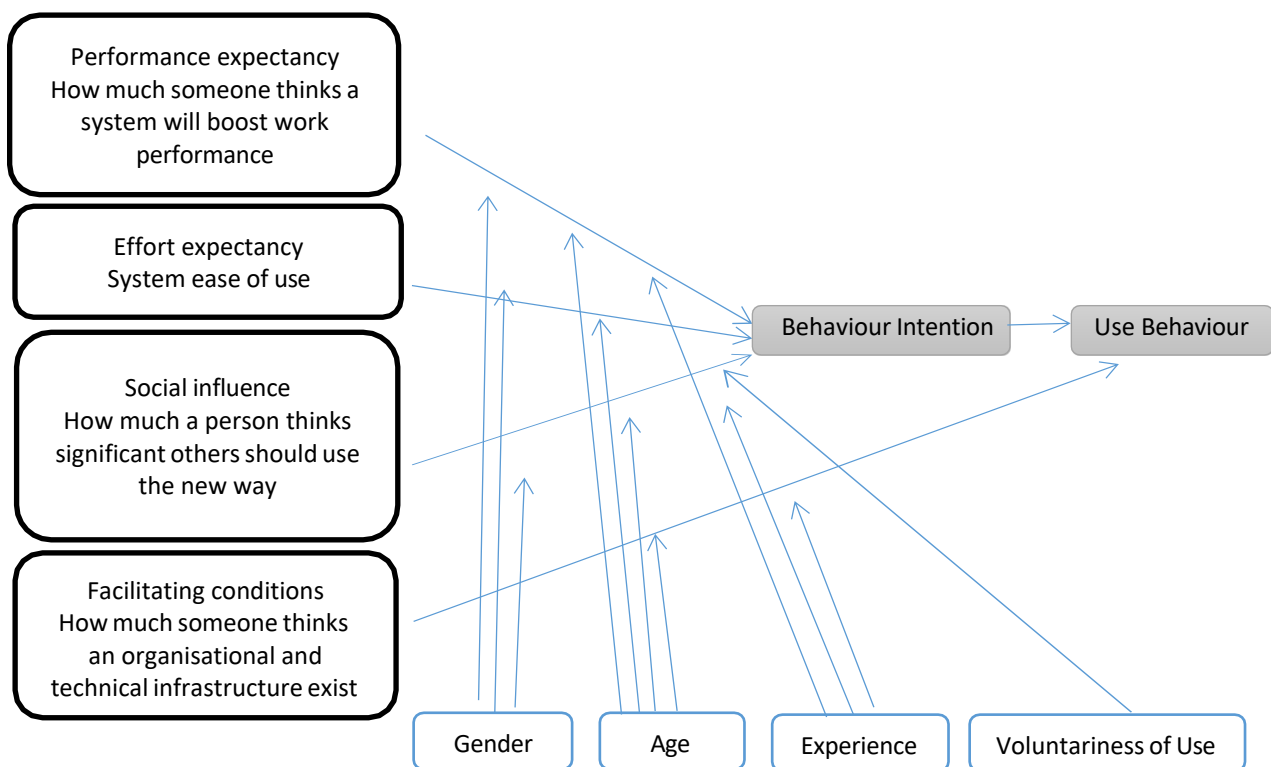


Fig. 1. Unified theory of acceptance and use of technology [60]

Previous research on FinTech adoption in Malaysia has identified the literature examining the macroeconomic implications of FinTech adoption in Malaysia involving financial variables and discussed the adoption of FinTech services by analysing the potential drivers of FinTech adoption in the country [29]. The main goal of this research was to comprehend the relationships between the adoption of FinTech and the advancement of the financial sector in Malaysia, taking into account the rising utilisation of digital platforms in the financial services industry [29]. In the context of the insurance/takaful in Malaysia, a cross-sectional study examined the factors influencing the adoption of FinTech services acceptance, specifically focusing on the three dimensions of the UTAUT model

[30]. The study demonstrates the relevance of the UTAUT model in understanding FinTech adoption. It provides valuable insights for stakeholders in the financial services industry to leverage their organisational goals toward a hub of financial digital ecosystems as technology advances [30]. Some studies have explored the linkages between FinTech adoption and financial development in Malaysia. It is crucial to conduct more research that specifically examines the factors influencing FinTech adoption in the country's economic and financial landscape to gain insights into the adoption behaviours of users towards FinTech services. This study can contribute new knowledge by exploring the literature and providing valuable insights for financial service industry stakeholders. There is a lack of studies that specifically focus on the influence of adoption factors on FinTech in investment services in Malaysia. Most of the previous works often do not concentrate on the factors that influence the adoption of FinTech in investment services, which is crucial for understanding the potential of FinTech in enhancing financial services and investment. Furthermore, there is a lack of comprehensive examination in the literature regarding implementing the UTAUT model in relation to the adoption of FinTech in Malaysia, despite its established effectiveness in forecasting technology adoption.

3. Methodology

The study utilised the questionnaire method to gather empirical information on the usage of financial technology (FinTech) in investment among Malaysians. The questionnaires used in this study comprise three distinct portions. The initial component offers respondents a binary choice between "yes" or "no," representing a straightforward approach for eliciting responses. This type of question is commonly known as ranking questions, where respondents are allowed to rank the possible responses to the questions using a predetermined range of values. In the subsequent part, the measurement of usage variables in this study was conducted using a set of seven items derived from the UTAUT proposed by Venkatesh *et al.*, [60].

The UTAUT framework incorporates various factors such as social influence, performance expectancy, effort expectancy, behavioural intention, facilitating conditions, behaviour use, attitude, anxiety, perceived credibility, gender, age, experience, and voluntariness of use. The unified model, known as UTAUT, was developed to encompass the basic drivers of intention usage and up to four moderators of crucial interactions. The study conducted by Yuen *et al.*, [64] employed a five-point Likert scale to assess the items corresponding to each question in the research model. The scale ranged from 1 (indicating strong disagreement) to 5 (indicating strong agreement). The demographic information part encompasses various factors, including gender, age, race, education, career, and income. The measurement was conducted utilising a nominal scale. The survey utilised a random sample technique, considered the most rigorous probability sampling. The selection process ensures that each sample or respondent from the population has an equal probability of being chosen in Malaysia. The questionnaires were distributed electronically through various online platforms, including Facebook, Telegram, WhatsApp, and email. The questionnaires underwent additional processing and were subjected to statistical analysis using SPSS.

For the study, both descriptive and inferential analyses were conducted. The provided methodology involves both descriptive and inferential analyses. Descriptive statistics are used to calculate mean and standard deviations for variables such as performance expectancy, social influence, effort expectancy, behavioural intention, facilitating conditions, behaviour use, attitude, anxiety, and perceived credibility. This method provides preliminary insight into data trends and variability, assisting in comprehending these constructs. Furthermore, inferential statistics, specifically regression analysis, are used to investigate the correlations between distinct variables.

This strategy improves knowledge of how these variables interact and influence one another, allowing predictions and insights beyond the immediate data set. Descriptive statistics are used to summarise and describe the data, while inferential statistics are used to make inferences about the population based on the sample data.

This methodology is useful for analysing datasets and identifying patterns and relationships between variables. It is also helpful for making predictions and drawing conclusions about the population based on the sample data. Overall, using descriptive and inferential statistics is essential to the research process, providing valuable insights into the data and helping researchers to draw meaningful conclusions.

4. Results

4.1 Reliability and Normality Test for Variable in Investment

For the analysis, Table 1 displays the reliability test of Cronbach's Alpha for each variable about investment among the respondents. The variable dependability of investment in social influence, performance expectancy, effort expectancy, behavioural intention, attitude, perceived credibility, anxiety, facilitating situations, and behaviour usage falls within the range of 0.823 to 0.937. The table illustrates that all variables exhibit fluctuations in investment and possess a high degree of reliability.

Table 1
Reliability test for the variables

Factors	Cronbach's alpha	No. of item
Social influence	0.875	5
Performance expectancy	0.936	7
Effort expectancy	0.901	4
Behavioural intention	0.937	3
Attitude	0.923	3
Perceived credibility	0.892	3
Anxiety	0.823	2
Facilitating conditions	0.883	3
Behaviour use	0.904	4

Besides that, Table 2 displays the results of the normality tests conducted on all variables within the investment domain. This study aims to analyse the many stages of social influence, performance expectancy, effort expectancy, behavioural intention, attitude, perceived credibility, anxiety, facilitating conditions, and conduct in use among the participants.

Moreover, to provide a more comprehensive understanding, Table 3 presents a descriptive analysis. The table shows the scores for various constructs: performance expectancy, effort expectancy, behavioural intention, attitude, perceived credibility, anxiety, and behaviour use. The mean and standard deviation values are provided for each construct. The results indicate that the scores for all constructs among the respondents are high. Specifically, the mean scores for performance expectancy, effort expectancy, behavioural intention, attitude, perceived credibility, anxiety, and behaviour use are 3.88, 3.98, 4.01, 4.06, 3.71, 3.70, and 3.87, respectively. Their corresponding standard deviations are 0.730, 0.669, 0.714, 0.679, 0.763, 0.900, and 0.742, respectively. The average score for social influence among respondents is 3.58, with a standard deviation of 0.781. Similarly, the average score for facilitating conditions is 3.59, with a standard deviation of 0.848. Both scores indicate a moderate level of these factors among the respondents.

Table 2
 Normality test for the variables

Factors	Skewness		Kurtosis	
	Statistic	Std. error	Statistic	Std. error
Social influence	-.755	.171	.991	.340
Performance expectancy	-.600	.171	.149	.340
Effort expectancy	-.381	.171	-.135	.340
Behavioural intention	-.998	.171	2.486	.340
Attitude	-.569	.171	.680	.340
Perceived credibility	-.279	.171	-.265	.340
Anxiety	-.276	.171	-.560	.340
Facilitating conditions	-.884	.171	1.358	.340
Behaviour use	-.387	.171	.402	.340

*The result in the table shows that all of the variables in the investment of Skewness and Kurtosis are ± 2 standard deviations, which is normal.

Table 3
 Value of the mean and standard deviation

Factors	Mean	Standard deviation	Level
Social influence	3.58	.781	Moderate
Performance expectancy	3.88	.730	High
Effort expectancy	3.98	.669	High
Behavioural intention	4.01	.714	High
Attitude	4.06	.679	High
Perceived credibility	3.71	.763	High
Anxiety	3.70	.900	High
Facilitating conditions	3.59	.848	Moderate
Behaviour use	3.87	.742	High

(Level: Low = 1.00 – 2.33, Moderate = 2.34 – 3.66, High = 3.67 – 5.00)

4.2 Factors Influencing Adoption of FinTech in Investment

The present study utilises its findings to investigate the influence of performance expectancy, effort expectancy, and social influence on the behavioural intention of respondents about investment variables. A multiple regression analysis aims to investigate the influence of performance expectancy, effort expectancy, and social influence on behavioural intention among the participants, as presented in Table 4. The findings demonstrated in the table indicate that performance expectancy, effort expectancy, and social influence significantly influence behavioural intention, as evidenced by the R^2 value of 0.744 and the statistically significant F-test result ($F(3,199) = 82.385, p < 0.05$). The combined effect of all the predictors accounts for 74.4% of the variance in behavioural intention. Subsequent examination revealed that performance expectancy, effort expectancy, and social influence considerably influence behavioural intention. Effort expectancy is the primary determinant of behavioural intention, with a significant positive relationship ($\beta = 0.504, t(199) = 6.869, p < 0.01$). Following this, performance expectancy also has a significant positive relationship ($\beta = 0.177, t(196) = 2.462, p < 0.05$), as does social influence ($\beta = 0.160, t(199) = 2.857, p < 0.01$). In light of this, it can be stated that the participants' behavioural intention is substantially influenced by performance expectancy, effort expectancy, and social influence.

Table 4

The influence of performance expectancy, effort expectancy, and social influence on behavioural intention

Factors	Unstandardised coefficients		Standardised coefficients Beta	t	Sig.
	B	Std. error			
(Constant)	.666	.216		3.089	.002**
Performance expectancy	.174	.071	.177	2.462	.015*
Effort expectancy	.538	.078	.504	6.869	.000**
Social influence	.146	.051	.160	2.857	.005**

R² = 0.744; F (3,199) = 82.385, sig. F = 0.000, **p<0.01; *p<0.05

The findings of this study provide valuable insights for researchers investigating the influence of behavioural intention and facilitating situations on investment behaviour among respondents. The findings pertain to a study that employed multiple regression analysis to examine the relationship between behavioural intention and reducing factors about behaviour usage. The results in Table 5 indicate that both behavioural intention and facilitating settings have a strong predictive effect on behaviour, with an R² value of 0.835. The statistical analysis, using an F-test with degrees of freedom (2,200), yielded a significant result (F = 229.406, p < 0.05). The collective influence of all predictor's accounts for 83.5% of the variance observed in behavioural usage. Subsequent examination revealed that both behavioural intention and favourable factors considerably influence the utilisation of behaviour. The primary determinant of behaviour utilisation is the behavioural intention, with a standardised coefficient (β) of 0.607, a t-value of 13.851 (df = 200), and a significance level (p) below 0.001. Following this, facilitating conditions also play a significant role, with a β of 0.358, a t-value of 8.170 (df = 200), and a significance level (p) below 0.01. Hence, the respondents' utilisation of conduct substantially influences their behavioural intention and conducive situations.

Table 5

The influence of behavioural intention and facilitating conditions to use behaviour

Factors	Unstandardised coefficients		Standardised coefficients Beta	t	Sig.
	B	Std. error			
(Constant)	.221	.173		1.274	.204
Behavioural intention	.631	.046	.607	13.851	.000**
Facilitating conditions	.313	.038	.358	8.170	.000**

R² = 0.835; F (2,200) = 229.406, sig. F = 0.000, **p<0.01

The study also investigated the influence of age and gender on individuals' performance expectancy in investment, as perceived by the respondents. The purpose of doing a multiple regression analysis is to investigate the influence of age and gender on performance expectancy among the respondents, as depicted in Table 6. The findings presented in Table 6 indicate that there was no significant predictive relationship between age and gender with regard to performance expectancy (R² = 0.134; F (2, 200) = 1.821, p > 0.05). Subsequent examination revealed that age, with a standardised coefficient (β) of -0.056, t-value (200) of -0.796, and p-value greater than 0.05, as well as gender, with a β of -0.126, t-value (200) of -1.791, and p-value greater than 0.05, do not yield statistically significant effects on performance expectancy. As a result, it can be inferred that performance expectancy within the surveyed population remains unaffected by age and gender factors.

Table 6
 The influence of age and gender on performance expectancy

Factors	Unstandardised coefficients		Standardised coefficients Beta	t	Sig.
	B	Std. error			
(Constant)	4.362	.308		14.174	.000**
Age	-.058	.073	-.056	-.796	.427
Gender	-.184	.103	-.126	-1.791	.075

R² = 0.134; F (2, 200) = 1.821, sig. F = 0.165, **p<0.01

The results of this investigation show the influence of gender, education, and career on effort expectancy among the participants. Examining gender, profession, and education as factors influencing effort expectancy among the respondents shown in Table 7 is crucial for the researcher, as it provides valuable results from multiple regression analyses. The findings presented in the table demonstrate that gender, education, and occupation are significant predictors of effort expectancy, as indicated by an R² value of 0.071. The statistical analysis, with an F value of 5.083 and degrees of freedom of 3 and 199, further supports the significance of these predictors. The p-value, which is less than 0.05, confirms the statistical significance of the results. The several factors collectively account for a considerable proportion of the variance in effort expectancy, specifically 7.1%. Subsequent examination revealed that the variable representing occupation ($\beta = -0.222$, $t(199) = -3.094$, $p < 0.01$) exhibits a statistically significant influence on effort expectancy. Conversely, the variables representing gender ($\beta = -0.132$, $t(199) = -1.902$, $p > 0.05$) and education ($\beta = -0.069$, $t(199) = -0.962$, $p > 0.05$) do not demonstrate a significant effect on effort expectancy. Hence, it can be posited that the occupation substantially influences individuals' perceived level of expected effort.

Table 7
 The influence of gender, education, and profession on effort expectancy

Factors	Unstandardised coefficients		Standardised coefficients Beta	t	Sig.
	B	Std. error			
(Constant)	5.267	.471		11.186	.000**
Gender	-.177	.093	-.132	-1.902	.059
Education	-.082	.085	-.069	-.962	.337
Profession	-.171	.055	-.222	-3.094	.002**

R² = 0.071; F (3, 199) = 5.083, sig. F = 0.002, **p<0.01

The study investigated the influence of age, gender, education, and career on social influences among the participants. The utilisation of multiple regression analysis enables researchers to investigate the influence of age, gender, education, and occupation on social effects among respondents. The present study examines the relationship between age, gender, education, and career concerning social influence, utilising a table of multiple regression analysis. Table 8 displays the projected significance of age, gender, education, and profession in social influence investment. The coefficient of determination (R²) is 0.066. The F-statistic, with degrees of freedom (4, 198), is 3.524, indicating a statistically significant relationship. The p-value is less than 0.05, further supporting the significance of the findings. Up to 6.6% of the variance in investment outcomes can be attributed to the collective contribution of forecasters, highlighting the importance of social factors. Subsequent analysis revealed that the variable of the profession ($\beta = -0.200$, $t(198) = -2.716$, $p < 0.01$) has a significant influence on social influence in investment. However, the variables of gender ($\beta = -0.065$, $t(198) = -0.934$, $p > 0.05$), age ($\beta = 0.028$, $t(198) = 0.364$, $p > 0.05$), and education ($\beta = -0.131$, $t(198) = -1.711$, $p > 0.05$) do not exhibit any significant effects on social influence in investment. Thus, it can be inferred that the occupation plays a significant role in shaping the participants' social influence related to investment.

Table 8

The influence of age, gender, education, and profession on social influence

Factors	Unstandardised Coefficients		Standardised Coefficients Beta	t	Sig.
	B	Std. Error			
(Constant)	5.173	.557		9.294	.000**
Gender	-.102	.109	-.065	-.934	.351
Age	.031	.084	.028	.364	.716
Education	-.180	.105	-.131	-1.711	.089
Profession	-.180	.066	-.200	-2.716	.007**

R² = 0.066; F (4, 198) = 3.524, sig. F = 0.008, **p<0.01

This study has found that, generally, gender influences facilitating conditions for investment among the respondents. The multiple regression analysis was applied to examine the influence of age, education, and profession on the facilitating conditions experienced by the respondents, as depicted in Table 9. The findings presented in the table indicate that age, education, and career do not have a significant influence on facilitating conditions (R² = 0.031; F (3, 199) = 2.133, p > 0.05). Subsequent examination revealed that age, with a standardised coefficient (β) of -0.116, t-value of -1.503, and p-value greater than 0.05; education, with a β of 0.006, t-value of 0.080, and p-value greater than 0.05; and occupation, with a β of -0.107, t-value of -1.426, and p-value greater than 0.05, do not exert a statistically significant influence on facilitating conditions. Hence, it is asserted that factors such as age, education, and profession do not substantially influence the facilitation of conditions among the respondents.

Table 9

The influence of age, education, and profession on facilitating conditions

Factors	Unstandardised coefficients		Standardised coefficients Beta	t	Sig.
	B	Std. error			
(Constant)	4.371	.548		7.982	.000**
Age	-.140	.093	-.116	-1.503	.135
Education	.009	.115	.006	.080	.936
Profession	-.104	.073	-.107	-1.426	.155

R² = 0.031; F (3, 199) = 2.133, sig. F = 0.097, **p<0.01

Additionally, Table 10 presents the findings of the Pearson correlation analysis, which assessed the magnitude and direction of the association between the variables of performance expectancy, effort expectancy, social influence, and behavioural intention in the context of investment. The Pearson correlation analyses, as displayed in Table 4, indicate that a significant and positive association exists, ranging from moderate to high levels, between behavioural intention and performance expectancy, effort expectancy, and social influence. A significant correlation was seen between behavioural intention and performance expectancy (r = 0.630, p < 0.01), indicating a moderate association. Similarly, a significant correlation was found between behavioural intention and social influence (r = 0.504, p < 0.01), suggesting a moderate level of linkage. The present study observed a significant positive connection between behavioural intention and effort expectancy (r = 0.718, p < 0.01).

Table 10
 Analysis of the variables in the investment of performance expectancy, effort expectancy, and social influence on behavioural intention

Factors	Behavioural intention
Performance expectancy	.630**
Effort expectancy	.718**
Social influence	.504**

**significant level at $p < 0.01$

The Pearson correlation analysis results enable the researcher to investigate the association between the factors on investment for behavioural intention and facilitating conditions on behaviour usage among the respondents, as depicted in Table 11. The results of the Pearson correlation analysis, as displayed in Table 11, indicate a significant and positive link of moderate to high strength between behaviour use, behavioural intention, and facilitating conditions. The association between behaviour use and facilitating conditions is moderate ($r = 0.637$, $p < 0.01$), while the link between behaviour use and behavioural intention is significant ($r = 0.771$, $p < 0.01$).

Table 11
 Analysis of the variables in investment for behavioural intention and facilitating conditions on use behaviour

Factors	Behaviour use
Behavioural intention	.771**
Facilitating conditions	.637**

**significant level at $p < 0.01$

Using Pearson correlation analysis is essential in investigating the association between age, gender, education, and employment with variables including investment in performance expectancy, effort expectancy, social influence, and facilitating conditions among the participants, as depicted in Table 12. The findings of the Pearson correlation analyses, as presented in the table, suggest a minimal correlation between age and effort expectancy ($r = 0.155$, $p < 0.05$), as well as enabling conditions ($r = 0.145$, $p < 0.05$). However, the results of our study suggest that there is no statistically significant association between age and performance expectancy ($r = 0.046$, $p > 0.05$) or social influence ($r = 0.05$, $p > 0.076$). Similarly, the study demonstrates that there is not a statistically significant association between gender and performance expectancy ($r = 0.05$, $p > 0.0122$), effort expectancy ($r = 0.05$, $p > 0.0096$), social influence ($r = 0.024$, $p > 0.05$), and enabling conditions ($r = 0.030$, $p > 0.05$). A significant association has been observed between education and social influence ($r = 0.170$, $p < 0.05$). Nevertheless, the analysis revealed that there was no noteworthy association between education and performance expectancy ($r = 0.024$, $p > 0.05$), effort expectancy ($r = 0.115$, $p > 0.05$), or facilitating conditions ($r = 0.069$, $p > 0.05$). Moreover, it is worth mentioning that there exists a significant association between one's occupation and their perception of effort expectancy ($r = 0.228$, $p < 0.05$), social influence ($r = 0.224$, $p < 0.05$), and enabling settings ($r = 0.139$, $p < 0.05$). Nevertheless, the analysis did not reveal any substantial association between occupation and performance expectancy ($r = 0.061$, $p > 0.05$).

Table 12

Analysis of age, gender, education, and profession against variables in investment for performance expectancy, effort expectancy, social influence, and facilitating conditions

Factors	Age	Gender	Education	Profession
Performance expectancy	-.046	-.122	-.024	-.061
Effort expectancy	-.155*	-.096	-.115	-.228**
Social influence	-.076	-.024	-.170*	-.224**
Facilitating conditions	-.145*	.030	-.069	-.139*

*significant level at $p < 0.05$

5. Discussion

The study investigated several variables and their influence on diverse investment-related behaviours among participants. The research revealed a notable influence of performance expectancy, effort expectancy, and social influence on behavioural intention, with effort expectancy emerging as the primary determinant. Similarly, the utilisation of behaviour is highly influenced by both behavioural intention and favourable conditions, with behavioural intention exhibiting the most pronounced influence. Notably, performance expectancy is not greatly influenced by age and gender. When evaluating the perception of effort anticipation, it is observed that only the professional background exerts a substantial influence, whereas gender and educational attainment do not demonstrate a significant influence. In investing, occupation emerged as the only significant predictor when considering the influence of age, gender, and education. Finally, it may be concluded that age, education, and profession do not substantially influence the facilitating conditions related to investment. In conclusion, although certain investment behaviours may be significantly influenced by factors such as occupation, other factors such as age and gender may have less influence in particular domains.

Furthermore, the study focuses on analysing the determinants that affect the acceptance and utilisation of FinTech in investment practices among Malaysian individuals. Specifically, the UTAUT model is employed to investigate the influence of various factors on individuals' behavioural intentions. The findings of this study highlight the importance of performance expectancy, effort expectancy, and social influence in shaping individuals' behavioural intention towards adopting FinTech in investment. Among these factors, effort expectancy emerges as the most influential determinant. The research emphasises the need for continuous regulatory refinements and frequent supervision to keep pace with the highly evolving FinTech landscape, ensuring a balance between financial stability, consumer protection, innovation, and competition. Furthermore, the research findings provide valuable insights for businesses, policymakers, and stakeholders in Malaysia's FinTech industry, guiding them in leveraging the opportunities and addressing the challenges presented by the flourishing FinTech ecosystem in the country. The study further emphasises that the combination of behavioural intention and a favourable environment plays a crucial role in shaping the behaviour of FinTech utilisation. It is worth noting that occupational characteristics consistently demonstrated significance across many contexts. However, traditional demographic factors such as age and gender exhibited comparatively less influence, particularly in domains like performance expectancy. Hence, in the context of FinTech adoption in investing within the Malaysian population, it is crucial to give precedence to occupational factors and user expectations. However, it is important to note that demographic variables may not always be reliable.

6. Conclusions

This study thoroughly examines the factors influencing investment behaviour, specifically emphasising FinTech uptake in Malaysia. The study employs the UTAUT model and emphasises the critical role of performance expectancy, effort expectancy, and social influence in determining individuals' behavioural intentions toward FinTech adoption. The most important variable among these is effort expectations. The data also show that behavioural intention considerably affects actual FinTech utilisation behaviour when combined with a positive environment. The persistent impact of occupational qualities across multiple contexts, overshadowing traditional demographic parameters like age and gender, is a significant component of this study, particularly in areas such as performance expectancy. The data suggests that Malaysians' likelihood of adopting FinTech for investing is strongly influenced by their occupation, while demographic variables such as age and gender have a weaker impact. As a result, by emphasising the significance of user expectations and professional background over traditional demographic variables, this research adds a more nuanced understanding of investment behaviour, particularly in developing financial technologies for stakeholders. This study helps participants in the future of the financial services industry leverage their organisational goals towards a hub of financial digital ecosystems as technology advances. The comprehensive development of FinTech is essential to the investment management capabilities of all parties, such as value aggregators, advisors, and competitive access facilitators, in the increasingly challenging field of digital technologies. Effective and systematic investment services could be combined with internal capabilities in FinTech across the investment landscape for external innovations, service providers, and advice facilitators. To aid in future studies, examining the dynamic characteristics of regulatory frameworks and their influence on FinTech adoption rates among Malaysians is recommended. Considering the swift technological progress observed in FinTech, evaluating the ramifications of novel FinTech products and services that arise after a comprehensive examination is imperative. Furthermore, investigating the cultural and socio-economic factors that could influence the level of trust and acceptance of FinTech solutions among Malaysians could yield a more profound understanding. Additionally, it would be beneficial to evaluate the influence of variables such as financial literacy, prior technological familiarity, and personalised user experiences with FinTech on the wider adoption and incorporation of these technologies within investment practices in Malaysia.

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