

# Fortifying Cash Waqf for SDG 2 attainment: Inquiry into Philanthropic Intention of the Nigerian Muslim Community

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**Abstract:** This study explores the potential of cash waqf (charitable endowments) in achieving Sustainable Development Goal 2 (Zero Hunger) in Nigeria through digitalization. By surveying and interviewing Nigerian Muslims, we investigate the philanthropic intentions and preferences of the community towards cash waqf, and assess the willingness to adopt digital platforms for waqf management and distribution. A questionnaire structured to nine sections comprising ‘demographics profile’, ‘performance expectancy’, ‘effort expectancy’, ‘social influence’, ‘perceived ihsān’, ‘trust’, ‘behavioral intention’, and ‘use behavior’ related to digital waqf usage. In this quantitative research, data was collected through questionnaires that shows Expectancy PE, EE, SI and PI have positive and significant effect on BI since the p-value are below 0.5 for HO1, HO2, HO3 and HO4. This provides the basis for rejecting the hypothesized relationships. In addition, FC, TR and BI have positive and significant effect on UB. In summary, BI is having positive and significant mediation effect between PE, EE, SI and PI on BI, while FC and TR have direct positive and significant effect on UB, hence signifying the basis for rejecting all the null hypothesis of the study. The coefficient of determination or assessment of R-square level was assessed in order to evaluate the amount of variance explained by the exogenous variables on the endogenous variable Our findings suggest a strong desire to utilize cash waqf for sustainable development, particularly in addressing food security and poverty. We propose a digital framework for cash waqf management, harnessing fintech and blockchain technology to enhance transparency, efficiency, and impact. This research aims to contribute to the development of innovative, community-driven solutions for achieving SDG 2 in Nigeria, and shed light on the role of faith-based initiatives in promoting sustainable.

**Keywords:** Waqf, Digitilisation, Muslims, Sustainable Development, Nigeria

**JEL Classification:** O55, Z12, D64, Q01

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## 1. Introduction

From the emergence of Islam, Islamic charitable activities have expanded worldwide alongside the growth of Islam. One notable charitable institution is waqf, which plays a key role in financing

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advanced community development projects and has the capacity to address various contemporary issues like poverty, environment sustainability and equality. In the past, waqf organization played a substantial role in influencing the economies of numerous nations and showcased a noteworthy legacy of Islamic charitable giving, up until the late 19<sup>th</sup> century. Abubakar (2019) opined that, the concept of philanthropy was not commonly used in the early days of Islam. Nonetheless, when seen from conventional standpoint, the term philanthropy carries a distinct connotation compared to the Islamic tradition.

Although there was a period when the growth of waqf became dormant during modern times, both in terms of concept and practice, in the recent years, waqf has been identified as an instrument that can empower the ummah (community), in nations where Muslims make up the majority of the population as well as in countries where Muslims are in the minority. Numerous countries with a Muslim majority and those with a Muslims minority population have embarked towards a mission to either revive or introduce waqf.

As stated by Abubakar (2019), shortly after Nigeria's return to democratic rule on May 29, 1999, it witnessed the revitalization of sustained advocacy for a revival conscious implementation of Shariah in numerous states in Northern Nigeria. In this sense, twelve states: Bauchi, Borno, Gombe, Jigawa, Kaduna, Kano, Katsina, Kebbi, Niger, Sokoto, Yobe, and Zamfara all adopted the Shariah legal system and established various essential components such as Shariah commissions, Da'awah committees, Hisbah groups as well as zakat and waqf bodies.

Whilst growth of Islamic finance industry in Nigeria in other dimensions was evident not just in its market volume but in product development as well, the industry grapples with numbers of challenges. Further to this is the sustained criticism trailing policies and conduct of the industry as highlighted by academic scholars. Thus, the importance of Waqf as a social finance arrangement to supplement it becomes handy. A significant milestone was achieved with the establishment of Association of Zakah and Waqf Operators of Nigeria (AZAWON) as an umbrella body comprising several Zakah and Waqf operators across the country.

Significant numbers of excluded poor members of Muslim communities do not access finance. Thus, Elgari (2004) mooted the idea of incorporating Waqf to provide a source of financing for the poor who are restricted from accessing external finance, Elgari (2004) proposed an idea to incorporate waqf into the concept of qard hasan (interest-free loan). In this context, he recommended establishing a non-profit financial intermediary in the form of a qard hasan bank. The capital injection of the bank would come from the monetary (cash) waqf donated by Muslims while the bank would provide qard hasan as a form of financing for the poor.

Despite Nigeria being the largest Muslim population in sub-Saharan Africa, tapping into Islamic social financing vehicles (Cash Waqf in this context) to energize youth skills-building, enterprise promotion, and employment creation through agriculture remains an underutilized pathway (National Bureau of Statistics, 2021). This highlights a noteworthy gap in scholarship on youth unemployment interventions tailored to meet Nigeria's demand for increased food production as a necessary employment strategy to mitigate its rising food inflation in recent years and stem the tide of hunger which SDG 2 seeks to achieve. The instrument could provide opportunities for accelerated agriculture development aimed towards fighting hunger.

Digitally enabled cash Waqf refers to the integration of digital technologies and cash Waqf (an

Islamic endowment or charitable trust) to enhance the efficiency, transparency, and reach of charitable donations. In traditional cash Waqf, donations are made in cash, and the funds are managed and distributed by a Waqf administrator. Digitally enabled cash Waqf leverages digital platforms, block chain, and other technologies to ease donations through online portals and mobile apps, increase transparency through block chain technology which ensures traceability and accountability of funds, expand reach that enables global donations and impact.

By embracing digital technologies, cash Waqf can become more efficient, inclusive, and effective in promoting social welfare and community development. Aligned to this, development in information and communication technology (ICT) has extensively impacted the financial services now known as 'FinTech'. Yoshida (2019) mentioned that money, being a conceptual entity, has no intrinsic value in notes and coins under the fiat money system. This characteristic makes financial services compatible with ICT, which handles data processing, leading to potentially limitless forms of financial services in the future. In this context, the concept of Fin-tech enable cash waqf has emerged, and shows the sign of further growth. In Nigeria, several FinTech firms and payment solutions exist offering variety of services that waqf donors can utilize the opportunities offered by the institutions.

Zooming onto a country like Nigeria, waqf is an Islamic tool which has the potential of eradicating poverty and improving the socio-economic state of both the Muslim and broader non-Muslim communities. The global community had on various occasions proposed and implemented wide ranging policies and programs that seek to bring about change in the deplorable conditions of human living around the world. Thus, the continuous urge for reconsideration of the status quo resulted in the enactment of the 17 Sustainable Development Goals SDGs initiative by the United Nations UN in September 2015, which succeeded the failed Millennium Development Goals MDGs. The clear resolve of the Heads of States and Governments as well as high representatives then were stated to include ending poverty and hunger, building peaceful, just and equitable societies among other several goals. SDG 2 focusses in ending hunger and achieving food security and improved nutrition and promoting sustainable agriculture

During the first decade after independence, Nigerian economy was dominated by agriculture which provided the government with substantial foreign exchange and revenue (Ogen, 2003) and agriculture contributed more than 60% of the GDP in 1960s (Lawal, 1997). Oil production in commercial quantities began in early 1970s in Nigeria which marked the beginning of decline in contribution of agriculture to national wealth and setting in of rural-urban migration which meant abandonment of rural wealth creation through agriculture.

In Nigeria and elsewhere, agricultural products serve as both consumption items for human beings and animals and for industrial use. No individual or country can claim immunity from the dangers of hunger. In this sense therefore, concerted efforts are necessary to put in place carefully arranged and well-coordinated mechanisms of sustainable development of agricultural production for income generation and wealth creation through efficient and effective financing, which if successfully operated will significantly tackle the scourge of a ravaging poverty especially among rural farming communities in Nigeria and Northern Nigeria in particular.

Nigeria is blessed with immense natural assets for agricultural activities with its abundant land and human resources. While the population continues to grow, the agricultural resources continue to remain underutilized. According to estimates, Nigeria has a total land mass of 924 000 km<sup>2</sup> area

(Azih, 2008). Out of this, about 74 million hectares is good for farming and mostly located in rural communities, but less than half of the available land is being utilized. Furthermore, farming population is 60-70%, while 70% of the population live on less than N100 (US 0.7) per day while food import bill is significant. Nigeria comprises 36 states and a federal capital territory, with 19 states and the federal capital territory located in the Northern region of the country. Stephen (1980) identifies five major agricultural zones in Nigeria.

This study thus focuses on examining the philanthropic intention of Nigerian Muslim communities to utilize digitization enabled cash Waqf towards attaining SDG 2 in Nigeria, by exploring the dimensions of trust in waqf institutions and perception of *iḥsān* (altruism) in influencing donors' intention to make waqf donations.

## **2. Literature Review**

An increasing number of Islamic banks and other Islamic financial institutions are indicating growth in the Islamic finance in the country. This is supported by an increase in the number of zakat and waqf organizations, thus signaling growth in Islamic Social Finance sector. AZAWON was formed in 2014 to advocate, sensitize and educate members of the public as well as improve the management of zakat, waqf and sadaqat to the best practices. Ten years after its formation, the increasing activities of the association are not only sign of its growth and maturity but for Islamic Social Finance in the country. Though some of these indicators show that the association is on course, however, there is need to do more in the area especially with the increasing level of poverty and social unrest. Some of the achievements of the association include but not limited to institutionalization of zakat in some emirates and States, advocacy visits, annual conferences, quarterly awareness creation seminar, local and international recognitions and partnerships, involvements of youths; regular monthly Newsletters, curriculum development on zakat and series of print and online media publications among others. With the vast potentials in the sector, other stakeholders in the Islamic social finance sector in particular and Islamic finance in general may need to join hands to support the increasing activities so as to deliver excellent programs and interventions to the member organizations, poor and less privileges and zakat payers and waqf donors respectively.

Zakat and waqf organizations are increasing in various part of the country. Expectedly, the Association of Zakat and Waqf Operators in Nigeria is being recognized and approached by the day for membership. The essence of the association is to, among others promote best practices and reposition zakat and waqf to harness them for socio-economic development in the society. With the rising unemployment, inflation and poverty, zakat and waqf could serve as effective instruments in mitigating their effects. This will go a long way in ensuring the better outcome. The increasing conferences both online and offline facilitates many interested parties to set up zakat and/waqf organizations.

### **Agriculture In Nigeria**

Developing countries including Nigeria are faced with numerous problems militating against the development of agriculture. Some of the problems include insufficient availability of usable farm lands caused by land tenure system, dearth of infrastructure critical to agricultural development in farming communities (such as adequate and steady electric energy, clean drinking water and irrigation facilities, adequate and good storage and processing facilities,, etc), poor agricultural

education on the part of many farmers and soil infertility problems which are caused by water and wind erosion resulting in declining soil qualities in farming communities.

The farming communities are mostly rural dwellers and represent significant number of the poor population in developing countries. These groups of people as identified by Dao (2008) depend heavily on agriculture for their earnings and livelihood. For instance, Nigeria is listed among the seventy low-income Food-deficit countries in the world (FAO, 2011). According to Food and Agricultural Organization (FAO), the 2009 UNESCO Global Monitoring Report indicates that four out of five of the at least 72 million out of school children are rural. As a consequence, the majority of the illiterate youth and adults, who today number more than 774 million, are rural people. The FAO (2007) found that food security and universal primary education of rural children are inseparable. FAO research indicates further that both food security and farmer education are twin issues that need to be tackled simultaneously and with equal effort and priority with the view to develop the capacity of rural people – children, youth and adults - to feed themselves and their communities and overcome poverty, hunger and illiteracy. Furthermore, unstable policies and programmes of governments at all levels had in no small measure increased the woes of farmers. In addition to all these is the problem of agricultural financing.

Evidence from the literature shows that previous studies focused on issues such as analysis of various sources of agricultural financing, comparative studies on conventional and Islamic sources of agricultural financing, impact of Islamic financing on wealth creation, etc. Gulaid (1995) in his work noted that most of small-scale agricultural enterprises, as they are having limited capacity to generate revenues from farming activities sufficient to meet basic needs of farmer households. The study therefore affirms the assertion that most farmers are peasant and live-in rural communities where poverty is endemic, access to loan is rarely available and where available, high interest rates on loan from interest based financial institutions and inadequate collaterals militate against access to it and this inhibits wealth creation. Sabih (1998) conducted a research to investigate the relevance of community supported agricultural financing method as a way for agricultural financing and established that it is an alternative means of financing. Elheraika(2003) examined the experience of Islamic agricultural financing in Sudan in which an evaluation of the merits (advantages) and limitations of various Islamic financial instruments in agriculture as practiced in Sudan was undertaken. The work found among others the suitability of microfinance in extending credit to farmers compared to full scale financial institutions or banks. Kaleem and Abdulwajeed (2009) studied the applicability of Islamic product (Bai Salam) for agriculture financing in Pakistan and found that farmers need it as a source of financing. All these among others point to the desirability, workability and acceptability of an Islamic mode of agriculture financing with the aim of boosting rural farming communities' wealth

### **Sustainable Development Goals SDGs**

The introduction of the sustainable development goals SDGs initiative was thus a response to this challenging phenomenon of backwardness across the world. Adopted by all United Nations Member States in 2015, the SDGs provide a shared blueprint for peace and prosperity for people and the planet by the year 2030, and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries - developed and developing - in a global partnership. In their perspective, Ivankina and Anikina (2015) maintain that SDGs are inseparable companions in the journey towards social welfare of the society indicated by healthcare, education and security at quality standards. As noble as it seems, all countries recognize that ending

poverty and other forms of deprivations must go hand-in-hand with strategies that improve health and education, assure reduced inequality, and thus spurring economic growth – all while tackling climate change and working to preserve our oceans and forests.

The Sustainable Development Goals SDGs are meant to be a blue print to achievement of a better and more sustainable future for all, which in a way reflect the contents and objectives of Maqasid Al Sharia that predates it. There are 17 goals set to be achieved by the year 2030 that would expectedly bring about the required prosperity to mankind. The 17 SDGs are 1) End poverty in all its forms everywhere; 2). End hunger, achieve food security and improved nutrition and promote sustainable agriculture; 3). Ensure healthy lives and promote well-being for all at all ages 4). Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all; 5). Achieve gender equality and empower all women and girls; 6). Ensure availability and sustainable management of water and sanitation for all; 7). Ensure access to affordable, reliable, sustainable and modern energy for all; 8). Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all; 9). Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation; 10). Reduce inequality within and among countries; 11). Make cities and human settlements inclusive, safe, resilient and sustainable; 12). Ensure sustainable consumption and production patterns; 13). Take urgent actions that combat climate changes and its impacts, 14). Conserve and sustainably use the oceans, seas and marine resources for sustainable development; 15). Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss; 16). Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels & 17). Strengthen the means of implementation and revitalize the global partnership for sustainable development.

Tools for attaining the SDGs available in Muslim societies that reflect Maqasid Al Sharia are the Islamic Social finance arrangements of Zakah, Waqf, Qard Hasan, and Islamic microfinance on another. All the mentioned tools are routes to attainment of SDGs except SDG 5 which runs parallel to Islamic values. For instance, green finance through Awqaf and Zakah is an emerging thought in Islamic finance that could reflect SDGs 11, 13, and 15.

### **Cash Waqf in Nigeria**

Recently, waqf endowments have been revived and set up in Northern Nigeria, with awqaf houses effectively addressing the needs of those less fortune. By implementing the corporate cash waqf model nationwide, Nigeria can generate funds for small business centers. This cash waqf initiative has the potential to significantly alleviate poverty among Nigerian Muslims, as long as it is managed by trustworthy individuals.

Another viable option is the Waqf Shares Model, which is successfully implemented in countries like Malaysia, Sudan, Kuwait, and the UK. This model involves purchasing shares from reputable religious institutions at a predetermined price, receiving a cash-Waqf certificate, and later donating the shares to an endowed institution (mutawalli) for management. The accumulated funds are then channeled into various charitable activities, such as building and renovating mosques, establishing and renovating schools, and supporting economic and social development projects that benefit the needy. (Magda Ismail 2008)

The Waqf Shares Model can be implemented in Nigeria, where each state's Waqf endowment acts as a trustee (mutawalli), encouraging capable Muslims to purchase shares. The collective funds can be invested in profitable ventures, with the profits used to support needy Muslims. For instance, if 2 million Muslims purchase shares at N1000 each, the total amount would be N2 billion (2 million x N1000). Under honest and pious management, this amount can be diversified into lucrative investments, addressing the needs of disadvantaged Muslims. By initiating the Waqf Shares Model in each state, Nigeria can potentially reduce poverty among its Muslim population. Shares can be sold through mosques, Arabic schools, Islamic centers, or special events. This initiative can particularly benefit small-scale businesswomen, who often require small capital amounts (e.g., N20,000 or N30,000) to start or enhance their businesses, such as selling tomatoes, onions, cassava flour, and other petty items.

### **Corporate Cash Waqf Model**

The Corporate Cash Waqf Model, also known as public waqf, has been implemented in various countries like Malaysia (Kumpulan an –Nur in 1998), Turkey (Sabanci foundation in 1974 and 1953), Pakistan (Hamdard foundation), and South Africa (National Awqaf foundation in 2000). This model can be initiated by an individual or corporate entity, which channels dividends to associated waqf institutions as cash waqf. The waqf institution, acting as the Mutawalli, manages and invests the funds into profitable ventures which are then used for charitable projects (Magda Ismail, 2008). In Nigeria, waqf endowments could adopt this model to generate funds for establishing small-scale business centers, providing employment for unemployed Muslims. For instance, funds could be used to purchase construction equipment, with the waqf acting as a trustworthy building contractor, attracting people to have their homes built.

### **The Deposit Product Model**

This Deposit Product Model has been implemented in Bangladesh by the social Investment Bank and the Islamic Bank Bangladesh limited. In this model, the funder deposits money directly into a cash waqf account at a specific bank. The founder is provided with a list of beneficiaries' forms which they can select. The bank then acts as the mutawalli, investing the deposited money in a mudarabah contract. The gains from these investments are used to assist the needy (Magdah Ismail, 2008). It is the responsibility of the waqf endowment management to carefully plan profitable ventures and businesses for the waqf institution to engage in. Proposed ventures should be thoroughly studied and evaluated to meet the needs of those in serious need.

### **The Waqf Mutual Fund Model**

The Waqf Mutual Fund Model involves the funder contributing money to mutual funds, specifying that a portion (e.g., 60%) of the returns goes to their personal earnings while the remaining 40% is allocated to waqf for charitable activities. The waqf endowment acts as the mutawalli, managing the 40% contributed by the funder and investing it in profitable ventures to benefit the needy (Magda Ismail, 2008). In Nigeria, the current lack of well-organized Islamic institutions and the deficiencies in Islamic banks make it challenging to implement this model. However, if waqf institutions are legally and constitutionally established, they can be effectively managing the donated funds. These funds can be invested in housing projects, where tenants pay rent, and the returns are divided between the funder and waqf for charitable activities, while the property remains under the funder's ownership. The primary goal of this model is to address the challenges faced by the under privileged

in Nigeria.

### **Wakala (Agency Contract) With Waqf Funds**

Another model is the Wakalah (Agency Contract) with Waqf Funds model, where the donor (shareholder) makes an initial donation to create waqf funds, losing ownership rights while the donation becomes the property of the waqf endowment. The endowment can then develop rules for spending, developing and investing the funds. A reputable company manages and invests the cumulated funds, with profits reinvested for further growth. In this model, the donor benefits from the fund (Abdul-Rahim, 2006). It is important to note that these models require experienced corporate bodies to manage large sums of money effectively. Therefore, waqf endowments should consist of skilled individuals capable of optimizing donated funds. The more the waqf invests in lucrative ventures, the greater the profits and the better the institution can support the needy.

### **3. Methodology**

The research instrument and Sample:

For this study, a questionnaire structured to nine sections comprising ‘demographics profile’, ‘performance expectancy’, ‘effort expectancy’, ‘social influence’, ‘perceived ihsān’, ‘trust’, ‘behavioral intention’, and ‘use behavior’ related to digital waqf usage. In this quantitative research, data was collected through questionnaires. The explanatory approach utilized hypothesis testing to explore whether causal relationships exist between variables and elucidate empirical phenomena (Sukmawati & Nurfitriani, 2019). Factors like Likert scale was utilized to assess the responses, with ratings ranging from 1 (strongly disagree) to 5 (strongly agree), with respondents selecting one of the possible alternative responses as their choices. Performance expectancy factors and items were adapted from the following previous literature: effort expectancy, facilitating condition and social influence (Kasri & Yuniar, 2021; Suki et al., 2022), perceived ihsān (Rizal & Amin, 2017), and trust (Shukor et al., 2017). The research population consisted of donors who contributed cash waqf through digital channels.

For data collection, an online survey using purposive sampling was employed. Purposive sampling deliberately selects specific individuals or groups with the desired information or meeting specific criteria set by the researcher (Sekaran, 2003). The data for this study were gathered through the administration of questionnaires during the survey process. A total of 350 questionnaires were distributed to individuals residing in different areas of the country through online platforms. However, only 333 respondents participated in the survey. Thirty-one (15) responses were excluded due to their lack of knowledge and insight on waqf. The analytical tool employed in this research was the Structural Equation Model (SEM). Early data screening involved examining missing values and conducting normality tests, preparing for multivariate analysis and ensuring the data’s integrity. Following this, the data underwent cleaning, sorting, and descriptive statistics were utilized to explore the sample’s demographics. The complete model’s validity and reliability were then assessed using a Confirmatory Factor Analysis (CFA), specifically the measurement model.

In this study, the following hypotheses have been formulated:

**H<sub>01</sub>:** There is no positive and significant influence of performance expectancy on the intention of the Nigerian Muslim community to use digital cash waqf.

Ho2: There is no positive and significant effect of effort expectancy on the intention of the Nigerian Muslim community to use digital cash waqf.

Ho3: There is no positive and significant social influence on the intention of the Nigerian Muslim community to use digital cash waqf.

Ho4: There is no positive and significant influence of perceived ihsan on the intention of the Nigerian Muslim community to use digital cash waqf.

Ho5: There is no positive and significant effect of facilitating condition on the intention of the Nigerian Muslim community to use digital cash waqf.

Ho6: There is no positive and significant effect of trust on the intention of the Nigerian Muslim community to use digital cash waqf.

Ho7: There is no positive and significant influence of behavioural intention on use behaviour of the Muslim community to use digital cash waqf.

#### 4. Results and Discussion

**Table 1:** Measurement Items

<b>Performance Expectancy</b>
[PE1] The use of digital cash waqf benefits me
[PE2] The application of digital cash waqf allows me to donate waqf more quickly
[PE3] The implementation of digital cash waqf facilitates me to donate waqf whenever I wish and wherever I am
[PE4] The use of digital cash waqf increases my effectiveness in the provision of waqf
<b>Effort Expectancy</b>
[EE1] My interaction using digital cash waqf is transparent and straightforward
[EE2] It was simple for me to learn how to use digital cash waqf
[EE3] I affirm that the system of digital cash waqf is easy to use
[EE4] It is easy for me to carry out waqf utilising digital cash waqf
<b>Social Influence</b>
[SI1] The people closest to me encourage me to participate in waqf by using digital cash waqf
[SI2] My family encourages me to donate waqf by using digital cash waqf
[SI3] My friends encourage me to join in waqf by utilising digital cash waqf
[SI4] Religious leaders encourage me to participate in waqf by using digital cash waqf
<b>Facilitating Condition</b>
[FC1] I have the knowledge needed to use digital cash waqf
[FC2] I have the necessary resources (e.g., smartphone, laptop and others) to implement digital cash waqf
[FC3] It is easy for me to get a guide to operating digital cash waqf
[FC4] I choose waqf through an institution that regularly publishes its waqf performance reports
<b>Trust</b>
[T1] In my opinion, digital cash waqf is beneficial for the community
[T2] I believe that digital cash waqf is compliant with Islamic principles

[T3] I believe that digital cash waqf is credible and responsible
<b>Perceived Ihsān</b>
[PI1] Helping others is crucial for me
[PI2] Benefiting others is essential to me
[PI3] Showing love to my family is significant for me
[PI4] Being nice to others is essential for me
<b>Behavioural Intention</b>
[BI1] I intend to participate in utilising digital cash waqf
[BI2] I am interested in employing digital cash waqf
[BI3] I prefer to use digital cash waqf compared to conventional waqf
<b>Use Behaviour</b>
[UB1] I regularly employ digital cash waqf
[UB2] I used to apply digital cash waqf
[UB3] I have to use digital cash waqf as it is suitable to my needs

Source: Author's effort

#### Demographic Profile of Respondents

Respondents were asked to indicate various aspects relating to their profile such as gender, age of the respondents, educational qualification and occupation of the respondents. The following are the results of the profile of the respondents.

**Table 2:** Demographic Profile of Respondents (n=318)

<b>Demographic Variables</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Gender</b>		
Male	242	76
Female	76	24
<b>Age of the Respondents</b>	<b>Frequency</b>	<b>Percentage</b>
18-25	86	27
26-33	124	39
34-42	59	19
43 and above	49	15
<b>Educational Qualification</b>	<b>Frequency</b>	<b>Percentage</b>
Secondary	78	25
Diploma/NCE	123	39
Degree/HND	94	30
Masters	19	5
PhD	4	1
<b>Occupation of the Respondents</b>	<b>Frequency</b>	<b>Percentage</b>
Students	151	47
Business Persons	104	33
Civil Servant	48	15
Others	15	5

Table 2 above, showed that majority of respondents, 242 were male (76%), with the remaining 76

(24%) females. In addition, participants were asked their age. 86 (27%) were within the age of 18-25, 124 (39%) were within the age of 26-33, 59 (19%) were within the age of 34-42, and 49 (15%) have 43 years and above. Similarly, table 1 indicates that the largest group of respondents were Diploma/NCE holders 123 (39%), followed by Degree/HND holders 94 (30%), subsequently the Secondary holders 78 (25%), then the Masters holders 19 (5%) and lastly, PhD holders 4 (1%). Lastly, concerning the occupation of the respondent, 151 (47%) were students, business men have 104 (33%), civil servant have the total of 48 (15%) and 15 (5%) were from another category.

### Descriptive Statistics of the Variables

The descriptive statistics of the variables are presented. The mean (the sum of all observed outcomes from the sample divided by the total number of events) and standard deviation (SD, the measure used to quantify the amount of variation or dispersion of a set of data values) were computed using the 5-Point Likert scale to determine the descriptive characteristics of the study's variables. Therefore, the outcome of the analyses is presented in Table 3 below.

**Table 3:** Descriptive Statistics of Variables

Constructs	N	Mean	Std. Deviation
Performance Expectancy	318	4.016	1.152
Effort Expectancy	318	3.901	1.055
Social Influence	318	4.840	1.201
Perceived Ihsan	318	4.013	1.074
Facilitating condition	318	3.993	1.122
Trust	318	4.441	1.121
Behavioural Intention	318	4.974	1.110
Use Behaviour	318	4.840	1.160

As can be seen from Table 3, performance expectancy, effort expectancy, social influence, perceive ihsan, facilitating condition, trust, behavioral intention and use behavior have a mean 4.016, 3.901, 4.840, 4.013, 3.993, 4.441, 4.974, 4.840 and standard deviation of 1.152, 1.055, 1.201, 1.074, 1.122, 1.121, 1.110 and 1.160 respectively. This implies that majority of the respondent agreed with the statement of each variable of the study.

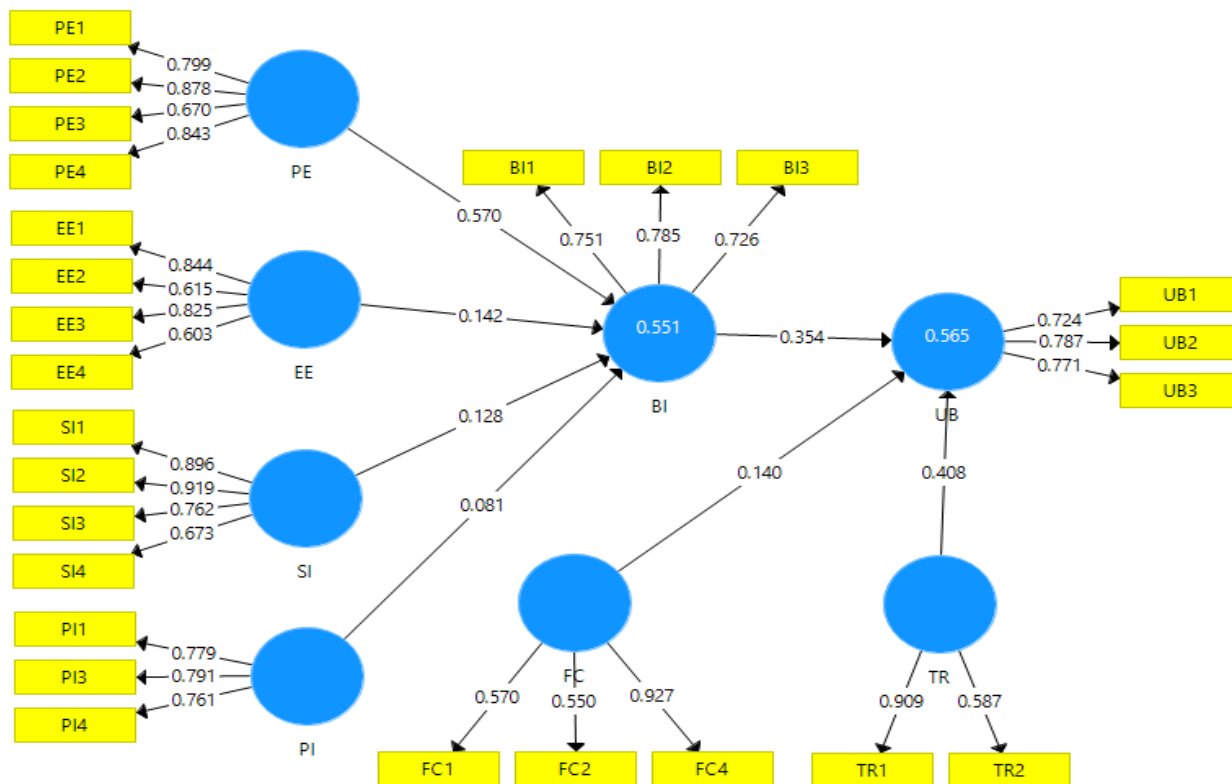
### Assessment of PLS Path Model

The data collected were analysed using Partial Least Square Modeling (PLS-SEM) with the aid of SmartPLS software 3.0. To validate and assess the model for this study, Hair, Hult, Ringle, Sartedt and Thiele (2017) recommends a two-stage assessment. They are measurement models (also known as outer models) and structural models (also known as inner models).

### Measurement Model

The measurement model was assessed based on items reliabilities, internal consistency reliabilities, convergent validity and discriminant validity for all the variables (Henseler et al., 2009). Therefore, Hair et al. (2017) proposed the rule of thumb for retaining the items reliabilities between 0.40 and 0.70 if it can increase AVE, composite reliability should be 0.7 and AVE should be 0.50. Hence, figure 1 show the result of items reliabilities where PI2, FC3 and TR3 was remove due to low loadings below 0.4, and table 2 shows that internal consistency reliabilities and convergent validity

was achieved since the composite reliability for all the variable is greater than 0.7 and average variance extracted values are greater than 0.5 as suggested by Hair et al. (2017).



**Fig. 1:** Measurement Model

**Table 4:** Item loadings for variables

Variables	Codes	Loadings	Composite Reliability (CR)	Average Variance Extracted (AVE)
Performance Expectancy	PE1	0.799	<b>0.875</b>	<b>0.643</b>
	PE2	0.878		
	PE3	0.670		
	PE4	0.843		
Effort Expectancy	EE1	0.844	<b>0.817</b>	<b>0.534</b>
	EE2	0.615		
	EE3	0.825		
	EE4	0.603		
Social Influence	SI1	0.896	<b>0.889</b>	<b>0.670</b>
	SI2	0.919		
	SI3	0.762		
	SI4	0.673		
Perceived Ihsan	PI1	0.779	<b>0.820</b>	<b>0.604</b>
	PI3	0.791		
	PI4	0.761		

Facilitating Condition	FC1	0.570	<b>0.735</b>	<b>0.596</b>
	FC2	0.550		
	FC4	0.927		
Trust	TR1	0.909	<b>0.730</b>	<b>0.586</b>
	TR2	0.587		
Behavioral Intention	BI1	0.751	<b>0.798</b>	<b>0.569</b>
	BI2	0.785		
	BI3	0.726		
Use Behavior	UB1	0.724	<b>0.805</b>	<b>0.579</b>
	UB2	0.787		
	UB3	0.771		

Source: Author's effort

Table 4 indicates the test results for each variable indicator which were deemed valid, since the loading attached to them exceeded 0.05. Significantly, this study utilizes the construct reliability approach to assess the construct reliability of the instrument. Where the CR value is 0.70 and the AVE value is 0.50, a construct is considered reliable. Following the analysis, it was concluded that the performance expectancy (PE) variable exhibited reliability, with a CR value of 0.875 and an AVE value of 0.643. In respect of effort expectancy (EE) measure, the CR value was 0.817 (exceeding the 0.70 threshold), and the AVE value was 0.534 (surpassing the 0.50 criterion), indicating the questionnaire's trustworthiness for the EE variable. The same criteria were applied to the social influence variable, reporting an AVE of 0.889, and a CR value of 0.670 (exceeding 0.70) and an AVE of 0.670 (surpassing 0.50), thus confirming the trustworthiness of the social influence variable questionnaire.

For the facilitating condition (FC) variable, a CR value of 0.735 (meeting the  $\geq 0.70$  criterion) and an AVE value of 0.596 (satisfying the  $\geq 0.50$  criterion) are reported. Similarly, the perceived ihsan (PI) variable attained CR and AVE values of 0.820 and 0.604 (both meeting the  $\geq 0.70$  and  $\geq 0.50$  criteria), confirming the accuracy of the claim on the PI variable. The Trust (T) variable exhibited an AVE value of 0.730 and a CR value of 0.586, supporting the assertion of the variable's dependability. For the behavioural intention (BI) variable, the CR value was determined to be 0.798, and the AVE value was 0.569, validating the questionnaire statement's accuracy. Finally, the use behaviour (UB) variable demonstrated a CR value of 0.805 ( $\geq 0.70$ ) and an AVE value of 0.579 ( $\geq 0.50$ ), confirming its validity as shown in the UB variable questionnaire

Furthermore, Henseler, Ringle and Sarstedt (2015) proposed the use of Heterotrait-Monotrait Ratio (HTMT) for assessing discriminant validity. The recommended HTMT thresholds are less than 0.85, 0.9, or 1 (Hair et al., 2017). Therefore, the HTMT value shown in table 5 below indicated that the study had adequate discriminant validity for all the variables.

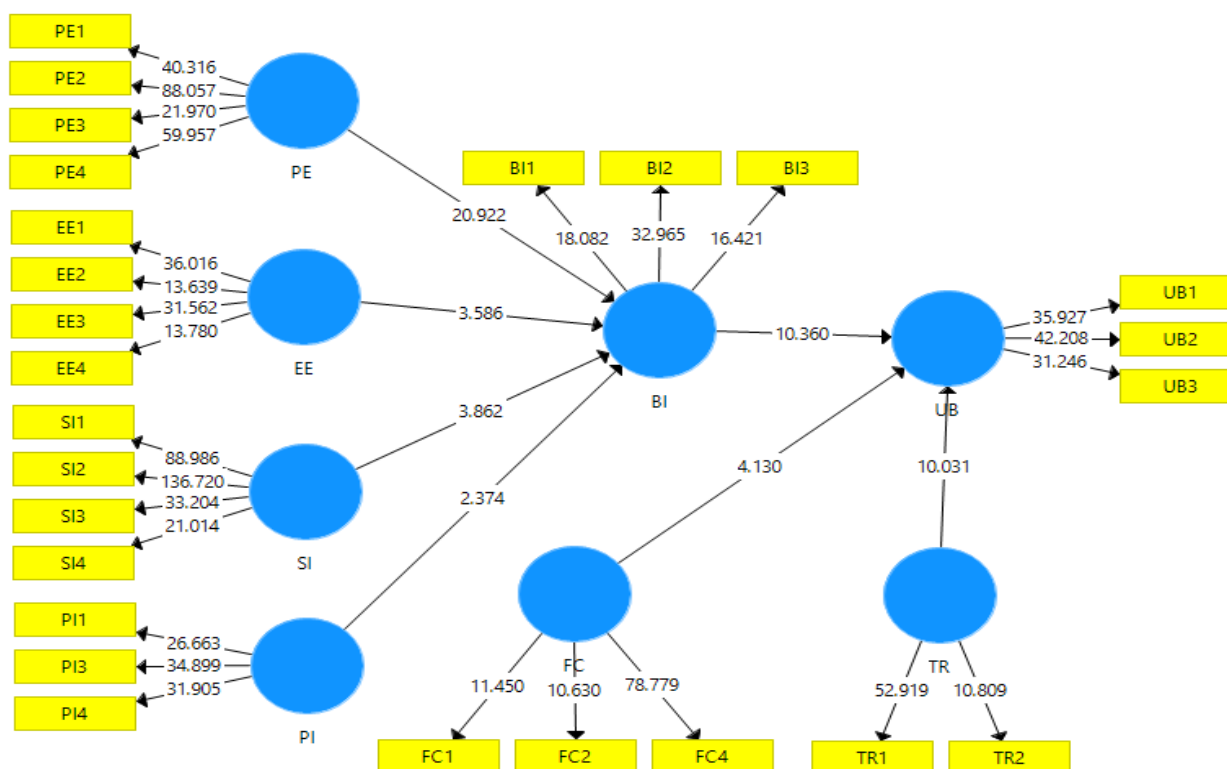
**Table 5:** Discriminant Validity Result using HTMT

Variables	BI	EE	FC	PE	PI	SI	TR	UB
BI								
EE	0.458							
FC	0.824	0.746						
PE	0.743	0.182	0.625					
PI	0.625	0.587	0.712	0.633				

SI	0.615	0.732	0.775	0.560	0.616			
TR	0.664	0.655	0.351	0.814	0.825	0.785		
UB	0.815	0.549	0.771	0.828	0.827	0.714	0.308	

## Structural Model

After successfully meeting the requirement of measurement model, the structural model is assessed. The first part of the structural model assessment is assessing the path coefficient, then coefficient of determination, effect size and predictive relevance. Therefore, the study used 5,000 bootstrap samples in order to assess the importance of the path coefficient for the relationships (Hair et al., 2017). Hence, the results are presented below.



**Fig. 2: Structural Model**

**Table 6: Path Coefficient for Direct and Mediation Relationships**

Hypothesis	R/Ships	Beta	Standard Deviation	T Statistics	P Values	Decision
HO1	PE → BI	0.570	0.027	20.922	0.000	Rejected
HO2	EE → BI	0.142	0.040	3.586	0.000	Rejected
HO3	SI → BI	0.128	0.033	3.862	0.000	Rejected
HO4	PI → BI	0.081	0.034	2.374	0.018	Rejected
HO5	FC → UB	0.140	0.034	4.130	0.000	Rejected
HO6	TR → UB	0.408	0.041	10.031	0.000	Rejected
HO7	BI → UB	0.354	0.034	10.360	0.000	Rejected

**Note:** PE = Performance Expectancy, EE = Effort Expectancy, SI = Social Influence, PI = Perceive Ihsan, FC = Facilitating Condition, TR = Trust, BI = Behavioural Intention and UB = Use Behaviour

Table 6 shows that PE, EE, SI and PI have positive and significant effect on BI since the p-value are below 0.5 for HO1, HO2, HO3 and HO4. This provides the basis for rejecting the hypothesized relationships. In addition, FC, TR and BI have positive and significant effect on UB. In summary, BI is having positive and significant mediation effect between PE, EE, SI and PI on BI, while FC and TR have direct positive and significant effect on UB, hence signifying the basis for rejecting all the null hypothesis of the study.

Next is the assessment of coefficient of determination, effect size and predictive relevance. The coefficient of determination or assessment of R-square level was assessed in order to evaluate the amount of variance explained by the exogenous variables on the endogenous variable. According to Chin (2010),  $R^2$  values are 0.67, 0.33 and 0.19 for substantial, moderate and weak respectively. The  $f^2$  value provides an overview of the potential effect of exogenous variables on the endogenous variable. The general criterion for evaluating  $f^2$  values of either small, medium and large  $f^2$  values is measured by 0.02, 0.15 and 0.35 respectively (Cohen, 1988). Similarly, the predictive correlation ( $Q^2$ ) of the external endogenous variable was examined using cross-validated redundancy criteria. Hence, table 7 below shows that PE, EE, SI and PI have 0.551 (55.1%) per cent variance in BI. Then, PE, EE, SI, PI, FC, TR and BI explain 0.565 (56.5%) per cent variance in Use Behaviour. This means the  $R^2$  value explained by this exogenous variable on the target endogenous variables is moderate. On the effect size, PE, EE, SI, and UB has small effect size, PI has none effect while TR and BI have large effect. On the predictive relevance, the  $Q^2$  is greater than zero for both BI and UB which implies that the model of the study has predictive relevance (Duarte-Reposo, 2010).

**Table 7:** R Square ( $R^2$ ), Effect Size ( $f^2$ ) and Predictive Relevance ( $Q^2$ )

Indicators	R Square		
Behavioural Intention	0.551		
Use Behaviour	0.565		
Indicators	F2	Effect Size	
PE	0.063	Small	
EE	0.030	Small	
SI	0.020	Small	
PI	0.009	None	
TR	0.254	Large	
BI	0.190	Large	
UB	0.027	Small	
Indicators	SSO	SSE	$Q^2(=1-SSE/SSO)$
Behavioural Intention	3057,000	2281,263	0.254
Use Behaviour	3057,000	2079,641	0.320

## 5. Conclusion And Recommendations

This study highlights that despite widespread poverty among those facing income constraints, individuals have a benevolent mindset to make sacrifices for those in dire need. The economic constraints have not deterred the willingness to extend support to vulnerable members of society in many situations. Thus, the findings of this research as evidenced by the rejection of the hypotheses

for the study confirms the position that the favorable disposition to adopt digitally enabled cash Waqf as a source of financing hinges on the independent variables of the study either as direct or indirect influencers.

Strategic measures, such as the enhanced digitization of the management of Waqf funds, integration of waqf data, and sustained educational campaigns aimed at raising public awareness—especially among the younger generation—about cash waqf, are imperative. Initiatives like roadshows to schools and universities can prove to be effective methods. It suffices here to recommend here that future research efforts can be geared towards exploring additional determinants for effective cash Waqf mobilization and management and putting in place innovative yet effective mechanisms of its sustenance. Furthermore, these inquiries demand larger sample sizes, more diverse participant groups, and broader observational networks.

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