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# A Conceptual Framework of E-Takaful Participation Readiness (ETPR) among Individuals at Insurable Age in Malaysia

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**Farah Hanan Muhamad<sup>1,2</sup>** (Corresponding Author), **Hartini Ab Ghani<sup>2</sup>**, **Juliana Arifin<sup>2</sup>**

<sup>1</sup> Faculty of Entrepreneurship and Business  
Universiti Malaysia Kelantan  
Malaysia

<sup>2</sup> Faculty of Business and Management,  
Universiti Sultan Zainal Abidin,  
Malaysia  
Email: farahhanan@umk.edu.my

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**Abstract** – Malaysians need more savings and a critical financial backup to protect themselves from adversity. Hence, a call for a digital platform is vital to further reach out in the current economic situation. The phenomenal growth of B2C e-commerce, particularly after the pandemic, has impacted almost every industry, including banking and financial services. This research suggests an integrated model of E-Takaful Participation Readiness (ETPR). However, academic research on digital takaful is still in its early stages. Most academics focus on technology and ignore the takaful institutions adopting it. Past studies have explored the topic of e-banking readiness, but limited studies have focused on its relation to the takaful area. This study is a pioneer in examining consumer participation readiness for e-takaful services, particularly during the digital shift process due to the pandemic. This paper proposes a conceptual framework for e-takaful adoption. Takaful institutions can use the proposed framework as a starting point for implementing e-takaful, and scholars can use it to expand, refine, and evaluate takaful technology (Takatech) research. The findings of this study can be shared with takaful industry stakeholders and regulatory bodies to help them develop innovative marketing strategies and customer-centric takaful products.

**Keywords:** “Takaful Literacy”, “E-Takaful Participation Readiness”, “Attitude”, “Technology”

## 1. Introduction

Currently, digital technologies play an important role in people's day-to-day lives (Saleem, Aslam, Kim, Nauman, & Khan, 2022). These digital technologies will alter people's attitudes towards adopting new and appealing lifestyles. In Asia-Pacific, digital insurance is expected to increase 7.5% from 2023 to 2028. With a growing middle class and an increasingly digital population, the uninsured and underinsured are likely to adopt digital insurance at a higher rate (PricewaterhouseCoopers Malaysia, 2023). In addition, the market's InsurTechs are primarily responsible for driving the digitalization of the insurance industry, focusing on customers' growing demands for transparent, readily available, and cost-effective insurance.

On the other hand, takaful technology (Takatech) aims to provide cooperative Islamic insurance services through digital platforms (Ali, 2021).

The recent Discussion Paper on Licencing Framework for Digital Insurers and Takaful Operators (DITOs) issued by Bank Negara Malaysia (2022) identified three value propositions, which are inclusion, competition, and efficiency, in a way to attract new digital players capable of providing innovative solutions to critical protection gaps among unserved and underserved market segments, as well as to improve customer experience and boost trust. These values hope to contribute to long-term social and economic benefits for the country. In Section 2(1) of the IFSA, digital takaful business refers to takaful business that is carried on wholly or almost wholly through digital or electronic means. At the same time, DITOs also imply that a person licenced under Section 10 of the IFSA carries on a digital takaful business.

Increased digitalization is one of the tailwinds expected to impact the Islamic Financial Services Industry (IFSI), including the takaful industry, with its current global growth of up to 5.2% (Islamic Financial Services Board, 2022). The industry's successful performance reflects the population's growing familiarity with the takaful system and increased acceptance of takaful coverage as the preferred form of protection (New Straits Times, 2019). Fintechnews (2022) reported that *"new digital platforms are helping to advance financial inclusion by improving access to payment services, credit, insurance, and wealth management."* The takaful industry is witnessing a strong demand for its products as more Malaysians recognise the importance of protecting themselves and their families against financial risks (BERNAMA, 2023).

Customers' expectations are also changing, with the demand for personalised and digital services growing. However, 57.7% of Malaysian citizens are still unaware of the takaful online system (Riaz, Akram, & Saad, 2023). Globally, regulatory barriers and technological challenges pose significant obstacles to adopting e-insurance (Nyirenda & Nyirenda, 2023). The COVID-19 pandemic and the emergence of climate-related disasters have significantly increased the need for financial protection for the uninsured and underinsured communities and smaller businesses that are most vulnerable to external shocks.

Many factors can potentially influence individuals' takaful decisions. This study primarily addressed three predictors: religiosity, attitude, and takaful literacy into a new conceptual framework of E-Takaful Participation Readiness (ETPR). This area of study is important to be carried out as there has been a significant shift toward digital platforms in a variety of financial services, including the insurance or takaful industry, as a result of technological advancements and shifting consumer behaviours.

Previous studies have mainly focused on e-insurance (Grazy & Parimalarani, 2019; Bagheri & Forushani, 2016; Hashim, 2022; Nyirenda & Nyirenda, 2023; Stanković et al., 2022; Nuralieva, 2021), but little research has been done on e-takaful participation readiness

(Toukabri & Ettis, 2021). The relevance of online participation in takaful is essential to addressing the changing preferences of policyholders and the evolving landscape of the takaful industry.

This study also contributes to the existing literature by providing insights into the role of these factors in an e-takaful context. The findings provide recommendations to the takaful industry on how to increase the participation of customers in online takaful services rather than conventional offline services.

## **2. Literature Review**

Theoretical and empirical research has attempted to determine a strategy or technology diffusion pattern and the settings that influence innovation adoption and implementation. However, this critical area, such as technology for bringing innovation to takaful products, is not found in the present literature (Qadri, Ali, Jafar, Tahir, & Abbasi, 2022). Hence, Tech Takaful is a new area that needs to be explored in the digital era's future model of the takaful sector (Stanković et al., 2022). Nevertheless, previous studies have discussed e-insurance acceptance at two levels: organisational and individual (Scupola, 2009). Hence, an organisation must first acquire and adopt technology before end-users of the company accept and use it (Stanković et al., 2022).

### *2.1. E-Takaful Participation Readiness (ETPR)*

Amuda and Hassan (2019) led a study on the readiness of takaful operators to diversify takaful surplus. This study suggested that the government collaborate with takaful operators to cater to the needs of the underprivileged in Saudi Arabia while also achieving the United Nations' Sustainable Development Goals' (SDGs) vision for 2030. The COVID-19 pandemic is considered a blessing in disguise since the unprecedented crisis may hasten the adoption of a new normal of innovation in Malaysia's family takaful market (Abubakar, A., 2020).

In an earlier study by Dasgupta and Sengupta (2002), they suggested the introduction of e-insurance in the Indian insurance industry to conduct all transactions through secure channels and store information about the insurance policies digitally, which also enhances the security of the insurance process. By creating service niches, first-mover advantages, and online promotions, e-insurance offers new revenue streams. These channels provide greater market penetration than traditional channels and generate more revenue than conventional insurance processes.

Ramayah et al. (2009) thought the proliferation of the internet had profoundly transformed how banks and financial firms provide online financial services. Likewise, Mat Ali et al. (2021) advised takaful and insurance businesses to improve the digitization of their

operations, such as claims processing and customer assistance, to reduce physical interactions during the recent pandemic-related movement restriction order.

## 2.2. Religiosity

The level of religiosity should be considered as it may convey the customers' intention to take part in a family takaful plan. Religion connects a person to a superior being and develops a relationship in society. Mokhlis (2009) defined religion as a multifaceted concept encompassing actions, attitudes, ideas, feelings, and experiences. Religiosity is of interest because evidence has revealed that takaful holders exhibit a higher degree of religiosity than conventional insurance policyholders (Riaz et al., 2023).

Takaful's approach parallels the implementation of Maqasid Shariah to protect religion, life, wealth, property, and dignity (Gwadabe, 2019; Abdullah, S., 2012; Abdul Aziz & Mohamad, 2013). Besides, Hassan, Salman, Kassim, and Majdi (2018) described *ta'awun* and *tabarru'* as the two main concepts embodied in takaful implementation. According to Mansor (2015), Muslim consumers who perceive takaful products to be superior to conventional products, as well as those with a higher religiosity value, have a higher preference for takaful. The main goal of takaful from the participant's perspective is to comply with the rules of Islamic law for Muslims to meet their legal needs.

All of the good practices of Islamic teachings are fulfilled by a Muslim who is knowledgeable of Islam, has a strong affirmation of his faith with the tongue, and admits it with the heart. Md. Husin and Ab Rahman (2013) addressed the existence of the market mainly to cater to the spiritual needs of Muslims who are conscious of their religious obligations. According to Shahid (2018), the growth of Islamic insurance is different in each country depending on demography, political, religious beliefs, and sociocultural environment. Hassan and Abbas (2019) regarded religiosity as a critical and influential factor, ranking second in terms of effect on takaful adoption.

Similarly, Wilson and Liu (2011) asserted that, compared to Muslims who do not follow Islamic teaching, those who are highly religious have a strong preference for Islamic products. It can be concluded that the level of religiosity influences Muslims before they take part in any family takaful scheme. Meanwhile, Afif Muhamat, Zubaidah Ahmad, Roslan, Karim, and Azizan. (2019) advised takaful operators to focus more on formalised development processes before introducing new takaful products, such as offering *hibah-waqf* as a takaful product feature.

Thus, the religiosity variable is also essential for someone who intends to purchase takaful. The level of spirituality demonstrates a greater sense of consumer responsibility associated with customer religiosity (Johar & Suhartanto, 2019).

### 2.3. Attitude

Attitudes significantly influence the adoption of innovations in information systems and technology. In a study investigated by Amin (2012), he found attitude to have a significant positive relationship with Islamic insurance participation. Attitude directly influences usage behaviour (Dwivedi, Rana, Jeyaraj, Clement, & Williams, 2019). This finding is significant because it emphasised how important it is for theories of technology acceptance and use to model individual characteristics explicitly. Insurance has attributes closely associated with the utilitarian approach to risk reduction. Rocha and Botelho (2018) outlined how a person's willingness to pay a certain amount for insurance can be considered a risk-reduction strategy. Kharde and Madan (2018) identified that one of the significant factors influencing customer purchase intentions besides environmental influences is consumer attitudes.

According to a previous study by Park and Campus (2006), Muslims' behavioural intention to make the purchase depends significantly on attitudes toward family takaful purchases. Li, Liu, Shi, and Sui (2021) agreed that the central determinant of both portfolio allocation and insurance policy choices is risk attitude. As stated by Ali et al. (2019), consumer awareness may be their level of adoption or acceptance of an innovation. In the earlier study, Md. Razak et al. (2013) discovered a noteworthy degree of community acceptance of takaful products in Malaysia and recommended that takaful operators adopt an aggressive marketing strategy to raise the level of acceptance towards takaful products. Meanwhile, Kehinde and Sharofiddin (2021) asked for improved public awareness as it may increase customer acceptance of the country.

Mas'ud (2017) provided evidence that individuals with high-risk vulnerability would have favourable attitudes towards takaful acceptance than those with low-risk vulnerability. Farhat, Aslam, and Sany Sanuri (2019) considered attitude to significantly influence an individual's participation in family takaful, whether positive or negative attitudes towards a behaviour. In contrast, Kazaure (2019) and Poan et al. (2021) gave another significant outcome to the study: attitude was not significantly related to trust. However, Salleh, Kassim, Yazid, and Rashid (2018) further outlined in their research on consumers' attitudes towards insurance concerning claim fraud and identified a positive association between the variables. According to Alkhawaiter (2022), the results identified performance expectancy as the most important predictor of attitude.

### 2.4. Takaful Literacy

Ana and Wan Ahmad (2020) explained that financially educated and well-informed consumers are more capable of making prudent decisions for their families and themselves, improving their financial stability and overall well-being. Based on Rogers (2003), consumer awareness is a pre-contemplation stage that occurs before an individual begins to

investigate the knowledge, persuasion, decision, and confirmation stages of accepting a new idea. Rahman and Nor Hamizah (2016) found that the level of indebtedness can downgrade the financial situation in the household. On the other hand, Mohd Hafizuddin et al. (2019) proposed that the takaful operators make an effort to cooperate with the B40 households to encourage them to acquire takaful as a financial safety net in the case of economic shocks and to raise their living standards to that of a middle-class society. Meanwhile, Kehinde and Sharofiddin (2021) suggested improving the public's awareness as it may increase customer acceptance of the country.

Agarwal (2020) suggested that efforts should be made to promote financial and digital literacy among the general public. Financial literacy is significantly associated with the UTAUT model (Yaday, Tripathi, & Tripathi, 2022). According to Weedige, Ouyang, Gao, and Liu (2019), financial literacy is accentuated by informed decisions, protected consumers, economic independence, and peace of mind. Mohamad Puad (2017) suggested that an increase in income leads to a rise in insurance demand. As a result, more excellent income contributes to higher community purchasing power and living conditions, leading to the market for fiscal stability products such as insurance and annuities.

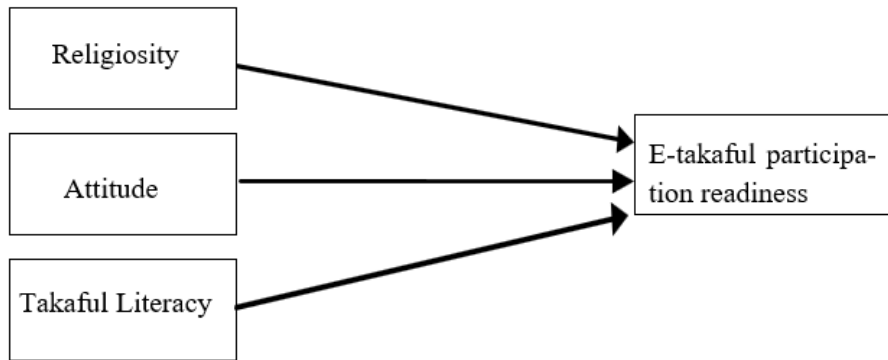
Hassan et al. (2018) revealed that, while some people recognise takaful, the level of awareness needs to be higher in some countries, and it is therefore critical to focus on marketing to raise awareness among individuals. Based on the information gathered in this report, the takaful operators were aware of most flood victims and acknowledged that it differed from the traditional insurance scheme. Unfortunately, the participants were still uncertain whether they could rely on a takaful plan to minimise flood losses and whether they were willing to spend takaful contributions every month.

The involvement of the takaful family scheme heavily depended on the client's awareness. To the best of the researcher's knowledge, financial literacy does not necessarily translate to insurance literacy (Lin et al., 2019). Similarly, in Islamic financial literacy, takaful is one of the aspects to be measured in determining the health state of personal financial behaviour (Nawi, Daud, Ghazali, Yazid, & Shamsuddin, 2018). To conclude, awareness significantly impacts someone's ownership of family takaful. According to Driver et al. (2018), most people are unaware of the value and importance of personal insurance policies. Previous research has validated people's preference for general insurance, but has also highlighted the subsequent lack of trust and the impact of behavioural decision-making biases in such decisions.

## *2.5. Conceptual Framework*

The model for this study had three exogenous constructs: religiosity, attitude, and takaful literacy, and an endogenous construct, e-takaful participation readiness. The conceptual framework for this study is presented in Figure 1.

**Figure 1: Conceptual Framework E-Takaful Participation Readiness**



As can be seen, several hypotheses regarding the interrelationships among the constructs were tested in this study. The hypothesis statements and method of analysis are shown in Table 1 below.

*Table 1: Hypotheses Statement*

	<b>Hypotheses statement</b>	<b>Statistical Analysis to employ</b>
H <sub>1</sub>	Religiosity is positively related to e-takaful participation readiness by individuals	Partial Least Squares SEM
H <sub>2</sub>	Attitude is positively related to e-takaful participation readiness by individuals	Partial Least Squares SEM
H <sub>3</sub>	Takaful literacy is positively related to e-takaful participation readiness by individuals	Partial Least Squares SEM

## 2.6. Methodology

Survey research is necessary to gather data on the theoretical constructs of interest, such as religiosity, attitude, and takaful literacy, towards e-takaful participation readiness among individuals. This can provide empirical evidence to support the assumptions of a conceptual framework. Therefore, this study proposed for future studies to realise this conceptual framework with more relevant findings by using statistical analysis suitable to this study, as suggested in Table 1, Partial Least Square Structural Equation Modelling (PLS-SEM).

## 3. Conclusion

Takaful is a subset of the Islamic financial planning cycle. The significant contribution of this research is the development of a new model for e-takaful, as fewer studies have been found on this topic compared to e-insurance. Hence, Tech Takaful needs to be explored in the digital era's future model of the takaful sector (Stanković et al., 2022). In addition, this study is essential to raise public awareness and help the government accomplish its goal of hastening the recovery from the COVID-19 pandemic, reducing poverty, fostering stability and prosperity, and encouraging "green economic growth" in the nation.

This study contributes in terms of new additional variables, which have been given less attention on takaful literacy and how it affects individual behaviour towards purchasing takaful electronically. It is relevant to be conducted since it counts from the perspective of one of the critical enablers stated in Shared Prosperity Vision 2030: enlightening society towards economic development. The outcome of this study will shed some light on several components of the 17 Sustainable Development Goals (SDGs) proposed by the United Nations for the implementation of 2030.

This study also supports initiatives stated in the Financial Sector Blueprint 2022-2026, in which the insurance or takaful penetration rate will contribute around 4.8 to 5.0% to the gross domestic product (GDP). Meanwhile, from a practical perspective, several parties may benefit from this study. First, this study may help individuals. With the adoption of e-takaful, it is becoming imperative for individuals to adopt a proactive approach to financially protect themselves and their dependents in light of any financial shock, mainly due to the death of the sole breadwinner and the repercussions on the dependents' income. Hence, in such situations, insurance and takaful can act as a safety net to provide temporary relief and unwind the pressure of financial burden (Mohd Hafizuddin et al., 2019).

Next, the outcome of this study may also benefit takaful operators. Many financial institutions, including takaful operators, invest in information technology (IT) primarily for information processing to stay relevant. It gives them a better way to differentiate their offerings and offer dependable, timely, and convenient services (Saleem et al., 2022). In Bahrain, e-Takaful has been adopted due to several benefits, such as fast online services,



avoiding long lines, simple steps to follow, direct online purchases, secured payment, and immediate policy coverage.

In order to improve consumers' insurance literacy, policymakers or the government will find this model helpful in creating a well-developed information and advice programme that can educate consumers on alternative risk management tools, the values of insurance, their responsibilities in the process, and cases of successful policy outcomes (Weedige et al., 2019).

To conclude, this study shows that Malaysia has an enormous growth potential, thanks to affluent segments and the country's Muslim majority. It also provides takaful operators in Malaysia valuable insights to critically devise their new market penetration strategies during the current outbreak, which could make household finances more difficult. They should focus on giving extra value to induce takaful literacy and make room for improvement in product penetration to the target segments. Hypotheses were developed for this study based on selecting some factors that were thought to support the research objectives.

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