The Usage of Islamic Financial Services in Zanzibar: The Influence of Accessibility, Relevancy and Expected Benefits

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ABSTRACT

Aim: The study investigated the relationship between accessibility, relevance, expected benefits, and usage of Islamic financial services among Zanzibar residents.

Method: This study was based on a quantitative approach. A multistage sampling process was used to obtain questionnaire responses across all five regions of Zanzibar. A total of 400 questionnaires were used for the analysis.

Findings: The results indicate a significant influence of accessibility, relevancy, and expected benefits on the usage of Islamic financial services in Zanzibar.

Limitation of the study: This study focuses on only three (supply-side) determinants of the use of Islamic financial services in Zanzibar.

Practical Implication: This study provides empirical evidence in the new environment of Zanzibar, where Islamic finance is growing steadily. These findings will be useful for future researchers studying Islamic finance and financial inclusion. In addition, the study’s findings provide research inputs to financial service providers and policymakers toward enhancing their reach to customers.

Originality: This study is the first to assess the relationship between accessibility, relevance, expected benefits, and usage of Islamic financial services. In addition, the current study provides the evidence about usage of Islamic financial services in new environment; Zanzibar, the emerging Islamic financial market in East Africa.

KEY WORDS: Accessibility, Expected benefits, Relevancy, Usage, Islamic financial services in Zanzibar.

JEL classification: G2;G20; G21.

1. INTRODUCTION

The current study determined the relationship between the accessibility of Islamic financial institutions, the relevance of financial services offered by Islamic financial institutions, the perceived welfare benefits of Islamic financial services, and the usage of Islamic financial services in Zanzibar.

According to the financial inclusion principle, people should have equitable opportunities to use financial services when they need them (Ozili, 2020). Financial services should be easily accessible, meet the required quality, and be offered at a reasonable price and conveniently (Centre for Financial Inclusion, 2013). The ultimate aim of an inclusive financial system is to increase the rate of financial service use among people of different classes in a community (The World Bank, 2018). In addition, financial services should support the livelihoods of users. Indeed, the accessibility, relevancy, and perceived welfare benefits of financial services are considered among the important drivers of financial service usage in Tanzania (NFIF, 2018-2022). However, there is evidence that even where financial services are easily accessible and relevant, the usage of financial services is low; especially in Muslim majority areas (Demirgüç-Kunt, Klapper, & Randall, 2013; Demirguc-Kunt, Klapper, Singer, Ansar, & Hess, 2018). Specifically, prior studies revealed a low rate of Muslim populations with accounts in Islamic financial institutions despite the increased number of Islamic financial institutions (Demirguc-Kunt, et al., 2013; Naceur, Barajas, & Massara, 2015; Zulkhibri, 2016).

Prior studies indicated the direct relationship between accessibility, usage, relevancy, and expected benefits (welfare) of financial services (Amidžić, Massara, & Mialou, 2014; Arora, 2010; Demirguc-Kunt & Klapper, 2012; Demirguc-Kunt, et al., 2018; Goel & Sharma, 2017; Ozili, 2020). Besides, the financial inclusion measurement models were empirically developed indicating the direct relationship between access, usage, quality, and welfare of the financial services (Bongomin, Ntayi, & Munene, 2016; Bongomin, Ntayi, & Munene, 2017; Mindra & Moya, 2017; (Trianto, Rahmayati, Yuliati, & Sabiu, 2021). Similarly, previous studies asserted
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that the accessibility and relevancy, and welfare of Islamic financial services provide a significant effect on the usage of financial services in Muslim majority areas (Nawaz, 2018; Razak, Muhammad, Hussin, Zainol, & Hadi, 2017; Mustafaa, Baita, & Usman, 2018; Hassan, Hossain, & Umsl, 2018).

For example, Tanzania the NFIF (2018-2022) clearly documented the presence of a relevance gap, which is a significant barrier to the usage of bank accounts. Further, the value creation model of NFIF (2018-2022) stated that the relevance of financial products is among the necessary conditions for the usage of financial services, although not sufficient. NFIF (2018-2022) further depicted that, in addition to relevancy, financial services should be affordable, convenient, well understood, and appropriately sized. Specifically, the use of financial services in Tanzania is driven by appropriateness, affordability, convenience, safety, and reliability (NFIF, 2018-2022). In Zanzibar, there is increased accessibility to banks that offer Islamic financial services. However, a substantial number of people do not have bank accounts (FinScope-Tanzania, 2017). However, there is a lack of empirical evidence on the extent to which accessibility, relevancy, and expected benefits influence the usage of Islamic financial services. Obviously, the present literature stresses more studies on the determinants of Islamic finance (Jouti, 2018).

Accordingly, this study investigates the relationship between the accessibility of Islamic financial services, the relevance of Islamic financial services, and the expected benefits of Islamic financial services on the usage of Islamic financial services in Zanzibar. This study contributes to the literature by providing empirical evidence on the relationships between accessibility, relevance, perceived benefits, and usage of Islamic financial services. The study was conducted in Zanzibar, a potential market for Islamic finance in Tanzania and East Africa.

2. LITERATURE REVIEW

2.1 Usage of financial services in Tanzania

The FinScope survey (2017) documented a significant rate of financially excluded people in mainland Tanzania and Tanzania (43% and 28%, respectively). These statistics indicate that a significant number of individuals do not use banking services. In Zanzibar, the use of financial services is directly associated with social, economic and personal factors. As a result, a shortage of financial services that comply with Islamic values and ethos is among the most common reasons for not having bank accounts (FinScope-Tanzania, 2017). The introduction of Islamic banking services in 2008, has successfully opened windows for more banks to offer Islamic financial services including more banks, and Islamic insurance initiatives (Khamis, Isa, & Yusuff, 2021; Omar, Yusoff, & Sendaro, 2017; Shkeily & Abdullah, 2021). The progression of Islamic finance in Zanzibar was intended to improve the accessibility of financial services and provide wider choices to financial service customers. Islamic financial services cover unique customer demands, particularly for the Muslim population.

The provision of Islamic banking services was among the strategies used to raise the rate of formal financial services in Zanzibar (FinScope-Tanzania, 2017). Nevertheless, there are some concerns about the presence of Islamic finance within the conventional banking system in Zanzibar. These issues are directly related to the relevance, affordability, and benefits of Islamic banking services (Omar, Yusoff, & Sendaro, 2017). There are opinions that Islamic finance in Zanzibar is not Sharia compliance, due to the basic fundamentals of the existing conventional financial system operating in Tanzania. Some argue that there is no difference between conventional and banking services; the only difference is the names of the products or services offered by Islamic banking institutions, but the issue of interest (riba) still exists under the name of the profit rate (Soud & Sayilir, 2017). In addition, there are some arguments that Islamic financial services are expensive and hence inappropriate for poor people. Given that most Islamic financing products are issued by conventional banks in Islamic windows, the profit rates of Islamic financial services are almost equal to those of conventional financial services. These issues, in addition to the limited knowledge about Islamic finance, may be considered a limitation of the use of Islamic financial services (Khamis et al., 2021; Khamis & Rashid, 2018).

Currently, some progress has been made in accessibility and improving the quality of services. The progress includes increased service centres and branches, as well as adopting agent banking and mobile money services to facilitate access to banking accounts (PBZbank, 2022). In addition, adjustments have been made to ensure that services are affordable for many social groups. For example, Amana bank has initiated various forms of accounts to reach people of different classes; such as “Nuru” saving accounts-for children under 18 years; “Annisao” saving account-for women of different classes; students saving accounts- for students of higher learning institutions; “Nafuu” saving account-especially for any ordinary income earners; “Boda Boda” account- specifically for people engaged in transport services using motorcycles. Other forms of services initiated by Amana bank include Hajj and Umra saving accounts- for people saving for Hajj and Umra; Mafao saving account-for retirees with a regular flow of income; “Kilimanjaro” diaspora account-for Tanzanians living abroad. In addition, the common forms of saving accounts available include fixed deposit accounts, saving accounts, and salary accounts (Amana Bank, 2022). However, there is no clear evidence that the current improvement in the accessibility and quality of Islamic finance services has any significant effect on the usage of Islamic financial services. This study aims to address this gap.
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2.2 The relationship between access, usage, quality, and expected benefits/welfare of financial services

The use of financial services is crucial to an inclusive financial system. Together with usage, financial inclusiveness is determined by the accessibility, quality, and potential welfare benefits of financial services (Demirgüç-Kunt et al., 2018; Ernst and Young, 2017). Obviously, financial services are meant to reach society without any form of discrimination. Accordingly, financial institutions promote their services to increase the customer base for the profit motive and accomplish social responsibility objectives. Enhancing the economic well-being of society is an important goal of financial institutions. Accessibility, relevance, and satisfaction are among the significant indicators of successful financial institutions (Khamis & Rashid, 2018).

According to Sarma (2008) and Sarma and Pais (2011), the accessibility of financial services refers to the convenience in accessing financial services; that is, financial services should be easily accessible. Accessibility is determined by the presence and extensiveness of the financial services. Arora (2010) suggests that physical access and ease of financial transactions are important aspects for people to use financial services in different economies. Usage refers to the ability of people to use the financial services available at a service centre. In most cases, usage is determined by the frequency with which people use their accounts at formal financial institutions. The relevance refers to the ability of financial services to meet customers’ needs and expectations. Relevance is determined by the sufficiency of financial services to customer general and specific needs. Expected benefits refers to the social and economic benefits of financial services (Arora, 2010; Demirgüç-Kunt, et al., 2018).

Prior studies have demonstrated a direct relationship between accessibility, usage, quality, and welfare of financial services. Sarma (2008) suggests that financial services should be relevant and easily accessible to cover all small and marginal groups in a society. Demogruc-Kunt et al. (2013) indicated an association between the use of financial services and factors such as the viability of financial services and the relevance of financial services. Demogruc-Kunt et al. (2013) and (2018) also indicate that the financial institution which is conveniently accessible has greater chance to influence people to use that service. Additionally, financial services must be relevant to meet customers’ specific needs. The World Bank’s Findex survey (2017) indicated the direct link between the uptake and usage of financial services, accessibility of financial services, quality of financial services, and potential welfare. Mindra and Moya (2017) indicated a reciprocal relationship between accessibility, quality, and usage of financial services in Uganda. Bongomi et al. (2016) also reported a positive association between the access, quality, usage, and welfare of financial services in Uganda.

In Tanzania, the National Financial Inclusion Framework (2018-2022) emphasized improving the quality and accessibility of financial services to enhance their uptake and usage. In addition, relevancy and satisfaction are key indicators of value creation by financial services in Tanzania (NFIF, 2018-2022). From an Islamic finance perspective, Trianto et al. (2021) state that Islamic financial institutions need to invest in marketing and products offered to increase inclusiveness. Khamis et al. (2022) conceptualized a reciprocal relationship between accessibility, usage, quality, and customer satisfaction with Islamic finance in Zanzibar. However, empirical evidence of the relationship between access, quality, usage, and welfare has not been clearly stated by prior studies, especially in Islamic finance.

2.3 Research framework and hypothesis

Based on the literature on the relationship between accessibility, relevance, expected benefits/welfare, and usage of Islamic financial services (Demogruc-Kunt et al. (2013; Khamis et al. (2022). Thus, the present study assumed that there is direct relationship between accessibility, relevance, expected benefits and usage of Islamic financial services in Zanzibar. Accordingly, the research framework is developed (Figure 1).

Figure 1. Research framework
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2.4 Hypothesis

H1: accessibility will influence the usage of Islamic financial services in Zanzibar
H2: relevancy will influence the usage of Islamic financial services in Zanzibar
H3: expected benefits/welfare will influence the usage of Islamic financial services in Zanzibar

3. METHODOLOGY

3.1 The study design, target population, and the study area

This study adopted a quantitative research design to achieve its intended objectives. In this study, the survey method was used to collect responses from the target population. The target population included all Zanzibar residents aged 18 years and above. Approximately, Zanzibar’s population is 1.6 Million, of which 58% are adults aged 18 years and above. Therefore, the actual target population was approximately 928,000. The approximated population was used because there is no current population census. Population figure were collected from the OCGS websites (2020), Zanzibar. This study is based on Zanzibar, the potential Islamic finance market in Tanzania and East Africa. Zanzibar is a semi-autonomous nation in East Africa. It is part of the United Republic of Tanzania. Historically, Zanzibar has long been colonized by sultans from Oman, adopting most of its culture from Oman. Consequently, approximately 99% of the residents were Muslims. The approximated Zanzibar population is 1.6 million, of which the adult population makes 58% of the total population (OCGS-Zanzibar, 2019).

3.2 Type of data

This study was based on primary data collected using structured questionnaires. During the survey, 600 questionnaires were self-administered, and 597 respondents were able to complete the questionnaires, resulting in a response rate of approximately 99.5%. The final analysis was based on 400 questionnaires after considering missing responses and outliers.

3.3 Data collection process

Given the geographical length of the study area, a multistage sampling procedure was applied (Kothari and Garg, 2019). In the first stage, the geographical areas were stratified based on region, and all five regions were considered in the survey. In the second stage, the respective districts were selected from the respective regions; all ten districts were considered for the survey. In the third stage, wards/shehia were randomly selected from the respective districts, for which individuals were selected to fill out the questionnaires. The study applied a proportion of 1/5, that is, all wards were classified into groups of ten (10), and the fifth (5th) ward/shehia in each group of ten (10) was selected as a sample ward. In the fourth stage, the number of respondents in each ward was selected based on the proportion of the total sample size divided by the total target population in a respective ward. In the final stage, respondents were randomly selected from the sample ward/shehia for the questionnaire. The ward/shehia leaders provided guidelines to facilitate the distribution of questionnaires to respondents.

3.4 Measurement of variables

This study was designed to collect responses from people and determine the relationship between independent variables (accessibility, quality, and welfare) and dependent variables (usage) of Islamic financial services. These variables are continuous in nature; thus, a Likert scale of 5 points was used to rank respondent opinions about the accessibility, relevancy, and welfare of Islamic financial services in Zanzibar. The items used to measure the respective variables were adopted from Bongomin et al. (2016), Khamis et al. (2021), and Trianto et al. (2021). Table 1 presents the measurement indicators for the variables of the study.
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### Table 1. Measurement indicators

| Measurement items | 
|--------------------|
| **Accessibility** | 
| FI1 The Islamic financial Institutions are widely distributed in Zanzibar. | 
| FI2 The nearest Islamic bank is less than 5 Kilometre from my home. | 
| FI3 The nearest Islamic microfinance institution is less than 5 Kilometre from my home. | 
| FI4 The nearest Islamic Insurance institution is less than 5 Kilometre from my home. | 
| FI5 The nearest institution dealing with zakat/sadaqat/waqaf services is less than 5 Kilometre from my home. | 
| FI6 I live within less than 1 kilometer of Islamic financial institution’s service center/facilities such as ATM that I can easily access my account. | 
| FI7 It is easy to access the service offered by Islamic financial institutions due to the availability of on-line facilities. | 
| **Usage** | 
| FI8 I have used Islamic financial products and services for saving/payments/remittances. | 
| FI9 I have used Islamic financial products and services for financing/investment. | 
| FI10 I have used Islamic financial products and services for insurance/protecting against financial risk. | 
| **Relevancy** | 
| FI13 I can afford the initial fee of up to TZS 10,000 charged for opening an account by an Islamic financial institution. | 
| FI14 Products/services offered by Islamic financial institutions are safe for me. | 
| FI15 Islamic financial institutions have convenient operating hours. | 
| FI16 The loan products and services provided by Islamic financial institutions suit my needs. | 
| **Expected benefit/welfare** | 
| FI17 The products and services provided by Islamic financial institutions can improve my access to basic utilities/facilities. | 
| FI18 The products and services provided by Islamic financial institutions can improve my access to amenities. | 
| FI19 The products and services offered by Islamic financial institutions can improve my nutrition/health. | 

### 4. DATA ANALYSIS AND THE FINDINGS

The current study used descriptive statistics and structural equation modelling to achieve the stated objectives. Descriptive statistics were used for the respondents’ profiles, while PLS-SEM was used to determine the relationship between the independent variable (accessibility, quality, and welfare) and the dependent variable (Usage).

#### 4.1 Respondents’ profile

The descriptive statistics (Table 1) show that the male respondent rate is higher than the female respondent rate. In addition, the age groups 18 to 29 and 30 to 39 years have a higher respondent rate compared to other age groups, that is, 40 to 49, 50 to 59, and 60 and above. Respondents’ profiles also attained a sufficient level of education, ranging from ordinary certificate education (O level) to post-graduate degrees; few respondents indicated a lower level of education, that is, primary education or not attended school. In addition, the results indicate that most respondents receive a monthly salary of less than TZS 1000,000, whereas a small percentage of respondents receive a monthly income of TZS 1000,000 and above (Table 2). The results correspond with the survey by Finscope-Tanzania (2017), which found that males have a higher rate of access to financial services compared to females, and that most Zanzibar residents possess basic formal education. In addition, the study confirmed that many Zanzibar residents receive a low monthly income; however, most of them are able to read and write.

### Table 2. The respondents’ profiles

| Gender | Frequency | Percent |
|--------|-----------|---------|
| Male   | 215       | 53.8    |
| Female | 185       | 46.3    |

| Age   | Frequency | Percent |
|-------|-----------|---------|
| 18 to 29 years | 141 | 35.3 |
| 30 to 39 years | 103 | 25.8 |
| 40 to 49 years | 96 | 24.0 |
| 50 to 59 years | 49 | 12.3 |
| 60 and above | 11 | 2.8 |

| Monthly income | Frequency | Percent |
|----------------|-----------|---------|
| Less than TZS 300,000 | 187 | 46.8 |
| TZS 300,000 to 499,999 | 100 | 25.0 |
| TZS 500,000 to 999,999 | 62 | 15.5 |
| TZS 1000,000 to 1,999,999 | 21 | 5.3 |
| TZS 2000,000 to 2,999,999 | 11 | 2.8 |
| TZS 3000,000 to 4,999,999 | 10 | 2.5 |
| TZS 5,000,000 and above | 9 | 2.3 |

Note: Exchange rate TZS/US$ = 2340

| Level of education | Frequency | Percent |
|--------------------|-----------|---------|
| Not attended any school | 8 | 2.0 |
| Primary education | 19 | 4.8 |
| Ordinary secondary education | 92 | 23.0 |
| Advanced secondary education | 76 | 19.0 |
| Basic/technical certificate | 33 | 8.3 |
| Ordinary diploma | 88 | 22.0 |
| Bachelor Degree | 52 | 13.0 |
| Post Graduate | 32 | 8.0 |
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4.2 The descriptive statistics
The descriptive results (Table 3) presented the mean, standard deviation, maximum, and minimum to describe the summary of questionnaire responses in relation to the study variables.

Table 3. Descriptive Statistics

| Variable | N  | Minimum | Maximum | Mean   | Std. Deviation |
|----------|----|---------|---------|--------|----------------|
| Access   | 400| 1.00    | 5.00    | 2.8761 | .94550         |
| Usage    | 400| 1.00    | 5.00    | 2.9250 | 1.06849        |
| Relevance| 400| 1.00    | 5.00    | 2.7467 | 1.07618        |
| Welfare  | 400| 1.00    | 5.00    | 3.5283 | 1.00640        |

The results (Table 3) revealed moderate responses for accessibility (M=2.876, SD = 0.945), usage (M=2.925, SD = 1.068), and relevance (M=2.746, SD = 1.076). These results show that many respondents have used Islamic financial services to make transactions, including saving and remittances. In addition, the results revealed that many respondents considered Islamic financial services to be easily accessible and relevant. Welfare was ranked highest among the variables (M=3.528, SD = 1.00), indicating that respondents considered Islamic financial services to meet their welfare needs. However, some respondents consider Islamic financial services as not easily accessible, not relevant, and not beneficial; as a result, their use of Islamic financial services is low. Generally, the descriptive results indicate variations in responses from respondents, which indicates that the respondents have clearly understood the questionnaires and answered them freely and honestly.

4.3 The analysis of smart PLS-SEM results
4.3.1 The evaluation of measurement model
The measurement model for this study consisted of four variables: three independent variables (accessibility (access), relevance, and perceived benefits) and one dependent variable (Usage). This section presents the reliability and validity of the measurement and the latent variables in the model. Indicator reliability is presented in Table 4, which shows the indicator loadings for each variable. All indicators with loading values above 0.6 were considered relevant, taking into consideration their effect on other validity measures, such as composite reliability and discriminant reliability (Hair et al., 2021; Wong, 2019). Accessibility is measured using seven indicators, expected benefits using three indicators, relevancy using four indicators, and usage using three indicators. The loadings of all the indicators were substantial.

Table 4. Reliability and validity measures

| Variable            | Loadings | Cronbach’s Alpha | rho_A | Composite Reliability | AVE   |
|---------------------|----------|------------------|-------|-----------------------|-------|
| Access              | 0.608    | 0.838            | 0.845 | 0.878                 | 0.508 |
| Perceived benefits  |          |                  |       |                       |       |
| FI1                 | 0.827    | 0.769            | 0.773 | 0.866                 | 0.683 |
| FI18                | 0.847    |                  |       |                       |       |
| FI19                | 0.804    |                  |       |                       |       |
| Relevancy           | 0.728    | 0.758            | 0.771 | 0.845                 | 0.578 |
| FI13                | 0.737    |                  |       |                       |       |
| FI15                | 0.773    |                  |       |                       |       |
| FI16                | 0.800    |                  |       |                       |       |
| Usage               | 0.817    | 0.760            | 0.761 | 0.862                 | 0.676 |
| FI10                | 0.789    |                  |       |                       |       |
| FI9                 | 0.860    |                  |       |                       |       |
The internal consistency and reliability of measurement variables is measured using three indexes: composite reliability, Cronbach’s Alpha, and “rho_A.” The values range between 0.1; whereby the higher value close to 1 is preferred. Specifically, acceptable values for composite reliability, Cronbach’s Alpha, and “rho_A” is between 0.5 to 0.95; the value below 0.5 or above 0.95 is suspicious (Hair et al., 2018; Hair et al., 2021). In this study, the results (Table 1) for the measurement index of Cronbach’s alpha, composite reliability, and rho_A were above 0.5. Thus, internal consistency is substantial, and the measurement constructs are statistically reliable.

Convergent validity
Convergent validity is measured using average variance extracted (AVE) in smart PLS. The convergent validity for all variables in the study is above the threshold value of 0.5 (Hair et al., 2021). Therefore, the results confirmed the existence of convergence between the variables (Table 1).

Discriminant validity
Discriminant validity is determined by the Fornell-Lurker metric, which represents the comparison between the square root of AVE and the correlations of each variable with the corresponding variables. According to Fornell and Lurker (1981), the square root of AVE for each variable should be greater than the correlation between the corresponding variables in the model. The results indicate that the square root of AVE for all variables is greater than the correlations with the other variables in the model (Table 5). Based on the Fornell-Lurker metric, discriminant validity is well established between the variables (Table 5).

In addition to the Fornell and Lurker metric, the Heterotrait-monotrait ratio (HTMT) is another method used to determine the discriminant validity of the variables in the model. It is suggested that an HTMT lower than 0.85 or 0.90 is better for the structural model (Hair et al., 2021). Based on the results, the HTMT also confirmed that the discriminant between the variables was established (Table 5).

The Evaluation of structural model

Collinearity diagnostics
In Smart PLS studies, the variance inflation factor (VIF) is commonly used to determine whether multicollinearity exists. Accordingly, a VIF value below 5 indicates the absence of collinearity. In a more vigilant manner, a VIF value of 3 or lower is recommended (Hair et al., 2018; Wong, 2019). Accordingly, the results confirm the existence of collinearity issues between the variables. Based on the results (Table 6), the VIF values for all the variables were below the threshold of 3.

Table 6. Collinearity diagnostics – inner models’ VIF values

| Variables     | Usage |
|---------------|-------|
| Access        | 1.085 |
| Perceived benefits | 1.630 |
| Relevancy     | 1.645 |
4.3.2.2 In sample predictive capacity (R²)
The R² value measures the in-sample explanatory capacity of the independent variables to the dependent variable in the model (Hair et al., 2021). The R² values ranged from 0 to 1; the higher the value, the better. The explanatory power of the variables' cons was considered substantial, moderate, or weak, depending on the R² value. Conventional scholars considered the R² values between 0.26 to 0.67 as substantial; R² values between 0.13 and 0.33 as moderate; and R² values between 0.02 and 0.19 as weak (Cohen, 1988; Chin, 1998). An R² value of 0.10 is regarded as sufficient (Falk & Miller, 1992). Most recently, studies suggest that the R² value of 0.75 is substantial; the R² value of 0.5 is moderate, and the R² value of 0.25 is weak (Hair et al., 2018). However, it should be noted that the value of R² is affected by the number of rows pointing to the independent variables. Hence, the analysis should be conducted carefully, and most importantly, the interpretation of R² should refer to prior similar studies to determine the predictive strength of the model (Hair et al., 2021). In the current study, the R² value was 0.364, indicating a moderate predictive capacity. Despite the shortage of studies in this domain, similar studies, such as Mindra and Mmoya (2017) and Bongomin et al. (2016), found R² value between 0.25 to 0.75 respectively. Therefore, the results confirmed that the model had a sufficient predictive power.

4.3.2.3 Out-of-sample predictive power (k-fold cross-validation)
The “k-fold cross-validation” (holdout sample) was also performed to determine the out-of-sample predictive capacity of the model (Shmueli et al., 2019). The “k-fold cross-validation involves the comparison of naïve (LM’s RMES or MAE) with PLS’s RMSE or MAE.

Table 7. Out-of-sample predictive power

| Indicators | PLS’s RMSE | LM’s RMSE | PLS - LM | Q²_predit |
|------------|------------|-----------|---------|-----------|
| FI10       | 1.138      | 1.121     | 0.016   | 0.254     |
| FI8        | 1.150      | 1.168     | -0.018  | 0.205     |
| FI9        | 1.125      | 1.140     | -0.015  | 0.230     |

According to Shmueli et al. (2019), a higher predictive power is expected if the PLS’s RMSE or MAE is lower than the LM’s RMSE or MAE for the majority of indicators in the key variable (dependent variable). Based on the results, the model has moderate out-of-sample predictive power (Table 7); the majority (2 out of 3) of the dependent variable indicators have PLS’s RMSE values lower than LM’s RMSE. In addition, Q²_predit for all three indicators was greater than zero.

4.3.2.4 The predictive relevancy (Q²)
To confirm the predictive accuracy of the model, Q² was set greater than 0. Accordingly, a Q² value up to 0.25 indicate medium predictive accuracy; a Q² value of 0.5, or higher, indicates a higher predictive relevancy; and a Q² value below 0.25 indicate a low predictive relevancy of the model (Hair et al., 2018). Accordingly, the results of the study revealed sufficient predictive accuracy of the model; Q² was 0.243 (Table 8).

Table 8. Constructs’ cross-validated redundancy measures (Q²)

|             | SSO | SSE  | Q² (=1-SSE/SSO) |
|-------------|-----|------|-----------------|
| Usage       | 1200.000 | 908.053 | 0.243 |
| Access      | 2800.000 | 2800.000 | |
| Perceived benefits | 1200.000 | 1200.000 | |
| Relevancy   | 1600.000 | 1600.000 | |

4.3.2.5 Analysis of path coefficients
The path coefficients resulting from smart PLS –SEM are presented in Table 9 and Figure 2.

Table 9. Path coefficients

|                      | β    | T Statistics (|O/STDEV|) | P Values |
|----------------------|------|----------------|----------|
| Access -> usage      | 0.376 | 8.1128         | 0.000    |
| Expected benefits-> usage | 0.206 | 4.019          | 0.000    |
| Relevancy -> usage   | 0.220 | 4.102          | 0.000    |
The results indicate a significant relationship between access to and usage of Islamic financial services ($\beta = 0.376$, $P < 0.001$). Thus, the results support hypothesis H1: there is a significant positive relationship between accessibility and usage of Islamic financial services in Zanzibar. Similarly, the study revealed a significant relationship between the expected benefits and usage ($\beta = 0.206$, $P < 0.001$). Therefore, the results support hypothesis H2: there is a significant positive relationship between expected benefits and usage of Islamic financial services in Zanzibar. The results also showed a significant relationship between relevance and usage ($\beta = 0.220$, $P<0.001$). Accordingly, the results support hypothesis H3: there is a significant positive relationship between relevancy and usage of Islamic financial services in Zanzibar.

The structural model of the relationship between the variables (Figure 2)

![Figure 2. Structural model of the study](image)

4.3.2.6 The effect size ($f^2$) of predictor variables

According to Hair et al. (2021), a researcher is required to discuss the effect size of the predictor variables, in addition to the significance of the path coefficient. The effect size indicates the changes in $R^2$ when the variable is included or excluded from the structural model. Commonly, Cohen’s (1988) criteria are used to rank the effect sizes of the predictor variables; whereby, 0.02, 0.15, 0.35 are considered small, medium, and large, respectively. Any $f^2$ value below 0.02 entails that the variable does not have sufficient effect on the predictor variable at the 5% significance level. The effect sizes for the three variables (access, perceived benefits, and relevance) are listed in Table 10.

| Predictor variables | $f^2$ | Remark |
|---------------------|-------|--------|
| Access              | 0.207 | Medium |
| Perceived benefits  | 0.041 | Small  |
| Relevancy           | 0.047 | Small  |

Based on the results (Table 10), access has a medium ($f^2 = 0.207$) effect size on usage, whereas expected benefits and relevancy have small effect sizes ($f^2 = 0.041$ and 0.047, respectively). By considering Cohen’s (1988) criteria, the predictor variables had a substitution effect on the dependent variable (usage). Therefore, the path coefficient results were considerable.

5. DISCUSSION OF THE FINDINGS AND RECOMMENDATIONS

The results revealed a significant relationship between accessibility, relevance, perceived benefit, and usage of Islamic financial services in Zanzibar. This study supports a prior study by Khamis and Rashid (2018), which revealed the significant effect of perceived service quality on customer satisfaction with Islamic banking in Zanzibar. Specifically, Khamis and Rashid (2018) found that customers were more attracted by compliance with Islamic principles, the reliability of Islamic banks’ financial services, and Islamic banks’ physical assets. Based on the current findings, the accessibility of Islamic financial services is the most influential factor in their usage of Islamic financial services. The accessibility of Islamic financial institutions is defined by the nearness of service centres and easily available facilities, including ATM machines, agents, and mobile network banking services. The results imply that with the improvement in accessibility by 1, the usage of Islamic financial services will significantly increase by 0.375. Consequently, the wide distribution of Islamic financial networks, branches, and service centres has a significant impact on the
usage of Islamic financial services in Zanzibar, among others. This study suggests that it is crucial to increase the physical distribution of branches, service centres, and ATMs, as well as enhance mobile and network financial services, in order to enhance the usage of Islamic financial services.

Further, the results show a significant relationship between the perceived benefits of Islamic financial services and their usage. A significant positive effect means that if people consider Islamic finance to be beneficial, the usage of Islamic financial services will increase. These results affirm that people decide to use Islamic financial services if they consider them beneficial to their daily life. Like any other form of financial service, people expect Islamic financial services to facilitate access to amenities, utilities, and health services. Accordingly, the availability of Islamic insurance services, modern bank remittance and payment systems, as well as financing products that can facilitate the acquisition of basic facilities, including houses and transport, can increase the probability of customers using Islamic financial services. Therefore, expanding the range of products and services is an important step toward attracting people to use Islamic financial services in Zanzibar.

Moreover, the study demonstrated a significant relationship between relevance (quality) and the usage of Islamic financial services in Zanzibar. The findings infer that when people consider Islamic finance to be relevant, they can opt to use Islamic financial services. Obviously, people’s use of Islamic finance is driven by the quality of customer services, affordability of financial services, and convenience of operation. In addition, the quality of Islamic financial services is determined by compliance with Islamic principles, suiting customer needs, and the safety of customer deposits and information. The significant positive effect of relevancy on usage indicates that when relevance increases by 1, the usage of Islamic financial services could increase by 0.22. This means that relevancy explained approximately 22% of the variance in the usage of Islamic financial services in Zanzibar. Hence, to attract more customers, Islamic financial institutions should focus on designing products or services that meet customers’ needs. Sharia compliance and the pricing (profit rates) of financing (loan) products should be considered.

Islamic financial institutions should consider compliance with Islamic principles, service charges, profit rates, and the convenience of operating hours (Khamis & Rashid, 2018). To achieve this, a comprehensive marketing analysis is required before designing and launching new products. Based on these findings, we suggest that mainstream products designed in different environments from Zanzibar are not satisfactory. Islamic financial institutions should be creative in designing and offering products that align with the needs and economic conditions of the Zanzibar residents. Marketing analysis, among others, should identify the economic profiles of different classes of people. This will help understand the nature of the products to offer and plan for target customers.

The findings of this study support the argument that the accessibility and relevance of Islamic financial services are among the important drivers of their uptake and usage of financial services in Zanzibar (FinScope-Tanzania, 2017). Additionally, the results support the general observation that the use of financial services depends significantly on accessibility, relevancy, and potential benefits to customers. The FinScope survey (2017) showed that people tend to avoid using financial services because they feel that they are far from their homes. In addition, some people avoid using financial services because they consider them irrelevant in terms of cost, security, convenience, religious concerns, etc. (Demirguc-Kunt et al., 2018). In addition, Mindra and Moya (2017) and Bongomin et al. (2016) reveal a positive connection between access, quality, welfare, and usage of financial services as important components of financial inclusion.

A high usage rate of financial services is expected when they are easily accessible (Arora, 2010; Goel & Sharma, 2017; Sarma & Pais, 2011). However, most Islamic financial products are considered costly by lower-income individuals; hence, they are not involved (Naceur, Barajas, & Massara 2015; Soud & Saylr, 2017). Indeed, people struggle to differentiate Islamic banking services from conventional banking services from an economic perspective, especially in countries dominated by conventional financial systems. For example, in Zanzibar, many people failed to find any economic difference that could encourage them to shift from conventional to Islamic banking systems. Unsurprisingly, these people consider conventional banking services more flexible and relevant for economic purposes. For example, conventional banks in Zanzibar charge interest rates between 12% and 14% (compounded annually) for consumer loans, which is similar to Islamic banking services. Importantly, a conventional bank’s customer is able to receive cash so that he can freely engage in any transaction he wishes, while Islamic banks do not provide cash due to fear of losing profit from Qard Hasan loan. Instead, Islamic banks encourage the use of trade-based financing modes such as Murabaha, mutawamah, Bai-al-mu‘ajjal, and ijarah. Therefore, it is obvious that people are more likely to select conventional banks over Islamic banks when this factor is considered. Thus, in areas where dual banking operates and religiosity is not a major concern in choosing financial services (such as Tanzania), the true success of Islamic finance is difficult to achieve. Islamic financial institutions are recommended to operationally differentiate themselves from their conventional counterparts by being creative enough to align themselves with the social and economic environments of Zanzibar (Issa, 2018). This can help the Islamic finance industry achieve true development.
6. CONCLUSION AND AREA FOR FURTHER STUDIES

This study examined the influence of accessibility, relevance, and perceived benefits on the use of Islamic financial services in Zanzibar. The results are based on primary data collected from 400 residents across all five (5) regions of Zanzibar. Using a multiple-stage sampling procedure, sample wards/Shehias were selected, and the questionnaires were randomly distributed to residents of the respective wards/Shehia in the respective districts of the region. Smart-PLS (3)-SEM was applied to evaluate the measurement and structural models and determine the effects of access, relevancy, and expected benefits on the usage of Islamic financial services. The study was motivated by financial inclusion theory, which emphasizes accessibility, relevancy, and efficiency to encourage the use of financial services (Ozili, 2020). Additionally, this study is motivated by the growing trend of financial institutions offering Islamic financial services in Zanzibar. The findings of the study confirmed that all three predictor variables (access, relevancy, and perceived benefits) are significant and play an important role in the use of Islamic financial services in Zanzibar. Based on the findings, the more branches, services centres, and agents who are equipped with quality customers’ services and the intention to help people are important drivers of the usage of Islamic financial services in Zanzibar. The current findings are important to practitioners, researchers, and policymakers involved in planning, directing, and researching Islamic financial services. The findings suggest that enhancing accessibility to Islamic financial services should be in line with improving the quality of services to meet customers’ expectations. In addition, involvement in corporate social responsibility may add more value to Islamic financial institutions, thereby creating positive attitudes among people about Islamic financial services.

Despite its contribution to the literature, the current study is not without limitations. This study is limited to the supply-side determinants of the use of Islamic financial services. Besides, the study was limited to Zanzibar environment, where many residents are Muslims, and Islamic finance is at growing stage. Future studies should broaden the knowledge by examining the nexus between usage of Islamic finance and other factors including demand-side factors.

REFERENCES

1) Amana Bank. (2022, 7 7). Home: Amana Bank. Retrieved from Amana Bank Web site: http://www.amanabank.co.tz
2) Amidičić, G., Massara, A., & Mialou, A. (2014). Assessing Countries’ Financial Inclusion Standing—A New Composite Index. International Monetary Fund: Working Paper (WP/14/36).
3) Arora, R. U. (2010). Measuring Financial Access. Gold Coast, 4222, Australia: Griffith University: Discussion Papers economics, No. 2010-07.
4) Bongomin, G. O., Ntayi, J. M., & Munene, J. (2016). Institutional frames for financial inclusion of poor households in Sub-Saharan Africa: Evidence from rural Uganda. International Journal of Social Economics, Vol. 43 No. 11, 1096-1114.
5) Bongomin, G. O., Ntayi, J. M., & Munene, J. C. (2017). Institutional framing and financial inclusion: Testing the mediating effect of financial literacy using SEM bootstrap approach. International Journal of Social Economics, Vol. 44, No. 12, 1727-1744.
6) Centre for Financial Inclusion. (2013). Enabling Financial Capability Along the Road to Financial Inclusion. 1101 15th Street NW, Suite 400, Washington, DC 20005 USA: Financial Inclusion 2020 Financial Capability Working Group.
7) Chin, W. W. (1998). The partial least squares approach to structural equation modeling in. Modern Methods for Business Research, Vol. 295, 295-336.
8) Cohen, J. (1988). Statistical Power Analysis for the Behavioral Sciences (2nd ed.). New York: Lawrence Erlbaum Associates.
9) Demirguc-Kunt, A., & Klapper, L. (2012). Measuring Financial Inclusion: The Global Findex Database. http://econ.worldbank.org: The World Bank Development Research Group Finance and Private Sector Development Team: Policy Research Working Paper 6025.
10) Demirguc-Kunt, A., Klapper, L., & Randall, D. (2013). Islamic Finance and Financial Inclusion: Measuring Use of and Demand for Formal Financial Services among Muslim Adults. The World Bank Development Research Group Finance and Private Sector Development Team: Policy Research Working Paper 6642.
11) Demircigü-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2018). Measuring Financial Inclusion and the Fintech Revolution: Overview. 1818 H Street NW, Washington, DC 20433: International Bank for Reconstruction and Development/The World Bank.
12) Ernest & Young. (2017). Innovation in financial inclusion: Revenue growth through innovative inclusion. United Kingdom (UK): Ernst & Young Global Limited.
13) Falk, R. F., & Miller, N. B. (1992). A Primer for Soft Modeling. University of Akron Press.
14) FinScope. (2017). FinScope Tanzania: Insights that drive innovation. Dar-es-Salaam: FinScope Tanzania and Financial Sector Deepening Trust (FSDT).
The Usage of Islamic Financial Services in Zanzibar: The Influence of Accessibility, Relevancy and Expected Benefits

15) Fornell, C., & Larcker, D. F. (1981). Structural Equation Models with Unobservable Variables and Measurement Error: Algebra and Statistics. Journal of Marketing Research, 18 (3), 82–388.

16) Goel, S., & Sharma, R. (2017). Developing a Financial Inclusion Index for India. Procedia Computer Science, Vol. 122, 949–956.

17) Hair, J. F., Hult, G. T., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R. Gewerbestrasse 11, 6330 Cham, Switzerland: Springer Nature Switzerland AG.

18) Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2018). When to use and how to report the results of PLS-SEM. European Business Review, https://doi.org/10.1108/EBR-11-2018-0203.

19) Hassan, M. K., Hossain, S., & Unsal, O. (2018). Religious Preference And Financial Inclusion: The Case For Islamic Finance. In Management of Islamic Finance: Principle, Practice, and Performance: International Finance Review, Vol. 19: Published online: 06 Nov 2018;, 93–111.

20) Issa, M. (2018, April 17 and 18). Islamic Finance in Tanzania: Success or Failure. A paper presented at the fifth African Islamic Finance Summit . Dar-es-Salaam, Hayat Regency Hotel, Dar es salaam, Tanzania: The fifth African Islamic Finance Summit .

21) Jouti, A. T. (2018). Islamic finance: financial inclusion or migration? ISRA International Journal of Islamic Finance, Vol. 10, No. 2, 277-288.

22) Khamis, F. M., & AbRashid, R. (2018). Service quality and customer’s satisfaction in Tanzania’s Islamic banks: A case study at People’s Bank of Zanzibar (PBZ). Journal of Islamic Marketing, Vol. 9, No. 4, 884-900.

23) Khamis, F. M., Isa, M. Y., & Yusuff, N. (2021). Constructing Indicators For Islamic Financial Inclusion. International Journal of Islamic Economics Vol. 3, No.2, 101-124.

24) Mindra, R., & Moya, M. (2017). Financial self-efficacy: a mediator in advancing financial inclusion. Equality, Diversity and Inclusion: An International Journal, Vol. 36 No. 2, 128-149.

25) Mustafaa, D., Baita, A. J., & Usman, A. Y. (2018). Impact Analysis Of Islamic Finance On Financial Inclusion And Economic Growth In Selected Muslim Countries:Lessons For Nigeria. International Journal of Economics, Management and Accounting 26, No. 2, 393-414.

26) Mzee, M. M. (2016). The Legislative Challenges of Islamic Banking in Tanzania. Journal of Law, Policy and Globalization, Vol.45, 131-137.

27) Naceur, S. B., Barajas, A., & Massara, A. (2015). Can Islamic Banking Increase Financial Inclusion? IMF Working Paper:International Monetary Fund, WP/15/31.

28) Nawaz, T. (2018). Lifting the Lid on Financial Inclusion: Evidence from Emerging Economies. International Journal of Financial Studies, Vol.6, No.59, 1-8.

29) NFIF. (2018-2022). National Financial Inclusion Framework (NFIF), 2018 - 2022:Tanzania at a Glance. Dar-es-salaam: National Financial Inclusion Council.

30) OCGS-Zanzibar. (2019). Zanzibar Statistical Abstract . Zanzibar: Office of Chief Goverment Statistician .

31) Omar, H. H., Yusoff, M. E., & Sendaro, A. A. (2017). Regulatory Framework For Islamic Banking In Tanzania. Jurnal Kemanusiaan Vol. 26, No. 1, 32-41.

32) Ozili, P. K. (2020). Theories of financial inclusion . Munich Personal RePEc Archieve (MPRA), http://mpra.ub.uni-muenchen.de/101810/.

33) PBZbank. (2022, July 7). Home: PBZ bank. Retrieved from PBZ Bank LTD. Web site: http://www.pbzbank.co.tz

34) Rani, P. (2014). Factors influencing consumer behaviour. International Journal of Current Researches and Academic Review, Vol.2, No.9, 52-61.

35) Razak, A. A., Muhammad, F., Hussin, M. Y., Zainol, Z., & Hadi, F. S. (2017). The Role of Ar-Rahn in Enhancing Financial Inclusion: A Structural Equation Modeling Approach. Jurnal Pengurusan, Vol.50, 97 – 109.

36) Salim, K. A. (2012, March 14). Islamic Banking in Tanzania: Hopes and Challenges. Retrieved from Islamic banking and Islamic Insurance: http://khalfanabdallah.blogspot.com/2012/03/islamic-banking-in-tanzania-hopes-and-challenges.html

37) Sarma, M. (2008). Index of Financial Inclusion. New Delhi: Working Paper, No.215, Indian Council for Research on International Economic Relations (ICRIER).

38) Sarma, M., & Pais, J. (2011). Financial Inclusion and Development. Journal of International Development, Vol.23, 613–628.

39) Shkeily, H. M., & Abdullah, N. (2021). Examining the nexus between Riba and Gharar and Islamic banking products among Zanzibar People. Sumerianz Journal of Business and Marketing, Vol.4 (1), 27-34.
The Usage of Islamic Financial Services in Zanzibar: The Influence of Accessibility, Relevancy and Expected Benefits

40) Shmueli, G., Sarstedt, M., Hair, J. F., Cheah, J.-H., Ting, H., Vaithilingam, S., & Ringle, C. M. (2019). Predictive model assessment in PLS-SEM: guidelines for using PLSpredict. European Journal of Marketing, https://doi.org/10.1108/EJM-02-2019-0189.

41) Soud, N. S., & Sayılır, Ö. (2017). Perceptions of Islamic Banking Among Muslim and Non-Muslim Citizens in Tanzania. International Journal of Islamic Economics and Finance Studies, Vol. 3, No. 3, 15-29.

42) The World Bank. (2018, 12 23). Financial inclusion. Retrieved from The World Bank: http://www.worldbank.org/en/topic/financialinclusion

43) Trianto, B., Rahmayati, Yulliaty, T., & Sabiu, T. T. (2021). Determinant factor of Islamic financial inclusiveness at MSMEs: Evidence from Pekanbaru, Indonesia. Jurnal Ekonomi dan Keuangan Islam, Vol. 7 No. 2, 105-122.

44) Wong, K. K.-K. (2019). Mastering Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS in 38 Hours. 1663 Liberty Drive Bloomington, IN 47403: iUniverse.

45) Zulkhibri, M. (2016). Financial inclusion, financial inclusion policy and Islamic finance. Macroeconomics and Finance in Emerging Market Economies, DOI:10.1080/17520843.2016.1173716.

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