| e-ISSN: 2805-4741 | http://iiecons.usim.edu.my

FACTORS INFLUENCING CONSUMERS ACCEPTANCE TOWARD TAKAFUL TECHNOLOGY (TAKATECH)

Syahzlyen Mustakim[1,a], Haneffa Muchlis Gazali[2,b*]

[1,2] *Labuan Faculty of International Finance, Universiti Malaysia Sabah, Malaysia*

[a] bg19110017@student.ums.edu.my
[b] haneffa@ums.edu.my

*Corresponding Author: haneffa@.ums.edu.my

Abstract**:** *TakaTech is a digital financial platform that offers innovative solutions for various business models and addresses customer needs. This paper aims to investigate the factors that influence consumers' acceptance of TakaTech by using the Theory of Planned Behaviour (TPB). Specifically, this study examines the effects of Attitude (ATT), Subjective Norm (SN), and Perceived Behavioural Control (PBC) on predicting the factors that influence consumer acceptance towards TakaTech. An online questionnaire was administered to Malaysian consumers (N=211) using convenience and snowball sampling. SPSS (Statistical Package for the Social Sciences) version 28 analysed the collected data for model fit and hypotheses. The regression analysis results indicate that a positive attitude towards TakaTech significantly increases consumers' acceptance of the platform, while subjective norms and perceived behavioural control do not have a significant impact. This study has practical implications for stakeholders such as consumers, researchers, and policymakers. Through this research, readers may better understand TakaTech and feel more confident in utilising its services. Moreover, the findings can guide policymakers in developing better takaful policies for consumers. This study is a preliminary attempt to investigate the behaviour of Malaysians towards TakaTech using the aforementioned variables. We examine the behavioural intention of both current users and non-users of TakaTech, which has not been previously explored in this context.*

Keywords: Attitude, Takaful Technology, Malaysian Consumers, TPB, Fintech

1. Introduction

Takaful originates from the Arabic term *kafalah*, meaning mutual guarantee. It is a system, as defined by the Takaful Act (1984), built on unity, brotherhood, and mutual support among participants who willingly contribute. The Islamic Services Act of 2013 defines Takaful as a mutual assistance arrangement, wherein participants agree to contribute to a shared fund that provides financial benefits to participants or their beneficiaries when specific events occur. According to Muhamat and McIver (2019), takaful differs from conventional insurance by avoiding prohibited elements like interest-based transactions (*riba*), excessive uncertainty (*gharar*), and gambling (*maysir*). Kazaure (2017) explains that takaful is a form of mutual aid for unexpected circumstances such as illness, death, fire, or disability. Furthermore, the Islamic Financial Services Board (IFSB) and the International Association of Insurance.

Supervisors (IAIS) recognise Takaful as the Islamic counterpart to conventional insurance, covering life, family, and general insurance. The global takaful industry is embracing technological advancements, substituting manual labour with technology-based solutions and utilising technology to understand better and better serve their customers.

The integration of information technology has revolutionised the takaful industry. Information technology is crucial for expanding the insurance industry and its survival in the Western world. Insurance companies that have adapted their strategies to embrace technology have thrived (Ali, 2021, p. 444). Information technology not only connects the insurance industry but also facilitates business development. Salmony (2014) emphasises that innovative financial technology enables the development of various business models and meets customer demands. Insurance companies and their clients continuously adopt new technologies such as electronic payments, mobile applications, and "insurtech" (the combination of insurance and technology) (Hemed et al., 2021). Moreover, Fintech services have emerged as a focal point for applying cutting-edge technology to explore novel concepts with significant market potential (Kim et al., 2015). Fintech, short for "finance and technology," utilises advanced technology like mobile, social media, and the Internet of Things (IoT) to enhance the efficiency and effectiveness of financial services without relying on traditional financial institutions (Chuang et al., 2016; Kim et al., 2016). Fintech has gained global attention as a ground-breaking innovation that empowers businesses to compete effectively in the twenty-first century (Wonglimpiyarat, 2017). In essence, Fintech encompasses advancements that aim to improve businesses' processes, distribution, and utilisation of financial services (Mention, 2019).

Fintech plays a vital role as a catalyst in optimising, modifying, accelerating, and refining various aspects of existing financial services, including payment methods, fund transfers, loans, fund collection, and asset management (Nangin et al., 2020). In the Western world, Fintech has made significant progress as financial institutions strive to enhance consumer experiences by bridging the gap between technology and services (Truong, 2016). According to Wijayanti and Riza (2017), Fintech has emerged as a transactional alternative for the community, offering more accessible access to financial products, simplified transactions, and improved financial literacy. The growing number of individuals connected to mobile services further contributes to the rapid expansion of Fintech. The Global System for Mobile Communications Association (GSMA) predicts that 2025 mobile internet users will surpass five billion, indicating substantial growth in the Fintech market (Beyene et al., 2019). Technology serves as the primary channel in the financial industry, offering an opportunity to provide consumers with enhanced experiences and greater convenience (Devadevan, 2013). However, before embracing Fintech services, the financial sector must assess consumer acceptance towards technology in financial services.

Technology has become integral to human existence, playing an undeniable and irreversible role in replacing human intelligence. Those who fully harness technology emerge as the driving force in a competitive environment. The rapid emergence of new technology constantly challenges and replaces existing technology, rendering it obsolete (Ali, 2021, p. 457). Fintech, encompassing electronic payments and online banking, has contributed to the technological advancement of Malaysia. To seize market opportunities, financial institutions must understand and cater to customer preferences for new technological products (Choo & Teh, 2019).

"TakaTech" refers to using technological innovations and digital advancements to transform and disrupt the traditional Takaful industry. The term combines "Takaful" and "technology" to describe the application of technological solutions that enhance various aspects of the Islamic insurance sector. Limited research has been conducted on Takatech in Malaysia, specifically regarding the utilisation of technology in the takaful industry. In contrast, other countries such as Mexico and Taiwan have delved into technology adoption within the insurance

sector. For instance, a study conducted in Taiwan examined how the implementation of Taiwan's 1995 National Health Insurance (NHI) affected technology adoption, ownership, and utilization in hospitals (Chou et al., 2004). Similarly, a study carried out in Mexico explored the adoption of technology in insurance by evaluating schemes and subsidies for Maise farmers (Freudenreich & Mußhoff, 2018).

While the adoption of modern technology is progressing rapidly, the aspect of TakaTech services is still relatively new in the market, particularly in Malaysia. Addressing the lack of awareness among the Malaysian public is crucial to increasing exposure and education about TakaTech. By doing so, the Islamic insurance sector can fully leverage the potential of technological advancements to enhance its offerings and meet customers' evolving needs. Therefore, this study aims to investigate the factors influencing consumer acceptance of Takaful Technology among Malaysian consumers, as predicted by the Theory of Planned Behaviour (TPB) incorporating attitude, subjective norm, and perceived behavioural control. The findings of this study will benefit various stakeholders, including consumers, researchers, and policymakers. It will guide formulating of effective policies to encourage consumer adoption of TakaTech, providing clear and measurable guidelines for future customer protection. Policymakers and regulators can also utilise this study to establish streamlined regulatory and fiscal procedures, facilitating the expansion of the takaful industry in Malaysia and internationally.

The content of this study is influenced by the relative novelty of Takaful Technology services at the time. The structure of this paper is as follows: the next chapter will provide a comprehensive literature review and formulation of research hypotheses, followed by a detailed description of the research methodology. The fourth section will discuss the results and discussion, while the conclusion will conclude the study by discussing its implications and suggesting avenues for future research.

2. Literature Review

The Theory of Planned Behaviour (TPB) was developed by Ajzen (1991), which aims to explain the various factors that influence an individual's behavioural intention. It is an extension of the TRA proposed by Fishbein and Ajzen (1975), and Ajzen and Fishbein (1980). The theory asserts that a person's attitudes (A), subjective norms (SN), and perceived behavioural control (PBC) play a significant role in shaping their intentions and tendencies. The PBC factor was added to TPB to define an individual's perception of the ease or difficulty of acting. According to Ajzen (1991), PBC refers to the extent to which an individual expects to act freely in a matter of interest. TPB suggests that behavioural beliefs, normative beliefs and control beliefs determine intentions. Sommer (2011) explains that behavioural beliefs describe an individual's beliefs regarding the consequences of their behaviour, normative expectations of others, and factors that can influence or hinder the performance of the behaviour. Furthermore, Bhatti and Md Husin (2020) state that controls beliefs refer to a person's access to resources and opportunities required to carry out actions or internal and external factors that can facilitate or hinder the performance of the behaviour.

The theory of Planned Behaviour is a remarkable framework that has revolutionised our understanding of consumer behaviour. It offers a comprehensive perspective that enables researchers to gain profound insights into the complex factors driving consumer decision-making. What sets this theory apart is its remarkable predictive power based on an individual's attitudes, subjective norms, and perceived behavioural control. This makes it an unrivalled tool for consumer researchers seeking to anticipate consumer actions and tailor strategies

accordingly. The theory's comprehensive perspective ensures that no crucial aspect of consumer behaviour is overlooked. Examining the interplay between personal beliefs, social influences, and perceived control offers a holistic understanding of consumer decision-making processes. As a result, marketers can create more effective campaigns that lead to improved outcomes.

2.1 Behavioural Intention

According to Ajzen and Fishbein (1980), a person's behavioural intentions determine their actual behaviour. The intention is a significant aspect that highlights a person's contribution and approach towards a specific action. Positive reviews of Fintech services can lead customers to perceive them favourably and increase their inclination towards using them, as stated by Chuang et al. (2016). Islamic Fintech adoption has been linked to behavioural intention in various studies, including Thaker et al. (2019), Thaker et al. (2021), and Raza et al. (2019). This study aims to investigate the factors that influence Malaysian consumers' acceptance of takaful technology, with attitude (ATT), subjective norm (SN), and Perceived Behavioural Control (PBC) serving as independent variables and behavioural intention as the dependent variable.

2.2 Attitude

Fishbein and Ajzen (1975) define an attitude as a person's positive or negative perception of behaviour. This psychological tendency to evaluate objects can predict human behaviour, according to Ajzen and Fishbein (1980). Yap et al. (2018) describe attitude as how individuals handle goods through their actions and choices. Studies conducted by Nasira et al. (2021), Ariffin et al. (2017), and Ghani and Lambak (2018) reveal a significant correlation between Takaful and life insurance purchase intent and attitude. Farhat et al. (2019) and Aziz et al. (2019) support this notion by stating that attitude significantly influences the intention to purchase family takaful. High positive attitudes drive greater participation in Family Takaful, making attitude a crucial factor in determining consumer intention (Ghani & Lambak, 2018).

Another study by Razak et al. (2018) found that attitude significantly and directly impacted the propensity to participate in micro-takaful. This suggests that highly motivated micro-entrepreneurs are drawn to these schemes. This study's findings align with previous research by Ajzen and Fishbein (1980), Ibrahim et al. (2017), and Husin and Rahman (2016). However, Poan et al. (2021) found that attitudes and trust were not positively correlated. This means that potential customers will not purchase insurance if they do not believe it will benefit them and have no faith in the insurance provider. Therefore, attitude is deemed relevant for this study. The hypothesis to be tested is as follows:

H1: There is a significant positive relationship between attitude and consumer acceptance toward adopting takaful technology.

.

2.3 Subjective Norm

The Subjective Norm (SN) concept relates to an individual's perception of social pressure to engage in or abstain from a particular behaviour (Fishbein and Ajzen, 1975). Numerous prior studies have investigated the impact of SN on behavioural intention. Darmansyah et al. (2020), Nasira et al. (2021), Raza et al. (2020), and Usman et al. (2022) have reported that SN has a positive effect on behavioural intention. Further research by Bhatti and Md Husin (2020), Farhat et al. (2019), and Md Husin et al. (2016) has established a link between subjective norms and

the intention to purchase a family takaful scheme. Additionally, studies by Faizal et al. (2020) and Khairi et al. (2020) have highlighted the significant positive relationship between SN and the intention towards a takaful scheme for mental health disorders, indicating that SN is a crucial factor in the intention of Malaysian consumers towards a takaful scheme for mental health disorders.

As per recent research, the subjective norm plays a crucial role in determining a customer's trust and intention to purchase Islamic insurance, also known as takaful. Poan et al. (2021) discovered that customers who perceive a favourable subjective norm are more likely to invest in Islamic insurance. Furthermore, Toukabri and Ettis (2021) found that a customer's attitude towards subjective norms influences their intent to use e-insurance. Customers who are aware of the social significance of using e-insurance among their significant others are more likely to utilise it. However, it is essential to note that subjective norms can be positive or negative, depending on social pressure, and may or may not align with customer preferences (Raza et al., 2020). To support this argument, the following hypothesis was proposed:

H2: There is a significant positive relationship between subjective norms and consumer acceptance toward the adoption of takaful technology.

2.4 Perceived Behavioural Control

Ajzen (1991) defines perceived behavioural control (PBC) as an individual's perception of ease or difficulty in performing a behaviour. Tucker et al. (2020) further elaborate that PBC encompasses the perception of having the necessary resources, abilities, and opportunities to conduct an activity. The impact of PBC on the intention to purchase takaful is significant, as discussed in studies by Nasira et al. (2021), Raza et al. (2020), Adamu et al. (2017), Kazaure (2019), and Kazaure and Abdullah (2019), which all indicate a positive relationship between PBC and takaful acceptance intention in Nigeria. Confidence in one's ability to perform actions stems from having the required resources and opportunities, as noted by Nasir et al. (2017) and supported by Raza et al. (2020), who found that belief in one's competence and available resources increases the likelihood of participating in Islamic insurance.

According to Toukabri and Ettis (2021), e-insurance is more likely to be adopted by customers who perceive themselves as skilled in using it. PBC positively impacts their intention to utilise the service. Razak et al. (2018) found that PBC was the most influential factor in determining willingness to participate in micro-takaful schemes. However, Bhatti and Md Husin (2020) discovered a weak correlation between PBC and purchase intent. Nasir et al. (2017) suggest that a favourable impression (attitude) and subjective norm alone are not enough to encourage participation in life insurance, as the lack of PBC (resources) can hinder individuals' willingness to participate. For this purpose, the following hypothesis was proposed:

H3: There is a significant positive relationship between perceived behaviour control and consumer acceptance toward the adoption of takaful technology.

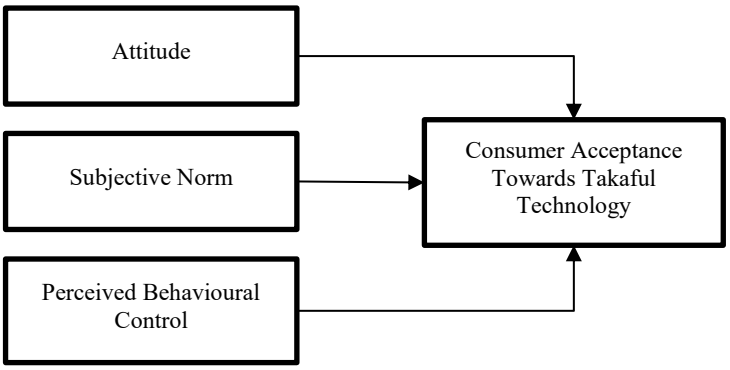

Figure 1. Theoretical Framework

3. Methodology

To fulfill the study's objectives, a quantitative research design was employed. The researcher utilized convenient and snowball sampling methods to acquire diverse perspectives and experiences from Malaysian consumers regarding their acceptance of Takaful Technology. Despite encountering challenges associated with limited awareness and adoption of TakaTech services, the study strived to gather valuable insights into consumer acceptance. This sampling strategy helps to gather valuable data to analyse the factors influencing acceptance and to provide insights for future policy and research considerations. Data collection was carried out through an online survey. The questionnaire gathered information on participants' attitudes, perceptions, and experiences relevant to the investigated variables. It included Likert scale items, ranging from "1" for strongly disagree to "5" for strongly agree, providing participants with a means to express their opinions and attitudes precisely.

The data collection period spanned five weeks, from October 23 to November 30. During this period, efforts were made to maximise participant response rates. The survey was shared through various channels, including social media platforms such as Whatsapp, Telegram, and others, targeting individuals who met the selection criteria to reach the targeted respondents. Once the data had been collected, it underwent analysis using the Statistical Package for the Social Sciences (SPSS). This software was equipped with all the necessary tools for data analysis, including descriptive statistics, correlation analysis, and regression analysis. The relationships between variables were examined through these analyses, and the formulated hypotheses were tested.

4. Result and Discussion

The information provided in Table 1 summarises the demographics of the respondents. Out of the 212 participants, 54.2% were female, while males constituted 45.8%. The majority of the respondents belonged to the indigenous Sabah group, accounting for 38.2%, while the Indian group was the smallest with only 4.2%. The age range of 20 to 30 years had the highest representation, with 63.2% of the participants falling within this category, indicating that millennials dominated the sample. The survey also showed that 40.1% of the respondents were students, which explains why most had a monthly income below RM2000 at 50.5%. The majority of the participants had a bachelor's degree, with 55.2% falling in this category Although the survey revolved around TakaTech Services, majority of the respondents were not aware of it, as 62.7% reported being unfamiliar with it, while only 37.3% acknowledged having knowledge of the services. This could be attributed to the fact that TakaTech is still a new concept, and the community has not fully embraced it.

Table 1. Demographic Profile of Respondents

Demographic Profile	Frequency N=212	Percentage %
Gender		
Male	97	46
Female	114	54
Ethnicity		
Malay	80	37.9
Chinese	10	4.7
Indian	9	4.3
Indigenous Sabah	80	37.9
Indigenous Sarawak	32	15.2
Age		
20-30	133	63
31-40	26	12.3
41-50	37	17.5
51-60	9	4.3
61 and above	6	2.8
Education level		
SPM	12	5.7
STPM/Diploma	50	23.7
Bachelor	116	55
Master	25	11.8
Phd	8	3.8
Occupation		
Self-employed	33	15.6
Civil servant	41	19.4
Private employee	44	20.9
Student	84	39.8
Others	9	4.3
Monthly income		
Below RM2000	106	50.2
RM2001-RM3000	36	17.1
RM3001-RM4000	25	11.8
RM4001-RM5000	17	8.1
Above RM5001	27	12.8
Knowledge about TakaTech		
Yes	79	37.4
No	132	62.6

Participation in any Islamic insurance		
Yes	82	61.6
No	129	38.9

4.1 Factor Analysis

The process of factor analysis can be extremely useful when it comes to handling and streamlining a large amount of data (Shrestha, 2021). Based on the KMO value of 0.948%, it can be inferred that the sample data is appropriate for factor analysis. According to Tabachnick and Fidell (2013), for a factor analysis to be successful, the KMO index should be at least 0.6.

The analysis revealed that there is a total variance of 78.783%. Furthermore, all the data loaded effectively onto factors with loadings exceeding 0.6, with a range from 0.73 to 0.83. Table 2 reveals the results, indicating that only two variables, ATT (Attitude) and SN (Subjective Norm), exhibited significant loadings exclusively on their respective factors, without any cross-loading on other factors. It is important to note that only four items from the PBC variable were included in the analysis. This was due to the cross-loading of PBC1 into components 1 and 3, which led to its exclusion from the analysis. In this study, the reliability of the scales was assessed using Cronbach's alpha. The results indicate that all measurements for the intention construct demonstrated excellent reliability, with coefficients ranging from 0.944 to 0.951. According to the rule of thumb established by Hinton et al. (2004), alpha coefficients below 0.6 are considered poor, 0.6 to 0.7 are moderate, 0.7 to 0.8 are good, 0.8 to 0.9 are excellent, and coefficients above 0.9 are considered outstanding.

Table 2. Rotated Component Matrix

	Component		
	Factor 1	**Factor 2**	**Factor 3**
ATT2	.834		
ATT1	.829		
ATT4	.815		
ATT3	.796		
ATT5	.748		
SN3		.811	
SN4		.793	
SN2		.787	
SN1		.787	
SN5		.758	
PBC3			.786
PBC4			.760
PBC2			.749
PBC5			.732
Eigenvalue	9.778	1.252	.724
Variance explained	69.84	8.943	5.173
α	.944	.951	.944
Kaiser-Meyer Olkin Measure of Sampling	948		
Bartlett's Test of Sphericity	Approx. Chi-Square 3343.429 (df 91 p-value = .000)		

4.2 Correlation Analysis

According to Senthilnathan's (2019) study, the correlation coefficient measures the strength of the relationship between two variables. Table 3 presents the correlations among the main variables employed in this study. The results reveal positive and significant correlations between the independent and dependent variables, with all values falling from -1 to +1. Thus, it can be inferred that greater ATT, SN, and PBC levels are associated with a higher likelihood of consumers accepting TakaTech Services.

Table 3. Correlation

	INT	**ATT**	**SN**	**PBC**
INT	1			
ATT	**0.841	1		
SN	**0.615	**0.629	1	
PBC	**0.656	**0.644	**0.727	1

Note:**Correlation is significant at the 0.01 level (2-tailed).

4.3 Hypothesis Testing

The results of the multiple regression analysis are presented in Table 4. This analysis examines the relationship between the dependent variable, Consumer Acceptance of TakaTech Services, and three independent variables: Attitude (ATT), Subjective Norm (SN), and Perceived Behavioural Control (PBC). The calculation of p-values aids statistical testing. A p-value less than 5% ($p < 0.05$) indicates the rejection of the null hypothesis in favour of the alternative hypothesis. Conversely, if the p-value exceeds 5% ($p > 0.05$), the null hypothesis cannot be rejected (Rubinfeld, 2000). Based on the results presented in Table 4, a significant relationship is evident between ATT and consumer acceptance of TakaTech ($p < .001$, $t = 5.196$). Consequently, H1 is supported, suggesting that respondents acknowledge the influence of attitude on their acceptance of TakaTech services. These findings are consistent with the research conducted by Razak et al. (2018), who identified a significant and direct impact of attitude on the propensity to participate in micro-takaful. Additionally, studies by Nasira et al. (2021), Ariffin et al. (2017), and Ghani and Lambak (2018) found a significant correlation between Takaful and life insurance purchase intent and attitude.

However, the results reveal that Subjective Norm (SN) and Perceived Behavioural Control (PBC) do not significantly impact consumer acceptance of TakaTech Services. The p-value for the subjective norm is above the threshold of 0.05 ($p = 0.581$), accompanied by a t-value of -0.552. Similarly, the p-value for perceived behavioural control also exceeds 0.05 ($p = 0.198$), with a t-value of 1.290. Consequently, these findings do not support Hypotheses 2 and 3, indicating that consumers do not perceive any relationship between subjective norms, perceived behavioural control, and their acceptance of TakaTech services. This finding is consistent with a previous study by Raza et al. (2020), which suggested that social pressure can influence subjective norms and may have varying effects on consumer behaviour. Furthermore, subjective norms are shaped by individual beliefs that guide consumers' decision-making

process (Farhat et al., 2019). Individuals who feel compelled to conform to the expectations of specific groups or individuals may experience significant social pressure.

Regarding perceived behavioural control, the findings of this study are supported by the research conducted by Bhatti and Md Husin (2020), who discovered a weak correlation between perceived behavioural control and purchase intent. This finding contradicts previous studies based on the Theory of Planned Behavior (TPB), but it is pertinent to the context of family takaful schemes. Limited financial resources or restricted access to them could influence potential customers' decisions not to participate (Bhatti & Md Husin, 2020).

Table 4. Multiple Regression Analysis

Variables	Standardised Beta, B	t-value	p-value (sig)
Attitude (ATT)	0.423	5.196	<.001
Subjective Norm (SN)	-0.034	-0.552	0.581
Perceived Behavioural Control (PBC)	0.084	1.290	0.198

Note: Significant level *p<0.05 and **p<0.01; is not significant

5. Conclusion

The primary objective of this study was to examine the factors influencing consumer acceptance of Takaful Technology. The key findings demonstrated a positive relationship between attitude and consumer acceptance of TakaTech Services, thereby providing empirical support for the hypothesis. However, the analysis revealed that subjective norms and perceived behavioural control did not significantly impact consumer acceptance. It can be inferred that the Theory of Planned Behavior (TPB) may have limitations in fully elucidating consumer acceptance of TakaTech services. The results indicated that while attitude emerged as a significant factor influencing acceptance, subjective norms and perceived behavioral control did not exhibit a significant impact. This suggests that relying solely on TPB may not be sufficient to comprehensively explain consumer acceptance of TakaTech services. It is plausible that additional factors or variables, beyond those considered in the TPB framework, play a role in shaping consumers' acceptance of TakaTech services.

The findings of this study significantly contribute to the existing body of knowledge on Takaful Technology and have practical implications for various stakeholders. Firstly, consumers stand to benefit from these findings by gaining a deeper understanding of TakaTech and feeling more confident in utilizing its services. The study's results emphasize the role of attitude as a crucial determinant in shaping consumer acceptance of TakaTech Services. By recognizing the influence of attitude, consumers can make informed decisions regarding their acceptance and adoption of TakaTech services, thereby enhancing their overall experience and satisfaction. Secondly, policymakers can leverage these findings to develop effective takaful policies and strategies. Understanding the factors that drive consumer acceptance can guide policymakers in creating an enabling environment for the growth and adoption of TakaTech services. By incorporating the insights gained from this

study, policymakers can design targeted interventions that address potential barriers and promote consumer acceptance and engagement with TakaTech. Moreover, researchers in the field of Takaful Technology can build upon this study's findings and methodology, further expanding the research landscape. The study's results provide a valuable reference point for future studies, allowing researchers to delve deeper into the determinants of consumer acceptance in the context of TakaTech. By building upon this foundation, researchers can explore additional variables, investigate specific demographic or cultural factors, and examine the dynamics between different components of the Theory of Planned Behaviour or other relevant theoretical frameworks.

This study is subject to certain limitations, which offer valuable insights for future research endeavours in this domain. Firstly, the time constraint imposed on the researcher restricted data collection to a sample size of only 211 respondents within a five-week period. To yield more reliable and comprehensive results, future investigations should allocate a more extensive timeframe to recruit a larger sample size. This will enhance the generalizability and validity of the outcomes. Furthermore, the limited body of literature concerning TakaTech studies emerged as a notable constraint. Given the novelty of TakaTech services in Malaysia and their limited implementation, identifying literature addressing this topic proved challenging. Future researchers are encouraged to address this gap by exploring further and generating more literature that delves into the nuances and intricacies of TakaTech services. Future studies should endeavour to construct a more comprehensive literature review by incorporating emerging research on TakaTech. It is crucial to acknowledge that this study solely focused on the antecedent variables derived from the Theory of Planned Behaviour (TPB) and did not encompass other potential variables that could influence consumer acceptance of TakaTech services. Subsequent research should consider exploring additional factors, such as perceived risk, religiosity, and awareness, to develop a more holistic understanding of the determinants of consumer acceptance in the TakaTech context.

Moreover, it is important to highlight a limitation stemming from the demographic composition of the study participants. Although the perspectives of both Takaful users and non-users were taken into account, the sample may not fully represent the target population, potentially resulting in less precise findings. Future researchers should strive to obtain a more representative sample that accurately reflects the population of interest, thereby enhancing the accuracy and reliability of the study outcomes.

References

Adamu, H., Polytechnic, F., & State, J. (2017). Risk Vulnerabilityand Takafulacceptance : 2(2), 411–431.

Ajzen, I. (1991). The theory of planned behavior. Organisational Behavior and Human Decision Processes, 50(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T

Ajzen, I., & Fishbein, M. (1). Understanding Attitudes and Predicting Social Behavior. Prentice Hall, Englewood Cliffs.

Ajzen, I., & Madden, T.J. (1986). Prediction of goal-directed behavior: Attitudes, intentions, and perceived behavioral control. *Journal of Experimental Social Psychology, 22*(5), 453- 474.

Ali, K. M. M. (2021). TakafulTech for Business Excellence and Customer Satisfaction. Islamic Fintech, 385–403. https://doi.org/10.1007/978-3-030-45827-0_21

Ariffin, K., Universiti, M., Mara, T., English, I., Mathematics, M., Applications, M., Low, T., Students, A., & View, T. C. (2017). A Study on Factors In fl uencing Muslim' s A Study on Factors In fl uencing Muslim' s Consumers Preferences Towards Takaful Products In Malaysia. August.

Aziz, S., Md Husin, M., Hussin, N., & Afaq, Z. (2019). Factors that influence individuals' intentions to purchase family takaful mediating role of perceived trust. Asia Pacific *Journal of Marketing and Logistics, 31*(1), 81–104. https://doi.org/10.1108/APJML-12-2017-0311

Beyene Fanta, A. and Makina, D. (2019). The Relationship Between Technology and Financial Inclusion. In Extending Financial Inclusion in Africa. https://doi.org/10.1016/b978-0-12- 814164-9.00010-4

Bhatti, T., & Md Husin, M. (2020). An investigation of the effect of customer beliefs on the intention to participate in family Takaful schemes. *Journal of Islamic Marketing, 11*(3), 709–727. https://doi.org/10.1108/JIMA-04-2018-0066

Choo, W., & Teh, J. (2019). An adoption of Fintech service in malaysia. 18(5), 134–147 Chou, S. Y., Liu, J. T., & Hammitt, J. K. (2004). National health insurance and technology

adoption: Evidence from Taiwan. Contemporary Economic Policy, 22(1), 26–38. https://doi.org/10.1093/cep/byh003

Chuang, L.-M., Liu, C.-C., & Kao, H.-K. (2016). The Adoption of Fintech Service: TAM perspective. *International Journal of Management and Administrative Sciences (IJMAS), 3*(7), 1–15. www.ijmas.orgwww.ijmas.org

Darmansyah, Fianto, B. A., Hendratmi, A., & Aziz, P. F. (2020). Factors determining behavioral intentions to use Islamic financial technology: Three competing models. *Journal of Islamic Marketing, 12*(4), 794–812. https://doi.org/10.1108/JIMA-12-2019- 0252

Devadevan, V. (2013). Mobile banking in India-issues & challenges. *International Journal of Emerging Technology and Advanced Engineering, 3*, 516-520.

Faizal, K., Hidayah, N., & Fadzirul, A. (2020). Malaysian Consumer Intention toward Takaful Scheme for Mental Health Disorders: A Preliminary Findings using Multiple Regression Analysis. *Journal of Islamic Finance, 9*(1), 035–045.

Farhat, K., Aslam, W., & Sany Sanuri, B. M. M. (2019). Predicting the intention of generation M to choose family takaful and the role of halal certification. *Journal of Islamic Marketing, 10*(3), 724–742. https://doi.org/10.1108/JIMA-12-2017-0143

Fishbein, M. & Ajzen, I. (1975): Belief, attitude, intention and behaviour: An instruction to theory and research; Addison-Wesley

Freudenreich, H., & Mußhoff, O. (2018). Insurance for Technology Adoption: An Experimental Evaluation of Schemes and Subsidies with Maize Farmers in Mexico. *Journal of Agricultural Economics*, *69*(1), 96–120. https://doi.org/10.1111/1477-9552.12226

Ghani, H. A., & Lambak, S. (2018). Determinants of Takaful: Case in East Coast Region of Malaysia. *International Journal of Academic Research in Business and Social Sciences,8*(12). https://doi.org/10.6007/ijarbss/v8-i12/5059

Hemed, H. A., Alamoudi, A. A. A., Al Qassim, A. A. A., & Qasem, B. M. S. (2021). The Potential Use of Fintech Developments in Takaful. *International Journal of Management and Applied Research, 8*(2), 109–121. https://doi.org/10.18646/2056.82.21-007

Hinton, P. R., Brownlow, C., McMurray, I. & Cozens, B. 2004. SPSS explained, East Sussex, England, Routledge Inc.

Husin, M. M., & Rahman, A. A. (2016). Predicting intention to participate in family takaful scheme using decomposed theory of planned behaviour. *International Journal of Social Economics, 43*(12), 1351–1366. https://doi.org/10.1108/IJSE-03-2015-0074

Ibrahim, M. A., Fisol, W. N. M., & Haji-Othman, Y. (2017). Customer Intention on Islamic Home Financing Products: An Application of Theory of Planned Behavior (TPB). Mediterranean *Journal of Social Sciences, 8*(2), 77–86. https://doi.org/10.5901/mjss.2017.v8n2p77

Kazaure, M. A. (2019). Extending the theory of planned behavior to explain the role of awareness in accepting Islamic health insurance (takaful) by microenterprises in northwestern Nigeria. *Journal of Islamic Accounting and Business Research, 10*(4), 607– 620. https://doi.org/10.1108/JIABR-08-2017-0113

Kazaure, M. A., & Abdullah, A. R. (2019). the Microenterprising Size and Acceptance of Islamic Health Insurance (Takaful) in Northwestern Nigeria. *Journal of Islamic Monetary Economics and Finance, 5*(3), 541–558. https://doi.org/10.21098/jimf.v5i3.1153

Kazaure, M.A. (2017), "Extending the theory of planned behavior to explain the role of awareness in accepting Islamic health insurance (takaful) by microenterprises in northwestern Nigeria", *Journal of Islamic Accounting and Business Research, 10*(4), 607- 620, doi: 10.1108/ JIABR-08-2017-0113.

Khairi, K. F., Laili, N. H., & Kamarubahrin, A. F. (2020). Determination of Malaysian consumer intention toward purchasing Takaful scheme for mental health disorders. *Jurnal Ekonomi & Keuangan Islam, 6*(2), 106–118. https://doi.org/10.20885/jeki.vol6.iss2.art3

Kim, Y., Choi, J., Park, Y., & Yeon, J. (2016). The adoption of mobile payment services for "Fintech". *International Journal of Applied Engineering Research, 11*(2), 1058-1061

Kim, Y., Park, Y.-J., Choi, J., & Yeon, J. (2015). An Empirical Study on the Adoption of "Fintech" Service: Focused on Mobile Payment Services. December 2015, 136–140. https://doi.org/10.14257/astl.2015.114.26

Mention, L. A. (2019). The future of Fintech. Research-Technology Management, 62(4), 59-63. https://doi.org/10.1080/08956308.2019.1613123

Mohd Thas Thaker, H., Khaliq, A., Ah Mand, A., Iqbal Hussain, H., Mohd Thas Thaker, M. A. Bin, & Allah Pitchay, A. Bin. (2021). Exploring the drivers of social media marketing in Malaysian Islamic banks: An analysis via smart PLS approach. *Journal of Islamic Marketing, 12*(1), 145–165. https://doi.org/10.1108/JIMA-05-2019-0095

Mohd Thas Thaker, M. A. Bin, Allah Pitchay, A. Bin, Mohd Thas Thaker, H. Bin, & Amin, M. F. Bin. (2019). Factors influencing consumers' adoption of Islamic mobile banking services in Malaysia: An approach of partial least squares (PLS). *Journal of Islamic Marketing, 10*(4), 1037–1056. https://doi.org/10.1108/JIMA-04-2018-0065

Muhamat, Amirul Afif, and Ronald McIver. (2019). Linking governance qualities and stewardship attributes: Findings from Malaysian takaful operators. *Journal of Islamic Accounting and Business Research 10*: 736–55.

Nangin, M. A., Barus, I. R. G., & Wahyoedi, S. (2020). The Effects of Perceived Ease of Use, Security, and Promotion on Trust and Its Implications on Fintech Adoption. *Journal of Consumer Sciences, 5*(2), 124–138. https://doi.org/10.29244/jcs.5.2.124-138

Nasir, N. F., Roslin, R. M., & Chui, C. B. (2017). Decomposing the theory of planned behaviour and incorporating spiritual intelligence to further understand purchase intention of life insurance and takaful. *International Journal of Economic Research, 14*(16), 241– 251.

Nasira, N. F., Roslin, R. M., Nasir, M. N. F., Nasir, M. F., Nasir, M. A., & Mohamed, N. A. (2021). Investigating Knowledge as a Possible Predictor of Purchase Intention among Muslims in Malaysia for Life Insurance and Takaful. *International Journal of Academic Research in Business and Social Sciences, 11*(2), 727–740. https://doi.org/10.6007/ijarbss/v11-i2/8880

Poan, R., Merizka, V. E., & Komalasari, F. (2021). The importance of trust factor in the intentions to purchase Islamic insurance (takaful) in Indonesia. *Journal of Islamic Marketing.* https://doi.org/10.1108/JIMA-01-2021-0026

Raza, S. A., Ahmed, R., Ali, M., & Qureshi, M. A. (2020). Influential factors of Islamic insurance adoption: an extension of theory of planned behavior. *Journal of Islamic Marketing, 11*(6), 1497–1515. https://doi.org/10.1108/JIMA-03-2019-0047

Raza, S. A., Shah, N., & Ali, M. (2019). Acceptance of mobile banking in Islamic banks: evidence from modified UTAUT model. *Journal of Islamic Marketing, 10*(1), 357–376. https://doi.org/10.1108/JIMA-04-2017-0038

Razak, A. A., Muhammad, F., Hussin, M. Y. M., Ramdan, M. R., & Hadi, F. S. A. (2018). Applying Ajzen's Theory of Planned Behaviour on the Participation of Micro-Entrepreneurs in Micro-Takaful. *International Journal of Academic Research in Business and Social Sciences, 8*(11), 1666–1679. https://doi.org/10.6007/ijarbss/v8-i11/5340

Razak, A. A., Muhammad, F., Hussin, M. Y. M., Ramdan, M. R., & Hadi, F. S. A. (2018). Applying Ajzen's Theory of Planned Behaviour on the Participation of Micro-Entrepreneurs in Micro-Takaful. *International Journal of Academic Research in Business and Social Sciences, 8*(11), 1666–1679. https://doi.org/10.6007/ijarbss/v8-i11/5340

Rubinfeld, D. (2000). Reference guide on multiple regression. Reference Manual on Scientific Evidence, 179–227. https://bulk.resource.org/courts.gov/fjc/sciam.1.mult_reg.pdf

Salmony, M. (2014). Access to accounts: why banks should embrace an open future. *Journal of Payments Strategy & Systems, 8*(2), 169–170.

Senthilnathan, S. (2019). Usefulness of Correlation Analysis. SSRN Electronic Journal, July. https://doi.org/10.2139/ssrn.3416918

Shrestha, N. (2021). Factor Analysis as a Tool for Survey Analysis. *American Journal of Applied Mathematics and Statistics, 9*(1), 4–11. https://doi.org/10.12691/ajams-9-1-2

Sommer, L. (2011). The Theory Of Planned Behaviour And The Impact Of Past Behaviour. *International Business & Economics Research Journal (IBER), 10*(1), 91–110. https://doi.org/10.19030/iber.v10i1.930

Tabachnick, B. G., & Fidell, L. S. (1996). Using multivariate statistics (3rd ed.). New York: HarperCollins.

Toukabri, M. T., & Ettis, S. A. (2021). The Acceptance and Behavior Towards E-Insurance. *International Journal of E-Business Research, 17*(2), 24–39. https://doi.org/10.4018/ijebr.2021040102

Truong, O. (2016). How Fintech industry is changing the world. (Thesis, Centria University of Applied Sciences). Retrieved from https://www.theseus.fi/bitstream/handle/10024/123633/TRUONG_OANH.pdf?sequence = 1&isAllowed=y

Tucker, M., Jubb, C., & Yap, C. J. (2020). The theory of planned behaviour and student banking in Australia. *International Journal of Bank Marketing, 38*(1), 113–137. https://doi.org/10.1108/IJBM-11-2018-0324

Usman, H., Mulia, D., Chairy, C., & Widowati, N. (2022). Integrating trust, religiosity and image into technology acceptance model: the case of the Islamic philanthropy in Indonesia. *Journal of Islamic Marketing, 13*(2), 381–409. https://doi.org/10.1108/JIMA-01-2020-0020

Wijayanti, D. M., & Riza, A. F. (2017). Sharia Fintech: Positive Innovation in Consumer Perspective. Proceeding International Seminar on Competition Policy and Law, 101–120.

Wonglimpiyarat, J. (2017). Fintech banking industry: a systemic approach. Foresight, 19(6), 590–603. https://doi.org/10.1108/FS-07-2017-0026

Yap, R. J. C., Komalasari, F., & Hadiansah, I. (2018). The Effect of Financial Literacy and Attitude on Financial Management Behavior and Satisfaction. *Bisnis & Birokrasi Journal, 23*(3), 3–5. https://doi.org/10.20476/jbb.v23i3.9175