TITLE:

Redefining Financial Inclusion: Access Bank Plc' USSD Code-Based Investment Platform.

[Project USSD Investment Nexus]

By

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Executive Summary

This proposal centres on a transformative digital financial solution. It presents the potential for designing, developing, and introducing the USSD Investment Nexus, primarily to address the structural exclusion of unbanked, low-income, and feature-phone users from Nigeria's formal investment ecosystem. Built on a USSD technology, the objectives of the initiative are to tap into the potential provided by the vast Access Bank Plc's network of over 50,000 agents, asset manager partnerships, and Digital Labs capacity to simplify investment in regulated instruments for any Nigerian. This solution will make treasury bills and mutual funds investments possible without the need to have a bank account or smartphone.

The solution is a response to strengthen inclusivity. This is necessary as only 2% of Nigerians have capital markets investment, and smartphone penetration in rural areas remains stagnant at less than 50% (GSMA, 2023; EFInA, 2023). The proposed solution aligns with the strategic vision of Access Bank to integrate asset management and insurance under a HoldCo framework and Ochestration (Access Bank Plc, 2022). This subsists while targeting sizeable non-interest income and social significance. Leveraging insights from relevant frameworks and literature, the Nexus is designed as a disruptive, simplified innovation, capable of being operatively resilient in an infrastructure deficit and disruption-prone jurisdictions.

Through an agile, five-level technical architecture and a progressive implementation plan, the initiative guarantees compliant, secure, and scalable solution deployment. The network of agents plays a key role in customer education, onboarding, and dispute resolution. This will be supported by result-oriented incentives and phased training of the employee. Business Model Canvas and Porter's Five Forces certify a secure market position, while a 6-month break-even projection is facilitated by financial forecasting. The early break-even projection is informed by the solution capacity to expedite diversified revenue streams.

Risk analysis is underpinned by integrated PESTLE, SWOT, and TOWS frameworks, with mitigation strategies encompassing regulatory dynamics, telco dependence, and customer apathy. ESG emphasis is incorporated through green investment choices and virtual training of staff to cut carbon footprints. Blockchain and AI/ML integrations are registered for future readiness. The pilot targeted 4.6 million annual active users by Q3 2026 ending. By 2028, the user base is projected to grow to 6.08 million users.

The report concludes by urging formal adoption and swift implementation of the initiative by Access Bank senior management.

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Glossary

ALV - Average Lifetime Value

AM - Asset Managers

AMC - Asset Management Companies

AML - Anti-Money Laundering

AML – Anti-Money Laundering

API – Application Programming Interface

BMC - Business Model Canvas

CBN - Central Bank of Nigeria

DSE - Digital Services Environment

HSM - Hardware Security Module

IAU - Innovation Assurance Unit

ISE - Innovation Steering Committee

IVR – Interactive Voice Response

KYC - Know Your Customer

MVP - Minimum Viable Product

NAICOM – National Insurance Commission

NAV – Net Asset Value

NCC - National Communications Commission (NCC)

ROSCA - Rotating Savings and Credit Associations

SEC - Security and Exchange Commission

SLA - Service Level Agreements

SMS - Short Messaging Service

USSD – Unstructured Supplementary Service Data

1. Introduction

The significance of inclusive, technology-powered, and smart innovation has become dominant in the post-COVID-19 financial services environment (World Bank, 2022). For financial organizations like Access Bank Plc, with a robust bancassurance and wealth management (BWM) legacy and pan-African drives, the core challenge is closing the gap of digital exclusion while widening financial product access. This proposal offers a revolutionary innovation designed to tackle this issue. The initiative centres on the development and roll-out of a USSD Code-based investment platform, open to all, including non-customers of Access Bank, the digitally marginalized, and the traditionally unbanked populations.

While operational digital investment platforms depend largely on internet-enabled smartphone and computer systems, this proposed solution redefines low-tech infrastructure as a democratizing vehicle for accessing savings, insurance products, and wealth building. Basic mobile phones are leveraged by the proposed platform to navigate typical infrastructural limitations such as device affordability, digital literacy, and data access. With 95%+ mobile penetration in sub-Saharan Africa, including Nigeria, but lagging internet access (GSMA, 2023), this asymmetry-tailored channel provision opportunity is commercially as well as socially strategic.

From a strategic and leadership alignment viewpoint, the initiative is underpinned by strategic insights afforded by the internal analyses of Access Bank. This includes the bank's corporate strategy 2022–2027 and its larger mandate of financial inclusion (Access Bank Plc, 2023). As a result, the proposal aligns the most progressive thought concerning innovation during instability (Bar-Am et al., 2020), disruptive transformation commitment (Cohen et al., 2019; Christensen, 2012), and innovation management models (HYPE Innovation, 2017).

The key offer is to reimagine the access and delivery of investment services, particularly for disadvantaged demographics who are characteristically overlooked by the legacy wealth management system. This goes beyond just a technological upgrade, it is a structural shift that aligns telecom company’s partnerships, agent networks, and strong risk-management standards. It harnesses regulatory guidance and behavioural insights to promote compliance, establish trust, and facilitate enduring resilience during crises.

The proposal unveiling the USSD-based investment platform idea covers the literature and theoretical foundations upon which the organs that hold the idea rest. It also provides the current state assessment and gap analysis underpinned by different frameworks, and conceptual design of the USSD investment nexus which demonstrate the architectural, operational, and regulatory design of the platform. Porter's Five Forces and the Business Model Canvas were incorporated under strategic alignment to assess the initiative's commercial viability, while the operational and technical implementation plan highlights the execution roadmap. The proposal forecasts uncertainties and prescribes mitigation plans in risk analysis and change management, while also incorporating principles of ESG and demonstrating future readiness founded on future application of AI/ML and blockchain technologies. The financial projection for three years is presented, with KPIs and the socio-economic impact of the initiative highlighted.

2. Literature Review and Theoretical Foundations

The proposed USSD Investment Nexus solution is underpinned by crucial theoretical and empirical evidence for its justification. The initiative is built on interdisciplinary works on disruptive innovation theory, strategic leadership frameworks, crisis-facilitated innovation, and low-tech digital inclusivity to confirm the viability of the platform for Access Bank Plc.

2.1 Crises-driven Innovation: Opportunity Amid Challenge

Crisis periods, whether epidemiological, economic, or geopolitical, have traditionally accelerated disruptive innovation (Archibugi et al., 2013). Crises upset established norms, and stimulate innovation rush (Rosenbloom, 2020). Bar-Am et al. (2020)'s “Eight Essentials of Innovation” framework emphasizes reimagining the inherent needs of the customer, recalibrating portfolios with developing opportunity areas, and swift resource reallocation. This perspective is furthered by Furstenthal et al. (2021), by argue that bold, crisis-driven innovation is not a reflexive consequence, but rather, a strategic option. They advocate value-focused sprints, real-time customer feedback loops, and agile teams, which are Access Bank’s echoed principles post-Covid. The bank transformed to favour USSD-based micro-insurance for its traditional customers and attracted around 4.6million users in its inaugural year (Access Bank Plc, 2023).

This forward-thinking innovation mirrors Cohen et al. (2019) “Innovation Commitment” principle, which cautions that organizations mostly ease into low-risk, progressive initiatives when refuse to articulate a measurable innovation objective. For Access Bank, the plan to register 100,000 unbanked on the proposed USSD platform and the resultant attraction of ₦10 billion in new deposits is an audacious green-box goal, which aligns with crisis-fostered reinvention principles.

2.2 Transformational Innovation: Bottom-tier Market Position and Strategic Response

Christensen's (2012) disruptive innovation theory postulates that underserved segments are initially served by market entrants with basic solutions and progressively optimize until the incumbents are upended. This scenario has materialized in Nigeria's fintech market, where startups like Monipoint and Opay utilized mobile platforms to bypass physical branch-reliant incumbents to cater to the underserved market (QUT IFB, 2015; Gilchrist, 2022; World Bank, 2021). Drawing from the disruptive innovation postulation, the USSD Investment Nexus targets wealth management long-excluded segments, which are low-literacy, low-income, and feature-phone users, by offering simplified investment services.

The principle of 'low-end disruption' by Christensen strengthens the strategic significance for Access Bank to compete internally with its customary advisory model through digital self-service media. Access Bank's USSD-based offering pre-empts disruption, rather than allowing fintech platforms to snatch its clients, thereby encouraging customer loyalty in a rapidly digitising economy. Furthermore, the proposed solution's planned evolution, to later integrate AI for financial coaching, follows the 'performance trajectory' framework (Christensen, 2012).

2.3 Innovation Management: Disruption Institutionalization

HYPE Innovation (2017) promotes the adoption of systematic innovation governance to mitigate the risk of innovation theatre, a condition where execution scarce even in the face of abundant ideas. HYPE's four-pillar model, which includes, People, Process, Technology, and Governance, activates disruption within traditional institutions. This, in the USSD Investment Nexus, involves:

- People: Cross-functional innovation teams, sourced from Digital Labs, Retail Banking, Compliance, and Bancassurance Units.

- Process: Stage-managed idea-to-market processes, with pilot testing taking place in three demographically divergent states of Lagos, Akwa Ibom, and Kano.
- Technology: Relying on the bank's Digital Service Ecosystem and leveraging telco partnerships to foster scalability.
- Governance: A Bancassurance Head chaired the Innovation Steering Committee chaired to manage product launch and performance shifts.

This systematic governance structure is underpinned by Cohen et al.'s (2019) advocacy for discovery-focused planning, where data-driven learning loops, and not rigid business justifications, inform initiative iteration. It equally implements Scott's (2017) dual-transformation model, which aligns experimental initiatives with core optimization.

2.4 Low-Tech Digital Inclusion: USSD as Empowering Infrastructure

The choice of USSD by Access Bank is informed by the evidence that smartphone possession and usage among Nigerians hovers around 60%, leaving about 40% of the population without one (GSMA, 2023). According to Gilchrist (2022), USSD is Africa's digital balancing force, with a recorded annual growth of 25% between 2018–2022. The technology bypasses data cost barriers, internet availability and app literacy inhibitions, which are synonymous with older populations and rural areas (Gilchrist, 2022). Frost and Sullivan (2022) certify its strong credibility owing to its use of mobile banking and airtime recharge. This makes it a perfect instrument for innovative financial services such as micro-investments.

The proposed USSD code-based solution emulates M-Pesa's Kenya success, which showed that advanced financial behaviours can be supported by basic feature phones when accompanied by a fitting trust-enabling structure (Wood, 2021). Investment offering in acquainted instruments like mutual funds and T-bills via the USSD channel is key for early adoption, as it balances legitimacy with simplicity.

2.5 Strategic Leadership Models: Accelerating Implementation

Implementation of innovation on a large scale requires visionary and operationally rooted leadership. A five change-leadership strategic priorities including, All In, Connect, Align, Innovate, and Learn, is advocated by Hemerling (2016). The HoldCo structure of Access Bank offers a perfect premise to practicalize these core priorities through vertically integrated collaboration between Retail, Wealth, Digital, and Technology.

Osho (2025) demonstrates how standardized experimentation-driven agile and innovative governance is embraced by the leadership of Access Bank. This is complemented by Li's (2014) networked leadership concept by supporting flat and cross-disciplinary teams. Operationally, this translates to allowing compliance officers on USSD design cycles and co-developing onboarding processes with app developers and field agents. Such an approach to leadership mitigates front-management friction and speeds up delivery.

The leadership discourse is extended by Bardy (2004), by integrating ethics, institutional integrity, and sustainability into innovation. The ISO-adherent data protection of the USSD platform, its NAICOM/ CBN KYC policies alignment, and the availability of ESG product alternatives, such as green-bond mutual funds, fulfil human-centric management criteria by Bardy. By design, the initiative promotes social inclusion through investment democratization, economic sustainability through NPV-positive business cases, and institutional legitimacy through regulatory compliance.

2.6 Integrated Innovation Metrics

Typical Return on Investment (ROI) metrics mostly disincentive emerging innovation. A tri-tiered innovation measuring approach was proposed in 2019 by Cohen et al. They include:

- Activity indicators**:** including agent-assisted enrolments or USSD session numbers.
- Impact indicators: such as USSD code sourced Assets Under Management (AUM).
- Outcome indicators: including Net Promoter Score (NPS) among the urban unbanked demographic.

By separating emerging innovation from immediate contributions of P&L, a learning-first approach can be adopted by Access Bank towards execution, in alignment with Scott's (2017) proposition. This model fosters adaptive planning, where pivots or next-phase investments are informed by rapid feedback loops.

3. Current State Evaluation and Gap Analysis

The critical assessment of Access Bank's existing BWM infrastructure is essential for establishing the bank's USSD Investment Nexus readiness. Inspired by established insights from the organization, frameworks including PESTLE, SWOT, and value chain are applied to identify market exclusions, innovation gaps, and structural inefficiencies, to set the foundation for strategic transformation.

3.1 Macro-environment Analysis - PESTLE

Political:

Developments from regulatory bodies like the National Insurance Commission (NAICOM), the Securities and Exchange Commission (SEC), and the Central Bank of Nigeria (CBN), are progressively intended for financial inclusion. The Tiered KYC guideline of 2023 allows the use of digital channels for low-risk onboarding, particularly for previously unbanked demographics (CBN, 2023). This puts Access Bank in a leading position for compliance-built innovation through a USSD-provided investment platform. This is particularly exigent as the financially excluded are the target of Nigeria's National Financial Inclusion Strategy (NFIS 3.0).

Economic:

The macroeconomic instability in Nigeria, evidenced by regular naira devaluation, 34% inflation (NBS, 2025), and growing consumer cynicism, has produced a hesitant and underinvested retail population. Notwithstanding these challenges, compelling returns are produced by risk-averse instruments such as T-bills (CBN, 2024)). However, these investment instruments are not being accessed by low-income demographics due to complexities associated with onboarding (EFInA, 2023). Meanwhile, about 2/3 of Access Bank's transactions now arise from non-traditional branch channels, thus demonstrating a change in consumer behaviour (Access Bank, 2023).

Social:

The crisis of financial exclusion continues, especially among rural and women populations (GSMA, 2022). The report reveals that only 26.6% of adults have broad access to credits, investment, savings, and insurance products (EFInA, 2023). While Access Bank's agent networks and "W" initiative have made progress, the bias of product-market fit in favour of urban literates persists. In addition, cognitive barriers and trust deficits around investment remain, and these strengthen the necessity for intuitive, and culturally allied digital product delivery (Peterson, 2020).

Technological:

With smartphone ownership in Nigeria reaching only 48% (GSMA, 2023), USSD technology among rural and lower-income users remains dominant. Access Bank's USSD (*901#) microinsurance has attained yearly transactions in excess of 9.2 million, evidencing low-tech engagement demand (Access Bank Plc, 2023). However, its wealth management element is integrated into the AccessMore app, therefore fostering a digital divide that excises some demographics of the population from formal capital market investment.

Legal:

Tiered KYC directive by CBN facilitates low-income users onboarding through basic compliance. But, AML/CFT regulations dictate partner agents and asset manager accountability. The lack of simplified, digitally compliant processes remains an obstacle to investment products inclusiveness.

Environmental:

There has been recorded growth in green finance (IFC, 2022). ESG-compliant investment products and savings are gaining investor and regulatory attention. However, these offerings remain elusive for non-smartphone user groups within the country. By leveraging USSD to deliver ESG portfolios, Access Bank could moderate paper usage, and reduce its carbon footprints, and congestion in branches, consequently contributing to its sustainability objectives (Access Bank, 2023).

3.2 Internal Environment Analysis: SWOT

Table 1: SWOT Analysis

Strengths:	Weaknesses:
• Pan-African presence and robust brand equity. • Existing USSD footprint and over 50,000 agent network. • Established strategic partnerships with Insurance and Asset Management companies like Coronation • Digital Labs empowered agile development capacity. • CBN-compliant governance and efficient KYC infrastructure.	• Skewed wealth and investment products in favour of HNI and middle-income customers. • Lack of USSD-compliant investment interface. • Low-literacy users targeted design inadequacy. • Marginal conversion from microinsurance products to investment. • Inefficient data utilization for personalization or behavioural targeting.
Opportunities:	**Threats:**
• 40 million-strong potential customer base of financially active Nigerians without formal investment access (EFInA, 2023). • Regulatory support for investment wallets with minimal KYC • Potential for cross-selling via microinsurance channels and agent networks. • Increasing demand for government treasuries among traditionally risk-averse customers with saving accounts in different financial institutions.	• Competition from Fintech companies with mobile investment apps (e.g., Bamboo, RiseInvest, and Cowrywise). • Risk of trust damage due to transactional errors or downtime on USSD. • Cybersecurity threats. • Intermediary/agent removal risk associated with value digitization shift

3.3 Value Chain Analysis - Porters

Inbound Logistics:

There scaling and inclusivity challenges inherent in the logistics value chain of the solution. This is evident in access to quality portfolios offered by Asset Managers being currently connected with formal bank accounts and in-branch interactions. Likewise, telco partnerships on USSD are restricted to elementary services like checking account balances, but not investment activities.

Operations:

Though robust, the core systems such as Origin8, are rigid. It is designed to support premium offerings. There is the absence of a devoted integration framework for pooled investments, or wallet-based NAV monitoring via USSD.

Service Delivery:

The journey of most investments starts and terminates in the branch. Despite the rise of digital banking, channel equivalence for feature phone users is absent. Agents are limited to savings and insurance promotion, therefore lacking the incentives or tools required for investment clients' onboarding.

Sales and Marketing:

Aspirational urban market segments are prioritized in campaigns, which ignore the community-based media exposed to by peri-urban and rural populations (Kotler and Keller, 2021). The lack of referral mechanisms, agent-led sales, or local language IVR scripts inhibits grassroots penetration.

3.4 Gap Analysis

Five crucial gaps hamper inclusivity in investment:

i. Platform Accessibility:

Users without traditional bank accounts or smartphones do not have access to investment channels, despite the existence of USSD infrastructure.

ii. Complexity associated with Onboarding:

The existing KYC framework is designed for mass-market engagement. It disregards the flexibility provided by CBN's Tiered KYC directive.

iii. Agent Empowerment:

Despite being the first-line customer touchpoints, agents lack incentives, training, or digital tools required to steer investment onboarding.

iv. Siloed Customer Experience:

Customer journey is fragmented across agent, mobile, and branch touchpoints. There is a wide variation in product information, engagement, and customer service.

v. Data Usage Inefficiency:

Failure to leverage behavioural insights from insurance and savings connections to drive tailored recommendations or best judgment.

It is essential to address these gaps for USSD Investment Nexus to be operationalized as both a business and societal innovation by Access Bank. The next section articulates a system blueprint to directly address these gaps.

4. USSD Investment Nexus Conceptual Design

4.1 Concept Overview

The USSD Investment Nexus is conceived and framed as a mobile phone-accessible, bank-orchestrated, telco-facilitated channel that empowers any mobile phone user access and opportunity to invest in regulated financial instruments. Irrespective of whether such individuals are Access Bank customers or not, the offering empowers them to invest in instruments such as treasury bills, mutual funds, and ESG-focused bonds. It is custom-designed for the underbanked, unbanked, and feature phone user population in Nigeria. The initiative offers inclusive access to financial markets while complying with the digital inclusion framework of the CBN (EFInA, 2023; CBN, 2023).

USSD investment Nexus concept's design mirrors HYPE's systematic innovation philosophy, focusing on user-friendly design, staged validation, and orchestrated growth (HYPE Innovation, 2017). Distinct from traditional internet-dependent platforms, this product idea is independent of smartphones and internet connectivity data plans. It uses USSD protocols, ChoralPay interbank debit APIs, provisions of CBN Tiered KYC, and agent facilitation to democratize investment access.

4.2 Technical Architecture

The channel is structured into five segmented layers:

i. USSD Gateway Layer

This front-end is run as a result of the collaboration of the Access Bank with telcos in Nigeria. It manages the code input, language selection, and rendering of the menu. Telco-end authentication is channeled through a secure IP link in satisfaction of NCC protocols before landing at Access Bank's Digital Services Environment (DSE). This supports 5,000 simultaneous sessions regionally with the assurance of 99.8% uptime.

ii. Application Logic Layer (ALL)

Access Bank's DSE stack will host the ALL, which manages fund selection, investment execution, and general user sessions. Core integrations in the ALL include:

- Product terms and NAVs pulled by API from AMCs partners
- Tiered KYC mapping and BVN validation via NIBSS
- Wallet logic for customers
- Authorization of payment through mapped Access Bank accounts or ChoralPay.

iii. Wallet and Ledger Layer

Digital investment wallets are issued to users. For Access Bank account-holding customers, their wallets are linked to their main accounts, while non-customers are provided with a temporary wallet after their KYC is approved. Daily NAV calculations, interest accrual, contribution logs, and fund redemption are updated via real-time ledgers.

iv. Security and Compliance Layer

The security and compliance follow ISO/IEC 27001-compliant encryption, geolocation checks, PIN-based 2FA, and TLS 1.3 for API endpoints protocol. Regulatory compliance involves a monthly Real-time AML/CFT scanning integration and sharing with SEC and CBN.

v. Analytics and Reporting Layer

USSD session volume, size of investment, churn, and effectiveness of the agent is analyzed in real-time with the dashboards. 'Next Best Action, logic-based predictive modelling is done using behavioural and transaction data to activate SMS prompts to inactive users (Doshi and McGregor, 2018).

4.3 User Interaction Flow

To guarantee accessibility and usage seamlessness, the platform provides a streamlined 5-stages experience adjusted for low-literacy demography:

a. Access and Language Selection:

User a designated code, e.g., *901# to select the language preferred from available options. The platform will start with English, and the three major Nigerian languages of Hausa, Igbo, and Yoruba. The available language will be increased in the course of further optimization of the system.

b. Registration and Tiered KYC:

New users supply their Name, while Date of Birth and BVN are retrieved from NIBSS. User also create a 4-digit PIN. This is followed by assignment of a Tier 1 wallet, with a cumulative limit of ₦300,000 daily, ₦500,000, and unlimited, depending on the KYC tier.

c. Investment Selection:

Curated funds, e.g., 'Mutual Fund – ₦1000 min., 19% yield' is displayed by USSD menu. Users select, the preferred amount, and enter a PIN to confirm the selection.

d. Payment and Confirmation:

For Access Bank customers, their account is instantly debited. Clients with no Access Bank account are also debited instantly aided by real-time access to other banks platforms enabled by Cora pay and NIBSS systems. SMS confirmation is sent to all users.

e. Post-Investment Services:

Users initiate withdrawals, which will be credited in 24 hours, or check balances. For repeat investment, the menu also permits auto-save scheduling.

4.4 Agent Integration

Access Bank's CLOSA agent network is significant in supporting mass-market onboarding and providing support services for users. Agents function as:

- Onboarding Facilitators: Initiate USSD code registration sessions, input KYC parameters for users, and assist with the first investments. ₦50 per activation and ₦100 per wallet are given to Agents as incentives.
- Educational Representatives: Conduct seminars in rural areas to explain fund types to customers. Upskilling sessions will be organized for agents to safeguard message clarity.
- Support Escalation Points: Resolve reported errors via Android dashboards, targeting reducing complaint resolution time much faster than the in-branch approach.

4.5 Security Protocol

Cybersecurity is a mandatory support given USSD's openness. The institution the following protections will apply:

- Session Encryption: All bank-USSD interactions are channeled via TLS 1.3 encrypted VPN. This is for session hijacking or data theft prevention.
- 2-Factor Authentication (2FA) & OTP Controls: Customer PINs and Session one-time passwords are required for Tier 2&3 upgrades, and these are validated via ChoralPay OTP servers.
- Compliance with Telco SLA: Access Bank-telcos MoUs dictate routing control, audit logs, and monthly penetration tests, in line with the 2024 NCC protocol.

4.6 KYC Requirements

The process of onboarding is CBN's Tiered KYC guideline compliant.

- Tier 1: Just Name, BVN, and DoB are required for a wallet limit of ₦300,000.
- Tier 2: Addition of utility bill or NIN for ₦500,000 limit.
- Tier 3: Permits premium funds access (unlimited limit). Full ID and utility verification are required for this tier. This is achieved via agent-assisted KYC or branch visits.

4.7 Implementation Flow

- USSD Entry Point (Tier 1): The code, *901# automatically activates the Tier 1 flow. No branch visit or agent intervention is required.
- Tier 2 Prompt: The system automatically sends an SMS prompt for the user to upgrade to Tier 2 to unlock new products and higher limits. This happens post Tier 1 investments. The SMS prompt posts 'UPGRADE' via the USSD option.
- Tier 3 Referral: A cumulative value exceeding ₦1 million triggers a USSD prompt for Tier 2 users. The message instructs the user to submit other relevant documents at any branch to unlock Tier 3 for premium funds.

Access Bank guarantees mass-market inclusion and regulatory compliance by basing onboarding on CBN's tiered KYC frameworks and utilising agents to close the digital divide (EFInA, 2023). The progressive passage from Tier 1-3 accommodates underserved populations while upholding stringent risk controls.

5. Strategic Alignment and Business Model

Harmonizing USSD Investment Nexus with the organization's overarching corporate strategy necessitates evaluating the competitive landscape and instituting the platform's value within Access Bank's innovation and revenue-making ecosystem. Porter's Five Forces (P5F) framework (Porter, 2008) and Baron and Parent's (2015) Business Model Canvas are deployed to illustrate how a strong market position can be secured by the USSD solution while supporting strategic priorities such as customer acquisition, financial inclusion, and asset growth.

5.1 Porter's Five Forces (P5F) Analysis

Table 2: P5Fs Analysis

Force	**Intensity**	**Key Insights**
Threat of New Entrants	Moderate	Though fintech startups can operate in the investment sphere through the use of mobile apps with comparatively lower fixed costs, however, penetrating the market via the USSD channel requires navigating regulatory demands and securing telco rights of access. NAICOM, CBN, and the SEC enforce licensing, AML, and KYC requirements that create significant barriers market to entry. Access Bank's nationwide license, risk controls, and internal compliance systems give it an edge. Moreover, its 50,000 agents, 700 branches, and known brand visibility among 40 million customers impose costly brand penetration on new entrants.
Bargaining Power of Suppliers	Low (AMCs), High (Telcos)	Telcos serve as the USSD gateway gatekeepers. Nigeria's telecom market's limited competition gives telcos negotiating power for high session fees or share of the revenue. To reduce this, Access Bank's strategy is to secure multi-operator agreements to improve redundancy and gain discounts afforded by high volume. (Osho, 2025). However, AMCs compete for distribution. Through AMC products aggregation and determining customer capacity, Access Bank fortifies its negotiating power and gains referral fees without jeopardizing investor returns.
Bargaining Power of Buyers	High	The main target audience, which is underbanked or unbanked Nigerians, is very price-sensitive. Access Bank must charge minimal fees and add significant value, as it competes with traditional banks, informal savings methods, and mobile apps.

		Complementary services such as SMS alerts for financial education, zero-fee onboarding, and flexible investment limits strengthen customer loyalty.
Threat of Substitutes	Moderate to High	Savings via ROSCAs or "Esusu" offer trust within communities due to familiarity. These systems lack digital records or formal regulation, yet yield handsome informal returns. Moreover, investment apps (e.g., Cowrywise, PiggyVest) and emerging digital wallets serve smartphone smartphone-owning population with smart interfaces. Therefore, the proposed product must highlight formal product security, access ease from any mobile phone, and regulatory trust.
Rivalry Among Existing Competitors	High	The USSD-enabled investment approach is new, but its constituent services, including mobile access, savings, and wealth management, exist silos across traditional banking and the fintech space. Fintechs like Fairmoney and Kuda progressively offering hybrid investment services. Digital platforms are also being built by AMCs, though none targets non-smartphone users at the moment. Access Bank's strategic advantage is inherent in integrating cross-functional services, including savings, insurance, and wealth, under a single platform.

5.2 Business Model Canvas

The USSD Investment Nexus conceptualization is informed by Baron and Parent's (2015) Business Model Canvas (BMC) adaptation. The product concept includes:

1. **Value Propositions:**

- Low‑tech Access: Require only feature phone for access; ₦10,000 minimum ticket sizes, thus covering the last lap (Gilchrist, 2022).
- Integrated Product Platform: Aggregated bonds, mutual funds, and money‑market instruments from AMC partners; using USSD to compare and invest.
- Agent‑Aided Onboarding: Agents assist fresh users, mitigating digital friction and instituting trust (HYPE Innovation, 2017).
- Regulated Security: KYC‑Lite compliance, CBN oversight, and IPFS‑supported encryption for transaction stability (Wood, 2021).

2. **Customer Segments:**

- Unbanked and Underbanked Rural Demographics: 65 million Nigerians do not have formal bank accounts (EFInA, 2023).
- Low‑Income Urban Users: Peri‑urban areas low-income earners without smartphones.
- Retail Customers of Access Bank: Cross‑sell to Access Bank's savings‑account customers looking for higher yields.
- Diaspora and Remittance Targets: Enabling investment-targeting affordable inbound remittances.

3. **Channels:**

- USSD Menu (*901#): Interactive English-and‑local‑language menu; zero‑data interface.
- Agent Network: In-person KYC, onboarding support, basic dispute resolution.
- SMS & IVR Alerts: Educational messages, transaction confirmations, and yield updates.
- Branches: For physical‑channel counseling for transitioning users.

4. **Customer Relationships.**

- Agents Supported Trust Building: Agents serve as ambassadors on the ground, delivering tailored outreach.

- Automated Engagement: Routine SMS‑propelled portfolio performance summary, plus top-up investments message prompt.
- Tiered Support Desk: Round-the-clock service centre triaged by platform specialists.

5. **Revenue Streams:**

- Platform Transaction Fees: A flat fee of ₦100 (excluding ₦7.50 VAT).
- Commission to Access Bank: Total of ₦605 per year on every ₦10,000 fund invested. That is ₦5 (625kobo on every ₦1,000) on the ₦7,000 mutual fund, and ₦600 (20% on every ₦1,000) on the ₦3,000 insurance and other product embedded in the ₦10,000 investment.
- SMS Charge: ₦3

6. **Key Resources:**

- Telco Partnerships and USSD Infrastructure: Cross-network USSD integration agreements, including Interswitch and FoneLink(Gilchrist, 2022). This is already exist for other uses by the bank. The Investment Nexus will be integrated into the existing USSD framework.
- Agent Network: Over 50,000 CLOSA agents; and over 700 branches for back-up support.
- Tech Infrastructure:
    - AccessMore backend (the Core Banking APIs).
    - Secure API gateway (TLS1.3 & OAuth2) for AMC systems integration
    - Central analytics engine (Python/ML + PostgreSQL).
- Human Resource: 120 staff from finance, compliance, risk management, and IT.

7. **Core Activities:**

- Platform Development and Maintenance: Two‑week cycles iterative sprints for USSD, local‑language menus, and AML rule optimization (Furstenthal et al., 2021).
- Quality Control and Agent Training: Quarterly product-centred workshops for agents, addressing KYC protocols, behavioural scripts, and effective sales approaches (HYPE Innovation, 2017).
- Content and Education: Scheduled SMS and IVR scripts, monthly reviewed for literacy‑level relevance.

- Partner Management: Biannual AMCs SLAs, monthly performance evaluations, and quarterly revenue‑share % review.

8. **Main Partnership:**

- Asset Managers/Insurer (Stanbic IBTC, Coronation): Offer investment products, yield calculations, and performance data feed.
- Telco Aggregators (TechnoTel, Interswitch): Offer USSD connectivity across telecom networks.
- NIBSS: Supports cross-companies wallet‑to‑wallet debit queries (ChoralPay API).
- Cybersecurity Providers (Cloudflare, CrowdStrike): Execute AES‑256 encryption for routine penetration testing, and USSD payloads.

5.3 Revenue and Partners Revenue Share Models

Table 3: Revenue Flow Analysis

Revenue Element	**Revenue Flow Analysis [Year 1 Annual Estimates]**
USSD Transaction Fees	₦920million = ₦100 (excluding ₦7.50 VAT) per successful transaction * 9.2million projected average transaction per year (Average of 2 transactions per customer in a year from an average of 4.6 million yearly active users.
Commissions (Mutual Fund)	₦2.760 million = ₦600 (20% on every ₦1,000) on the ₦3,000 insurance and other product embedded in the ₦10,000 investment * average of 4.6 million projected yearly active users.
Commissions (Micro-insurance and other embedded products)	₦23million = ₦5 (62.5kobo on every ₦1,000) on the ₦7,000 mutual fund * average of 4.6 million projected yearly active users.
SMS	₦27.6million = ₦3 (50% share of ₦6 SMS charge) per successful transaction * 9.2million projected average transaction per year (Average of 2 transactions per customer in a year from an average of 4.6 million yearly active users.

5.3.1 Total Revenue [Year 1 Annual Estimates]

- Total Revenue: ₦920m + ₦2.760m + ₦23m + ₦27.6m = ₦2,838.2m

5.4 Pricing Strategies

1. Tiered USSD Transaction Fees: Echoing rural users' price sensitivity, the ₦100 flat‑fee structure confirms basic pricing while facilitating cross‑subsidization:

   Table 4: Tiered USSD Transaction Fees

Charge	**Tickets**
₦100	₦10,000
₦100*	> ₦10,000

   – Tier thresholds reflect regular monthly income ranges (₦2,000 average daily wage in rural areas), lowering the psychological barrier to micro‑investing (Doshi and McGregor, 2018).

2. Zero Onboarding Fees (KYC‑Lite): KYC fee is waived by the bank. This approach sacrifices short‑term revenue and promotes quick wallet growth (Scott, 2017). The strategy supports the argument that organizations must invest through disruption (Bar-Am et al., 2020).

3. Dynamic SMS Prompt Alerts: A standard subscription of ₦6 per SMS is charged for updates on portfolio performance and financial literacy messages. This service is targeted at low‑income urban professionals who appreciate real-time market information (Beltrán, 2025).

5.5 Strategy-Access Bank Fit

The innovative USSD product resonates with the 2022–2027 strategic aspiration of the bank "to be the world's most respected African bank" (Access Bank Plc, 2022). It expands the bank's core competencies, including agent banking, compliance, and risk management, into the field of asset management. The platform strengthens customer relationships, reinforces CBN's Financial Inclusion Strategy, and enhances ESG synergy (CBN, 2023). The USSD Investment Nexus, through monetization of idle savings and streamlining onboarding, activates a value innovation model that exposes alternate market segments while warding off fintech. Porter's and the Business Model Canvas frameworks defined a sustainable advantage and inherent operational value. In addition to becoming an innovation, the solution also serves as Access Bank's revenue diversification and financial inclusion agenda core enabler.

6. Operational and Technological Implementation Plan

Besides its dependence on its conceptual strength, the USSD Investment Nexus's success is also a function of the disciplined implementation of its operational and technological plan. Accordingly, a phased, nimble implementation framework with clear sprints, milestones, defined governance structure, and cross-functional teams will be adopted by Access Bank. A structured plan, grounded in digital transformation best practices (Furstenthal et al., 2021; Scott, 2017), designed to deliver an MVP within six months and scale to full deployment within 12 months is presented below.

6.1 Agile Plan and Sprint-Driven Delivery

Consistent with a Scrum-based approach, the execution will be done across six (6) phases. The activities are divided into six (6) key phases of Initiation, Planning, Development, Testing, Deployment & Close-out activities and Solution Go-Live.

Phase 1-Initiation (20 Days)

- Approval Memo
- Technical Review Board Presentation & Approval

Phase 2- Planning (42 Days)

- Customer Journey Mapping , Requirements Elicitation & Backlog Refinement
- Business Requirements Documentation & Approval
- Sprint Planning
- Technical Design Documentation
- APIs Review (Validation, Security Check, Adaptability and Readiness for integration)

Phase 3- Development (30 Days)

- API Development & Integration
- Middleware Development
- Code Review, Internal code scan, and Unit testing

Phase 4- Testing (12 Days)

- System Integration Testing (SIT)
- Functional Testing
- User Acceptance Criteria (UAT)
- UAT Signoff
- VAPT/Source Codes Scans/Certification and Remediation

Phase 5- Deployment and Close Out Activities (44 Days)

- CMC Presentation & Approval
- Deployment
- Pilot
- Pilot report and signoff

Phase 6- Solution Go-Live

- Go Live
- Sales and Marketing Campaign Creatives

6.2 System Governance Structure

Centralized governance under BWM head-chaired ISC will apply. There will be biweekly meetings of the ISC to monitor delivery and sanction scope variations. ISC members will include leads from all participating expertise units. Each sprint terminates at the review that has ISC in attendance. This promotes agile decision-making and quick reallocation of resources (Bar-Am et al., 2020).

Digital Labs manages the product backlog, while the IT Project Office guarantees sprint resilience. There will be subcommittees for:

- Commercial Operations: Coordinate marketing campaigns and agent training.
- Regulatory Synergy: Relate with NAICOM, CBN, and SEC for guideline alignment.

- Risk and cybersecurity: Reviewing outcome of penetration test and encryption standards.

6.3 Supplier Ecosystem

Effective supplier partnerships are central to maintaining data security, reliability, and regulatory adherence. Major vendors include:

- Telco Aggregators: TechnoLink and Interswitch provide secured USSD bandwidth across main carriers. A session drop rate of <1.5% will be mandated by SLAs.
- API Gateways: Preference for Kong due to modular integration with the bank's DSE and lower latency of <80ms.
- Cybersecurity Vendor: Quarterly penetration tests and real-time dashboard threat tracking will be performed by Trustwave.
- Settlement API: Interbank transactions will be managed by NIBSS, with SLA-supported routing time <5 secs.

SLA breaches-related penalty clauses will be included in SLAs of all contracts, and in addition to quarterly review borders. Independently verified performance data will by an Internal Audit's IAU for oversight to ensure transparency.

6.4 Team Roles and Capability Building

The project execution will involve a minimum of 40 part-time and full-time contributors from the Finance, Digital Labs, Marketing, Legal, and Risk departments. To strengthen innovation fibre, capability-building targeted programs for the internal team will include:

- Agile Workshops **-** for upskilling members on Kanban, Scrum, and MVP sprints.
- Compliance Labs - to simulate dynamic regulatory breaches and pathways to resolution.
- Customer Feedback Panels - from the pilot phase to ensure a feedback loop on transaction confidence and menu clarity.

6.5 Milestones and Key Deliverables

The plan features budget-controlled and time-bound deliverables:

Table 5: Milestone deliverables

Milestone	Target Date	Owner
Functional and Technical Specification Approval	Week 2	BWM & Digital Labs
USSD Sample Authenticated	Week 4	BWM & Digital Labs
Contracts Decided	Week 8	Legal
Deployment of MVP Pilot in Lagos, Kano, & Uyo	Week 17	ISC & Scrum Master
ESG Fund Launch & National Rollout	Week 24	Commercial Ops & ISC

There will be a review of each milestone against success criteria.

7. Risk Analysis & Change Management

USSD Investment Nexus introduction heralded numerous risks, ranging from telco integration friction to regulatory delays and resistance from within the bank. Extended PESTLE analysis (Watters et al., 2025), succinct SWOT and TOWS analysis provide integrated insights into these risks. Stakeholder dynamics mapping (Heidari-Robinson and Heywood, 2019), and Wilkins-inspired communication strategy (Wilkins, 2021) are consequently prescribed for mitigation. The identification and addressing of these risks will enable Access Bank to sustain momentum, and stakeholder trust, and guarantee seamless transformation adoption.

7.1 Augmented PESTLE: External Shocks & Evolving Threats

Further to the conventional PESTLE analysis, a recent McKinsey study underlines fresh risk points, which are geopolitical uncertainties and unforeseen shocks (Watters et al., 2025). Core areas include:

Table 6: PESTLE Analysis

Augmented PESTLE	**Analysis**
Political and Regulatory Disruptions	Telco licensing fees were renegotiated by Nigeria's newly elected government in early 2025. This involuntarily hiked the costs of the USSD gateway by 15% (NCC, 2025). Though this risk was somehow expected, the fee hike scale surpassed forecasts. This shock will be mitigated by the renegotiation of multi‑year, volume-based discount clauses with TechnoLink and Interswitch, which limits per‑session costs. In addition, an 'issue‑routing' line will be maintained with NAICOM to accelerate minor feature changes (such as KYC updates) approvals.
Economic and Currency Instability	Accelerated depreciation of Naira (−12% YoY) was experienced in Q1 2025, thus inflating costs of imported infrastructure and increasing cybersecurity provider fees. Mitigation of this shock includes foreign‑currency obligation hedging by adopting forward contracts via the bank's FX desk. Staggered payment tied to strength thresholds of the Naira will be negotiated for core hardware such as on-site firewalls.
Social Disorder and Trust Deficit	Rival's USSD platform witnessed a data breach that was publicized in March 2025 by a local consumer advocacy group (ConsumerWatch NG), prompting public concern relating to USSD security. This will be mitigated by launching a USSD safety assurance awareness, co‑branded by Trustwave and Access Bank. The campaign will emphasize PCI DSS compliance, AES‑256 encryption, and routine external penetrating tests. Also, platform security health test summaries will be published monthly to instil credibility.
Technological and Cyber Threats	A Ghana incident saw SS7 vulnerabilities exploited by a fraud ring, aiming at USSD sessions appropriation (GSMA, 2025). This threat

	will be addressed through telco aggregator collaboration to execute Secure USSD (S‑USSD) tunnelling, and HSM for core management. ML-driven anomaly detection will also be deployed to identify suspicious session patterns.
Legal and Compliance Uncertainties	The April 2025 revised CBN rules increased mobile money issuers' capital threshold, thus affecting agent liquidity indirectly (CBN, 2025). Agent onboarding criteria will be widened to include microloans for registered agents to address this threat. This facilitates enough capital is maintained.
Environmental and Operational Disruptions	Perennial flooding in Lagos, as evidenced by the July 2024 occurrence, caused two weeks, 30%+ disruption of agent operations (NEMA Report, 2024). Mitigation of this will involve the pre‑deployment of 4G-equipped, solar-powered mobile KYC Vans, to limit agent training and KYC support disruption.

7.2 SWOT and TOWS Synthesis

A concise SWOT and TOWS analytics (Doshi and McGregor, 2018; Lynch, 2018) simplifies internal capacities and external influences.

Table 7: Secondary SWOT Analysis

Strengths:	**Weaknesses:**
o Partnerships with telcos guarantee multi‑network coverage. o 50,000 wide agent network and Access Bank's brand trust. o Robust in-house IT strength, with experienced security and API teams.	o The Newness of USSD‑powered investments implies agents face a steep onboarding process. o Telco uptime reliance means the bank lacks network quality and direct control. o Limited internal capacity for penetration tests to ascertain the strength of cybersecurity.
Opportunities:	**Threats:**

o 60%+ strong unbanked/underbanked population (EFInA, 2024) yearning for basic investment and simplified process. o Smartphone penetration growth (GSMA, 2024) with the potential of USSD+IVR hybrid adoption expansion o Bundled ESG-aligned mutual funds potential for a growing segment of socially cognizant clients (Bough et al., 2023).	o Introduction of related products by rival banks. o Agent fraud risk—fake IDs, social engineering. o Change in telco regulation which mainly increases USSD pricing or causes SS7 vulnerabilities.

Table 8: TWOS Actions

TWOS	Action
S–O (Harness Strengths to Unlock Opportunities)	Harnessing the robust agent network potential to rollout Green Savings Plan, which is an ESG-approved mutual fund, via USSD. Targets youth segment (18–35 years) and captures 30% of the demographic. For every ₦10,000 invested, e-certificates of impact are offered.
W–O (Mitigate Weaknesses to Unlock Opportunities)	Launch two-pronged (online & in-person) Agent USSD Academy, to facilitate upskilling of up to 90% of agents within 3 months. This increases the rate of rural areas onboarding effectiveness from 65% to 90%.
S–T (Leverage Strengths to Avoid Threats)	Create a dashboard for Real‑Time Fraud Monitoring (RTFM) that checks agent transactions against biometric verification irregularities, to engender 75% agent fraud reduction within 6 months.
W–T (Address Weaknesses and Mitigate Threats)	Create an in‑house platform resilience team with the responsibility to execute telco‑agnostic (SMS) backups for crucial flows, therefore avoiding future attacks and network interruptions.

7.3 Stakeholder Engagement Strategy

Stakeholder	Influence/Interest	Strategy
Executive Leadership	High/High	Involves monthly ROI reporting and early commercial validation. Engagement entails strategic dashboards and nimble burndown charts to illustrate momentum and effect.
Regulators	High/Medium	Routine compliance records with security audit digests, KYC pass rates, and product categorization updates.
Internal IT & Compliance	Medium/High	Integrate security-by-design into sprints, and assigned technology-communication liaisons simplified regulatory interpretation.
Agents	Medium/Medium	Deployment of Champions approach, where top 100 agents serve as peer engagement drivers. Training nudges and weekly incentives are provided using micro-communications platforms such as WhatsApp.

7.4 Change Management Communication Strategy

In line with Wilkins's (2021) proposal, alignment is ensured by the adoption of a three-tiered change management strategy:

1. Town Halls: Head BWM-facilitated monthly discussions communicating vision, sprint indicators, and rationale for change.
2. Regulatory and Telco Briefs: Biweekly briefings covering pending issues, SLA records, and milestones will be provided.
3. Field Communication: USSD-activated prompts, video explainers for customers and agents, and interactive onboarding milestones communicated weekly.

7.5 Telco Relationship Management and Regulatory Engagement

1. **Strategic Partnership Forum with Telcos**

- Members: NIBSS Integration Manager, TechnoLink Account Executive, Interswitch Relationship Manager, and Access Bank Telco Liaison Lead.
- Mandate: Monthly SLA compliance review, telco‑wide events, such as security patch rollout agenda, and co-funding of USSD‑Network resilience assessment to ascertain potential peak load challenges.
- Outcome: Signed Innovation MoU mandating telcos to give precedence to Access Bank's USSD traffic when upgrading systems.

2. **Regulatory Agile Response (RAR) Unit**

- Composition: One compliance manager, two legal officers, and one external banking law consultant.
- Mandate: Track NAICOM/ CBN circulars, flag any USSD investment features concerned with policy blind spots within 48 hours, and recommend amendments to the developed procedures.
- Deliverable: Weekly monitored regulatory trend e‑mail to ISC, summarizing emerging laws or directives that will inform platform updates.

7.6 Change Management Activities Timeline

Table 9: Change management activities timeline

Activity	Owner	Due Date	Notes
USSD Safety Assurance Awareness Launch	Marketing and CISO	Week 2 (during the Pilot phase)	Include social media promotion and press release
Agent USSD Academy prospectus distribution	Agent Program Lead	Week 3	For physical workshops, and include LMS modules
Inaugural Regulatory Forum	RAR Lead	Week 4	Extending invitation to observers from NAICOM and CBN

Publication of the Tech Debt Register	TRB and PMO	Week 5	Sprint reprioritization basics
Host USSD Nexus-focused Town Hall for employees	CIO and BWM Head	Week 6	Highlighting new roles and career paths
Implement Telco Resilience Drill	API Lead and Telco Liaison	Week 7	Refining failing logic
Introduce Trend e-mailing	RAR Lead	Week 8	Prepare ISC for the main deployment
Hotline and Agent FAQs distribution	Training Team	Week 9	Introduce agent support dedicated USSD code
MIS Regulatory Dashboard Launch	Data Analytics Lead	Week 10	Regulatory breaches count
Investor Security Workshop	Marketing and CISO	Week 11	Tackle consumer trust issues
Telco SLA Assessment Report publishing	SPF Lead	Week 12	Essential for pricing renegotiation
Post-launching Town Hall to debrief employees	BWM and CIO Head	Week 14	Incorporate learnt lessons, and revive the vision

7.7 Ongoing Performance Tracking and Feedback Mechanisms

1. **Real‑Time Tracking Dashboard**

- Designed to track key risk indicators (KRIs) like regulatory queries pending, average USSD session failure rate, and Agent turnover surge.
- An automated concerned alert is sent to ISC when any KRI exceed the threshold set.

2. **Bi‑Weekly Agent Experience Survey**

- Agent experience is collated using a single-item question. The question is based on how confident Agents are in addressing USSD inquiries, with scale options of 1–5 to select from. Below 3 scores prompt teleconferencing with the relevant team to address underline issues.

3. **Quarterly Risk and Compliance Audits.**

- Telco SLA compliance, data privacy logs, and KYC exceptions audits are executed by IAU. The audit results are presented with a risk heatmap, with proposed actions.

4. **CSAT and NPS Enabled Customer Sentiment Analysis**

- In‑session flash SMS asking the customer to rate his/her USSD experience on a scale of 5 immediately after a transaction is completed is implemented. The below 3 score prompts a call from a customer experience agent within 24 hours.

7.8 Incidences Escalation and Recovery Plans

To avert the cascading of minor issues into burning crises, clear tiers escalation protocol is provided.

- Tier 1 - Operational: Higher than 5% or hours USSD session errors trigger a round-the-clock swift operation alert. This is escalated to Telco Liaison and USSD Tech Lead to probe within 60 minutes.
- Tier 2 - Tactical: In the event of a higher than 10% agent turnover within two consecutive weeks, the issue is escalated to BWM Head and HR to activate retention initiatives.
- Tier 3 - Strategic: Non-compliance with regulation, such as OTP authentication failure, against NAICOM mandate, is flagged and escalated, causing an instant ISC meeting to decide whether to roll back the feature or continue.

8. ESG, Sustainability, and Future-Readiness

As much as the new initiative targets commercial scalability, it is also designed for synergy with ESG commitments and the sustainability of Access Bank in mind. The system embeds principles of sustainable finance by crafting ESG-approved mutual funds, like green bonds, thus allowing low-income individuals to invest in formal but value-aligned portfolios (Bough et al., 2023).

Enduring operational efficiency is attained by moderating customer branch visits via mobile-facilitated and agent-supported onboarding. This minimizes paper usage and reduces carbon footprint. Virtual agent training on WhatsApp videos, aided by carbon-light mobile KYC vans, and lean digital paperwork further contribute to the bank's environmental goals (Access Bank Plc, 2023).

The USSD platform also prepares for future technological changes. There is a plan to deploy AI/ML in phase 2 to support behavioural nudges, tailored portfolio suggestions, and fraud detection (Beltrán, 2025). Moreover, blockchain-supported ledgers will be leveraged for investment suitability optimization and facilitate first-time investors' trust enhancement (Wood, 2021).

The integration of ESG products, adaptive technology, and low-impact operations, highlights the innovativeness and sustainability characteristics of the platform. It is more than just a product deployment, rather, a core strategic pillar of responsible banking that is digitally transforming Africa in a post-COVID world.

9. Financial Projections, KPIs and Impact

The solution demonstrates robust financial sustainability, with a three-year projection indicating a defined roadmap to profitability. At the end of Year 1 (2026), the projected generated revenue by the platform is valued at ₦460. This grows to ₦970 million at the end of the 2028 financial year. EBITDA margin is projected to increase from 55% in 2026 to 64% in 2028. The growth is expected to be driven by referral commission inflows, economic improvement, and agent productivity.

Lean technology stack, telco discount, and remote onboarding will enable cost management. There is six months estimated payback period, and anticipated breakeven within six months post-rollout. The onboarding costs will be shared with AM via revenue splits, resulting in a lower upfront marketing and distribution load for Access Bank.

By 2028, the solution targets have 6.08million onboarded. So, the KPIs will include customer acquisition cost and monthly unique USSD sessions. The onboarding of the unbanked members of the population would have a significant social impact, as it grows the rate of participation in Nigeria's formal investment space.

Table 10. USSD Innovation Nexus Financial Projection

Year	Projected Average yearly active user (million)	USSD Transaction Fees (₦ million)	Commissions (Mutual Fund) (₦ million)	Commissions (Micro-insurance and other embedded products) (₦ million)	SMS Share (₦ million)	Total Revenue (₦ million)
2026	4.6	920	2.760	23	27.6	973.36
2027	5.29	1058	3.170	26.45	31.74	1119.36
2028	6.08	1216	3.650	30.4	36.48	1286.53

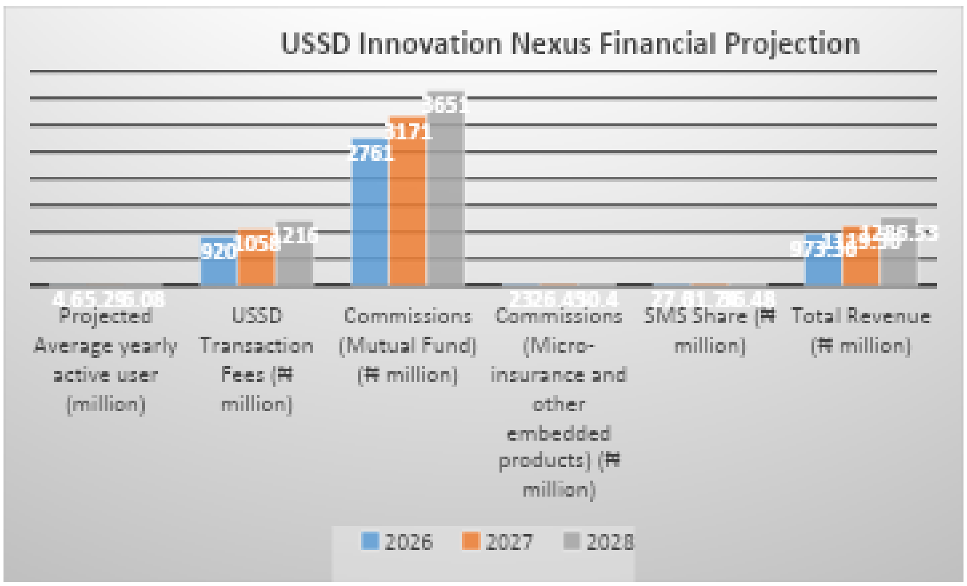

Figure 1. Bar chart of outlining USSD Innovation Nexus Financial Projection

10. Conclusion

USSD Investment Nexus offers Access Bank a disruptive lever to reinvent wealth access for underserved populations in Nigeria. By empowering low-income, feature-phone users, irrespective of their bank account-owning status, to invest in Nigeria-regulated financial instruments, the offering strengthens Access Bank's core strategic focus of innovation, sustainability, and inclusion. It bridges systemic digital access divides, advances the national financial inclusion objectives, and reinforces Access Bank's pan-African digital leader position.

Technologically, USSD Investment Nexus is a secure API-supported, USSD gateways anchored, and agent-aided workflow low-cost but scalable solution. Financially, it offers high scalability potential and robust return on investment, with more than ₦973.36 million in projected revenues by Year 1 which is projected to grow to ₦1,286.53 million by Year 3. Strategically, it offers a sustainable competitive advantage, converting redundant cash into future AUM while integrating AI-facilitated personalization and ESG investment pathways.

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