

DIGITAL FINANCE AS CATALYST FOR SUSTAINABLE INDIGENOUS ENTREPRENEURSHIP: EVIDENCE FROM IMO STATE ONE KINDRED ONE BUSINESS INITIATIVE (OKOBI)

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Abstract

This study examined the role of digital finance in bridging the financing gap faced by indigenous entrepreneurship models in the Global South, with specific reference to the One Kindred One Business Initiative (OKOBI) of Imo State, Nigeria. It examined how digital finance facilitates access to finance, financial inclusion, promotes business sustainability, and innovation within indigenous group-owned entrepreneurship models. A descriptive survey research design was employed, targeting a sample of 112 officially registered OKOBI enterprises selected from a population of 250 businesses across Imo State. Data were collected using a structured and validated questionnaire, and analysed through descriptive statistics including means, standard deviations, and percentages using SPSS version 25. The results revealed that digital finance significantly improved access to credit, enhanced financial inclusion, and fostered business innovation and sustainability among OKOBI enterprises. However, infrastructural challenges, digital illiteracy, cybersecurity concerns, and regulatory bottlenecks were identified as major obstacles to optimal digital finance adoption. The study recommends tailored fintech innovations, literacy and capacity-building initiatives, and enabling policy frameworks to strengthen digital finance integration in indigenous entrepreneurship models. Limitations include the study's focus on a single state-level initiative, reliance on self-reported data, and the use of descriptive rather than inferential statistical analysis, which restricts generalizability. Future studies should incorporate cross-regional comparative analyses and econometric modelling to enhance external validity.

Keyword: Digital Finance, Imo State, Initiative, MSME, One Kindred One Business

Introduction

There is an increasing recognition of digital finance as a transformative tool for promoting sustainable entrepreneurship, especially in contexts where traditional financial services are limited (Bakry et al., 2024). It helps transform economies (Beirne & Fernandez, 2023). Unlike conventional finance as it leverages on rapid advancement in information and communication technology (ICT) to improve access, efficiency, and inclusivity in financial systems. It offers additional benefits not only to the banks but also to the ecosystem, through financial inclusion, and economic stability (Dupas & Robinson, 2013; Manyika et al., 2016).

While its potential for inclusive economic growth is acknowledged widely, there is scarcity of empirical evidence linking it to indigenous entrepreneurship models. This study therefore contributes to the literature by examining how digital finance facilitates access to finance, financial inclusion, promotes business sustainability, and innovation within indigenous entrepreneurship models focusing on the Imo State One Kindred One Business Initiative (OKOBI) – a place-based, group-owned business model.

OKOBI as an indigenous entrepreneurship model faces a critical barrier in the form of limited access to finance, high transaction costs, and lack of financial inclusion, a challenge particularly pronounced for Micro, Small and Medium-sized enterprises (MSMEs), often constituting the backbone of local economies in Imo State and Nigeria in general. Traditional financing institutions systematically under-serve these enterprises. This has left an estimated \$2 trillion financing gap for formal MSMEs in low-and middle-income countries (Disse & Sommer, 2020a) such as Nigeria. An approximately 50% of these MSMEs remain without adequate financial support, reflecting a classic market failure driven by information asymmetries and high loan costs (Cressy, 2002). To address this obstacle, it is essential to sustain community-based, group-owned entrepreneurship initiatives such as OKOBI.

To tackle these challenges, digital finance has emerged not only as an alternative to the traditional banking, but also as a favourable alternative that expands access to finance, affordable, provides convenient financial services, and promotes financial inclusion (Beirne & Fernandez, 2023; United Nations, 2016). This is against the backdrop of high penetration of mobile phone (Benami & Carter, 2021; World Bank, 2014), making digital finance important in addressing the shortage of physical bank branches in rural communities. Hence beyond mere access, digital finance has been found to provide finance tools for household savings, and investment, supporting consumption smoothing during financial stress (Li et al., 2020; Wang & Wang, 2022), and sustaining group-owned businesses such as OKOBI.

Thus to examine how digital finance addresses access to finance, encourages financial inclusion, promotes indigenous business sustainability and innovation, answers were attempted for four research questions: (i) How does digital finance mitigate the financing gap faced by MSMEs within the OKOBI framework; (ii) To what extent does digital finance enhance financial inclusion for indigenous, community-led ventures; (iii) How does the adoption of digital financial tools influence the sustainability, growth, and innovation capacity of group-owned businesses under OKOBI?; and (iv) What are the key technological, regulatory, and literacy-related challenges limiting digital finance adoption in OKOBI, and what policy measures can address them?

This study makes contribution to knowledge by looking at the impact of digital finance on indigenous entrepreneurship in Nigeria. The study is divided into five (5) sections. While section 1 is the introduction of the study, section 2 briefly discussed relevant literatures, section 3 presented and explained methodological issues, section 4 outlined, interpreted and discussed the empirical findings, while section 5 concluded the paper.

Literature Review

There are empirical studies confirming that digital finance significantly enhances entrepreneurial performance, especially in the informal sector operating in rural areas. According to Yu et al., (2024), digital finance enhances their access to credit, while reducing their financial information barrier, hence altering households risk attitude. Sun & Xie, (2024) found that digital finance provided by the traditional banks positively enhances formal entrepreneurship, while that provided by Big-Techs significantly enhances the performance

of informal entrepreneurship. A study by Ofori-Sasu et al., (2023) using 52 African economies for the period 2004 to 2020 found a two-way relationship between entrepreneurship and finance, which is strengthened by the enhancement of finance channels for both entrepreneurship growth and financial inclusion in Africa. Alom et al., (2025) found that digital finance significantly enhances women's entrepreneurship as it empowers them increasing their chances of employment.

Digital finance is an efficient enabler channel for green and social finance (Ozili, 2021). It expands opportunities for innovative financial products design (Björkegren & Grissen, 2018). It transforms how economic activity is conducted by reducing economic costs (Goldfarb & Tucker, 2019). Digital finance improves economic growth and sustainable growth through diversification, technological upgrades and entrepreneurial innovation (Hasan et al., 2024).

In Kenya, Natile, (2020) found that digital finance models like M-Pesa not only have expanded digital financial inclusion but also has framed it as a social entrepreneurship benefiting largely mobile money providers and institutions rather than delivering meaningful redistribution to the unbanked poor. Furthermore, digital finance enhances financial innovation, lowering financial cost, in alignment with sustainable development goal of fostering long-term climate benefit (Abramova et al., 2024).

Also, Bachas et al., (2018) agreed to the fact that digital finance reduces transaction costs. They further argued that it also reduces travel barriers thus improving financial inclusion through increased account usage, and accessibility especially in low-income and financially excluded populations. It also reduces SMEs cost of doing business (Duan, 2021). Disse & Sommer, (2020) agreed that digital finance reduces transaction costs while broadening access to alternative data, and diversified financing sources, thus enhancing SMEs financing and promotion of inclusive economic development.

Digital finance has been found to enhance economic resilience while mitigating risks especially during global uncertainties (Tang et al., 2024). Beirne & Fernandez, (2023) found that while digital finance can significantly enhance financial inclusion and inclusive growth, its impact is largely dependent on ensuring its stability, security and consumer trust. They therefore advocated for addressing literacy gaps, infrastructural deficits, and regulatory challenges. Digital finance has also been found to enhance environmental financing as it synchronises digital transformation with ecological investments, especially where both direct digital financing and indirect digital capacity positively stimulate environmental investment and protection costs (Akberdina et al., 2023). In Pakistan, digital finance has been found to address financial inclusion through the reduction of barriers such as lack of money, formalities, and gender discrimination, while enhancing access to financial services for inclusive and sustainable economic growth (Zulfiqar et al., 2016).

Talking about green financing, digital finance significantly promotes technological diffusion across regions by enhancing digital economic pathways and fostering stronger diffusion effects (Tang et al., 2024). It significantly advanced environmental sustainability in Middle eastern countries (Ibrahim et al., 2024). Green financing leverages technology to channel funding effectively towards environmental projects though it faces barriers such as digital divide and cybersecurity risks (Attia, 2024), while addressing ESG and regulatory gaps (Gupta et al., 2025). According to Chiapello & Knoll, (2020), through financialized instruments, impact investment utilizes digital financing to reconfigure welfare provisions by leveraging private capital. Furthermore, Kölbel et al., (2020) reiterated that impact investing in digital finance without complimentary policies limits its transformative impacts.

Though digital finance promotes economic growth and curbs environmental pollution, its potential as a policy tool for sustainable development cannot be undermined (Xu & Tang, 2025). With an increasingly coordinated development, digital finance significantly enhanced urban low-carbon economy efficiency in China (Yao et al., 2022). The benefit of digital finance takes time to materialise in its relationship to CO₂ emissions (Bakry et al., 2024). Digital finance is synergetic with sustainable economic development significantly influenced by factors such as GDP per capital in the Yellow River Basin of China (An et al., 2024). It enhances risk management, product innovation, and regulatory compliance in green finance through technologies such as AI, ML, blockchain, and RegTech (Saeedi & Ashraf, 2024).

However, in as much as digital finance offers new business opportunities through technological advancement and global connectivity, it raises the complex challenge around cybersecurity, surveillance, privacy, and the contested use of personal data (Hagen & Lysne, 2016). Green finance also faces the challenges of project risk management, innovative products scarcity and regulatory compliance challenges (Saeedi & Ashraf, 2024). Through handshake by banks and FinTechs, digital financing can not only develop and transform culturally embedded business landscape, but digital finance can also serve as a powerful catalyst for sustainable innovation and scaling solutions for the advancement of SDGs as long as institutions step into action (Knowles Merrill et al., 2019).

Materials and Method

The study adopted the descriptive research survey design, which is appropriate for assessing the perceptions and experiences of registered business operators within the OKOBI framework. The population of study consisted of 250 OKOBI officially registered businesses in Imo State, each meeting a criterion of employing a minimum of five (5) staff members. These businesses represent the target respondents, as they are the direct beneficiaries and implementers of the OKOBI indigenous entrepreneurship model. They include co-operatives-based enterprises, small-scale group owned agro-processors, retail clusters, and other community-led ventures formally recognised under the Imo State One Kindred One Business Initiative. A sample size of 112 respondents was determined using the Taro Yamane formula for finite populations, ensuring statistical representation. The study utilised both primary and secondary data sources. Primary data were obtained through a structured questionnaire administered to members, managers, and financial officers of the registered OKOBI enterprises. These respondents were selected because of their operational involvement and knowledge of the impact of digital finance tools such as mobile banking, agent banking, and fintech platforms on their business financing, sustainability, and innovation. The questionnaire was subjected to face and content validity using three experts in entrepreneurship and development economics to ensure its alignment with the research objectives, as recommended by (Uzodimma et al., 2025). A pilot study conducted with 15 respondents yielded a Cronbach alpha coefficient of 0.82, confirming high internal consistency and reliability of the instrument. Collected data were analysed using descriptive statistics, including percentages, mean scores, and standard deviations. Mean scores of 2.5 and above are considered significant, while scores below 2.5 are deemed not significant. The results are presented in formatted tables to facilitate clarity and interpretation.

Results and Discussion

Data Presentation

All 112 copies of questionnaire distributed to the respondents were properly filled in and returned.

There was therefore 100% return.

Table 1: Demographic Variables of the Respondents

Variables	Options	Frequency (n)	Percentage (%)	Cumulative Percentage (%)
Gender	Female	63	56	56
	Male	49	44	100
	Total	112	100	—
Age	18–25	5	4	4
	26–35	27	24	28
	36–45	41	37	65
	46–55	31	28	93
	Greater than 55	8	7	100
	Total	112	100	—
Marital Status	Married	61	54	54
	Divorced	7	6	60
	Single	23	21	81
	Widowed/Widower	21	19	100
	Total	112	100	—
Educational Qualification	Non-Formal	—	—	—
	Primary	12	11	11
	Secondary	39	35	46
	Tertiary	61	54	100
	Total	112	100	—
Years of OKOBI Business Experience	Less than ½ year	37	33	33
	½–1 year	24	21	54
	1–2 years	19	17	71
	2–3 years	21	19	90
	Greater than 3 years	11	10	100
	Total	112	100	—
Responsibility at Work	Funder	53	47	47
	Management	55	49	96
	Adhoc Staff	4	4	100
	Total	112	100	—

Source: Survey Report (2025).

From the demographic information, the gender distribution is balanced at 56% female and 44% male. This is an indication that both genders are actively engaged in OKOBI initiative. Also, the age distribution reveals a striking point. Most of the people involved in OKOBI fall within the age bracket of 26-55 years, having the largest pool from 36-45 years followed by 46-55 (37%) years (28%). An indication that OKOBI is driven by mature and economically active individuals. The marital status also reflects diverse background as influencing entrepreneurial engagement with 54% married, 21% singles, and 19% widows/widowers.

Furthermore, 54% of the respondents attended tertiary education while 35% secondary education, and only a small fraction of 11% having primary education. This shows a well-educated participants base that could positively impact the sustainability of OKOBI

businesses. The varying degree of business experience 33% having less than half a year, 21% with between half and one year, 29% with over two years points to a mix of new and relatively experienced entrepreneurs. However, 47% representing almost half of the participants are funders while 49% are also involved in managing the OKOBI business, a small proportion of 4% are Adhoc staff. This highlights that OKOBI is currently a leadership-driven initiative with strong owner-manager involvement.

Table 2: Access to Finance

Q/No.	Item	VHE	HE	LE	VLE	M	SD
1	To what extent do you have access to digital financial platforms such as mobile money, digital loans, banking apps?	32	56	13	11	2.97	2.58
2	To what extent has access to these digital financial platforms improved your group's ability to secure financing for OKOBI ventures?	34	42	21	15	2.85	2.50
3	To what extent has digital finance reduced your reliance on informal lending or high-interest credit sources for business funding?	22	37	34	19	2.55	2.22
4	To what extent is digital finance platforms effective in providing timely access to credit or capital for MSMEs under the OKOBI initiative?	44	39	15	14	3.01	2.66
5	In your experience, to what extent has digital finance made it easier for your group to pool resources for collective business projects?	41	45	10	16	2.99	2.64
6	To what extent do you believe digital finance has closed the financing gap between rural/community businesses and conventional bank credit?	46	51	10	5	3.23	2.80

Note: VHE= Very High Extent; HE=High Extent; LE=Low Extent; VLE=Very Low Extent.

M= mean, and SD= standard deviation respectively.

Source: Survey Report (2025)

From the table above, the findings indicate that access to digital finance platforms has significantly improved access to finance for OKOBI businesses with a mean score of 2.97 and standard deviation of 2.58, while improving their accessibility of financing significantly with a standard deviation of 2.50. Furthermore, the respondents affirmed highly that digital finance have increased their access to timely credit and also closed the funding gaps between the rural businesses and conventional banking with mean values of 3.01 and 3.23 respectively. Also, the results suggest a moderate impact on reducing reliance on informal lending sources with a mean value of 2.55 and standard deviation of 2.22. This indicates that traditional credit channels may still hold relevance for some businesses despite the adoption of digital tools. This result supports (Azali, 2016) who found that the cashless policy in Indonesia increased access to finance, and Zhang et al., (2023) who found that digital finance enhances access to finance by SMEs in China.

Table 3: Financial Inclusion

Q/No.	Item	VHE	HE	LE	VLE	Mean	Std. Dev.
1	I/We use digital finance platforms such as mobile banking, online transfers, and agency banking for OKOBI-related activities.	48	47	6	48	3.51	2.79
2	Digital finance has improved my/our access to savings, investment, and credit opportunities previously unavailable through traditional banks.	45	53	8	45	3.57	2.79
3	Digital finance has enhanced participation of women, youth, or marginalized members in OKOBI ventures.	40	48	11	40	3.27	2.66
4	Digital finance has improved trust, transparency, and accountability in financial dealings within your OKOBI group venture.	28	62	4	28	2.98	2.53
5	Accessibility to digital finance services is significant in our location when compared to traditional banking services.	47	59	1	47	3.70	2.87

Note: VHE= Very High Extent; HE=High Extent; LE=Low Extent; VLE=Very Low Extent.
M= mean, and SD= standard deviation respectively.

Source: Survey Report (2025)

From table above, the data demonstrates that digital finance has strongly promoted financial inclusion among OKOBI groups. There is very high reported usage of digital platforms for OKOBI activities with a mean score of 3.51. There is also a strong consensus that these tools have improved access to savings and investment opportunities. This is represented with a mean score of 3.57. Furthermore, another significant finding is the perceived role of digital finance in enhancing participation for women, youth, and the marginalised groups. It further demonstrated this with a mean score of 3.27 and standard deviation of 2.66 suggesting digital finance fosters greater equity. However, respondents find digital finance services significantly more accessible than traditional banking in their localities, showcasing this with a mean score of 3.70. Also, with a mean of 2.98 and standard deviation of 2.53, it acknowledged a positive impact of trust and transparency of digital finance. This score hints that ensuring absolute accountability within groups may require additional measures beyond the digital platforms themselves. The above result is in line with findings of (Al-Smadi, 2023) whose research confirmed that digital finance significantly enhanced financial inclusion in the Middle East and North African countries.

Table 4: Sustainability and Innovation

Q/No.	Item	SA	A	D	SD	Mean	Std. Dev.
1	The use of digital financial tools has improved your group's record-keeping, accountability, and financial management practices.	36	50	15	11	2.99	2.61
2	Digital finance has contributed to the expansion or scaling of your OKOBI venture.	52	55	2	3	3.39	2.92
3	Digital finance has enabled your business to explore new opportunities such as e-commerce, mobile payments, and digital supply chains.	46	59	6	1	3.34	2.86
4	Digital finance enhances the long-term sustainability and competitiveness of your business.	38	54	12	8	3.09	2.68
5	The adoption of digital financial tools increased innovation and creativity in how your group operates its OKOBI venture.	41	54	8	9	3.13	2.73

Note: VHE= Very High Extent; HE=High Extent; LE=Low Extent; VLE=Very Low Extent.
M= mean, and SD= standard deviation respectively.

Source: Survey Report (2025)

The table above gives a breakdown of the responses from respondents on sustainability and innovation brought about by digital finance for OKOBI ventures. With a mean value of 3.39, and a standard deviation of 2.92 respondents overwhelmingly agreed that it has contributed directly to business expansion. Also, with a mean value of 3.34 (standard deviation of 2.86) they agreed that this enabled the exploration of new opportunities like e-business expansion. However, the respondents agreed strongly that digital tools enhance long-term competitiveness, depicting this with a mean score of 3.09 and standard deviation of 2.68. To them, this has increased innovation and creativity in operations with a mean value of 3.13. Further results showed that at a standard deviation and mean score of 2.61 and 2.99 respectively digital finance has improved foundational practices like record-keeping and financial management which is a crucial underlying factor for sustainable growth. This makes digital finance not only a transactional tool, but also a catalyst for strategic business development and resilience. The result here is in line with the findings of Xie et al., (2024) and W. Wang et al., (2023) that digital finance enhances business sustainability and growth.

Table 5: Challenges and Policy

Q/No.	Item	SA	A	D	SD	Mean	Std. Dev.
1	Infrastructural issues such as poor Internet, unstable electricity, unreliable mobile networks, and high cost of data	35	48	23	6	3.00	2.59
2	Fear of fraud and hacking	50	56	5	1	3.38	2.91
3	Lack of digital literacy among group members	48	32	11	21	2.96	2.66
4	Regulatory or policy-related barriers such as lack of government support, high transaction charges, and unclear fintech rules	34	30	25	23	2.67	2.39
5	Access to training inhibiting digital finance adoption in your community	44	33	14	21	2.89	2.59
6	Non-existence of adequately tailored services by financial institutions and fintech providers to the needs of rural or community-led businesses like OKOBI	25	20	24	43	2.24	2.04

Note: VHE= Very High Extent; HE=High Extent; LE=Low Extent; VLE=Very Low Extent. M= mean, and SD= standard deviation respectively.

Source: Survey Report (2025)

The challenges and policy impacts of digital finance on OKOBI businesses is presented above. Even though digital finance has some overwhelming benefits, there are however challenges that hinders its adoption and optimal use. These challenges include fear of fraud and hacking with a mean and standard deviation of 3.38 and 2.91 respectively. Infrastructural issues such as poor internet, unstable electricity, and high data costs with a mean value of 3.00 and standard deviation of is another challenge. Also, digital illiteracy among OKOBI business members also constitutes a barrier with a mean value of 2.96. These results align with the findings of Sarma (2025) that digital illiteracy, and cyber-attacks remains barriers to the use of digital finance tools. Furthermore, OKOBI businesses face regulatory challenges such as high costs of transaction. It buttressed this with a mean score of 2.67. They therefore agreed with a mean of 2.89 and standard deviation of 2.59 that access to training inhibits digital finance adoption.

Discussion of Findings

The findings of this study revealed that digital finance has significantly improved access to finance, financial inclusion, and resources pooling among OKOBI businesses. This has strengthened their operational capacities and also enhanced their growth prospects.

Furthermore, it also enhanced business sustainability through improved record-keeping, expansion opportunities, and innovation channels such as e-services and e-commerce. However, the adoption of digital finance remains constrained by challenges such as cybersecurity fears, weak digital infrastructure, and widespread digital illiteracy. It was revealed also that to address these barriers, there is need for tailored digital financial services, increased government support, and targeted policy interventions. These will deepen digital finance adoption especially in informal and grassroots entrepreneurship.

From the findings, digital finance plays a transformative role in supporting OKOBI businesses by bridging financing gaps. It also promotes inclusivity, driving long-term sustainability and innovation. Furthermore, it is evident that digital finance platforms improved access to finance by OKOBI businesses, improved participation of the marginalised groups including women and youths, while enhancing transparency, and accountability. It also increased the collective action of resource pooling, making it a resilient economic driver in the Global South.

Regarding barriers faced by OKOBI businesses, it is obvious that poor infrastructure, regulatory challenges, cybersecurity fears, weak mobile networks, and costs of transactions are endemic challenges to the adoption of digital finance in the Global South. To overcome this, there is need for tailored digital financial products that would be more engaging to the OKOBI business model. This will help the achievement of digital finance potentials in the Global South.

Policy Implications of the Result

Policy should place importance on investments in digital infrastructure such as mobile networks and electricity, to address the high cost and unreliable connectivity that hinder digital finance use. To build digital skills, financial literacy programs are needed. This will reduce illiteracy barriers. Also, consumer protection frameworks that will combat fraud need be strengthened. Furthermore, a review of regulatory frameworks need be reviewed to ensure reduced transaction costs in rural areas where OKOBI businesses operate more. Finally, there is need for government and institutional supports. This could be in form of training, and subsidies that will directly boost adoption of digital finance for business growth.

Conclusion and Recommendation

This study highlights how digital finance can catalyse and improve access to finance, promote financial inclusion, and enhance sustainability and innovation for group-owned businesses in models such as the OKOBI of Imo State government of Nigeria. The findings revealed that while digital platforms significantly closed the financing gaps, it also encouraged collective resources pooling, and encouraged women, youth, and the marginalised groups getting involved in group-owned entrepreneurship models. Furthermore, digital tools improved financial management, while supporting business expansion, stimulating innovation. This demonstrates the role of digital finance as not only a transaction tool, but also as a tool for the long-term competitive resilience of indigenous entrepreneurship models.

Digital finance however is not without challenges. These challenges include infrastructural deficits, digital illiteracy, regulatory challenges, and cyber-attack risks. These challenges hinder the effective adoption of digital finance platforms. Hence calls for increased investment in infrastructure, improved literacy programs, reduced cost of transaction and frameworks that enhance stronger user protections.

It is advised that further studies should explore the co-designing of tailored digital finance solutions with a view to unravelling how it can improve the adoption of digital finance, especially in the Global South. The study can explore the integration of fintech innovation with cultural and traditional business models such as OKOBI. This will ensure the sustainability of such businesses and also address the systemic barriers to inclusive economic growth in the Global South.

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