



# Conceptual Framework for the Adoption of General Takaful Among MSME Owner-Managers in North-West Nigeria: The Role of MSME Owner-Manager Characteristics

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## Abstract

The ability to manage risk is especially important to Micro, Small and Medium-sized enterprises (MSMEs) which constitute more than 90% of all businesses in Nigeria. One of the mitigating techniques in minimizing risk is through insurance and Nigeria being a Muslim-majority country, takaful is the alternative to conventional insurance. Despite their fragile nature and their exposure to various threats, MSMEs are the least segment utilizing insurance cover. Based on the reports from the country's financial regulators it shows that majority of these businesses do not participate in any insurance scheme. Furthermore, there are less studies that examined takaful adoption by MSMEs, especially in Nigeria. These past studies are also inconclusive on the significant factors influencing adoption especially from the behavioral perspective. This paper aims to propose a conceptual framework to study the factors that influence general takaful adoption among MSMEs owner-managers' in North-West Nigeria. An integrated framework based on the Diffusion of Innovation Theory (DOI) and the Unified Theory of Acceptance and the Use of Technology (UTAUT) was developed to examine what motivates MSMEs owner-managers to adopt general takaful. Furthermore, the proposed model incorporates MSME owner-manager's personal and demographic characteristics (age, gender, education, prior loss experience and religiosity) as potential moderators in the study to enhance the predictive power of the model. Validating the conceptual framework of this research will be useful to takaful operators, financial regulators and policy makers in Nigeria to devise appropriate strategies that will increase the adoption rate of general takaful scheme among MSMEs.

*Keywords: adoption; general takaful; MSMEs; Diffusion of Innovation Theory; Unified Theory of Acceptance and Use of Technology*

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## 1. Introduction

We live in a risk pervasive world where individuals and businesses are constantly exposed to various perils that if left unchecked will result in a chain of negative reactions affecting the quality of life, business continuity and socio-economic stability. Takaful (Islamic insurance) is a means of mitigating such risk factors by reducing the impact of such mishaps through financial compensation. The need for insurance coverage is even more pertinent to Micro, Small and Medium enterprises (MSMEs) due to their fragile nature compared to large enterprises. However, most MSMEs operate their businesses without insurance coverage. This trend is even more evident in the least developed economies. Furthermore, the insurance density and penetration level are very low in the Muslim-majority, emerging market economies (EMEs) (Hoffman, 2015). Conventional insurance, albeit its noble goals, has faced stiff resistance and apathy in Muslim-majority countries because it conflicts with the beliefs and laws (Shariah) of the Muslims (COMCEC, 2019; Akhter et al., 2017). Conventional insurance was deemed invalid because it entails the elements of *gharar* (excessive uncertainty), *maysir* (gambling) and *riba* (usury) which are prohibited in the Islamic economic and financial system (Salman and Hassan, 2020). Thus, the need for an alternative insurance mechanism, achieving the same noble objectives, that is Shariah-compliant and in harmony with the Islamic finance worldview was justified (COMCEC, 2019;

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Akhter et al., 2017).

Present-day takaful was developed four decades ago as an alternative to conventional insurance (COMCEC, 2019; Swartz and Coetzer, 2010). In contrast with conventional insurance that is a risk transfer mechanism, takaful is a risk-sharing tool that pools financial resources together to compensate participants in the event of the occurrence of identified risks. Takaful is a means by which participants mutually agree to contribute money into a pool of funds based on the principles of *tabarru* (donation) that will be used in mutually indemnifying members against pre-defined loss (Billah, 2001). Takaful is an Arabic term derived from the Arabic root word "*kafala*" which means to guarantee. It is also derived from the Arabic verb "*takafala*" which implies mutually guaranteeing and safeguarding each other (Husin et al., 2016). It is fundamentally based on the spirit of cooperation, brotherhood, and solidarity among members of a group (Nasir et al., 2021). The Islamic Financial Services Board (IFSB) defines Takaful as "a mutual guarantee in return for the commitment to donate an amount in the form of a specified contribution to the participants' risk fund, whereby a group of participants agree among themselves to support one another jointly for the losses arising from specified risks" (Islamic Financial Services Board [IFSB], 2018).

As in conventional insurance, takaful consists of two main product categories: family (life) takaful and general (non-life) takaful. Family takaful is usually a long-term contract that includes savings, investment and protection for members and their dependents in the event of death, incapacity, or survival difficulties. While general takaful is traditionally a short-term contract, usually a year, to provide insurance cover for properties and liabilities against unanticipated hazards. Typical insurance covers in general takaful include protection against fire, theft, natural calamities, accidents, among others (Husin and Haron, 2020a; Aziz et al., 2019). This present study is limited to general takaful because it is more relevant to the needs of the MSMEs.

Recently, there has been a renewed interest in the takaful subsector in Muslim-majority countries. The takaful subsector has attracted the attention of academicians, practitioners as well as policymakers as a veritable tool in enhancing societal welfare, business resilience and long-term sustainability. The takaful segment has maintained a steady, albeit slow growth rate in terms of gross contributions from USD 5 billion in 2006 to USD 27.07 billion in 2018 (IFSB, 2020, 2015). However, unlike the banking and capital market segments, takaful is the least contributor to the total Islamic finance assets, having a meagre percentage share of less than 2% (IFSB, 2020, 2019). Likewise, the takaful sector is heavily concentrated in few countries which represented 91% of the global total contributions in 2018. Five countries were identified as the major contributors to the takaful sector namely Iran, Saudi Arabia, Malaysia, the United Arab Emirate (UAE) and Indonesia (IFSB, 2020). These countries are in three subregions of the world, namely the Middle East, Gulf Cooperation Council (GCC) and Southeast Asia.

Sub-Saharan Africa is the least contributor to the takaful segment, contributing only 2% of the total market share for global takaful (IFSB, 2020, 2019). Empirical data has shown that, on a global scale, nearly 70% of valuable properties subjected to financial and physical losses are not insured. Africa, excluding South Africa, accounts for the bulk of this percentage due to the low insurance penetration rate across the region (Faber Consulting, 2020). Nigeria stands out in the continent as one of the countries with the lowest insurance penetration rate ranging between 0.2 to 0.3% (Faber Consulting, 2020; Oxford Business Group, 2019; Dias et al., 2013). Surprisingly, despite Nigeria having nearly all the positive indicators for the insurance sector to flourish, the insurance industry is still stagnant (Ardo and Saiti, 2017). Nigeria has the largest population, economy, and market in Africa. It also has a rising affluent middle class, coupled with a significant number of youths in the population. All these factors make Nigeria an ideal market for insurance (Ismail, 2015). Regrettably, the insurance industry is the least developed sector of the Nigerian financial ecosystem (Yusuf, 2012). According to a survey report by the Enhancing Financial Inclusion and Access (EFInA, 2020), only 2% of the total adult population (estimated at 106 million in 2020) participate in insurance schemes in Nigeria. Reports further revealed that women, youths, the less educated, MSMEs, and the northern region of the country are the least consumers of financial services in the country (EFInA, 2020; Central Bank of Nigeria [CBN], 2018). Also, the reports showed that within the northern zone, the North-West region has the highest percentage of financial exclusion and the lowest insurance penetration rate compared to other regions in the country (EFInA, 2020). Hence, the present study will be limited to the North-West region of the country.

Additionally, most MSMEs in Nigeria operate their businesses bereft of insurance cover. A recent survey by the Small and Medium Enterprises Development Agency of Nigeria [SMEDAN] and the National Bureau

of Statistics [NBS] (2017) revealed that 96.61% of micro enterprises and 63.9% of SMEs are uninsured. In the event of the occurrence of any calamity, these businesses are left vulnerable to closure and collapse. They are left to the mercy of external assistance in the form of government relief support, donor agencies and philanthropists which may never materialize (Dandago et al., 2020). For instance, a fire incident in the central market of Kano (Sabon Gari Market) destroyed more than 75% of the market, burnt down 3,800 shops, injured 15 persons, and destroyed assets worth more than USD 5 billion (Campbell, 2016). The negative effect of all these losses could have been mitigated if the MSMEs had insurance coverage (Dandago et al., 2020).

Three prominent adoption/ behavioral intention theories have been applied in studying the adoption of takaful. These theories include the Theory of Reasoned Action (TRA) (Siala 2013; Rahim and Amin, 2011), the Theory of Planned Behaviour (TPB) (Kazaure, 2019; Mas'ud, 2017; Husin and Rahman 2016a; Husin et al., 2016), and the Diffusion of Innovation (DOI) theory (Ali et al., 2019; Shaikh et al., 2019; Echchabi and Ayedh, 2015; Ayinde and Echchabi, 2012). Associated factors investigated by researchers include attitude, subjective norm, perceived behavioral control, awareness, religiosity, uncertainty, trust, relative advantage, and compatibility. However, despite the above studies, the literature is still limited in explaining takaful adoption, especially from the behavioral perspective. A recent review on takaful literature revealed that notwithstanding the importance of takaful in the Islamic financial system, it is the least investigated area in the Islamic finance literature (Khan et al., 2020). Moreover, the review highlighted that there are few studies applying behavioral theories to investigate the adoption of general takaful (Khan et al., 2020; Husin et al., 2016). Furthermore, the MSME segment have received little attention in research related to factors influencing demand and acceptance of takaful (Husin and Haron, 2020b). Additionally, little is known of the influence of noneconomic variables on general takaful adoption (Zerriaa and Noubbigh, 2016; Husin et al., 2016). For instance, the literature on takaful adoption suggests that government support can be a significant determinant of adoption intention (Kazaure, 2019; Sherif and Hussain 2017; Sherif and Shaairi, 2013), yet no empirical study on takaful adoption has examined this factor.

Moreover, the literature shows inconsistent findings on the influence of awareness, social influence, and religiosity on takaful adoption. Husin and Rahman (2016b) found that awareness, social influence and religiosity are not significant in predicting takaful adoption. While other studies found significant effects (Kazaure, 2019; Ali et al., 2019). Furthermore, research has shown that an MSME owner-manager's characteristics plays a significant role in influencing the adoption of financial products (Al Balushi et al., 2019). Financial product adoption has been found to vary based on an MSME owner-manager characteristics (Al Balushi et al., 2019). Examining the effect of MSME owner-managers characteristics especially demographics on adoption intention can support takaful operators (TOs) in devising effective marketing and segmentation strategies (Husin and Rahman, 2013). The Owner-manager characteristics to be investigated in this study are his/her personal (i.e., religiosity) and demographic characteristics (i.e., age, gender, education and loss experience) which have been shown in past studies to influence adoption intention in various contexts (Al Balushi et al., 2019; Patwary et al., 2018; Ltifi et al., 2016; Venkatesh et al., 2003). It is anticipated in this study that the differences in these personal and demographic characteristics may moderate the relationship between the predictor variables and general takaful adoption.

Hence, this study presents a conceptual framework derived from existing adoption theories, specifically DOI and the Unified Theory of Acceptance and Use of Technology [UTAUT]), uncertainty and awareness to examine the adoption behaviour of MSMEs owner-managers towards general takaful. Also, MSME owner-manager personal and demographic characteristics were incorporated in the framework as potential moderators to enhance the predictive power of the model.

## **2. Literature Review**

Several studies have employed different behavioral/adoption theories to study Islamic finance adoption by individuals and organizations across different geographical locations and socio-economic structures with varying sample constituents and sizes. These theoretical models have been adapted (Yahaya et al., 2016b; Thambiah et al., 2013; Amin et al., 2011), extended (Haider et al., 2018; Mahdzan et al., 2017) and integrated (Jamshidi and Hussin, 2016; Bodibe et al., 2016) to explain Islamic finance adoption. Most of these studies have confirmed the validity and usefulness of these theories, particularly TRA, TPB and DOI constructs in predicting behavioral intention and use of Islamic finance. Furthermore, researchers have applied various behavioral factors and marketing concepts to study takaful adoption across a variety of settings. Prominent theories applied in this stream include TRA (Siala 2013; Rahim and Amin, 2011), TPB (Kazaure, 2019;

Mas'ud, 2017; Husin and Rahman 2016a; Husin et al., 2016) and DOI (Ali et al., 2019; Shaikh et al., 2019; Echchabi and Ayedh, 2015; Ayinde and Echchabi 2012). Significant factors influencing takaful adoption include attitude, subjective norm, perceived behavioral control, awareness, religiosity, uncertainty, trust, relative advantage, and compatibility.

The body of literature on takaful adoption using behavioral and marketing theories increased rapidly in the past five years. South Asia and Southeast Asia have the highest number of publications in takaful adoption. Precisely, nearly half of the total takaful adoption literature came from Malaysia and Pakistan. Most of the studies were on takaful in general, studies on specific takaful products are few (i.e., family takaful, general takaful, micro takaful, Islamic health insurance). Notable theories and factors employed by researchers include TPB, DTPB, DOI, TRA, religiosity, awareness, uncertainty, demographics, image, and promotion. Various methodologies have been employed to investigate takaful adoption, however, quantitative method was the most used. Furthermore, various data analysis techniques have been employed from descriptive statistics to more sophisticated second-generation analytical tools like SEM. Most studies concentrated on direct effects and mediating effects, only a few empirical studies investigated moderating effects (Salleh et al., 2021; Shaikh et al., 2019; Kazaure, 2019; Mas'ud, 2017). Furthermore, non-probability sampling technique was the dominant sampling technique used in this research stream.

In the African continent few articles were published on takaful. Most of the studies were conducted in Nigeria. Furthermore, most of the empirical studies used TPB as theoretical framework (Dandago et al., 2020; Kirfi et al., 2019; Kazaure, 2019; Mas'ud, 2017). Moreover, only two studies (Kazaure, 2019; Masud, 2017) tested moderation effect, the other studies investigated only direct effects. Additionally, except for one study (Kazaure, 2019), the remaining studies focused on individual customers. Likewise, MSMEs, general takaful, and micro takaful were less explored in the overall takaful adoption literature.

### **3. Theoretical Framework**

Several theories have been employed by researchers in the field of consumer behavior and innovation adoption to examine the rationale informing the acceptance or rejection of numerous innovations by different categories of consumers in various settings. Among such theories which have gained wide applicability in the innovation adoption literature are the Diffusion of Innovation [DOI] and the Unified Theory of Acceptance and Use of Technology [UTAUT].

DOI was first proposed by Rogers in 1962. DOI theory has been extensively used in several research settings and had proven to be a robust model in predicting the adoption of several innovations (Ali et al., 2019; Shaikh et al., 2019; Mahdzan et al., 2017; Thambiah et al., 2013). The theory advocates that it is the characteristics of an innovation which influences its adoption rate. Rogers (2003) proposed 5 key features of an innovation as follows: relative advantage, compatibility, complexity, observability and trialability. The first three main features are generic and apply to a variety of innovations both tangible and intangible ones (Rogers, 2003; Tornatzky and Klein, 1982). However, the last two attributes mostly apply to tangible and observable innovations (Rogers, 2003).

DOI has been used by researchers to study innovation adoption both at the individual (Mahdzan et al., 2017; Jamshidi and 2015; Thambiah et al., 2013) and organizational level (Hsu et al., 2006; Zhu et al., 2006). The original DOI theory has rarely been applied by researchers without some form of modification, extension (Mahdzan et al., 2017; Jamshidi and Hussin, 2015; Thambiah et al., 2013), or integration with other behavioural/adoption theories (Jamshidi and Hussin, 2016, 2018; Zhu et al., 2006). Generally, most studies have shown that the DOI constructs, particularly relative advantage, compatibility, and complexity are consistently linked to innovation adoption decisions (Jamshidi and Hussin, 2016; Tornatzky and Klein, 1982). Although the DOI model has been used extensively to explain innovation adoption behaviour, it has been criticized for considering only the attributes of innovation and its perception by potential adopters. Other personal characteristics such as gender and age are excluded. Additionally, external influences such as social pressure and governmental support that have a significant influence on potential adopters are not considered in the model (Al-Zoubi, 2013).

Another competing and widely used theory of innovation adoption behaviour particularly in the Information Technology (IT) adoption research is the Unified Theory of Acceptance and Use of Technology (UTAUT). Developed by Venkatesh et al. (2003), UTAUT was proposed to address the limitations of other competing

behavioural/adoption models. Venkatesh et al. synthesized different constructs deemed to be similar from 8 behavioural/intention theories to form 4 consolidated constructs that will diminish the weakness found in previous models. To further strengthen the model’s predictive capacity, Venkatesh et al. incorporated 4 moderators (Dwivedi et al., 2019). Venkatesh et al. argued that by unifying similar behavioural theory constructs the dilemma of choosing one behavioural theory in preference to another is resolved. Additionally, UTAUT explanatory power surpassed previous behavioural models in explaining 70% of behavioural intention and actual usage variance (Venkatesh et al., 2012).

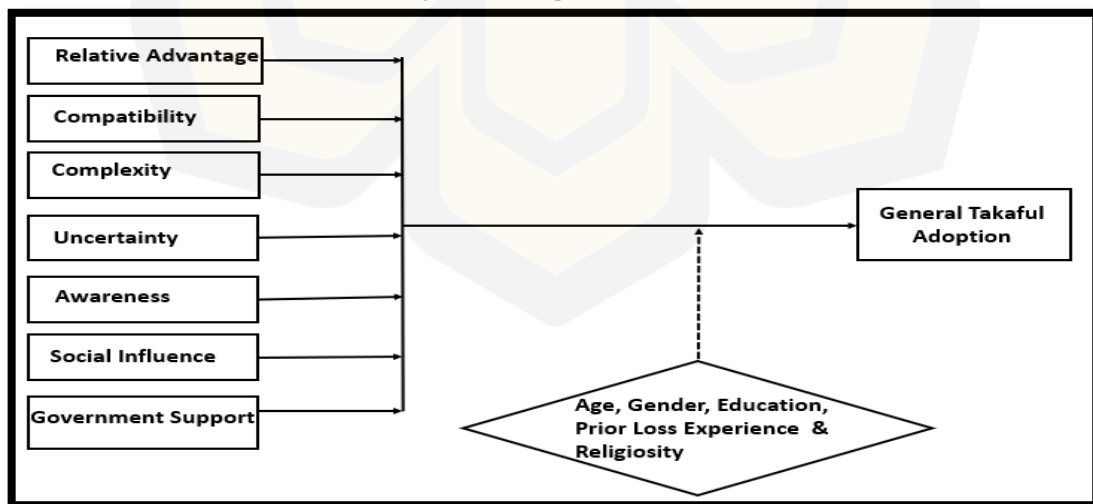
The UTAUT has four key constructs derived from the synthesis of previous competing models, namely (1) performance expectancy (PE) which is comparable to relative advantage in DOI and perceived usefulness in TAM,(2) effort expectancy (EE) which is like complexity in DOI and perceived ease of use (PEOU) in TAM, (3) social influence (SI) which is comparable to subjective norm in TRA, TPB/DTPB and (4)facilitating conditions (FC) which is partly derived from PBC in TPB/DTPB. Three out of the four core constructs were theorized as direct determinants of behavioural intention while the fourth construct (i.e., facilitating conditions) was hypothesized to be a direct determinant of actual usage. Furthermore, the theory postulates that the effect of these main constructs will be moderated by gender, age, experience, and voluntariness of use (Venkatesh et al., 2003).

UTAUT has been extensively utilized by researchers, particularly in the Information Technology adoption field in diverse contexts. Studies have applied the full model (Bühler and Bick, 2013), others have studied only the main effects (Odeh, 2019; Seid and Lessa, 2012), some have modified and extended it (Ebrahim and Naicker, 2019; Raza et al., 2019; Martins et al., 2014), while another group have integrated UTAUT constructs with other behavioural/adoption theories (Ikumoro and Jawad, 2019; Abbas et al., 2018). In the Islamic finance adoption field, researchers have employed UTAUT to examine Information Technology adoption (Raza et al., 2019; Kholid, 2019; Thaker et al., 2019) as well as innovations in other Islamic finance settings (Bouteraa et al., 2020).

#### 4. Conceptual Framework

The conceptual research framework was developed based on the review of research constructs and underpinning theories of previous studies in the innovation adoption literature, especially studies related to takaful and Islamic finance adoption. The constructs of the conceptual framework for this study were in part adapted from Roger’s (2003) Diffusion of Innovation theory (DOI) and the Unified Theory of Acceptance and Use of Technology (UTAUT) by Venkatesh et al. (2003). The conceptual framework for the proposed study is presented below.

Figure 1: Conceptual Framework



#### 4.1 Relative advantage

Relative advantage, as defined by Rogers (2003), is the extent to which an innovation is perceived to be better than its substitutes. Relative advantage is perceived by potential adopters in terms of economic benefits, social prestige, convenience, and satisfaction (Rogers, 2003). Perceived relative advantage had been tested in many research studies in the field of adoption of innovation and was found to be one of the major determinants of adoption of new innovations (Mahdzan et al., 2017; Yahaya et al., 2016a). This construct was consistently shown to be positively related to the adoption and use of innovation in different contexts, environments, and cultures (Mahdzan et al., 2017; Yahaya et al., 2016b).

In the literature on takaful adoption several researchers have investigated the influence of relative advantage. Some studies found relative advantage to be significant (Salman and Hassan, 2020; Hassan and Abbas, 2019; Raza et al., 2019; Ali et al., 2019; Shaikh et al., 2019; Aziz et al., 2019), while others found insignificant effects (Kirfi et al., 2019; Echchabi and Ayedh, 2015; Echchabi et al., 2014; Ayinde and Echchabi, 2012). For instance, a study by Kirfi et al. (2019) investigating takaful adoption in Gombe state, Nigeria, found an insignificant relationship between relative advantage (perceived usefulness) and takaful adoption. Similarly, studies by Echchabi and Ayedh (2015), Echchabi et al. (2014), Ayinde and Echchabi (2012) in Yemen, Tunisia, and Malaysia, respectively, found relative advantage to be insignificant in explaining takaful adoption.

Conversely, Salman and Hassan (2020), Hassan and Abbas (2019), Raza et al. (2019), Ali et al. (2019) and Shaikh et al. (2019) in India and Pakistan, respectively, confirmed the significance of relative advantage in predicting takaful adoption. Additionally, Mokhtar et al. (2017) investigated corporate demand for general takaful in Malaysia using a quantitative survey method. Findings from the study revealed that relative advantage (perceived advantage) is one of the key determinants influencing corporate organizations to purchase insurance (both conventional and Islamic insurance). Similarly, Aziz et al. (2019) using a modified version of TPB confirmed the significance of perceived usefulness (relative advantage) on family takaful adoption in Pakistan. Additionally, Coolen-Maturi (2013) found that competitive pricing (i.e., cost factor) influences the choice of insurance by Muslims in the UK. Therefore, due to the inconsistency of findings, there is a need to further investigate the effect of relative advantage in other less explored contexts and groups. The more general takaful is perceived by MSMEs to be useful and better than its substitutes, the more will be the adoption rate. Therefore, the following hypothesis is proposed:

H1: Relative advantage positively influences the adoption of general takaful among MSMEs owner-managers in North-West Nigeria.

#### 4.2 Compatibility

Compatibility is the degree to which an innovation is perceived to agree with the values, beliefs, experience and needs of potential adopters (Rogers, 2003). The more an innovation conforms to the values, experiences, and needs of the target market, the higher will be the adoption rate. The significance of compatibility in terms of adoption of an innovation was validated in past studies (Mahdzan et al., 2017; Amin et al., 2013). A study carried out by Amin et al. (2013), confirmed the positive influence of compatibility on the adoption of Islamic home finance products in Malaysia.

In studies on takaful adoption, several studies have confirmed the influence of compatibility on takaful adoption (Hassan and Abbas, 2019; Raza et al., 2019; Ali et al., 2019; Shaikh et al., 2019; Echchabi and Ayedh, 2015; Echchabi et al., 2014; Ayinde and Echchabi, 2012). For instance, a study by Echchabi and Ayedh (2015) using an extended DOI model revealed that only compatibility was significant in predicting customers intention to adopt takaful in Yemen. Equally, another study by Echchabi et al. (2014) found out that only compatibility was significant in explaining takaful adoption in Tunisia. Likewise, Shaikh et al. (2019), Ali et al. (2019) using an extended DOI model validated the significance of compatibility in predicting takaful adoption in Pakistan.

In the context of general takaful, MSMEs owner-managers will be more inclined to adopt insurance products and services that are in consonance with their ethical values, beliefs, and experiences. The more takaful operators and agents can demonstrate the compatibility of takaful products to MSME owner-managers beliefs, needs and ethical values, the more the adoption rate of takaful by MSMEs. Hence, the following hypothesis will be tested:

H2: Compatibility positively influences the adoption of general takaful among MSMEs owner-managers in North-West Nigeria.

#### *4.3 Complexity*

According to [Rogers \(2003\)](#), complexity is the degree to which an innovation is perceived as difficult to understand and use. Perceived complexity is closely related to perceived ease of use espoused by [Davis \(1989\)](#) in the Technology Acceptance Model (TAM). Innovations that are easy to understand and use tend to be adopted easily than those perceived to be complex and difficult to comprehend. Previous studies have tested this construct and it was found to have an inverse relationship with adoption of innovation ([Jamshidi and Hussin, 2018](#); [Thambiah et al., 2013](#)). Takaful is a recent innovation and therefore if it is perceived by MSMEs owner-managers as complex and difficult to understand and access, then the likelihood of adoption will be low.

Previous studies have validated the negative influence of complexity on Islamic financial services ([Ali et al., 2019](#); [Jamshidi et al., 2014](#)). For example, [Ali et al. \(2019\)](#) applying an extended DOI model confirmed the negative influence of complexity on takaful adoption among individual customers in Pakistan. Likewise, [Mokhtar et al. \(2017\)](#) found complexity to be significant in determining general takaful consumption by corporate organizations. On the contrary, a related study on family takaful adoption found complexity to be insignificant in influencing takaful adoption ([Shaikh et al., 2019](#)). Therefore, complexity needs to be further investigated in other regions and groups to confirm its significance or otherwise on takaful adoption. Takaful is a recent innovation and therefore if it is perceived by MSMEs owner-managers as complex and difficult to understand and access, then the probability of adoption will be low. Therefore, to validate this claim, the following hypothesis will be tested:

H3: Complexity negatively influences the adoption of general takaful among MSMEs owner-managers in North-West Nigeria.

#### *4.4 Uncertainty*

Uncertainty is the degree to which several possibilities are perceived, with respect to the occurrence of an event and the relative probabilities of these possibilities ([Rogers, 2003](#)). Rogers identified uncertainty as a common feature of any innovation. Perceived risk and uncertainty have been used synonymously by some researchers to investigate innovation adoption ([Yahaya et al., 2016a](#); [Echchabi and Ayedh, 2015](#); [Thambiah et al., 2013](#)). Bauer (1960) defined perceived risk as the degree of uncertainty and negative consequences associated with the purchase or use of a service or product. Risk, trust, and reliability of an innovation are some aspects of uncertainty ([Rogers, 2003](#)).

A negative relationship between uncertainty and the rate of adoption have been established by some studies ([Yahaya et al., 2016a](#); [Teo and Pok, 2003](#)). The more the uncertainty about an innovation in terms of its performance, reliability, and trustworthiness; the lower would be the adoption rate. However, a contrary finding was reported by [Echchabi and Ayedh \(2015\)](#), [Echchabi et al., \(2014\)](#), [Ayinde and Echchabi \(2012\)](#). These studies found that uncertainty was not a significant factor in predicting takaful adoption. Therefore, further investigations are required to determine the influence of uncertainty on takaful adoption.

Takaful as a recent innovation inherently creates uncertainty in the minds of potential adopters. Due to its newness, its reliability, genuineness as truly Shariah-compliant, and relative riskiness would be called into question by potential adopters. Furthermore, intangible products (i.e., services) are perceived to be riskier than tangible products ([Laroche et al., 2003](#)). Furthermore, the insurance business is shrouded with issues of reliability and uncertainty of outcomes. Though takaful is based on Islamic principles which diminishes such reliability and uncertainty issues; the perception of low reliability and uncertainty may still be attached to it by potential adopters ([Echchabi and Ayedh, 2015](#)). MSME owner-managers may be hesitant in adopting general takaful if they perceive it to be unreliable, ambiguous, and doubtful in terms of Shariah compliance and service delivery. Thus, the higher the perceived uncertainty by MSMEs owner-managers towards general takaful, the lower will be the rate of adoption. Therefore, the following hypothesis will be tested:

H4: Uncertainty negatively influences the adoption of general takaful among MSMEs owner-managers in North-West Nigeria.

#### 4.5 Awareness

Awareness is one of the major determinants of innovation adoption. Naturally, people are more likely to patronize such products and services that they are aware of and of which they have a certain level of understanding. Many studies have been done examining the relationship between awareness and adoption of an innovation (Mahdzan et al., 2017; Islam and Rahman, 2017; Bodibe et al., 2016; Yahaya et al., 2016b; Thambiah et al., 2013). These studies have confirmed that a positive relationship exists between awareness level and adoption rate. Furthermore, Al Balushi et al. (2018) confirmed the positive influence of awareness on MSMEs owner-managers intention to adopt Islamic financing alternative. Rogers (2003) have emphasized that awareness is the first step towards the adoption of an innovation.

In the literature of takaful adoption, several studies have investigated the relationship between awareness and takaful adoption (Dandago et al., 2020; Husin and Haron, 2020a; Hassan and Abbas, 2019; Raza et al., 2019; Ali et al., 2019; Shaikh et al., 2019; Aziz et al., 2019; Kazaure, 2019; Mokhtar et al., 2017; Husin and Rahman, 2016a, 2016b; Echchabi and Ayedh, 2015; Echchabi et al., 2014; Coolen-Maturi, 2013; Ayinde and Echchabi, 2012). Some of these studies have reported a positive significant relationship between awareness and takaful adoption (Dandago et al., 2020; Husin and Haron, 2020a; Hassan and Abbas, 2019; Raza et al., 2019; Ali et al., 2019; Shaikh et al., 2019; Aziz et al., 2019; Adamu, 2018; Mokhtar et al., 2017; Coolen-Maturi, 2013; Ayinde and Echchabi, 2012), while others have found insignificant influence of awareness on takaful adoption (Kazaure, 2019; Husin and Rahman, 2016a, 2016b; Echchabi and Ayedh, 2015; Echchabi et al., 2014). Consequently, the following hypothesis is proposed:

H5: Awareness positively impacts the adoption of general takaful among MSMEs owner-managers in North-West Nigeria.

#### 4.6 Social influence

Teo and Pok (2000) defined social influence as the degree of influence that reference groups have on an individual's decision towards the adoption and use of an innovation. Furthermore, Venkatesh et al. (2003) explains social influence as the influence others have on an individual's behaviour towards adopting or using an innovation. A colossal number of studies have verified the importance of social influence in determining adoption of innovations (Al Balushi et al., 2018; Abdulkadir et al., 2013).

Social influence has also been a subject of investigation in the takaful adoption literature. Several researchers have established that social influence influences takaful adoption (Aziz et al., 2020; Salman and Hassan, 2020; Hassan and Abbas 2019; Bhatti and Husin, 2019; Kirfi et al., 2019; Kazaure, 2019; Husin et al., 2016). However, a contrary finding was reported by other researchers which revealed that social influence is not significant in predicting takaful adoption (Husin and Rahman, 2016a, 2016b; Echchabi, and Ayedh, 2015; Echchabi et al., 2014; Ayinde and Echchabi 2012). Hence, the impact of social influence on takaful adoption is still debatable and requires additional validation in other less explored groups like MSMEs. People live in a social system and their attitudes, habits, principles are shaped by the system and group in which they are part. A positive view and suggestion by these groups will have a favourable impact on the adoption of general takaful. Consequently, to validate this claim, the following hypothesis is proposed:

H6: Social influence positively influences the adoption of general takaful among MSMEs owner-managers in North-West Nigeria.

#### 4.7 Government Support

Government Support refers to government actions, regulations, policies, and political support that favourably influences the decisions of individuals and business firms (Amin et al., 2011). The provision of a favourable macroeconomic environment, sound policies, necessary infrastructures, legal framework, and political backing is vital for the survival, development, and growth of Islamic finance (Abubakar, 2018; Lajuni et al., 2017). A very good example of the positive influence of government support can be seen in Malaysia; where Islamic banking and finance has advanced much due to such support (Lajuni et al., 2017; Nawi et al., 2013; Amin et al., 2011).



Government Support in this context reflects an aspect of facilitating conditions advanced in prior studies of innovation adoption and behavioural intention studies (Venkatesh et al., 2003; Taylor and Todd, 1995). Facilitating conditions as explained by previous empirical studies (Venkatesh et al., 2003; Thompson et al., 1991) refers to the degree to which an individual believes that the necessary environmental and technical support exists to facilitate the adoption of an innovation. Government Support is a fundamental factor in influencing the financing decisions of MSMEs. By providing the necessary policies, regulations, incentives and infrastructures, government can facilitate the adoption of general takaful among MSMEs.

Prior studies in innovation adoption field have examined the relationship between Government Support and adoption (Lajuni et al., 2017; Nawi et al., 2013; Amin et al., 2011; Teo and Pok, 2003). Most of the studies found a positive relationship between Government Support and adoption of an innovation (Lajuni et al., 2017; Nawi et al., 2013). Also, behavioural/adoption studies have shown the active role of government in influencing the adoption or rejection of an innovation (Lajuni et al., 2017; Nawi et al., 2013; Amin et al., 2011; Teo and Pok, 2003). Strong governmental support makes an innovation to be widely accepted and used in a country (Lajuni et al., 2017; Nawi et al., 2013; Amin et al., 2011). Equally, the lack of Government Support or commitment can inhibit the diffusion and acceptance of an innovation (Amin et al., 2011).

In the takaful demand and adoption literature, Government Support has received less attention. Little is known empirically on the influence of Government Support on takaful adoption (Sherif and Shaairi, 2013). Although some studies have highlighted the importance of Government Support in takaful adoption, no empirical study has validated this claim (Kazaure, 2019; Sherif and Hussnain 2017; Sherif and Shaairi, 2013). Even though Husin and Rahman (2013) have identified facilitating condition (of which Government Support is linked) as a potential determinant of family takaful adoption, this assertion has not been empirically tested. However, a few studies using qualitative approach have revealed the importance of Government Support in boosting takaful penetration and acceptance (Husin and Haron, 2020a; Yusuf and Babalola, 2015). In the context of MSMEs, the government's favourable disposition towards takaful can have a positive influence on the decision to adopt general takaful by MSMEs owner-managers. Consequently, this study will investigate the influence of Government Support on takaful adoption among MSMEs in North-West Nigeria. To substantiate this assertion, it is hypothesized that:

H7: Government Support positively influences the adoption of general takaful among MSMEs owner-managers in North-West northern Nigeria.

#### 4.8 Moderating role of religiosity

Religion plays a very fundamental role in the human society. Religion influences every aspect of the society. It also plays significant role in shaping attitudes and behaviours of its adherents. Additionally, religion also dictates and informs the attitudes and behaviours of people towards financial and non-financial products (Nawawi et al., 2018). For instance, Islam is such a religion that guides and directs the consumption behaviour of the Muslims. This has profound implication for those that want to tap into the lucrative *halal* and *halal* related market. Although, religion which implies one's beliefs about the complete credibility and integral truth of a religious teachings and scriptures (Moschis and Ong, 2011) is key in determining behavior; it is the intensity and devotion to the dictates of the religion (i.e., religiosity) that has significant impact on individual behavioral intention and actual behavior (Mukhtar and Butt, 2012).

Religiosity is the extent to which a person is devoted to his religion and expresses such through his attitude and behaviour (Johnson, 2001). The intensity of an individual's religiosity influences his consumption and financial behaviour (Mukhtar and Butt, 2012). Likewise, individuals may vary in their consumption and buying behavior based on their level of religiosity (Ibrahim and Ismail, 2015). Moreover, Muslims with high religiosity would be more likely to adopt or purchase *halal* and *halal* related products than Muslims with low level of religiosity (Nawawi et al., 2018). Consequently, based on the previous arguments, it is proposed that the intensity of one's religiosity can affect his behaviour towards adopting a religious labelled product.

Several studies in the Islamic finance adoption literature have investigated the moderating role of religiosity on adoption behaviour (Ku Amir et al., 2021; Masnita et al., 2019; Nawawi et al., 2018; Patwary et al., 2018; Ajetunmobi et al., 2018; Husin and Rahman, 2013; Thambiah et al., 2013). For instance, Husin and Rahman (2013) proposed a conceptual model for family takaful adoption based on the review of literature. The study identified religiosity as a potential moderator in family takaful adoption studies. Furthermore, Ajetunmobi et al. (2018) applied DTPB to investigate the moderating role of religion on the adoption of Islamic home

financing in Nigeria. Findings revealed that religion has a moderating effect on the adoption of Islamic home financing. Equally, Patwary et al. (2018) investigated the factors influencing consumers to purchase Islamic hotel service. The study findings showed that religiosity has a moderating effect on the relationship between the independent variables and purchase of Islamic hotel service. However, the moderating effect of religiosity on MSMEs general takaful adoption behaviour has not been tested in previous research. The more the religiosity of an MSME owner-manager, the higher will be the rate of adoption of general takaful among MSMEs. To validate this assertion, the following hypothesis will be tested:

H8: Religiosity of an MSME owner-manager moderates the relationship between the predictor variables in the study and general takaful adoption.

#### 4.9 Moderating role of MSME owner-manager demographic characteristics

Moderator variables have been shown to play a significant role in explaining and understanding consumer adoption decisions, especially in the field of marketing and technology adoption research (Venkatesh et al., 2003). A moderator is a qualitative (e.g., sex, education, religion, age) or quantitative (e.g., level of reward) variable that influences the relationship between the independent and dependent variables, either by increasing or decreasing the strength of the relationship, or reversing its direction (Namazi et al., 2016; Baron and Kenny, 1986).

In the field of technology adoption, numerous researchers have utilized several demographic characteristics such as age, gender, income level, education, and experience as moderator variables (Farooqi and Ansari, 2017; Venkatesh et al., 2003). Additionally, in marketing research, the use of moderator variables, particularly demographic factors, is prevalent (Ltifi et al., 2016; Berens et al., 2005). Moreover, studies have indicated that an MSME owner-manager's characteristics plays a substantial role in influencing the adoption of financial products (Al Balushi et al., 2019). Financial product adoption has been shown to differ based on an MSME owner-manager characteristics (Al Balushi et al., 2019). Investigating the impact of MSME owner-managers characteristics on adoption behaviour can support takaful operators (TOs) in developing successful marketing and segmentation strategies (Husin and Rahman, 2013).

Important demographic variables employed as moderators in behavioral intention and innovation adoption studies include age, gender, education, and experience (Husin and Rahman, 2013; Worthington, 2006; Venkatesh et al., 2003). However, in the Islamic finance adoption literature, particularly studies on MSMEs, there is a shortage of research investigating the role of moderators. Hence, this study seeks to investigate the moderating role of four demographic characteristics (age, gender, education, and prior loss experience) of MSME owner-managers on the adoption of general takaful. To substantiate this assertion, the following hypotheses will be tested:

H9: Demographic characteristics (age, gender, education and prior loss experience) of an MSME owner-manager moderate the relationship between the predictor variables in the study and general takaful adoption.

## 5. Conclusion

The present study proposed a conceptual framework based on DOI and UTAUT to specifically examine general takaful adoption among MSMEs owner-managers in North-West Nigeria. Upon validation, this framework could be used as an underlying model for evaluating MSMEs owner-managers intention to adopt general takaful as a risk mitigation tool. It is imperative to understand the influential factors affecting MSMEs owner-managers decisions regarding general takaful adoption as the success of any marketing and promotion strategy depends on it. Additionally, the proposed model can assist takaful operators and agents to identify the relevant features that specifically appeal to MSMEs owner-managers intention to adopt general takaful schemes. Furthermore, the framework identified specific factors that could be used by future researchers to investigate general takaful adoption. It is hoped that the validation of the framework will be of significance to takaful operators, takaful agents and researchers in the field of general takaful adoption.

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