DETERMINANTS OF TAKAFUL ADOPTIONS MEDIATING PERCEIVED TRUST IN CASE OF SOMALIA

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Abstract

Purpose – The aims of this paper is to determine intentions to adopt takaful mediating perceived trust in case of Somalia.

Design/methodology/approach – This study utilizes relative advantage, compatibility and complexity constructs as an original factors of diffusion innovation theory (DOI). Moreover, the three external constructs of awareness, culture, and trust are added into the DOI constructs. The authors distributed 419 questionnaires to the contributors of the study. The survey was conducted using convenience sampling technique in Somalia and our respondents were potential takaful product users. The DOI theoretical model was put to the test through structural equation modeling (SEM).

Findings – The findings show that relative advantage, compatibility, culture has positively and significantly influence on adoption of takaful with mediating perceived trust. On the other hand, perceived complexity and awareness is positively related to adoption of takaful but there is no mediation with perceived trust.

Originality/value – This research is an original attempt for investigating the factors that determines the adoption of takaful products regarding customers with mediating trust in Somalia by changing the DOI theory. Therefore, it presents a unique contribution to the takaful field in context of Somalia.

Keywords: Somalia, takaful, takaful adoption, Diffusion of innovation (DOI).

1. INTRODUCTION

Takaful is an Islamic insurance which is widely known “takaful” and it is alternative to conventional insurance (Ansari, 2022; A. Khan et al., 2020; I. M. Shaikh et al., 2020). (Ali et al., 2019) defined takaful as a joint guarantee with each other among contributors and it is derived from an Arabic verb “Kafalah”. Thus, This notion is defined as each member completing his or her commitment by donating to a fund (Wahab, 2018; Hemrit, 2020).

Contemporary takaful was introduced in 1979, along with Islamic banking which were separated into two forms; family and general takaful (Aziz et al., 2019). General takaful concerns damages such as fire, accident, burglary and flood while family takaful provides needs related to investment and it covers risks linked with human life including death, illness, and disability. The Islamic Insurance Company Ltd of Sudan is the world's first takaful operator and it was founded in 1979 (Md Husin and Ab Rahman, 2016). The demand for takaful in Muslim communities has grown which leads to attract the attention of academicians and researchers who need to learn more regarding the challenges surrounding takaful products in Muslim economies (Ali et al., 2019).
Azwa et al. (2021) argued that Saudi Arabia, Malaysia as well as other Middle Eastern countries control the majority of the takaful market while Malaysia also controls the market for global family takaful. Takaful assets were increased by 10 percent to USD 51 billion in 2019 when compared in 2018 which was increased only 1 percent (IFD, 2020). Another study revealed that Islamic finance has made a growth substantially in the last three decades, especially in 2017 which reached total assets of $2.05 trillion. Although total contribution of takaful was USD 26.1 billion in 2016, it is yet important under-investigated sector of Islamic finance (IFSB, 2018). Based on noteworthy anticipated population growth, recent regulatory as well as community awareness reforms, takaful schemes have been expected to become key players in the international insurance sector. (IFSB, 2018) also revealed that takaful markets are expected to reach total assets of USD 40 billion with a compound average growth rate of 13 percent by 2023.

Knowledge of the takaful industry in African countries is minimal although Muslims and non-Muslims around the world are aware of this industry. For instance, solely 0.3 percent of African poor nations are covered by insurance (Al-Amri & Hossain, 2017). Particularly, insurance culture in Somalia is a very minimal and they use informal insurance as an alternative to formal insurance to protect themselves against losses or damage. According Ali and Jama (2016) Qaaran is referred to as a Somali traditional culture in which family members or tribe contribute to one another in the event of loss or damage of family members. There has been no insurance legislation or insurance businesses since 1990 when Somali government collapsed and the Somali parliament has yet to pass an insurance act to regulate the insurance industry (http://www.somalibanca.org).

Furthermore, takaful adoption is very low in Somalia because Somalis have a unique culture in which people shield themselves from injury or liability. As a result, takaful penetration in Somali takaful market has inactivated. In our knowledge, there are few studies on the acceptance of Islamic insurance in Somalia, particularly the impact of traditional Somali insurance on Islamic insurance (Ali and Jama, 2016). Currently, Somalia has only Islamic insurance (takaful) system since all Somalis are Muslims. In Somalia, There are two Takaful licensed companies which offer Shariah based insurance (centralbank.gov.so/licensing-supervision-department.org). First Takaful and Re-takaful & Takaful Insurance of Africa are takaful firms in Somalia which are both of them debuted in 2014. The majority of financial institutions in Somalia, including the Takaful sector, are in their infancy. Hence, the takaful industry are still underdeveloped and will need time to develop. Furthermore, the sector suffers from a lack of market awareness, and Somalis have a culture that rejects the nature of insurance, which is a traditional manner of safeguarding rather than insuring (Maki, 2019).

In the case of Somalia, the amount of risk is diminishing, and domestic and foreign investors are attracted to the country’s good economic environment for recent years. The takaful market is projected to grow in the foreseeable future. Therefore, it is past time to switch from Somalia’s old method of protecting its citizens to Takaful products and services that adhere to sharia law, as long as the population is 100 percent Muslim, that live on Africa’s horn of Africa (federal republic of Somalia, 2020).

According to the previous studies, there are no published empirical research on takaful adoption with the diffusion theory of innovation (DOI) has yet to be fully tested in the context of Islamic insurance (takaful) in Somalia. Therefore, this study will add awareness, culture, and trust to some theory of DOI variables such as perceived relative advantage, perceived compatibility, and perceived complexity. Moreover, this present paper investigates the characteristics which drive potential customers to takaful adoption. Analogously, the current study will utilize DOI theory developed by Roger to see if the proposed model for customer desire to join in takaful in Somalia is perfect.
2. Literature Review and Hypotheses Development

Theoretical background of the study

Rogers (1962) the diffusion of innovation theory (DOI) was proposed, and later editions of this paradigm were followed (Rogers, 1999, 2003). The DOI hypothesis, according to Rogers, is a concept that explains the occurrence of new technology uptake. The initiation and implementation stages are the foundations of this paradigm. When a new concept or invention is recognized, the first phase should be done once a new notion or invention has been identified. The second step is implementation, which involves individual decisions about whether or not to accept or reject new ideas. Rogers (2003) also covers the five stages of the decision-making process that innovation adopters go through. Knowledge is one of these stages, illustrating how people are exposed to an innovation but have limited information about the original idea, restricting their potential to learn more about it. The second step is the persuasion stage, which assumes that individuals are actively seeking information about the new technology. Third step is the individual's involvement in actions that cause him to select between accepting or rejecting the innovation is referred to as the decision stage. The fourth step, known as the implementation phase, acknowledges the advantages of the initial concept. Individual confirmation is the final stage, which explains why innovation should be applied in the future. This stage might be interpersonal or intrapersonal in nature. Furthermore, DOI theory is very influential work for diffusion models. Jamshidi et al. (2015) Also, I believe that DOI theory is the most well-known work that methodically built our understanding in the domains of psychology and sociology to describe the process of public adoption of innovation.

In this study, researchers linked the social system to the takaful (Islamic insurance), products and services, among other things. As previously indicated, Islamic insurance (takaful) is a new concept in Somalia; consequently, we consider takaful to be a new idea (innovation), and its spread is linked to the takaful process.

Based on the above information, the authors believe that using the DOI framework in the context of Islamic insurance (takaful) adoption is a good concept. Our empirical study uses the diffusion of innovation theory (DOI) to portray takaful as a created notion vs traditional insurance in order to identify the adoption behavior of takaful users/consumers in Somalia. The knowledge stage of DOI has five attributes, namely; compatibility, complexity, relative advantage, triability and observability. However, our empirical research uses three attributes of DOI theory (compatibility, complexity, relative advantage) and other three external factors, namely; awareness, perceived culture and perceived trust as a mediator variable. Thus, this empirical study investigates whether these determinants contribute the adoption of Islamic insurance (takaful) in Somalia. The explanations of these six variables and their hypothesis development are shown in the below section.

Perceived Compatibility and Adoption of Takaful

Compatibility refers to how well an individual views innovation to be consistent with present cultural norms, beliefs, and what he or she has experienced and required in the past (Rogers, 2003). Compatibility, in our perspective, refers to how something aligns with your beliefs and is similar to your values and attitudes. This indicates that as soon as a client thinks that takaful products are comparable under Sharia law, the rate of acceptance is likely to increase, resulting in increased use of takaful products (H. Amin & Hassan, 2022). According to numerous research, perceived compatibility is one of the most critical variables that determines the adoption of Islamic insurance (Ali et al., 2019). According to Raza et al. (2020) show that in the context of Pakistan, there is a considerable positive relationship between compatibility and customers' intention to purchase Islamic insurance products and services. In Tunisian contexts also, there is a considerable positive association between customer compatibility and their intention to
use Islamic banking services (Kaabachi and Obeid, 2016). Perceived compatibility has a positive significant impact on the adoption of takaful products and services, according to a large body of previous research. As an example, (Shaikh et al., 2020; Kaabachi and Obeid, 2016; Echchabi et al., 2014; Areeba Khan et al., 2020; Ali and Puah., 2017). Therefore, the following hypothesis is proposed:

H1a: There is a significant positive relationship between perceived compatibility and the takaful adoption by the customers.

H1b: There is a significant positive relationship between perceived compatibility and the trust by the customers.

Perceived Complexity and Adoption of Takaful

Complexity is a perceived level that indicates the level of risk or difficulty in putting a concept into action (Rogers, 2003). The degree to which an innovation is regarded to be difficult to comprehend and use is also characterized as complexity. It was estimated based on how individuals viewed the innovation’s goal, intended utility, and ease of use (Gerrard & Cunningham, 2003). The more complicated the Sharia compliance knowledge of takaful products is, the lower the possibilities of customers adopting them (Ali et al., 2019). Complexity, in our perspective, can be characterized as the difficulty for consumers to understand or comprehend the takaful’s product or service. Many researches have established a negative association between complexity and takaful adoption in the past. As an example, (Ali & Puah., 2017; Abbas et al., 2017; Kaabachi & Obeid, 2016; Sanni et al., 2013; Ali et al., 2019). Similarly, other study finds that complexity, is positively influencing the choice of Islamic home finance (Amin et al., 2013). Therefore, the following hypothesis is proposed:

H2a: There is a significant positive relationship between perceived Complexity and the takaful adoption by the customers.

H2b: There is a significant positive relationship between perceived Complexity and the customer trust.

Perceived relative advantage and Adoption of Takaful

An individual’s or person’s opinion that innovation (a new idea) is superior to the current system is known as relative advantage (Rogers, 1999). Another study of (Rogers, 2003) demonstrated the benefits of creativity in the social system. According to Ali et al. (2019) the findings in their study of consumer acceptance of takaful in Pakistan, relative advantage is related to takaful products as financial solutions, secure and reliable services, and staff competency, as well as economic benefits such as incentives, profit earnings, and service charges for takaful operators’ customers. Many studies previously found the positive relationship between relative advantage and takaful adoption by customers. These studies include (Ali et al., 2019; Hassan & Abbas, 2020; Raza et al., 2020; I. M. Shaikh et al., 2020). While other studies find that relative advantage positively influences on adoption of Islamic banking products (Ali & Puah, 2017; Kaabachi & Obeid, 2016). Thus, we are proposed the following hypothesis:

H3a: Perceived Relative advantage significantly influences on adoption of takaful by customers.

H3b: Perceived Relative advantage significantly influences on consumer trust in using takaful products.

Consumer Awareness and Adoption of Takaful

According to Ali et al. (2019) Awareness refers to having access to information about something or a product that may lead to a purchase of that product. Likewise Kazaure (2019) individuals’ ability to directly understand, feel, and receive a product or service in their surrounding environment is defined as awareness. Customers' perceptions and information about a given product, service, or circumstance, on the other hand, might be defined as awareness (Rogers, 1962). The term "awareness" refers to a customer's
understanding of Islamic insurance goods and services as well as their attitude toward them (Areeba Khan et al., 2020).

Many studies have looked into the relationship between insurance customer awareness and takaful product or service acceptance. For example, (Ali et al., 2019) finds that awareness of takaful service has a positive significant effect on customer adoption of takaful products in Pakistan. Customers' lack of understanding of Islamic insurance has a significant impact on their purchasing decisions, as they are unfamiliar with the products and services available, and this study also discovered that awareness has a significant positive impact on customer intention to purchase an insurance policy (Poan et al., 2021). In addition to that, Consumer behavior toward takaful services is significantly influenced by customer awareness (Kehinde & Sharofiddin, 2021). Awareness is critical in developing the uses and advantages of a product or service, and that the study discovered a link between Takaful Insurance awareness and behavioral intention to use Takaful goods in Mogadishu, Somalia (Ali & Jama., 2016). According to the following papers, client adoption of takaful products is influenced by customer awareness of takaful services (Ali et al., 2019; Echchabi et al., 2014; Poan et al., 2021; Raza et al., 2020; I. M. Shaikh et al., 2020; Hemrit, 2020; Ibrahim et al., 2021). Therefore, the lack of public awareness, insurance penetration faces a significant barrier in marketing their products (Maiyaki & Ayuba, 2015). Based on the above empirical results, the following hypothesis is proposed:

H4a: There is a direct relationship between level of awareness and adoption of takaful by the customers.

H4b: There is a direct relationship between level of awareness and adoption of customer trust.

Perceived Culture and Adoption of Takaful

Culture is a social phenomenon that has an impact on everyone who lives in the same social environment (Hofstede, 1991). According to Md Husin and Ab Rahman (2016) Culture has the ability to impact how people act, think, and conduct. There are numerous empirical findings that show how culture influences purchasing habits and consumer behaviors in the service industry. For example, (Shaw and Clarke, 1998; Mattila, 1999; Ueltschy and Krampf, 2001). When it comes to culture, Somalia has a very low level of insurance culture, which has resulted in the absence of both an insurance act and insurance businesses for more than two decades (Sheikh Ali & Abdi Jama, 2016).

Somali culture is founded on financial payments, known as "Quaran" among the people, especially tribes or sub-tribes. For example, any family or relative member who is faced with an emergency situation, such as health concerns or the murder of someone, will be given money by his or her tribe to help address the problem. This informal insurance is widely acknowledged in Somali society and is equivalent to formal insurance (conventional and Islamic Insurance and Takaful). Therefore, in Somalia, informal insurance may prevent the use of official insurance, whether conventional or Islamic. Because religion is a part of culture that influences people's behavior, Muslims may prefer to participate in takaful products rather than traditional insurance (Md Husin and Ab Rahman, 2016). And when it comes to religious beliefs, Somalis are fierce. As a result, they were unable to use a product that is Shariah non-compliant goods and services. Md Husin and Ab Rahman (2016) why do Muslims prefer takaful products? For starters, takful is specifically developed as a shariah-compliant alternative to traditional insurance. Second, in an Islamic economy, involvement in Islamic insurance is one of the techniques that contributes to the development of Muslim communities. Therefore, the following hypothesis is constructed;

H5: Perceived culture has an influence on the adoption of takaful products.

Mediating role of trust

According to Ali et al. (2019) Trust is an attitude that is compatible with the premise that consumers have faith in something being true
or trustworthy. Furthermore, trust is the degree to which people believe in and want to rely on others (Luo et al., 2021). Religion is a key indicator of a society's core values. Thus, numerous insurance companies frequently employ belief cues as marketing methods in order to confirm positive consumer attitudes by increasing consumer trust in their goods and services. (Aziz et al., 2019). Consumers have built trust in service industries such as insurance because they value the constancy and honesty of service providers (Panigrahi et al., 2018). Therefore, one of the elements influencing an individual's buying intention toward a service is trust (Aziz et al., 2019). According to Aziz et al. (2019), the factor of trust is critical in allowing an organization to maintain its existing client base while also recruiting new potential customers for growth and sustainability. Trust acts as an essential tool needed for the success of any industry (Fauzi & Suryani, 2019). In marketing, trust is defined as the continuation of a contract between a vendor and a client, resulting in the sale of a specific item (Saleem et al., 2016).

Many previous studies have emphasized the importance of trust in various aspects of business, and empirical data show that trust is a key factor in determining whether or not to use takaful products. For example Hardius et al. (2017) argue that the value of ongoing connection between sellers and buyers has long been recognized in marketing as a means of establishing a mutually beneficial long-term relationship. The role of trust has been highlighted by Aziz et al. (2019) examined factors that influence intentions of individuals to purchase family takaful mediating role of perceived trust in context of Pakistan and their empirical research find that perceived trust has positively impact on purchase family takaful scheme. At the same time, Poan et al. (2021) discovered that trust has a positive impact on the purchase of Islamic insurance (takaful). Many studies also find that customer trust significantly related to purchase intentions (Chimedtsersen & Safari, 2016; Hajli et al., 2017; Luo et al., 2021; Saleem et al., 2016; Suhartanto et al., 2018). In addition to that, trust is considered as a mediator between exogenous variables such as Compatibility, Complexity, relative advantage, Awareness and Perceived Culture and the adoption of takaful (Islamic insurance). This study aims to enrich the existing literature by examining the role that consumer trust has to play in developing a positive intention to adopt takaful purchase and that will eventually encourage him/her to purchase takaful schemes.

H6: Customer trust mediates the relationship between Compatibility, Complexity, relative advantage, Awareness and Perceived Culture and the adoption of takaful (Islamic insurance).

![Figure I. Theoretical Framework](image-url)
3. Research method

Participants in the research

In this study, participants are current and potential takaful users in Somalia. The authors gathered the data through survey from Mogadishu residents, the capital city of Somalia. The Google document form survey was disseminated using social media platforms including Facebook, WhatsApp, emails of respondents and other channels. 419 respondents answered the questionnaire during January - March 2022. The authors applied convenience sampling technique in this study since the target population is infinite. Moreover, convenience sampling is normally utilized by researchers. These past studies used this technique include (Md Husin and Ab Rahman, 2016; Shaikh et al., 2020; Ali et al., 2019; Aziz et al., 2019). According to (I. Shaikh et al., 2018) convenience sampling is more common in Islamic finance studies. Consequently, this sampling technique was adopted in the present study.

Measures

All the variables in this study were adapted from past takaful studies. All measures of the variables such as Intention to adopt takaful, level of awareness, perceived relative advantage, perceived complexity (PC), Perceived compatibility (PCB) were adapted from (Shaikh et al., 2020). Similarly, trust items were adapted from (Aziz et al., 2019). Finally, culture measures were adopted from (Khan and Shahid, 2007).

The study's participants were split into two groups: 69.9% males and 30.1 percent females. In terms of age categories, the respondents aged 15 to 25 years old account for 63.5 percent of all respondents, while those aged 25 to 35 years old account for 33.4 percent of all respondents, and those aged beyond 35 years’ account for only 3.1 percent. In terms of education, 57.3 percent of the respondents were graduates, making up the greatest share of the research contributors, while 36.0 percent of the respondents were undergraduates. High school graduates account for 2.1 percent and other accounts for 4.5 percent of the remaining respondents, respectively. In terms of marital status, single respondents made up the majority of the study's sample, accounting for 75.9%, while married respondents made up only 24.1 percent. In terms of respondents' takaful experiences, the majority of the sampled respondents (72.3%) had no prior takaful experience, while the rest (27.7%) had used takaful products and services. While 74.5 percent of respondents were private employees, 8.4 percent of study contributors, and the smallest part were government employees, 17.2 percent of respondents engaged in business. Finally, in terms of income level, the majority of responders (52.5%) have less than $1,000 USD, while the second largest group of the respondents (10.0%) have income between $1,000 and 20,000 USD. The remaining 2.6 percent of respondents' income was in the range of 20,000 to 30,000 dollars, while 34.8 percent of respondents chose other (See Table I).

4. Statistical Analysis and Results

Data Analysis

Partial least Squares software: SmartPLS 3.3.7 is used in the study to evaluate the measurement and structural model as proposed by (Hair et al., 2011). The researchers elect PLS for two main reasons. First reason is PLS is a superior technique for this study because it is exploratory in nature (Henseler et al, 2009). Second reason is that PLS has recently gotten acceptance by searchers in the consumer and service research field (Sarstedt, 2008).

Table I. Overall profile of the Respondents

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>293</td>
<td>69.9</td>
</tr>
<tr>
<td>Female</td>
<td>126</td>
<td>30.1</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 - 25 years</td>
<td>266</td>
<td>63.5</td>
</tr>
<tr>
<td>25 – 35 years</td>
<td>140</td>
<td>33.4</td>
</tr>
<tr>
<td>Above 35</td>
<td>13</td>
<td>3.1</td>
</tr>
<tr>
<td>Education Level</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Graduate 240 57.3
Undergraduate 151 36.0
High school 9 2.1
Other 19 4.5

Marital Status
Single 318 75.9
Married 101 24.1

Takaful Experience
Yes 116 27.7
No 303 72.3

Occupation
Business man 72 17.2
Private employee 312 74.5
Government employee 35 8.4

Income Level
Less than $1,000 220 52.5
$1,000- $20,000 42 10.0
$20,000- $30,000 11 2.6
Other 146 34.8

Table II. Factor Loading and Reliability

<table>
<thead>
<tr>
<th>Construct</th>
<th>Items</th>
<th>Loading</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culture</td>
<td>CQ1</td>
<td>0.828</td>
<td>0.769</td>
<td>0.625</td>
</tr>
<tr>
<td></td>
<td>CQ3</td>
<td>0.751</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IAQ1</td>
<td>0.661</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intention to adopt Takaful</td>
<td>IAQ2</td>
<td>0.707</td>
<td>0.840</td>
<td>0.569</td>
</tr>
<tr>
<td></td>
<td>IAQ3</td>
<td>0.803</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IAQ4</td>
<td>0.833</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumer Awareness</td>
<td>LAQ3</td>
<td>0.933</td>
<td>0.706</td>
<td>0.565</td>
</tr>
<tr>
<td></td>
<td>LAQ4</td>
<td>0.511</td>
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<tr>
<td></td>
<td>PCPQ1</td>
<td>0.738</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compatibility</td>
<td>PCPQ2</td>
<td>0.712</td>
<td>0.826</td>
<td>0.542</td>
</tr>
<tr>
<td></td>
<td>PCPQ3</td>
<td>0.780</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PCPQ4</td>
<td>0.714</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PCQ1</td>
<td>0.709</td>
<td></td>
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</tr>
<tr>
<td>Complexity</td>
<td>PCQ2</td>
<td>0.713</td>
<td>0.848</td>
<td>0.527</td>
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<tr>
<td></td>
<td>PCQ3</td>
<td>0.726</td>
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<tr>
<td></td>
<td>PCQ4</td>
<td>0.742</td>
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<td></td>
<td>PCQ5</td>
<td>0.739</td>
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<tr>
<td></td>
<td>PRA1</td>
<td>0.773</td>
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<tr>
<td></td>
<td>PRA2</td>
<td>0.772</td>
<td>0.853</td>
<td>0.592</td>
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<tr>
<td></td>
<td>PRA3</td>
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<td></td>
<td>PRA4</td>
<td>0.766</td>
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<td></td>
<td>PTQ1</td>
<td>0.801</td>
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<tr>
<td></td>
<td>PTQ2</td>
<td>0.762</td>
<td>0.824</td>
<td>0.542</td>
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<tr>
<td></td>
<td>PTQ3</td>
<td>0.761</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>PTQ4</td>
<td>0.605</td>
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</tbody>
</table>

Measurement Model

The reliability and validity of a measurement model are frequently assessed (Leguina, 2015; Sarstedt et al., 2014). The authors examine the measuring model using convergent validity (loading), average variance extracted (AVE), composite reliability, and discriminant validity. Except for the (IAQ1), (PTQ4), and (LAQ4) questionnaire items, all assessments are evaluated using the PLS algorithm, which finds all factor loadings greater than the required 0.7 level threshold (Hu L.-T. & Bentler P. M., 1999) (see Table II). However, literature suggests that factor loadings of 0.40, 0.50, and 0.6 are acceptable if the average variance extracted (AVE) is more than 0.50 (Byrne, 2016; Hossan, 2021). As a result, this study’s average variance extracted (AVE) is more than 0.50 on each construct. To maintain the convergent validity, factor loading would have been removed, as numerous literatures suggested. However, deleting the loading prevents/hinders the curial condition that each construct must have at least two items (Md Husin and Ab Rahman, 2016). Thus, the authors keep (LAQ4) item in the model. Hence, all average extracted variance (AVE) and composite reliability (CR) values are exceed the recommended scores, 0.50 and 0.70 respectively.

To examine discriminant validity in the study, the authors used the Fornel-Larcker criterion. All inter-construct correlations and the AVE root square are compared. To pass the discriminant validity assessment of the model,
each AVE of concept should be greater than its squared correlation with any other construct, as recommended by (Fornell & Larcker, 1981). Finally, the Fornel-Larcker criterion is met, with no cross-loadings above the respective loadings, implying that discriminant validity is greater in this study (See Table III).

### Table III. Inter-construct correlation (Fornell-Larcker Criterion)

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Awareness</th>
<th>Compatibility</th>
<th>Complexity</th>
<th>Culture</th>
<th>Intention</th>
<th>PRA</th>
<th>Trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness</td>
<td>0.752</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Compatibility</td>
<td>0.084</td>
<td>0.736</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Complexity</td>
<td>0.182</td>
<td>0.555</td>
<td>0.726</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Culture</td>
<td>0.158</td>
<td>0.385</td>
<td>0.305</td>
<td>0.790</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intention</td>
<td>0.197</td>
<td>0.570</td>
<td>0.475</td>
<td>0.446</td>
<td>0.754</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRA</td>
<td>0.213</td>
<td>0.523</td>
<td>0.589</td>
<td>0.340</td>
<td>0.512</td>
<td>0.770</td>
<td></td>
</tr>
<tr>
<td>Trust</td>
<td>0.128</td>
<td>0.529</td>
<td>0.498</td>
<td>0.366</td>
<td>0.531</td>
<td>0.517</td>
<td>0.736</td>
</tr>
</tbody>
</table>

### Table IV. Heterotrait-Monotrait Ratio (HTMT)

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Awareness</th>
<th>Compatibility</th>
<th>Complexity</th>
<th>Culture</th>
<th>Intention</th>
<th>Trust</th>
<th>Relative Advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness</td>
<td>0.204</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compatibility</td>
<td>0.389</td>
<td>0.742</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complexity</td>
<td>0.385</td>
<td>0.718</td>
<td>0.536</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Culture</td>
<td>0.389</td>
<td>0.774</td>
<td>0.622</td>
<td>0.804</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intention</td>
<td>0.435</td>
<td>0.702</td>
<td>0.760</td>
<td>0.608</td>
<td>0.671</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relative Advantage</td>
<td>0.258</td>
<td>0.725</td>
<td>0.664</td>
<td>0.673</td>
<td>0.718</td>
<td>0.688</td>
<td></td>
</tr>
<tr>
<td>Trust</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Structural Model

The structural model assessment was carried out to determine the model's predictive power. Its objective is to explain the degree to which a dependent variable's variation is explained and unexplained by independent variables, as well as to assess the links between the study's latent constructs. The R-square value (R2) is used by the authors to determine the model's predictive potential. On the other hand, whether the hypothesized relationship is strength or not is determined using the path coefficients. Bootstrapping procedure is performed to assess the Structural model of the study and the authors have used 500 bootstrap samples to build stable intervals of confidence (Hair et al., 2011; Md Husin and Ab Rahman, 2016). Table V and Figure II show the structural model analysis results, which include standardized path coefficients, standard deviation error, t-values, and P-values for each association, as well as squared multiple correlations, as evaluated by R2. The R2 of the proposed model of intention is 46.7 percent, indicating that it can explain 46.7 percent of the variation in intention to adopt takaful by using these six independent variables of the study, which are perceived compatibility, perceived complexity, perceived culture, level of awareness, perceived relative advantage and perceived trust. Furthermore, as a mediator variable between the five independent variables and the dependent variable of intention to adopt takaful, the R2 of the hypothesized model of trust is 39.4 percent, indicating that 39.4 percent of the variation in trust to adopt takaful is explained by the hypothesized model of trust. This suggests that the model has a substantial explanatory power.

The path coefficients were estimated in order to test the hypothesized correlations between the constructs. The PLS-SEM algorithm was used to do this. For 5,000 samples, bootstrapping was used.

The hypothesized correlations among the constructs are summarized in Table VII. H1a shows the relationship between level of awareness and intention to adopt takaful, which is supported with $\beta = 0.075, < 0.048$, and t
statistics at 1.982**, whereas H1b depicts the relationship between level of awareness and intention to adopt takaful and trust as mediator, which is not supported with $\beta= 0.005, < 0.910$, and t statistics at 0.113, which means trust is not a mediator between awareness and intention to adopt takaful. H2a indicates the relationship between compatibility and intention to adopt takaful, which is supported with $\beta= 0.272, < 0.000$, and t statistics at 6.093**, whereas H2b depicts the relationship between level of compatibility and intention to adopt takaful and trust as mediator, which is not supported with $\beta= 0.005, < 0.910$, and t statistics at 0.113, which means trust is not a mediator between awareness and intention to adopt takaful. H3a indicates the relationship between compatibility and intention to adopt takaful, which is supported with $\beta= 0.272, < 0.000$, and t statistics at 6.093**, whereas H2b depicts the relationship between level of compatibility and intention to adopt takaful and trust as mediator, which is not supported with $\beta= 0.005, < 0.910$, and t statistics at 0.113, which means trust is not a mediator between awareness and intention to adopt takaful. H4a indicates the relationship between culture and intention to adopt takaful, which is supported with $\beta= 0.185, < 0.000$, and t statistics at 3.886**, whereas H4b depicts the relationship between level of culture and intention to adopt takaful and trust as mediator, which is supported with $\beta= 0.132, < 0.003$, and t statistics at 3.019** and that means trust is a partial mediator between culture and intention to adopt takaful. H5a indicates the relationship between perceived relative advantage and intention to adopt takaful, which is supported with $\beta= 0.148, < 0.011$, and t statistics at 2.543**, whereas H5b depicts the relationship between level of perceived relative advantage and intention to adopt takaful and trust as mediator, which is supported with $\beta= 0.232, < 0.000$, and t statistics at 3.757** which is mean

trust is a partial mediator between perceived relative advantage and intention to adopt takaful. H6a indicates the relationship between trust and intention to adopt takaful, which is supported with $\beta= 0.201, < 0.002$, and t statistics at 3.183**. Thus, the findings for the current study supported all of the hypotheses, with the exception of H1b and H3a, due to the mediation effect. The study's findings have significant consequences for Somali takaful companies, which are detailed in the study's implications section.

Model fit

For PLS models, standard root mean square (SRMR) can be used to assess the goodness of fit (GoF) (Henseler et al., 2014). SRMR is the residual differences between the samples' correlated data and the anticipated correlated model (Hooper et al., 2008). The SRMR scale runs from 0 to 1.0, with values near zero indicating perfect model fit. The SRMR value of a well-fitting model should be less than or equal to 0.05 (Hooper et al., 2008; Hu L.-T. & Bentler P. M., 1999). The current study's SRMR value is 0.064, indicating that the data are consistent with the hypothesized model.

Table V. Goodness of fit

<table>
<thead>
<tr>
<th></th>
<th>R Square</th>
<th>R Square Adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention</td>
<td>0.467</td>
<td>0.459</td>
</tr>
<tr>
<td>Trust</td>
<td>0.394</td>
<td>0.386</td>
</tr>
</tbody>
</table>

Table VI. Model Fit

<table>
<thead>
<tr>
<th></th>
<th>Saturated Model</th>
<th>Estimated Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRMR</td>
<td>0.064</td>
<td>0.064</td>
</tr>
<tr>
<td>d_ULS</td>
<td>1.333</td>
<td>1.333</td>
</tr>
<tr>
<td>d_G</td>
<td>0.395</td>
<td>0.395</td>
</tr>
<tr>
<td>Chi-Square</td>
<td>974.280</td>
<td>974.280</td>
</tr>
<tr>
<td>NFI</td>
<td>0.701</td>
<td>0.701</td>
</tr>
</tbody>
</table>

Structural Model

Table VII. Empirical Results

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Relationship</th>
<th>Beta ($\beta$)</th>
<th>T Statistics</th>
<th>P Values</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a</td>
<td>Awareness -&gt; Intention</td>
<td>0.075</td>
<td>1.982</td>
<td>0.048</td>
<td>Supported</td>
</tr>
<tr>
<td>H1b</td>
<td>Awareness -&gt; Trust</td>
<td>0.005</td>
<td>0.113</td>
<td>0.910</td>
<td>Not supported</td>
</tr>
<tr>
<td>H2a</td>
<td>Compatibility -&gt; Intention</td>
<td>0.272</td>
<td>6.093</td>
<td>0.000</td>
<td>Supported</td>
</tr>
</tbody>
</table>
5. Discussion

Our knowledge, this study was a first attempt to evaluate determinants those influencing consumers’ intention to adopt in takaful scheme mediating role of perceived trust. The authors gathered data from present and potential takaful customers in Mogadishu and discovered that the suggested model outperforms others in projecting general takaful product purchases. Empirical findings show that the diffusion of innovation theory model can explain 46.7 percent of the variance in takaful product adoption, but only 39.4 percent when trust is used as a mediator variable.

More specifically the results show that the perceived compatibility, perceived culture, perceived relative advantage, level of awareness and Perceived trust of consumers regarding takaful product usage are all significant elements in deciding their readiness...
to purchase/adopt takaful scheme. Except for awareness and complexity, which are insignificant. When trust is a mediating variable between awareness and the intention to adopt takaful, for example, awareness is insignificant, and when trust is not a mediating variable between complexity and intention, complexity is also insignificant.

This study anticipated that awareness has a positive impact on the intention to adopt takaful insurance. The findings demonstrate that awareness is positively associated with takaful adoption in Somalia. This indicates that having a basic understanding of takaful items can lead to the adoption of a takaful scheme. This evidence is consistent with several previous studies that found similar results (Ali et al., 2019; I. M. Shaikh et al., 2020). On the other hand, using the trust as a mediating variable, awareness has no link with intention. As a result, trust is unable to mediate awareness and intention. Furthermore, authors hypothesized that compatibility has a positive impact on the intention to adopt takaful. The findings demonstrate that perceived compatibility is associated to takaful adoption in a passive way. This means that takaful products will be purchased and adopted as a result of meeting current needs and gaining value from the takaful plan. The study's current findings are compatible with earlier research, such as (Ali et al., 2019; Ayinde & Echchabi, 2012; Doraisamy et al., 2011; Kaabachi & Obeid, 2016; Kim & Galliers, 2004; Nørskov et al., 2015; Sanni et al., 2013). The findings show that the study's participants believe Islamic Insurance (takaful) is suitable for their needs. Furthermore, the respondents believe that the takaful products are consistent with their ethical and religious convictions, as well as their financial aspirations. Compatibility, on the other hand, has a positive relationship with intention through trust. This implies that compatibility and intention are partially mediated.

In terms of complexity, the authors theorized that it has a detrimental impact on the intention to adopt takaful. However, the current studies show that complexity has had no impact on takaful acceptance. This finding is in line with previous research, which includes (I. M. Shaikh et al., 2020). However, this finding is contrary with diffusion of innovation theory proposed by (Rogers, 2003) which revealed complexity is negatively related to adoption of new ideas or innovation while adoption of takaful in Somalia is considered as a new idea. that Ali et al. (2019) It is argued that the more complicated a Sharia compliance understanding of takaful products is, the lower the possibility of consumers accepting such takaful products. Because Somalis are a 100 percent Muslim community, the respondents are well aware of whether takaful is a shariah-compliant product or not, and hence see it as a straightforward matter. However, through trust as a mediating variable, complexity has a considerable impact on takaful adoption. This indicates that trust acts as a complete mediator between complexity and the desire to practice takaful.

In this study, culture was hypothesized to have had a direct impact on takaful adoption. The findings suggest that culture has a significant impact on takaful product acceptance. This indicates that respondents are willing to buy a takaful scheme and believe that its adoption will fit into their culture. Thus, the empirical findings are consistent with prior studies that asserted that culture influences consumer behavior, such as (Liu et al., 2007; Shaw & Clarke, 1998; Ueltschy & Krampf, 2001). Because religious belief is an aspect of culture that influences people's behavior, Somalis may prefer to participate in takaful products rather than traditional insurance. Furthermore, through trust as a mediating element, culture has an impact on takaful adoption. This suggests that trust partially mediates between culture and the adopt on takaful.

In relation to perceived relative advantage, takaful adoption is likewise linked to perceived relative advantage. This indicates that as consumers become more aware of the benefits of takaful, the rate of adoption will rise. This empirical conclusion is in line with the findings of a number of research, including (Abbas et al., 2017; Aziz et al., 2019; Kaabachi & Obeid, 2016). Furthermore, using trust as a mediating variable, perceived relative advantage was
positively connected to takaful adoption. As a result, trust plays a role in mediating the relationship between perceived relative advantage and takaful adoption. Finally, the authors suggest that takaful adoption is directly related to perceived trust. Our findings show that the adoption of takaful has a positive impact on trust. Several studies came to the same conclusion including (Luo et al., 2019).

6. Conclusion

Theoretical and Policy implications

The findings make a substantial contribution to the literature. Our research findings make a substantial contribution to current understanding in the following respects, from a theoretical standpoint. To begin with, this is the first attempt to determine takaful adoption in Somalia. Second, the findings contribute to the Islamic finance literature by applying and expanding on Roger's famous diffusion of innovation theory (DOI). Despite the fact that the DOI framework has been employed in numerous studies, the takaful context is not uncovered in a substantial way using this theoretical method. Finally, because Islamic finance is new in Somalia, our study fills that gap left by previous researches.

This study, on the other hand, provides some useful policy implications for takaful managers and advertisers in designing effective marketing strategies. Our study results show that relative advantage, compatibility, consumer awareness and culture and trust are the important factors of takaful adoption by potential users. However, the data show that complexity has no significant on takaful users' adoption behaviors, especially when trust is not used as a mediating variable. Furthermore, whereas awareness has a direct association with the intention to adopt takaful, when trust is used as a mediator, the effect is negligible. Takaful operators should take into account the sector's contributions to the country's socioeconomic growth and provide ease of use in order to meet customers' needs for takaful products and services.

Limitations and future research of the study

There are certain limitations to our study that provide guidance for future studies in this sector. To begin, the writers undertake their empirical research only in Mogadishu. As a result, it is limited in terms of geography. Future research could be undertaken in other Somali cities as well as rural areas to obtain more in-depth information about takaful goods. Second, the study's variables are restricted to a certain DOI framework (relative advantage, complexity and compatibility) and adding other variables (consumer awareness, culture and trust). Hence, potential researchers can incorporate new and relevant components such as demographic characteristics, religious views, service quality, corporate image, promotional tools, subjective norm, and attitude into the DOI framework model to broaden the scope of DOI theory. Finally, the core data for our study comes solely from potential and current takaful customers. Thus, new studies comparing conventional and Islamic insurance should be done to supplement the existing knowledge. Finally, this study collects data using a questionnaire instrument. Other data collection methods, such as interviews, should be considered in future studies.

References


[38] 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...


