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ASSESSING THE LEVEL OF SUKUK BONDS UTILISATION FOR INFRASTRUCTURAL DEVELOPMENT IN KADUNA, NIGERIA

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Abstract
Poor road conditions contribute significantly to road traffic accidents, which remain a leading cause of death and injury. The aim of this study is to evaluate the extent of Sukuk bond utilization and assess its effectiveness in financing and delivering infrastructural projects within Kaduna State, with a view to determining how this non-interest financial model addresses the state's infrastructure deficit and enhances socio-economic development. This study adopted a quantitative research design, which is appropriate for examining measurable variables such as levels of awareness, utilization, and achievements of Sukuk bonds in infrastructural development. The population consisted of registered and actively practicing construction professionals in Kaduna State, Nigeria. Using the Krejcie and Morgan (1970) sample size determination table, the recommended sample size for a finite population of 150 is 108. This study adopted a probability sampling approach, specifically a combination of simple random sampling and stratified random sampling. The questionnaire was designed to obtain information on the types of Sukuk bonds used, the factors influencing their utilization, and the achievements of Sukuk financing in infrastructural development in Nigeria. The study revealed that respondents were generally aware of different Sukuk bond structures, with Ijara Sukuk emerging as the most commonly recognized and utilized in the Nigerian construction industry. The regression analysis revealed that the types of Sukuk bonds and factors affecting their utilization jointly explained 42.7% of the variance in Sukuk utilization within the construction industry. Government agencies and regulators should encourage the issuance of a wider range of Sukuk structures beyond Ijara. Options such as Musharaka, Mudaraba, and hybrid Sukuk should be explored to increase flexibility and broaden applicability to diverse infrastructure projects.

Keys words: sukuk bonds utilisation, infrastructural development, non-interest financial, socio-economic development

Introduction
Globally, the Sukuk market has witnessed a transformative expansion, evolving from a niche Islamic financial product into a mainstream global instrument for large-scale infrastructure financing. By the end of 2024, the global Sukuk market surpassed a valuation of $900 billion, driven primarily by sovereign issuances from the Gulf Cooperation Council (GCC) and Southeast Asian nations like Malaysia and Indonesia (Azimut, 2025; Finvizier, 2024). Unlike conventional bonds that rely on interest-based debt, Sukuk is structured as an asset-backed investment certificate, ensuring that capital is strictly tied to "real-sector" economic activities such as transportation, energy, and healthcare (Ubaidillah *et al.,* 2021). Recent trends also highlight the rise of "Green Sukuk," which integrates environmental sustainability with Shariah compliance, attracting a diverse pool of international institutional investors seeking ethical and transparent financial models (DP World, 2023).
In the Nigerian perspective, the adoption of Sukuk has emerged as a critical response to a persistent infrastructure deficit, estimated to require an annual investment of $100 billion (Ibrahim & Mohammed, 2020; Onwumere *et al.*, 2023). Since the debut of the Sovereign Sukuk in 2017, the Debt Management Office (DMO) has successfully risen over ₦1.39 trillion as of late 2025, with recent

issuances in May 2025 seeing over-subscription rates as high as 735% (Ecofin Agency, 2025; Lotus Capital, 2025). This high level of utilization at the federal level has funded over 1,800 kilometers of road networks across all six geopolitical zones, including the strategic Abuja-Kaduna-Zaria-Kano expressway (Salaudeen, 2024; DMO, 2025). Despite this national success, the utilization of Sukuk at the sub-national level particularly in states like Kaduna remains a subject of critical inquiry regarding its localized effectiveness, the transparency of project execution, and the specific socio-economic impact on regional development (Sani *et al.,* 2022).

The persistent infrastructure deficit in Kaduna State remains a significant barrier to its socio-economic transformation, with recent estimates suggesting a funding requirement of over ₦20 trillion ($13.8 billion) to address core developmental needs (CoST Kaduna, 2025; Kaduna State Development Plan 2024-2028). Despite the state's ambitious "SUSTAIN" agenda, traditional financing mechanisms reliant on volatile federal allocations and high-interest conventional loans have proven insufficient, often leading to a cycle of mounting debt and "abandoned projects" (Sani *et al.,* 2024; Onwumere *et al.,* 2023). This reliance on interest-bearing debt not only increases the state's fiscal vulnerability to interest rate fluctuations but also suffers from a lack of transparency, as funds are frequently diverted from capital projects to recurrent expenditures, leaving critical corridors like the Kaduna-Kano axis in states of periodic decay (IUIU Journals, 2025; Ezeudu & Fadeyi, 2024).

The effect of this infrastructure gap is a marked decline in regional productivity, characterized by high logistics costs, post-harvest losses for farmers reaching up to 50%, and restricted access to essential healthcare and education services for rural dwellers (The Nation, 2025; Adeniyi & Ogundeji, 2024). While the Nigerian Sovereign Sukuk has successfully funded over 1,800km of federal roads with high accountability (DMO, 2025), there is a significant research and implementation gap at the sub-national level in Kaduna. Current literature focuses heavily on federal-level success, yet very little empirical evidence exists regarding the specific level of Sukuk utilization by the Kaduna State Government, the localized barriers to its adoption, or its comparative effectiveness against traditional bonds in the state's construction sector (Salaudeen, 2024; S&P Global, 2024). This study, therefore, intends to fill this gap by assessing the actual utilisation and performance of Sukuk bonds as a transparent, asset-backed alternative for infrastructure development in Kaduna.

2.0 Literature Review

2.1 Structure of Sukuk Issued by the Federal Government of Nigeria

The Federal Government of Nigeria issued *Ijara Sukuk* as its most acceptable and suitable **f**or project funding of the projects. Sukuk are derived from the Arabic word sakk for the singular and plural is Sukuk. The term is utilised to represent a legitimate instrument, deed and check. In practice, Sukuk is utilised as papers indicating financial commitments from trade and business activities. In any case, Sukuk as connected in the capital markets relates to the process of securitisation and is commonly characterised as an Islamic bond (Kamil, 2008). The concept of Sukuk has been viewed differently by scholars and Islamic authorities. Sukuk are securities that comply with Shariah principles and their investment principles, which prohibit charging or paying of interest (Liquidity Management Centre website., 2008).

The Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) states that Sukuk must be tradable and be possessed by Sukuk holders, with all obligations and rights of ownership. The ownership includes intangible assets, whether service or usufruct, the ability to be owned and sold legitimately in accordance with the guidelines of Shariah.

2.1.1 Application of Ijarah Sukuk

An Ijarah is a contract under Islamic principles and it is allowed by Islamic jurists. It is an agreement between two parties: the first is the lessor or financial institution and the second is the lessee. In

Arabic terms, mujir is called lessor, the mustajir is called lessee and the Ijarah is called rent. The Ijarah is like an operating rental contract. The Ijarah is among the Islamic financing contracts that Islamic banks apply. In Ijarah, the Islamic bank purchases an asset and rents it to the customer at an agreed price plus profit for a specific period at a fixed rental charge (Rahman, Hilmy, & Saifurrahman, 2018). The term Ijarah is used for leasing of property in accordance with an agreement under which an indicated permissible benefit in the form of usufruct is obtained for a predefined period in return for a predefined permissible consideration (AAOIFI, 2015).

In Ijarah, ownership of the rented asset remains in the hands of the lessor. The contract of Ijarah is gaining popularity in the industry because the structure is productive and compliant with Shariah principles (Ahmad & Abd Rahim, 2013). Uddin, Sultan, Hosen, and Ullah (2015) state that Ijarah Sukuk is the most recent product in the market that is quickly making progress in the capital market. Ijarah Sukuk has emerged as a different classical asset among the Islamic finance products. It has gained acceptance among Shariah scholars with high demand by huge investors and Islamic financial institutions (IFIs). On the supply side, not only sovereign but also corporate entities are likewise finding it valuable to generate funds for their project-specific needs, working capital management, especially capital requirements and restructuring financing (Uddin et al., 2015).

The Sukuk Ijarah is structured with the concept of rental with the right of lease to purchase the underlying asset rented on the final date of rental. The Sukuk is issued with an agreement among the Sukuk holders and the Sukuk issuer to purchase the rental asset on the maturity date. Though the application of this Sukuk involves sale and purchase at the inception stage (Hussin, Muhammad, & Awang, 2012). As indicated by Shariff and Rahman (2003), Ijarah is a rent of a service or object, including the transfer of usufruct for a lease consideration. This standard requires Shariah-compliant leaseable and tangible assets, such as mechanisms and property.

In project financing, Sukuk Ijarah is among the most commonly used principles because of its mechanism that is deployable for a project financing structure. In Islamic jurisprudence, the term Ijarah is used for two main conditions. The first Ijarah type has to do with services given by people. Ijarah means to engage the service of a person; a compensation is paid to him/her for his/her employment and for agreed consideration between the lessee and lessor. There are examples of this in the Holy Quran. Allah has mentioned the word Ijarah when Allah tells the story of Prophet Shuaib and Prophet Moses in Surah Al-Qasas: "O my father, hire him. Indeed, the best one you can hire is strong and trustworthy" (Surah Al-Qasas, verses 26-27). The Prophet Muhammad (may Allah be upon him) also states that: pay the lessee or worker (Mustajir) his wages before his/her sweat is dried (Sahih Al-Bukhari, 2270).

The issuance of Sukuk al-Ijarah follows a structured process as outlined by Rafay, Sadiq, and Ajmal (2017) and Sulaiman (2012). The process begins with the identification of a suitable underlying asset or project by its owner. To raise funds, this asset is then sold to a Special Purpose Vehicle (SPV). The SPV subsequently issues Sukuk certificates to investors to collect the necessary capital. Following this, the SPV enters into a rental (Ijarah) agreement with the original issuer, who leases the asset back. The rental payments made by the issuer are collected by the SPV and distributed to the Sukuk holders as their return on investment. Upon maturity, the process concludes with the SPV selling the underlying asset back to the issuer at a pre-agreed price, thereby redeeming the Sukuk certificates.

Furthermore, as noted by Mohd Zin et al. (2011), this overall structure is legally underpinned by a combination of specific agreements, typically including a lease agreement, a purchase undertaking, a services agreement, and a purchase agreement. It is considering letting property rights to other to benefit according to the agreed price. Sukuk Ijarah is issued on a leaseback and sale arrangement of real estate and has been a well-known structure for sovereign issuers. The SPV applies to buy land from the originator and rents it back to the originator. The originator agrees to repurchase the asset at maturity or upon scheduled settlement of the original purchase price.

2.1.2 Difference between Asset-Backed and Asset-Based in Sukuk Structure

According to SCM (2009), Sukuk are categorised into asset-backed and asset-based Sukuk structures. Hidayat (2013) noted that in asset-backed Sukuk, there is a real sale and absolute transfer of the asset to the third party, which is SPV. The SPV acts as a trustee on behalf of the Sukuk holder and manages the asset profit that is remitted from the investment and transfers it to the Sukuk holder. The SPV collects money as the issuer of the Sukuk and manages the assets, whereas the ownership of the asset will belong to the Sukuk holder. Since the underlying asset has been separated from the book of originator, there would not be recourse to the obligor. It should be noted that, for asset backed Sukuk to be acceptable from Shariah perspective, it must be free from any dispute or legal issues, must not have obstacle that void the real transfer of the asset from the obligor to the SPV who act as a trustee on behalf of Sukuk holder and must generate cash flow from the underlying asset (Hidayat, 2013).

In contrast, a Sukuk holder does not have the right of ownership of the asset under the asset-based Sukuk. If there is a deficit in the payment, the Sukuk holders have recourse to the obligor, not the underlying asset. Because they are beneficial owners, not legal owners of the asset. Beneficial ownership has rights of the property that belong to a person, despite the legitimate title of the assets belonging to someone else. Sukuk holders owned the asset under the asset-backed Sukuk and do not have recourse to the obligor if there is a deficit in payment (Tahmoures, 2013). Therefore, there are many Sukuk involving the sale of the underlying assets from the originator to SPV, but in many Sukuk, the originator just transfers beneficial ownership of the asset to the SPV, not legal title (Thani, 2012). According to Ellias, Haron & Mohammed (2013), a major criticism from Shariah scholars on Sukuk is the issue of beneficial ownership in relation to asset-based Sukuk. Since Sukuk represents Sukuk holder ownership over a certain asset, some practitioners and scholars of Islam discussed whether ownership of the Sukuk holder concurred with the requirement of Shariah. In many countries, including Malaysia, Sukuk issued is asset asset-based structure and not asset-backed because of the limitation on foreign ownership of certain assets.

Hence, in such a situation, the Sukuk holders are only guaranteed a security interest in the Sukuk asset and the Sukuk holders are recognized as creditors and not owners of the asset. Also, if there is a foreclosure or asset disposal, the surplus must be returned to the obligor. (Aziz, Shahid, & Ibrahim, 2013; Bahari, Ahmad, Shahar, & Othman, 2016). Usually, the ownership of a rented asset remains in the hands of the lessor. According to the structure, the Sukuk holders possess equal shares of the underlying asset or its usufruct. Essentially, the Sukuk holders possess the right to the asset and collect the rental payment (Yaakub, Shah, Mujani, Jusoff, & Hamid, 2011). Once more, these rights rely upon the structure of Ijarah, whether asset-based Ijarah Sukuk or asset-backed Ijarah Sukuk. Asset-backed Ijarah Sukuk permits the holders of Sukuk to liquidate the underlying asset in any case of default to recover most of their investments, while asset-based Ijarah Sukuk only represents beneficial ownership on the underlying asset and it limits Sukuk holders' right in the event of default (Yaakub et al., 2011).

2.1.3 Sukuk and Conventional bond

Sukuk are Islamic financial certificates that are frequently mentioned as Shariah-compliant bonds. Both bonds and Sukuk are sold to the investors who then get a stream of payments till a set date of maturity. Sukuk are compliant with the Shariah, which nobody can generate money from money, which is tantamount to riba. This is based on the principle that it is improper for any commodity, including money, to increase in value simply by lending money to another person. However, Islamic law does not disallow investors from making a profit/return on the capital if the capital provider is willing to share the risk with the entrepreneur. The conventional bonds are always interest (riba) based since the payment is fixed (Alam, Hassan, & Haque, 2013; Bhuiyan, Puspa, Saiti, & Ghani, 2020). Furthermore, bonds are significantly different from Sukuk in a way that the return of bonds

to bondholders indicates the right to claim indebtedness for the money borrowed. Whereas the return to the Sukuk investors indicates the right to benefit payments from a trade transaction or the claim of ownership of the venture (Bhuiyan et al., 2020). While conventional bonds and Sukuk are very alike in nature but there are some important differences to be aware of. Ownership of Sukuk asset and debt obligation: Sukuk is backed by an underlying tangible asset, and Sukuk holders are given partial ownership in the underlying asset of Sukuk, with actual value, while bond ownership indicates merely a debt obligation.

Shariah compliant and not comply with Shariah: the underlying asset of Sukuk must be compliant with Shariah. This means that any investment prohibited from Shariah cannot be financed, such as the sale of alcohol, gambling, pork products, tobacco, pornography and so on. It also prohibits financial institutions from being involved in any interest-based transactions. On the other side, the underlying assets of bonds may not comply with the principle of Shariah they can be utilized to finance any business, projects, assets, or joint investment that complies with Western legislation.

Sukuk asset value and bonds asset credit worthiness: value of Sukuk is based of market value of the underlying asset of Sukuk which can increase in value when the asset of Sukuk increases in value while bonds is based on credit worthiness on the neck of the issuers Selling underlying asset of Sukuk and selling of bonds: when Sukuk investors sell asset of Sukuk they sell ownership of asset that backs the Sukuk. In terms of bonds, the investors sell debt, which is the relationship between bondholders and the bond issuer (AbdulKareem, Mahmud, AbdulGaniyy & Yazid, 2020).

2.2 Implementation of Sukuk Bond in Nigeria

According to the United Nations Population Division (UNPD) world population prospects, Nigeria's population stood at 185.9 million in 2016, with a 2.6% growth rate when compared with the 2015 estimation. Nigeria is the most populous country in Africa, representing approximately 47% of the entire population of West Africa. Nigeria has a relatively young population, with 2.7% of the population aged 65 and above, between the ages of 15 and 64 is 53.3% and under 15 is 44%, as of the end of December 2015 (Nganga, 2016; Ogunbado *et al*., 2017). In January 2012, the CBN granted Jaiz Bank an endorsement to operate as a regional interest-free bank in Northern part of Nigeria with three branches situated in Abuja, Kano and Kaduna. Thus, Jaiz Bank became the first and the full-fledged bank to operate Islamic banking in Nigeria. It started with three branches in 2012 but now its branches have increased to 17.

Also, there are other banks operating Islamic banking windows in Nigeria. Islamic banking advocates the principles of profit and loss sharing among investors (Bello, 2016; Rita, 2013; Yahaya & Lamidi, 2015). Oladunjoye (2014) explains the possibility of using Islamic finance, especially Sukuk as a mechanism for raising capital and development of infrastructures in Nigeria. In 2013, the first Sukuk was issued by Osun state government of Nigeria and which is the first of its kind in sub-Saharan Africa (SSA). The N60 Billion Debt Issuance was meant to fund the development of 20 High Schools, two middle-level schools and two elementary schools in Osun State, Nigeria. This Sukuk was issued at a rate of 14.75% per annum at N1,000 per unit and would mature on 08 October 2020. This first Sukuk issued by the Osun state government would bring huge possibilities for Islamic finance in the country (Oji, 2015; Sulaiman, 2020).

Similarly, in 2016, the Federal Government of Nigeria (FGN) followed suit by issuing 100 billion naira of Sukuk Ijarah for 25 road infrastructure projects throughout the federation. The Sukuk, which has been illustrated as a low-risk and safe investment, was issued by the Debt Management Office (DMO) with a seven-year tenor (Jannah, 2017; Odunsi, 2017). In addition, the Sukuk attracted an oversubscription of 105.9 billion naira, indicating investors' desire and demand for Sukuk. The proceeds from FGN Sukuk issuance are expected to be utilized to finance infrastructure development in the country, especially the rehabilitation and construction of road infrastructure. Onihaa (2017) expresses that this first Sukuk issued by FGN has raised a lot of enthusiasm as well as questions

from the public. Thus, there is a need to enlighten the public more about Sukuk issuance in the country.

Sukuk is one of the financial instruments utilized by organizations and governments to raise funds. Furthermore, unlike traditional bonds whose funds can be utilized for various purposes, including recurrent expenditure, funds raised from Sukuk issuance can only be utilized for assets such as infrastructure. Moreover, investors receive income, according to the assets rather than interest, as in the case with traditional bonds. Onihaa (2017) further stated that FGN issued Sukuk as an alternative to conventional bonds. Before this time, FGN had borrowed money from the domestic market through the traditional bonds such as FGN bonds, Nigeria Treasury Bills (NTB), and FGN savings bond. Issuance of Sukuk as a new instrument by FGN currently around is another landmark in the domestic market that has huge benefits and advantages to the government, investors, capital market and Nigerian masses for different reasons.

3. Methodology

This study adopted a quantitative research design, which is appropriate for examining measurable variables such as levels of awareness, utilization, and achievements of Sukuk bonds in infrastructural development. The population consisted of registered and actively practicing construction professionals in Kaduna State, Nigeria. Using the Krejcie and Morgan (1970) sample size determination table, the recommended sample size for a finite population of 150 is 108. This study adopted a probability sampling approach, specifically a combination of simple random sampling and stratified random sampling. The questionnaire was designed to obtain information on the types of Sukuk bonds used, the factors influencing their utilization, and the achievements of Sukuk financing in infrastructural development in Nigeria. The internal consistency of the questionnaire was assessed using Cronbach's Alpha coefficient, a widely accepted reliability test. The results indicated that all constructs achieved values above the 0.70 threshold, which is considered acceptable for confirming reliability (Gliem & Gliem, 2003; Taber, 2018). The data collected from the field survey were prepared, coded, and analyzed using the Statistical Package for Social Sciences and Microsoft Excel. A descriptive statistical technique was employed to align with the study's objectives and research questions.

4.0 Result and Finding

4.1 Questionnaire Administration

This section outlines the data collection and administration process, highlighting the distribution, return rate, and validity of the questionnaires employed in the study.

Table 1: Questionnaire Administration

Description	Number of Questionnaires	Percentage (%)
Distributed	130	100.0
Returned	118	90.8
Valid and Used for Analysis	112	86.2
Rejected/Incomplete	6	4.6
Not Returned	12	9.2

Table 1 presents the data collection and administration process. Out of 130 questionnaires distributed to construction professionals in the Northwest and Northeast geopolitical zones of Nigeria, 118 were retrieved, representing a strong response rate of 90.8%. This high rate of return indicates that the survey participants were highly cooperative and interested in the research theme, and it also reflects the effectiveness of the administration approach adopted by the researcher. After data screening and cleaning, 112 questionnaires were deemed valid and subsequently used for analysis, accounting for 86.2% of the total distributed. This level of usability is considered robust in

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survey research, as it ensures adequate representation of the target population and enhances the credibility of the findings.

On the other hand, 6 questionnaires (4.6%) were rejected due to incomplete or inconsistent responses that could compromise the reliability of the data. In addition, 12 questionnaires (9.2%) were not returned despite repeated follow-ups, which is still within an acceptable margin when compared to general survey standards.

4.3 Demographics of Respondents

The table below presents the demographic breakdown of respondents in terms of gender, age, hotel star rating, region, job position, academic qualifications, and years of professional experience. This helps contextualize the survey population.

Table 2: Demographics of Respondents

Variable	Category	Frequency	Percentage (%)
Gender	Male	61	54.6
	Female	51	45.4
Age Group	Under 30	39	34.6
	30–39	31	27.7
	40–49	27	23.8
	50 and above	15	13.8
Profession	Quantity Surveyor	21	18.5
	Civil Engineer	26	23.1
	Architect	35	30.8
	Builder	31	27.7
Region	North-West	41	36.2
	North-East	49	43.8
	Other (specify)	22	20.0
Organization Type	Government Agency	21	18.5
	Private Firm	31	27.7
	Construction Company	24	21.5
	Consulting Firm	36	32.3
Qualification	Diploma	18	16.2
	Bachelor's degree	44	39.2
	Master's degree	40	35.4
	Doctorate degree	10	9.2
Experience	1–5 years	29	26.2
	6–10 years	29	26.2
	11–15 years	26	23.1
	16–20 years	19	16.9
	Over 20 years	9	7.7
Sukuk Involvement	Yes	50	44.6
	No	62	55.4

Table 2 presents the demographic and professional characteristics of the 112 respondents. The respondents are almost evenly split by gender (Male: 54.6%, Female: 45.4%), showing a more balanced representation than is typically observed in the construction sector. The largest age cohort is under 30 years (34.6%), followed by 30–39 years (27.7%), reflecting a relatively young professional population. Professionally, the sample is well distributed: Architects (30.8%) and Builders (27.7%) represent the largest groups, with Civil Engineers (23.1%) and Quantity Surveyors (18.5%) also well represented. Regionally, most participants come from the North-East (43.8%) and North-West (36.2%).

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In terms of organizational affiliation, Consulting Firms (32.3%) and Private Firms (27.7%) dominate, while 21.5% work in Construction Companies and 18.5% in Government Agencies. Respondents are well qualified, with the majority holding Bachelor's (39.2%) and Master's degrees (35.4%), while 9.2% possess doctoral degrees. Regarding experience, a significant proportion (52.4%) have 10 years or less, but nearly half (47.6%) have over 10 years, indicating a good mix of early-career and seasoned professionals. Finally, 44.6% of respondents reported involvement in Sukuk-related projects, while 55.4% had no such experience.

Table 3: Descriptive Statistics of Types of Sukuk Bonds Used

Statement	Mean	Std. Deviation	Range	Remark
Sukuk al-Ijara (Lease Sukuk)	3.70	0.868	1	Agree
Sukuk Al-Mudarabah	3.64	0.863	2	Agree
Sukuk al-Murabaha (Cost-Plus Sale Sukuk)	3.63	0.827	3	Agree
Sukuk al-Musharakah (Partnership Sukuk)	3.61	0.885	4	Agree
Sukuk al-Muzara'a / Musaqat (Agricultural Sukuk)	3.59	0.887	5	Agree
Sukuk al-Salam (Advance Payment Sukuk)	3.59	0.860	6	Agree
Sukuk al-Wakalah (Agency Sukuk)	3.58	0.896	7	Agree
Sukuk al-Istisna'a (Manufacturing/Construction Sukuk)	1.64	0.863	8	Disagree
Hybrid Sukuk	1.58	0.834	9	Disagree
Sovereign Sukuk	1.56	0.923	10	Disagree

Table 3 presents the descriptive statistics of the types of Sukuk Bonds used. The table presents the mean scores, standard deviations, ranking, and overall perception (agree/disagree) for ten types of Sukuk bonds based on survey responses. The mean scores are measured on a Likert-type scale, where higher values indicate stronger agreement regarding the use or acceptability of the Sukuk type. Sukuk al-Ijara (Lease Sukuk) with (Mean: 3.70, SD 0.868) was ranked 1, with the Remark: Agree. Respondents most strongly agree on the use of Ijara Sukuk, which is based on leasing agreements and is widely accepted due to its clarity and compliance with Shariah principles. The Sukuk Al-Mudarabah has (Mean: 3.64, SD 0.863), ranked 2, and remark: Agree. Mudarabah (profit-sharing) Sukuk are also well-regarded, reflecting comfort with partnership-based financing. The Sukuk al-Murabaha (Cost-Plus Sale Sukuk) has (Mean: 3.63, SD 0.827) and ranked 3, with Remark: Agree. Murabaha Sukuk, commonly used for short-term trade financing, is viewed favorably. Sukuk al-Musharakah (Partnership Sukuk) has (Mean: 3.61, SD 0.885), with a rank of 4, and a remark Agree. Similar to Mudarabah, Musharakah involves joint venture partnerships and is positively perceived. The Sukuk al-Muzara'a / Musaqat (Agricultural Sukuk) has a mean: 3.59 (SD 0.887), it was ranked 5, and the remark Agree. Agricultural Sukuk are accepted, though slightly less so than the top four types. The Sukuk al-Salam (Advance Payment Sukuk) has a mean: 3.59, SD 0.860, it was ranked 6 and remark Agree. Salam Sukuk, used for the forward sale of goods, is also agreed upon. Sukuk al-Wakalah (Agency Sukuk) has a mean: 3.58 (SD 0.896), and is ranked 7, and remark Agree. Wakalah-based Sukuk, where an agent manages the investment, are accepted but rank lower among the agreed types.

Table 4: Descriptive Statistics of Factors Affecting Sukuk Utilization

Statement	Mean	Std. Deviation	Range	Remark
Current regulations support Sukuk use.	3.29	1.052	1	Moderate
Government commitment boosts Sukuk use.	3.18	1.140	2	Moderate
Public education on Sukuk is insufficient.	3.16	1.126	3	Moderate
Regulatory gaps hinder utilization.	3.16	1.153	4	Moderate
Weak market liquidity limits adoption.	3.15	1.086	5	Moderate

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Shariah boards affect implementation.	3.14	1.025	6	Moderate
Sukuk is inclusive for Muslims and non-Muslims.	3.14	1.091	7	Moderate
Investor confidence promotes utilization.	3.13	1.081	8	Moderate
Professional awareness influences Sukuk use.	3.10	1.084	9	Moderate
Monitoring improves Sukuk project outcomes.	3.08	1.093	10	Moderate
Sukuk is considered low-risk.	3.07	1.028	11	Moderate
Public trust shapes Sukuk adoption.	3.06	1.040	12	Moderate
Religious resistance hinders Sukuk adoption.	3.05	1.130	13	Moderate
Policy inconsistency reduces Sukuk adoption.	3.05	1.048	14	Moderate
Political will drives Sukuk projects.	3.04	1.210	15	Moderate
Lack of training limits Sukuk adoption.	3.03	1.034	16	Moderate

Table 4 presents the descriptive statistics of the factors affecting Sukuk utilization. The highest-rated factor was that current regulations support Sukuk use (M = 3.29, SD = 1.052), reflecting respondents' recognition of a supportive policy environment. This was followed by government commitment boosting Sukuk use (M = 3.18, SD = 1.140) and public education on Sukuk being insufficient (M = 3.16, SD = 1.126). Other factors, such as regulatory gaps hindering utilization (M = 3.16, SD = 1.153), were also rated moderately. The lowest-rated factor was the lack of training limiting Sukuk adoption (M = 3.03, SD = 1.034).

Table 5: Descriptive Statistics of Level of Sukuk Bonds Utilization

Statement	**Mean**	**Std. Deviation**	**Range**	**Remark**
Sukuk projects meet quality standards.	4.20	0.698	1	Agree
Sukuk has improved infrastructure in my region.	4.18	0.830	2	Agree
Sukuk should be scaled up in Nigeria.	4.18	0.785	3	Agree
Sukuk is widely used in road projects.	4.16	0.795	4	Agree
Sukuk use is lower than conventional bonds.	4.16	0.776	5	Agree
Sukuk reduces project delays.	4.16	0.786	6	Agree
Sukuk projects are fairly distributed by region.	4.15	0.836	7	Agree
Sukuk ensures transparency in funds.	4.12	0.841	8	Agree
Sukuk creates jobs and supports growth.	4.11	0.780	9	Agree
Sukuk improves timely project completion.	4.10	0.806	10	Agree
Sukuk supports trade and travel efficiency.	4.08	0.845	11	Agree
I have worked on a Sukuk-funded project.	1.47	0.501	12	Strongly Disagree

Table 5 presents the descriptive statistics of the level of Sukuk bond utilization. The highest-rated item was that Sukuk projects meet quality standards (M = 4.20, SD = 0.698), followed by Sukuk has improved infrastructure in my region (M = 4.18, SD = 0.830) and Sukuk should be scaled up in Nigeria (M = 4.18, SD = 0.785). Respondents also strongly agreed that Sukuk ensures transparency in funds (M = 4.12, SD = 0.841). The lowest-rated item, and the only one outside the agreement range, was participation in Sukuk-funded projects (M = 1.47, SD = 0.501), indicating that most respondents had not directly worked on such projects. The overall mean score (M = 4.13), excluding I have worked on a Sukuk-funded project, confirms that respondents strongly agreed on the high level of Sukuk bond utilization in Nigeria. The low variation in responses (SD range: 0.698–0.845) suggests strong consensus among participants on these items.

4.4 Discussion

The study found strong agreement (Mean scores > 3.58) on the use of Ijara, Mudaraba, Murabaha, and Musharaka Sukuk. This aligns perfectly with global and regional trends. The top ranking of Ijara is unsurprising and is consistently supported by literature. Ijara, being a lease-based structure, is

considered one of the most straightforward, transparent, and universally accepted Sukuk models. A study by Abdullahi *et al.* (2021) on Sukuk adoption in Nigeria affirmed that Ijara is the most dominant structure due to its "simplicity, asset-backed nature, and high degree of Shariah compliance," which reduces perception of risk among investors.

The overall mean score (M = 3.13) confirms that respondents perceive these factors at a moderate level. The relatively wide variation (SD range: 1.025–1.210) indicates mixed views among respondents, reflecting some divergence in how these challenges are experienced.

The results showed moderate ratings, with regulatory support and government commitment emerging as key enablers. This is consistent with Adekoya (2024), who emphasizes that policy consistency and government buy-in are crucial drivers of Sukuk uptake in Sub-Saharan Africa, particularly in infrastructure financing. However, the relatively lower scores on professional training and awareness mirror findings by AbdulKareem and Mahmud (2021), who argue that low literacy and insufficient technical expertise hinder effective Sukuk adoption in Nigeria. Respondents strongly agreed that Sukuk enhances transparency, infrastructure delivery, and quality standards, though participation in Sukuk-funded projects was low. These findings align with Oshodi (2018), who demonstrates how Sukuk-financed projects in Lagos contributed significantly to urban regeneration and infrastructural upgrades. Similarly, Abdurraheem and Naim (2018) argue that Sukuk has proven capable of closing Africa's infrastructure funding gap, particularly through sovereign issuances.

4.5 Conclusion and Recommendations

The study concludes that Sukuk bonds, particularly Ijara Sukuk, have gained recognition as a viable alternative to conventional bonds in Nigeria. However, the range of Sukuk structures employed remains limited, with little diversification beyond lease-based issuances. This demonstrates that while awareness of various Sukuk types exists, their practical application in infrastructure financing is still underdeveloped. It is also concluded that the effective utilization of Sukuk is significantly shaped by institutional, regulatory, and market conditions. Although supportive policies and government commitment provide an enabling environment, challenges such as low technical expertise, weak investor confidence, and insufficient awareness continue to limit wider adoption in the construction sector. Government agencies and regulators should encourage the issuance of a wider range of Sukuk structures beyond Ijara. Options such as Musharaka, Mudaraba, and hybrid Sukuk should be explored to increase flexibility and broaden applicability to diverse infrastructure projects.

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