



Factors Influencing Behavioral Intention to Participate in Family Takaful in Malaysia: An Extension of UTAUT2 Theory

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Abstract

This paper aims to investigate the critical success factors that affect behavioural intention to participate in family takaful in Malaysia using the extended Unified Theory of Acceptance and the Use of Technology Model (UTAUT2) among Muslim Malaysians. This study examines the direct relationship between performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, price value, and habit towards behavioural intention to participate in family takaful in Malaysia. Moreover, the study explores the indirect relationship between behavioural intention and trust. This research uses quantitative methods. The data were collected from 389 respondents using a convenient sampling technique. The relationship among the variables is assessed using partial least squares structural equation modelling (PLS-SEM) for hypothesis testing. The findings showed that performance expectancy, effort expectancy, facilitating conditions, hedonic motivation, price value are strong predictors of behavioural intention to participate in family takaful in Malaysia. Moreover, trust mediated the relationship between behavioural intention and participation in family takaful. However, social influence and habit insignificantly influence the behavioural intention to participate in family takaful in Malaysia. This study provides an extended UTAUT2 model that has never been tested in the context of family takaful. The study contributes to the field of consumer behaviour and marketing of Islamic financial products.

Keywords: Family takaful, Behavioural intention, UTAUT2 model, Trust, Islamic financial products

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1. Introduction

The growth of Islamic finance led to the augmented demand for Islamic insurance, better known as takaful, in many Muslim countries (Md Husin and Haron, 2020a; Nasir et al., 2021). The takaful market has gained great momentum compared to when it was first introduced. As one of the components of Islamic financial services, takaful contributed \$27.6bn to the global market in 2021 (Research and Markets, 2022). The takaful market is expected to grow at a CAGR of 13% from 2022 to 2027 to attain USD 49 billion by 2026 (Expert Market Research, 2022). The data indicate that the takaful market had grown over the years, both internationally and locally, evidenced by the notable increase in CAGR and the number of takaful operators operating worldwide as well as in Malaysia.

The takaful market has expanded internationally and locally as there has been an enormous increase in the number of takaful operators operating worldwide as well as in Malaysia (Md Husin and Haron, 2020b). The global finance industry consists of; banking, sukuk, takaful, Islamic funds and other Islamic financial institutions. Among all the markets, banking and sukuk are the two main markets that provide significant growth to the Islamic finance industry. According to Islamic Finance Development Report 2020, the Islamic finance industry's assets grew to US\$2.8 trillion in 2019 from US\$2.5 trillion in 2018, a rise of 3% (Thomson Reuters, 2020).

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Despite the growth, it must be acknowledged that takaful is still hugely under-tapped in Malaysia. Many still do not have takaful protection despite its growing market penetration (Md Husin, 2019). This indicates that the penetration of takaful is still inadequate in Malaysia. This observation is supported by the Malaysian Takaful Association that the family takaful penetration rate rose marginally to 18.6 per cent from 2020 to 16.9 per cent in 2021 (MTA Annual Report, 2021). Even in terms of coverage in the literature, it seems that takaful has been somewhat less covered relative to Islamic banking, although both represent imperative segments of Islamic finance (Alkhan et al., 2020). The takaful segment is admittedly very small compared to the other segments of the Islamic financial system, such as Islamic banking and sukuk.

The contribution for family takaful was relatively better at approximately RM10.8 billion in 2021, compared to general takaful, which contributed RM2.9 billion only in 2020 (Bank Negara Malaysia, 2019). Yet, the family takaful market in Malaysia still has a lot of room for further development. However, the rate of growth is still below the target set by BNM in its Financial Sector Blueprint (2022-2026). The Financial Sector Blueprint stated that the initiatives under life insurance and family takaful framework are expected to spur the innovation of a wider range of life insurance and family takaful products, as well as delivery channels to suit diverse consumer needs based on individual risk appetites, financial goals, and levels of financial capability. The initiatives aimed at helping to reduce the gap with efforts to increase penetration rate of 4.8-5% by year 2026 (Bank Negara Malaysia, 2019). Additionally, the market share for family takaful was only 41.9% in 2022 (Fitch Ratings, 2022). It shows that penetration for family takaful is still low compared to conventional insurance.

Therefore, it is essential to explore and identify the factors that may drive consumer intention to participate in family takaful in Malaysia (Husin et al., 2016; Md Husin and Haron, 2020a) and this study intends to do so. The factors that will be examined are adopted from the UTAUT2 model by Venkatesh et al. (2012) i.e.: performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, price value, and habit. Moreover, this study also investigates trust as the mediator toward the purchase intention to penetrate family takaful in Malaysia. The examination of these factors in the context of family takaful is meant to facilitate the development of a guiding framework for takaful operators in improving their business focus and decision-making so that they are strategically geared towards better market penetration for family takaful in Malaysia.

The paper starts by providing a brief overview of the takaful industry development, followed by sections on the theoretical background, the hypotheses, the research framework, and the research method, followed by findings the analysis result, the conclusion and future research recommendations.

2. Literature Review

2.1 Theoretical background

This study relies on the UTAUT2 model, which was developed by Venkatesh et al. (2012) as an extension of their earlier Unified Theory of Acceptance (UTAUT) of 2003 (Venkatesh et al., 2003). The UTAUT2 model will be used as a framework for examining the critical success factors for the penetration of family takaful in Malaysia. The original UTAUT model of 2003 was based on a mixture of eight technology adoption theories namely the theory of reasoned action (TRA), the technology acceptance model (TAM), the motivational model, the theory of planned behaviour (TPB), the personal computer (PC) utilization model, the social cognitive theory, a combination of TAM and TPB (TAM-TPB) and the innovation diffusion theory (IDT).

From the theories, Venkatesh et al. (2003) adapted four constructs for the purpose of the UTAUT model, namely, performance expectancy (PE), facilitating conditions (FC), social influence (SI) and effort expectancy (EE). In an extension of the UTAUT model, Venkatesh et al. (2012) introduced an improved model known as UTAUT2, which incorporates three new constructs, i.e., price value (PV), hedonic motivation (HM) and habit (H), on top of the previous four in the original UTAUT. UTAUT2 is considered more comprehensive and provides better explanations, compared to other technology adoption models (Kalinić et al., 2020).

The UTAUT2 model was originally developed in studies related to technology adoption. Later, the model has also been used in the context of technology adoption in banking and internet banking. Hence, it is argued that the UTAUT2 model can also be used for a study on behavioural intention to accept family takaful in Malaysia. The UTAUT2 model is considered one of the most widely used models due to its simplicity, parsimony, and robustness (Yuen et al., 2010; Venkatesh et al., 2012; Tarhini et al., 2016). The UTAUT2 model was also proved to be superior to other prevailing competing models (Venkatesh et al., 2003; Venkatesh et al.,

2012). Moreover, and as noted earlier, UTAUT2 is considered more comprehensive and provides better explanations, compared to other models (Kalinić et al., 2020).

2.2 Behavioral intention (BI)

According to Conner and Armitage (1998), behaviour intention (BI) represents a person's motivation in their sense of a conscious plan or decision to act in certain behaviour. Intentions and behaviour are held to be strongly related when measured at the same level of specificity in relation to the action, target, context, and time frame (Conner and Armitage, 1998).

Various studies have been conducted to determine the behavioural intention of an individual towards an action. Based on the studies of Cunningham et al. (2005) and Lapointe and Rivard (2005), the intention to adopt technology varies and highly depends on the features of the technology. Information about the new system, its operations, benefits features and other people's perceptions about it are important issues affecting users' intention to adopt or not to adopt the new system and use (Kwateng et al., 2019).

For this study, the individual's behavioural intention is a significant aspect of his/her decision to participate in the family takaful scheme. Overall, there seems to be some evidence to indicate that behavioural intention towards participation in family takaful could be explained by the determinants of the UTAUT2 model. UTAUT2 model is used in this study to predict consumer behaviour towards family takaful schemes. Thus, the present study investigates factors that determine the intention to participate in family takaful schemes.

2.3 Performance expectancy (PE)

Performance expectancy (PE) is defined as how individuals improve their performance (Venkatesh et al., 2003). PE is an important construct for behaviour intention in the UTAUT2 model. It refers to the extent to which the usage of new technology or a new technology product can provide consumers with benefits in performing certain activities (Venkatesh et al., 2012).

For instance, an individual believes that using mobile banking will improve his banking activities. The individual will apply the technology when he has the guarantee that it will bring in encouraging results (Raza et al., 2019). Abu Shanab and Pearson (2007) found that the adoption of internet banking in Jordan was significantly motivated by PE. Similarly, Lu and Su (2009) used the UTAUT model in their study and discovered that PE has influenced on mobile technology adoption. Another study by Luo et al. (2010) also outlined PE as a significant determiner. Literature shows that PE has been considered one of the most significant variables in influencing the behavioural intention to adopt internet banking (Alalwan et al., 2018; Hassanudin et al., 2020).

Another literature from Morosan and DeFranco (2016) revealed that PE has a significant effect on behavioural intention to adopt online banking. Similarly, various studies also stated that PE influences mobile technology adoption (Lu and Yu-Jen, 2009; Samsudeen et al., 2022). Another study by Mazhar et al. (2014) explained that the adoption of a certain technology and thus the attainment of the advantages that come with it are initiated by the technology user's positive intention to use it. In the context of family takaful, the PE will influence consumers to participate in family takaful if they are convinced that such participation can improve their ability to meet their needs in life, despite unexpected contingencies that might otherwise affect their livelihood. Therefore, the hypothesis would be:

H1: Performance expectancy positively influences consumer intentions towards family takaful.

2.4 Effort expectancy (EE)

Effort expectancy (EE) is defined as the degree of ease associated with consumers' use of technology (Venkatesh et al. 2012). Samsudeen et al. (2022) found that if the technologies are easy to use, it will surely increase the adoption rate. Users will be more interested to adopt technology for their banking activities if the usage of mobile banking is demonstrated to be effortless. Samsudeen et al. (2022) also recounted an e-learning adoption report that suggested the significance of perceived ease of use in driving the intention to adopt e-learning. In an earlier study by Luarn and Lin (2005), it was found that there exists a positive causality between perceived ease of use and usage intention. In contrast, Amin et al. (2008) suggested that perceived ease of use has no influence on the intention to adopt mobile banking.

From an internet banking perspective, the customer can feel that internet banking is easy to use and does not require much effort, they would have a high chance to adopt internet banking (Chaouali et al., 2016). Koenig-Lewis et al. (2010) demonstrated that the ease of use using a certain technology improves the rate of technology acceptance. Amin et al. (2008) found that there exists a relationship between perceived ease of use (EE) and mobile banking usage intention. Likewise, Raza et al. (2019) examined the acceptance of M-banking services and reported that EE influences the intention to adopt it. These studies revealed inconsistent results and the phenomenon was less explored in family takaful; therefore, the following hypothesis is formulated:

H2: Effort expectancy positively influences consumer intentions to participate in family takaful schemes.

2.5 Social influence (SI)

Social influence (SI) is directly correlated to the degree to which outcomes from using new products or innovations are noticeable to friends and relatives (Eneizan et al., 2019). They pointed out that if consumers observe others deriving pleasure from the use of new products or innovations, those products are more likely to be distributed faster among customers. Venkatesh et al. (2003) suggested that technology adoption is influenced by the personal belief of what others think of a certain technology, especially the perception of close relatives and friends. Similarly, Püschel et al. (2010) also highlighted the significance of SI in driving the intention of a person to use mobile banking in the context of Brazil.

In contrast, Raza et al. (2019) and Kaabachi and Obeid (2014) explored the factors affecting Islamic banking adoption in Tunisia and reported that SI does not affect the customers' intention to use it. The role of social influence in enhancing customer intentions and the use of internet banking has been widely analysed in previous studies (Tarhini et al., 2016; Hasanudin et al., 2020). Püschel et al. (2010) identified SI as a critical factor which affects the individual intention to use. Therefore, the hypothesis would be:

H3: Social influence positively influences consumer intentions to participate in family takaful schemes.

2.6 Facilitating conditions (FC)

Facilitating conditions (FC) is defined as the technical support available to the individual during technology usage (Venkatesh et al., 2003). Other studies from Venkatesh et al. (2003) and Kwateng et al. (2019) have indicated that FCs influence the behavioural intention to adopt mobile banking. Kwateng et al. (2019) further found that the extent of influence by FCs on behavioural intention is moderated by three factors, i.e., age, gender and experience. The older aged group is more affected by FCs compared to the younger ones; women are more affected by FCs compared to men; and the less experienced are more influenced by FCs compared to the more experienced ones (Kwateng et al., 2019).

In the context of mobile banking, a person mainly needs to have a certain set of skills, a mobile phone, and a stable and secure internet connection (Samsudeen et al., 2022). The better FC available to the users, the more will be their willingness to accept the technology (Baptista and Oliveira, 2015; Raza et al., 2019). Alalwan et al. (2018) found that FCs significantly influenced the behavioural intention of the customers in Jordanian banks. This is further supported by Islam (2017) who identified FC as a significant factor in mobile internet usage among youth. A study by Alwahaishi and Snasel (2013) affirmed that FC has an impact on behavioural intention and continuous usage of technology. Therefore, the hypothesis would be:

H4: Facilitating conditions positively influences consumer intentions to participate in family takaful schemes.

2.7 Hedonic motivation (HM)

Eneizan et al. (2019) described hedonic motivation (HM) as the value of escapism in its potential to fulfil consumer needs for entertainment or emotional involvement. Thus, pleasant, and likeable mobile marketing is generally thought to have a positive impact on consumers' attitudes towards the brand (Eneizan et al., 2019). In other words, HM refers to the feeling or emotion that emerges from using a certain technology, or in the case of mobile banking, the pleasure or fun when using the said technology (Venkatesh et al., 2012). In the consumer context, HM has also been found to be an important determinant of technology acceptance and use (Venkatesh et al., 2012). Venkatesh et al. (2012) also stated there is a direct relationship between HM and technology usage intention. In addition, the role of HM in banking and electronic platform has appeared in several studies (Curran and Meuter, 2007; Alalwan et al., 2017).

Alalwan et al. (2017) studied the adoption of mobile banking in Jordan and reported that HM influences the intention of the users to adopt it. Another study from San-Martin et al. (2015) found perceived enjoyment to

be a strong predictor of satisfaction in m-commerce, but only for young adults (less than 25 years old). Similarly, [San-Martin et al. \(2015\)](#) examined the drivers of customer satisfaction in mobile shopping and reported perceived entertainment as one of the key predictors of satisfaction. Therefore, this study hypothesizes the following:

H5: Hedonic motivation positively influences consumer intentions to participate in family takaful schemes.

2.8 Price value (PV)

[Venkatesh et al. \(2012\)](#) defined price value (PV) as “consumers’ cognitive trade-off between the perceived benefits of the applications and the monetary cost of using them”. In other words, consumers while adopting any new technology tend to compare the utilitarian benefits of the technology with the monetary cost involved in using it ([Venkatesh et al., 2012](#)). It means the greater the price value, the higher would be the motivation to adopt the new technology ([Dhiman et al., 2020](#)). In accordance with this assumption, [Dhiman et al. \(2020\)](#) suggested that if the price value is positive then the consumers’ preference to adopt the technology is more.

[Goh et al. \(2014\)](#) also reported that the more value the customer perceives from the system, the more likely would be its adoption of the Islamic mobile banking. Another existing research confirmed that price value acts as a strong determinant of consumers’ behavioural intention in the context of mobile banking ([Mahfuz et al., 2016](#)).

According to [Eneizan et al. \(2019\)](#), PV is significant in determining the BI to adopt mobile marketing among Jordanian customers. In addition, the studies conducted by [Kwateng et al. \(2019\)](#) among the m-banking users have also described PV as a significant predictor to behaviour intention. Consequently, this study assumed the following:

H6: Price value will strongly influence consumer intentions to participate in family takaful scheme.

2.9 Habit (HA)

Habit entails an individual’s repetitive actions driven by his knowledge and experience. Habit is also positively correlated to usage intention and actual usage ([Venkatesh et al., 2012](#)). [Kolodinsky et al. \(2004\)](#) found that habit influences the decision to adopt mobile banking for the US consumers. Other studies by [Kim and Malhotra \(2005\)](#) and [Limayem et al. \(2007\)](#) also discovered the significance of habit in affecting the continuous usage of information system (IS).

Habit has been included in several studies of continuance intention for use of IT-based technologies, as customers use these technologies or devices frequently and the behaviour becomes automatic ([Kalinić et al., 2020](#)). [Lin and Wang \(2006\)](#) reported that habitual prior preferences in the use of mobile commerce directly and strongly increase customer commitment, i.e., their intention to continue using mobile commerce in the future. Habit has been included in several studies of continuance intention for use of IT-based technologies, as customers use these technologies or devices frequently and the behaviour become automatic ([Hsiao et al., 2016](#)).

Habit is one of the proven to be significant constructs determining the behavioural intention of consumers in adopting m-banking services ([Farzin et al., 2021](#); [Ferreira et al., 2021](#); [Kwateng et al., 2019](#)) in adopting m-banking services by individual customers in Bangladesh. Given this situation, this study proposes the following hypothesis:

H7: Habit will strongly influence consumer intentions to participate in the family takaful scheme.

2.10 Mediating role of trust

Trust is known to be one of the most powerful influencers of relationship quality, intentions of loyalty and enduring buyer-seller relationships ([Shukor, 2020](#)). Trust also involves behavioural intention that signifies a customer's confidence in a service provider ([Sumaedi et al., 2015](#)). Trust is also important in a service relationship due to the intangible nature of services where trust is often used as a tool to market the organization's services to a customer ([Sumaedi et al., 2015](#); [Haron et al., 2020](#)).

Trust in the banking sector exists when customers feel confident and secured once they have some assurance that the bank will look after them ([Jarvinen, 2014](#); [Tabrani et al. 2018](#); [Haron et al., 2020](#)). [Jarvinen \(2014\)](#) explained that consumer trust is based on consumer’s experience, feeling of confidence and security in the ability of banks to behave honestly, committed with rules and regulations. It is very essential for the banks to keep their promises, be honest and committed to build bank trust relationship

(Jarvinen, 2014; Tabrani et al. 2018). This is supported by Cho and Hu (2009) who defined trust as a belief that a bank performs its business with a customer in a responsible, dependable, and competent manner, as well as behaves in a way that is not harmful to its customer to pursue its own interest.

Furthermore, trust is described as a consumer's conviction that a bank will carry out its operations as expected by the customer (Haron et al., 2020). According to Sumaedi et al. (2015), “the higher the level of customer trust with the connection, the higher the customer conviction that Islamic banks operate appropriately, and vice versa.” Positive customer experiences will enhance word of mouth to others in the long run (Sumaedi et al. 2015). Trust hence in Islamic banking services is based on positive customer experience that is supported by the bank’s ability to behave in a reliable way.

Sumaedi et al. (2015) investigated the impact of trust on emotional commitment in individual Islamic bank saving clients. They discovered that trust and affective commitment do not have a significant relationship. This finding differs from Sanchez-Franco (2009), and Fullerton (2011) findings on the connection between trust and affective commitment. The explanation for this discovery is that Islamic bank customers have the option of investing or their money in multiple banks. Despite the customer's faith in the bank, this situation precluded the emotional link that is at the heart of affective commitment.

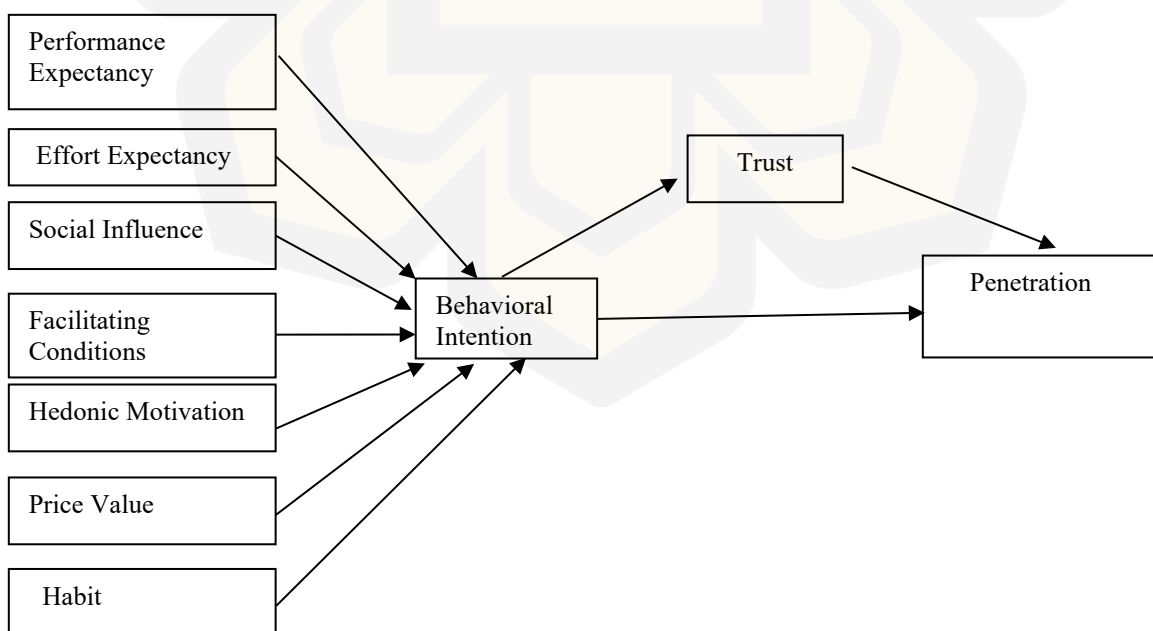
In the context of takaful, a trust may also have an impact. Shukor (2020) pointed out that trust reflects the client’s confidence towards the takaful agent’s integrity. Trust can be defined as “a belief in takaful providers’ honesty and that they will not behave opportunistically” (Aziz et al., 2019). In other words, trust reflects the extent of a client’s confidence in relying on takaful agent’s integrity.

The role of trust has been highlighted by Poan et al. (2021) to determine trust as a factor in the intention to purchase Islamic insurance (takaful) in Indonesia. In takaful industry, consumer trust is even more crucial. The result shows that trust significantly affected purchase intention regarding Islamic insurance. Considering the above discussion, the study assumes that trust can mediate between the path to behavioural intention and penetration of family takaful. Given this situation, this study proposes the following hypothesis:

H8: Trust will mediate between consumer intentions and the penetration of family takaful in Malaysia.

3. Conceptual Framework

Figure 1: Conceptual Framework



Note: Framework is extended from Venkatesh et al. (2003)

4. Research Methodology

The model of this research is illustrated in Figure 1, which is a conceptual model of this study. This model is extended from the UTAUT model (Venkatesh et al., 2003) which are performance expectancy, effort expectancy, social influence and facilitating conditions along with three additional factors such as hedonic motivation, price value and habit. In this study, these variables are used to study their influence on behavioural intention towards family takaful.

A self-administrated questionnaire (SAQ) was developed for the measurement of research variables and for the collection of demographic details. The questionnaire contains two sections. Section A related to the demographic information such as age, gender, occupation, educational level, and marital status. While Section B comprises five-point Likert scale measurement questions which range from strongly disagree (1) to strongly agree (5) for measuring the critical success factors on penetration family takaful such as performance expectancy, effort expectancy, social influence, facilitating condition, hedonic motivation, price value and habit toward the behavioural intention of family takaful. These items were adopted by Venkatesh et al. (2012), Hasanuddin et al. (2020), and Nawaz et al. (2020). The items for trust and behavioural intention variables were retrieved from Husin et al. (2016) and Poan et al. (2021), which are four items for trust and four items for behavioural intention. Prior to that, all the items in the questionnaire were validated by two (2) experts in the related field prior to distributing the questionnaires.

Sample research was also performed, and the questionnaire was distributed among Muslims in Klang Valley via email and social media. The sample data are collected from the survey method and the convenience sampling technique was used. A total of 410 participants returned the survey, of which the researcher deleted 21 participants' records due to inadequate responses. Thus, the total number of participants in the analysis was 389.

Once collected, the data are checked for errors, discrepancies, and outliers. The researcher used the partial least squares (PLS) method to analyse the data using Smart PLS software. PLS-SEM offers the use of many constructs and many items with a representative sample size to represent the total population and the model (Hair et al., 2019). The study uses Smart PLS because it is a variance-based structural equation modeling (SEM) approach and is a robust and incremental characteristic in predicting endogenous variables (Hair et al., 2017; Marko et al., 2022). Data analysis consisted of frequency analysis for demographic factors, confirmatory factor analysis for reliability and validity and bootstrapping for hypothesis testing.

In terms of ethical considerations, the objectives of the study were clearly stipulated for the survey participants. No participant was forced to participate in the survey, and personal information such as ID and personal email address was not collected. The data collected is only used for this research purpose and were not handed over to any other organization for any other use.

5. Results and Discussion

5.1 Demographic information of the survey participants

Table 1 denotes the demographic profile of the respondents. The total number of participants in the survey was 389, which 128 were male (32.9%) and 261 were female (67.1%). In terms of age, 181 participants belonged to the age group of less than 29 (46%), 44 participants belonged to the 30-34 years age group (11%), 50 participants belonged to the 35-39 years age group (12.9%), 39 participants belonged to the 40-44 years age group (10%), 65 participants belonged to the 45-50 years age group (16.7%) and 10 participants belonged to the above 50 age group (10%).

In terms of occupation, 39.8 per cent were professionals, 13.1 per cent were employees under non-professional and 47 per cent were those who were self-employed. In terms of education, 56.3 per cent respondents had a degree holder, 15.2 per cent respondents had Master holder, 4.6 per cent were PhD holder and the remaining 23.9 per cent belongs to another field of study. As for marital status, 48 per cent respondents were single and 48.6 per cent respondents were married while the remaining 2.8 percent were divorced.

Table 1: Profile of respondents

Demographic items	Frequency	(%)
<i>Gender</i>		
Male	128	32.9%
Female	261	67.1%
<i>Age</i>		
Less than 29	181	46%
30-34	44	11%
35-39	50	12.9%
40-44	39	10%
45-50	65	16.7%
Above 50	10	10%
<i>Occupation</i>		
Professional	155	39.8%
Non-professional	51	13.1%
Self-employed	183	47%
<i>Education</i>		
Degree	219	56.3%
Master	59	15.2%
Phd	18	4.6%
Other	93	23.9%
<i>Marital status</i>		
Single	189	48.6%
Married	189	48.6%
Divorced	11	2.8%

Source: Author estimates

5.2 Assessment of measurement model

The measurement model investigates the relation between latent variables and their measures. Table 2 shows the outcome of the measurement model. The measurement model has passed various tests for validity and reliability as described by Hair et al. (2011, 2012). Convergent validity of the measured items is validated by individual item reliability, Cronbach's alpha, composite reliability, and average variance extracted (AVE) in PLS- SEM. According to Tabachnick et al. (2007), convergent validity is established for a construct if the Cronbach's alpha is above 0.55, composite reliability is above 0.7 (Raza et al., 2019) and AVE is above 0.5 as proposed by (Fornell and Larcker, 1981). All the constructs surpass this criterion (see Table 2 supported by Figure 2).

Furthermore, it is observed that all items have a loading above 0.7 (see Table 2 supported by Figure 2). Scale reliability was assessed through composite reliability and Cronbach's alpha (see Table 2 supported by Figure 2), and both were greater than 0.7 for each construct.

Two tests are carried out to analyse the results of discriminant validity: analysis of the average variance extracted (AVE) and cross-loadings. Fornell and Larcker's (1981) criterion is used to examine discriminant validity and compare the square root of AVE and inter-construct correlations. Table 3 represents discriminant validity results. The first value of every construct is in italic and the diagonal part should be greater than the off-diagonal part. Fornell and Larcker's (1981) criterion was successfully met, and no cross-loadings were greater than their respective loadings. Also, the heterotrait-monotrait ratio of correlation results in Table 4 shows that none of the heterotrait-monotrait criteria is greater than 0.85 (Henseler et al., 2015).

Table 2: Measurement model results

Constructs	Items	Loadings	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Effort Expectancy (EE)	EE1	0.882	0.963	0.971	0.87
	EE2	0.953			
	EE3	0.936			
	EE4	0.947			
	EE5	0.945			
Facilitating condition (FC)	FC1	0.947	0.959	0.97	0.889
	FC2	0.943			
	FC3	0.936			
	FC4	0.945			
Hedonic Motivation (HM)	HM1	Deleted	0.924	0.952	0.868
	HM2	0.925			
	HM3	0.944			
	HM4	0.926			
Habit (HA)	HA1	0.876	0.948	0.96	0.829
	HA2	0.923			
	HA3	0.894			
	HA4	0.942			
	HA5	0.916			
Performance expectancy (PE)	PE1	Deleted	0.91	0.937	0.757
	PE2	0.937			
	PE3	0.941			
	PE4	0.946			
	PE5	0.929			
	PE6	0.511			
Price Value (PV)	PV1	0.93	0.908	0.942	0.844
	PV2	0.905			
	PV3	0.921			
Social influence (SI)	SI1	0.929	0.955	0.967	0.88
	SI2	0.943			
	SI3	0.935			
	SI4	0.945			
Trust (TT)	TT1	0.742	0.879	0.913	0.726
	TT2	0.855			
	TT3	0.909			
	TT4	0.893			

Note: HM1 and PE1 were deleted due to low loadings

Figure 2: Measurement model results

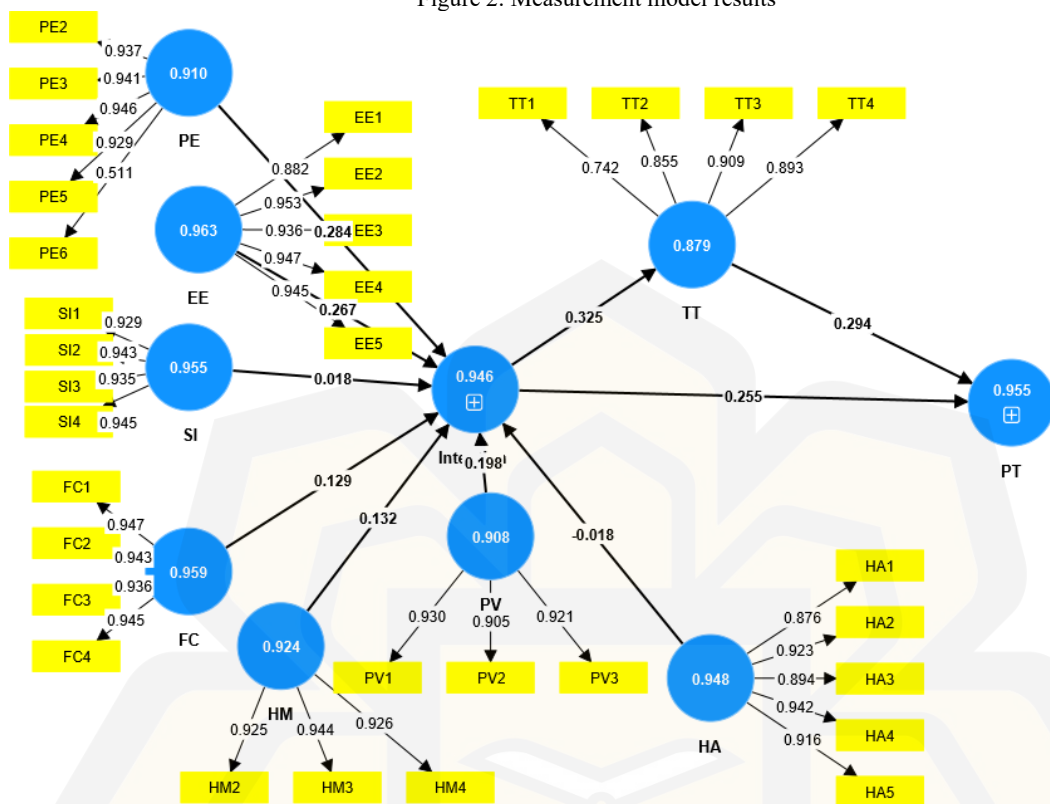


Table 3: Discriminant validity using Fornell and Lacker Criterion

	EE	FC	HM	HA	Int	PE	PV	PT	SI
EE	<i>0.933</i>								
FC	0.583	<i>0.943</i>							
HM	0.699	0.711	<i>0.932</i>						
HA	0.315	0.271	0.351	<i>0.911</i>					
Int	0.691	0.599	0.672	0.348	<i>0.928</i>				
PE	0.656	0.63	0.652	0.386	0.702	<i>0.87</i>			
PV	0.315	0.186	0.364	0.432	0.456	0.364	<i>0.919</i>		
PT	0.348	0.241	0.267	0.318	0.361	0.357	0.274	<i>0.831</i>	
SI	0.756	0.522	0.623	0.259	0.593	0.561	0.348	0.251	<i>0.938</i>
Trust	0.473	0.208	0.386	0.506	0.325	0.476	0.477	0.386	0.487

Note: The diagonal elements (italics) represent the square root of AVE (average variance extracted)

Table 4: HTMT criterion

	EE	FC	HM	HA	Int	PE	PV	PT	SI	TT
EE										
FC	0.6									
HM	0.739	0.748								
HA	0.33	0.284	0.375							
Int	0.715	0.619	0.713	0.368						
PE	0.715	0.653	0.706	0.434	0.743					
PV	0.332	0.193	0.392	0.467	0.49	0.427				
PT	0.359	0.248	0.282	0.332	0.377	0.399	0.29			
SI	0.785	0.539	0.659	0.27	0.617	0.614	0.372	0.261		
TT	0.508	0.207	0.419	0.544	0.332	0.569	0.51	0.388	0.54	

Notes: EE= Effort Expectancy, FC= Facilitating Conditions, HM= Hedonic Motivation, HA= Habit, Int= Intention, PE=Performance Expectancy, PV= Price Value, PT= Penetration, SI= Social Influence, TT= Trust

5.3 Structural model

After the assessment of the measurement model, the structural model was assessed. The structural model includes the model's predictive competencies and the relationships among the reflective constructs. For that reason, R^2 values and Q^2 predictive relevance were calculated. As shown in Table 5, R^2 for the behavioural intention was 64 per cent, penetration was 21 per cent and trust 10 per cent. This suggests that the model has a moderate explanatory power (Hair et al., 2011).

Furthermore, to assess the predictive relevance of the model, the blindfolding technique was used. Blindfolding should only be used for an endogenous variable that has a reflective measurement. If $Q^2 > 0$, then the model has a predictive relevance. The study showed Q^2 value for behavioural intention was 0.548, for penetration it was 0.143 and for trust was 0.068 (Table 5).

Table 5: Goodness of Fit and Predictive relevance

	R^2	Q^2
Behavioural intention	0.644	0.548
Penetration	0.211	0.143
Trust	0.105	0.068

The hypotheses tested in this research are performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, price value and habit which directly influence behavioural intention and trust as the mediator to influence between behavioural intention and penetration. Table 6 presents a summary of the hypothesised relationships among the constructs. As shown in Table 6, almost all hypotheses were accepted, except two hypotheses were rejected.

Table 6: Hypothesis testing

Hypotheses	Relationship	STDEV	t- value	p- value	Decision
H1	PE -> Int	0.046	6.169	0.000	Supported
H2	EE -> Int	0.059	4.561	0.000	Supported
H3	SI -> Int	0.05	0.348	0.728	Not supported
H4	FC -> Int	0.043	2.993	0.003	Supported
H5	HM -> Int	0.057	2.333	0.02	Supported
H6	PV -> Int	0.044	4.518	0.000	Supported
H7	Habit -> Int	0.035	0.493	0.622	Not supported
H8	Int -> Trust -> Penetration	0.022	4.446	0.000	Supported

The research explores the factors influencing the behavioural intention of an individual to participate in family takaful in Malaysia. The model of this study involves trust as a mediator between behavioural intention and penetration of family takaful. The results showed that performance expectancy (H1) is directly and significantly influence customer to participate in family takaful. These outcomes are consistent with the previous study (Hassanudin et al., 2020) which conclude that the performance expectancy influence customer to adopt internet banking. It shows that the customers can improve their ability to meet their livelihood when they participate in family takaful.

Similarly, effort expectancy (H2) also has a significant impact on the behavioural intention to participate in family takaful. The outcomes are similar to the study (Samsudeen et al., 2022). It concludes that customers will be more interested to participate in family takaful if the usage is demonstrated to be effortless. On the other hand, social influence (H3) is statistically insignificant, hence H3 is rejected. This means that the aspects of social influence will not influence the participants to be involved in family takaful. The result is consistent with a previous study (Kaabachi and Obeid, 2014) that stated that social influence does not affect the customers in Islamic banking adoption.

Furthermore, the results of the current study indicate facilitating conditions (H4) has a positive relationship with behavioural intention. The result is consistent with (Raza et al., 2019) that facilitating conditions play a significant role in influencing behavioural intention to use banking technology. Next, the hedonic motivation (H5) of this study is accepted and significant towards behavioural intention. The findings in this study correspond with previous studies that hedonic motivation plays a significant role in predicting behavioural intention to use technology in the wide variety of contexts (Beh et al. 2021; Farzin et al. 2021).

Furthermore, the current research indicates price value (H6) has a positive relationship with behavioural intention. The result is consistent with (Eneizan et al., 2019) that price value is significant in determining the behavioural intention to adopt mobile marketing among Jordanian customers. In the context of this study, price value significantly influences behavioural intention to participate in family takaful. In contrast, the aspect of habit (H7) and behavioural intention were not significant, hence H7 is rejected. It is consistent with (Mahfuz et al., 2016) that habit is not a significant driver in adopting m-banking services in Bangladesh, in line with (Kwateng et al., 2019).

The outcome of this study indicates that trust (H8) has a significant mediating impact between behavioural intention and penetration of family takaful in Malaysia. This means that the greater the consumer's confidence in family takaful, the stronger that the consumer's intention to subscribe to family takaful. The result of the study is in line with the findings from Kalinic et al. (2020) and Hanif et al. (2021) that stated the trust significantly influence the behavioural intention in mobile banking.

6. Conclusion and Recommendation

Based on the analysis, this study provides evidence that out of eight hypotheses, six hypotheses are accepted, and two hypotheses were rejected. Those hypotheses which are accepted are performance expectancy positively influence behavioural intention (H1), effort expectancy significantly influence behavioural intention (H2), facilitating conditions significantly influences behavioural intention (H4), hedonic motivation positively influences behavioural intention (H5), price value has a direct effect toward behavioural intention (H6) and trust significantly influences as mediator between intention and penetration (H8). However, social influences(H3) and habit (H7) positively influence behavioural intention is rejected.

The recommendation for this study helps family takaful managers and policy makers to develop strategies for family takaful customers. The result from the research will assist family takaful companies to form customer-oriented financial solutions. It is noteworthy opinion that the sale of family takaful plan needs extra skills and effort; therefore, the findings will be useful to understand the behavioural intentions for the customer to participate in family takaful. The reason behind it due to the research successfully implemented a well-established theoretical framework known as UTAUT2 model in the context of family takaful. Through this, the potential participant of family takaful plan will be attracted which will create a demand for family takaful companies.

The takaful operator must enhance the promotional campaign about family takaful to promote participation in its products. This can be done by increasing awareness within society on the benefits of having family takaful protection, especially in line with the seven factors identified as the critical success factors for behavioral intention under the UTAUT2 model.

More specifically, takaful providers should focus on educating their clientele about the comparative advantage of having a family takaful as opposed to not having one, or as opposed to conventional insurance. When the people are convinced that family takaful can ease their life and their loved ones, especially when facing difficult situations like death and permanent disability, they will be more receptive towards participating in the scheme. Hence, takaful providers need to create good reputation and satisfactory customer experience so that positive word of mouth can further reinforce popularity of takaful among the bigger populace.

If takaful providers decide to go for digitalization and fintech, attention must also be paid to facilitating condition as an important factor influencing behavioural intention of consumers. Matters, such as, fast and secure internet connection when using mobile phones or computers, user friendly interfaces, and stable and functional IT systems are crucial to provide conducive customer experience and facilitating conditions. In addition, ease of access to information related to family takaful will facilitate consumers' awareness and choice about family takaful. Facilitative takaful agents with excellent product knowledge will also influence the consumers' behavioural intention to participate in family takaful schemes.

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