



Genie Capital

**Africa Fintech Evolution -
Sudan 2026**





PREPARED FOR

Regulators, Policymakers, Investors, Executives, Development Partners, Media and the People

PREPARED BY

Genie Capital Ltd

FRAMEWORK

None

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The Journey

This report moves through eleven parts, from where Sudan's financial system came from, to the rules and players shaping it today, to what it could become and what must be done to get there.

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From colonial extraction to wartime necessity

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PART I

Origins

From colonial extraction to wartime necessity

Historical Foundations

Sudan's fintech trajectory cannot be understood without tracing the layered evolution of its financial system: from precolonial exchange networks to colonial extraction, post-independence nationalization, Islamization, and the wartime destruction that has paradoxically accelerated digital adoption.

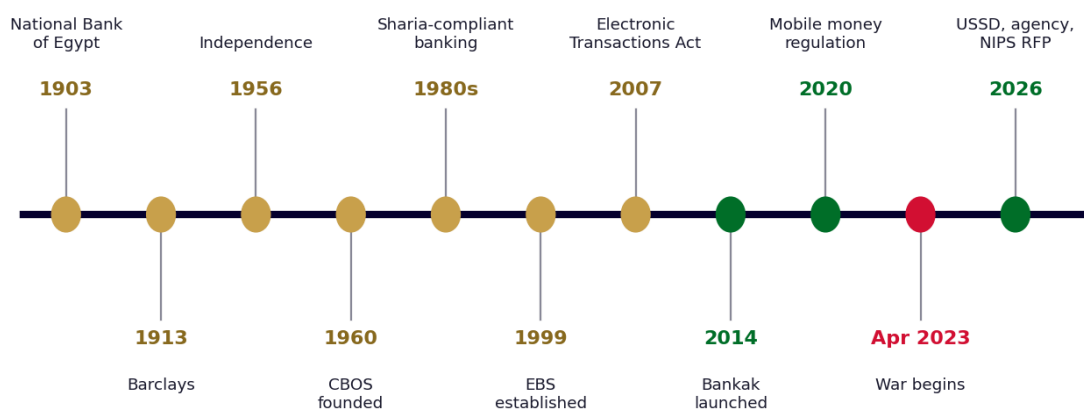


Figure 1. Milestones in Sudan's financial system, 1903 to 2026

Precolonial and Colonial Eras (pre-1899 to 1956)

Before modern banking, Sudan's economy operated on cash, barter, and informal credit networks rooted in Islamic finance principles such as sarf (currency exchange). The formal financial system was introduced entirely as an instrument of colonial extraction. Modern banking began in 1903 with the National Bank of Egypt, followed by Barclays Bank in 1913. These institutions served the colonial regime, financing trade and government operations for European and Egyptian communities, while systematically excluding the local Sudanese population. This exclusionary foundation planted deep-rooted distrust of formal banking that persists to this day.



Independence and the "Stable" Period (1956 to 1989)

After independence on 1 January 1956, Sudan began building its own financial institutions. The Central Bank of Sudan (CBOS) was established in 1960 to issue a national currency and regulate the sector. In the 1970s, the government nationalized several foreign banks. A pivotal shift occurred in the 1980s when the entire banking system was declared Sharia-compliant, a defining feature that continues to shape all subsequent financial innovation. The first steps toward electronic banking were taken in the late 1990s: the Electronic Banking Services (EBS) company was established in 1999 as the CBOS's technical arm, marking a crucial move toward interbank connectivity.

The Digital Awakening (2000s to 2023)

The 2000s brought the foundational technologies, mobile phones and the internet, that enabled a fintech sector to emerge from the constraints of the traditional banking system. The Electronic Transactions Act of 2007 provided a legal framework for digital payments. The CBOS launched the Sudanese Real-time Automated Gross Settlement System (SRAG) in 2008 and an electronic cheque clearing system in 2006.

In 2014, the Bank of Khartoum launched Bankak, a mobile banking app that became Sudan's dominant fintech service. By the time war broke out, it had 7 million users and was processing transfers of up to SDG 3 million per day. The CBOS licensed telecom companies as Mobile Money Operators (MMOs) to launch services such as MTN MoMo and Zain's Bede, though adoption was slow compared to bank-linked apps like Bankak.

War and Collapse: Fintech as a Lifeline (2023 to present)

The outbreak of war in April 2023 shattered the financial infrastructure. The Central Bank was set alight, the EBS national switch lost clearing capabilities, and the country's only currency printing press was bombed. The conflict physically destroyed data centres and banking operations concentrated in Khartoum, affecting the availability of financial services even in areas away from fighting.

Yet the war also made digital financial services an absolute necessity. Bankak's user base surged from 2.8 million registered subscribers in October 2024 to over 10 million subscribers by September 2026, becoming a vital "digital safety net" for buying food, paying bills, and receiving remittances from abroad. With the formal system in ruins, people turned to informal mechanisms: airtime credit transfers became a widely used workaround, with 68% of the population using them. The cost of these informal transfers, however, was extremely high, with withdrawal fees reaching 10% to 50% depending on region and liquidity.

A NOTE ON THE NUMBERS

Sources define "users" differently (registered subscribers, active users, downloads, installs). Figures in this report are quoted as published and are indicative of scale, not directly comparable. Sudan's currency is the Sudanese pound, abbreviated SDG throughout. Where USD equivalents are given, they use the February 2026 parallel rate of about SDG 3,575 per USD, against a commercial bank rate of about SDG 2,400 per USD.



PART II

The Rules

A dense but fragmented regulatory patchwork

Regulatory Environment

Sudan's fintech regulatory environment is a dense but often fragmented patchwork of laws and directives. The Central Bank of Sudan (CBOS) is the primary authority, operating under the Central Bank of Sudan Act of 2002 and the Banking Business Regulation Act of 2004. The legal framework relies on foundational laws such as the Electronic Transactions Act of 2007, which governs e-signatures and electronic records but predates modern crypto assets.

Core Fintech and Payments Regulations

The CBOS licenses and regulates fintechs through specific directives rather than a single consolidated law.

- ◆ **Mobile Money Regulation (2020).** The Regulation on Licensing and Regulating the Business of Mobile Payment Financial Institutions (2020) is the key framework for mobile money operators (MMOs). It allows non-bank entities to offer mobile wallets and opened the market beyond the state-owned EBS switch. Licences have been awarded to MTN Sudan Fintech (2022/FIMP/1, brand MoMo), Zain Fintech (brand Bede), and Hypernova Co. (2024/FIMP/2, brand Cash). Additional licences include Al raffia Alzrga Co. (2025/FIMP/1, brand Bravo 5), Zikher (2025/FIMP/2) and Sudani Fintech (2025/FIMP/3).
- ◆ **USSD Regulations (2026).** In March 2026, the CBOS issued controls for USSD (Unstructured Supplementary Service Data) services to ensure financial inclusion for feature phones without internet access. The regulation aims to provide a "secure, easy-to-access, low-cost payment channel for groups that do not have internet services or smartphones." USSD has short session timeouts, simple interfaces, and relies on network availability. Integration takes 10 to 16 weeks.
- ◆ **National Instant Payment System.** The CBOS is launching a National Instant Payment Scheme but notes that legislative amendments to the Payments System Act may be required. A matrix has set June 2026 as the deadline for issuing an electronic payment systems law through the Payments Council. In August 2026, the CBOS issued a Request for Proposal (RFP) for the design, supply, installation, testing, and operation of the National Instant Payment System (NIPS), with a bid closing date of 24 September 2026.



- ◆ **Agent Banking Regulation (2026).** The CBOS issued the Banking Agency Licensing Regulation (2026), allowing banks to deliver services through licensed agents (individuals or companies) outside traditional branches. Agents can offer balance inquiries, cash deposits and withdrawals, and domestic fund transfers in local currency. Banks must obtain prior approval from the CBOS before engaging agents, and applicants must have no record of credit default in the 12 months preceding the signing of the agency contract.
- ◆ **Regulatory tightening (July 2026).** The CBOS ordered all banks and licensed fintechs to secure prior approval before entering into any contractual, operational, or technical relationships, or executing data exchanges. The move followed controversy over Al-Asjad's launch of a digital platform amid questions about its establishment and reported indirect links to the UAE. The CBOS subsequently revoked Al-Asjad's licence and later cancelled the licence of "Sudan Pay Digital" for mobile payments.

Data Privacy: A Significant Gap

Sudan currently has no comprehensive data protection or privacy law. This is a critical issue as the wartime economy pushes millions onto digital platforms, creating risks related to ungoverned personal and financial metadata. A November 2025 decree established a Sudanese Data and Artificial Intelligence Authority and a Sudanese Cybersecurity Authority, but as of mid-2026 neither has issued binding rules. In July 2026, the Cabinet reviewed three core draft laws (the Cybersecurity Regulation Bill, the Data and AI Bill, and the Digital Transformation Bill), but none have been enacted. In the absence of a specific law, the CBOS has issued directives requiring entities to implement data governance, encryption, and access controls and to get prior approval before any data-sharing partnerships.

Sudan signed the African Union's Malabo Convention on Cyber Security and Personal Data Protection on 15 March 2023. Ratification status is unconfirmed in publicly available AU records. The Convention became active and enforceable in 2023 after ratification by 15 countries, and Sudan's Ministry of Communications and Digital Transformation has stated it signed the Convention.

KYC and AML: The Compliance Backbone

The AML/CTF Act of 2014 is the primary legislation governing KYC and AML. Compliance is enforced through directives from the CBOS and the Financial Intelligence Unit (FIU).

- ◆ **KYC and Customer Due Diligence (CDD).** Financial institutions must verify customer identity using reliable, independent documents (National ID, passport, etc.) and identify the beneficial owner (anyone owning 25% or more) of corporate clients. Enhanced Due Diligence (EDD) is required for high-risk customers. However, over 60% of Sudanese businesses operate informally, making beneficial ownership verification "complex" and often impossible. Registries are outdated or incomplete, and many institutions still rely on manual, paper-based systems. Financial institutions show "clear weakness" in dealing with beneficial owner concepts due to low AML/CFT awareness.



- ◆ **Record-keeping and reporting.** Institutions must maintain detailed customer records and report suspicious transactions to the FIU. Data fragmentation, connectivity gaps, and destroyed data centres make this aspirational rather than operational.
- ◆ **Digital identity (SudaPass).** The Civil Registry Authority manages national IDs, but verification infrastructure is limited. Sudan is integrating the SudaPass national digital ID with the banking sector for eKYC, enabling remote identity verification and data updates. Registration in SudaPass proves identity but does not exempt customers from other data-update requirements.

Cryptocurrency and Virtual Assets

The CBOS warned in March 2022 that cryptocurrencies are not recognized as money or property and carry high risk. Only the pre-Bitcoin Electronic Transactions Act 2007 and AML circulars apply, meaning there is no specific legal framework for virtual assets. Sudan operates under a near-total regulatory vacuum for digital assets, with no dedicated cryptocurrency legislation enacted as of March 2026. P2P crypto trading is not illegal but is unregulated, occurring via Telegram, WhatsApp, and Binance P2P, typically via VPN. The Sudan Islamic Fiqh Academy has historically engaged with modern financial questions, but no formal standalone fatwa on cryptocurrency has been published as of 2026. A proposed flat tax on crypto gains is pending parliamentary approval for 2026.



PART III

The Players

Telcos, banks and native fintechs competing for the first wallet

The Players

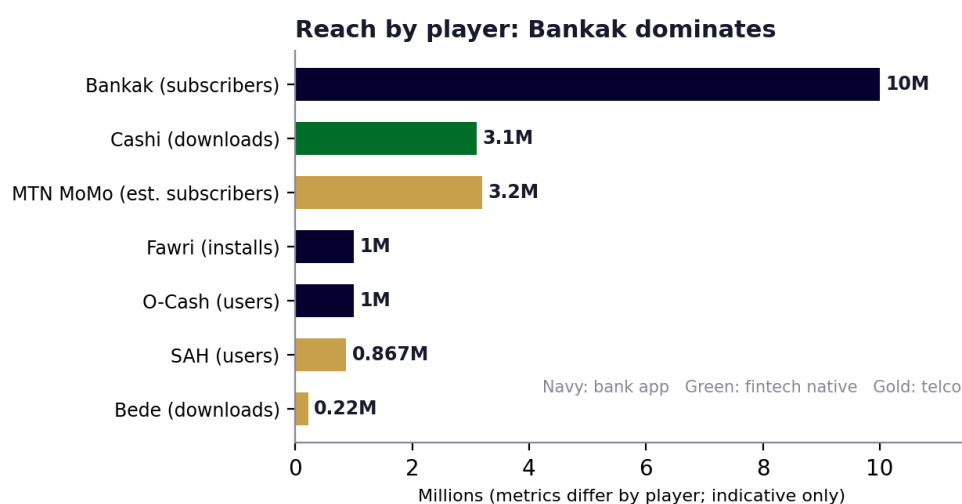


Figure 2. Reach by player (millions; metrics differ by player)

Telcos: The Mobile Money Challengers

Zain Fintech (Bede)

- ◆ **Leadership and founding:** Launched in April 2025 by Zain Group's fintech arm, led by Malek Hammoud (Chief Investment and Digital Officer).
- ◆ **Reach and wallets:** Leverages Zain Sudan's subscriber base. Available to all Zain customers via app and USSD (*800#), without requiring a traditional bank account.
- ◆ **Products and services:** Money transfers, airtime top-ups, bill payments, merchant purchases, and agent cash-in/cash-out.
- ◆ **App downloads:** About 220,000 total downloads (Android). Recent downloads average about 120 per day, indicating slow early adoption.
- ◆ **Revenue:** Zain Sudan's revenue for Q1 2026 rose 34% year on year to USD 157 million, with EBITDA of USD 90 million (58% margin) and net income of USD 56 million. Zain Group's fintech revenue grew 28% year on year, with transaction volume up 46%.



- ◆ **Tech stack:** Designed as an omni-channel payments stack (POS, QR, APIs). Zain Group uses Kubernetes, Prometheus, and Grafana for its fintech infrastructure.
- ◆ **Competitive advantage:** Deep mobile penetration, USSD accessibility for feature phones, and strong brand trust.

MTN Sudan Fintech (MoMo)

- ◆ **Leadership and founding:** The first licensed FIMP in Sudan (licence 2022/FIMP/1).
- ◆ **Reach and wallets:** MTN Sudan has reported varying subscriber figures. One source indicates a recovery to 3.2 million subscribers by end of 2025, while MTN Group investor data sheets list 8.8 million subscribers for Sudan. This figure requires verification and should be treated as an estimate.
- ◆ **Products and services:** Core mobile money services including transfers, savings, microcredit, and Mastercard virtual cards. Partnered with IOM to enable returning migrants to use MoMo.
- ◆ **Status:** Pre-conflict momentum has stalled due to severe infrastructure damage during the war. MTN Sudan's network was particularly affected by the February 2024 nationwide telecommunications shutdown and did not recover meaningful service until the end of May 2024.

Sudani Fintech (SAH)

- ◆ **Leadership and founding:** Licensed in 2025 (2025/FIMP/3). A joint venture between Sudatel and Africa Gulf Bank (AGB), launched officially in April 2026.
- ◆ **Reach and wallets:** First platform to offer an instant basic bank account (BBAN) upon registration. Available via app and USSD (*500#).
- ◆ **Products and services:** Transfers to and from any Sudanese bank, bill payments, airtime top-ups, and merchant payments.
- ◆ **Early traction:** Reached 867,000 users shortly after launch.
- ◆ **Competitive advantage:** True interoperability (connecting telecom and banking sectors) from day one, and a low barrier to entry with instant account opening.

Bank Apps: The Incumbent Giants

Bankak (Bank of Khartoum)

- ◆ **Leadership and founding:** Launched in 2014 by the Bank of Khartoum (Sudan's oldest bank, est. 1913).
- ◆ **Reach and accounts:** Over 10 million subscribers as of September 2026, with approximately 7 million active users. Over 10 million downloads on Google Play. Requires a Bank of Khartoum account.
- ◆ **Products and services:** P2P transfers, bill payments, merchant payments (QR), cardless ATM withdrawal, and microfinance payments. Daily transfer limit of SDG 3 million (approx. USD 840 at the February 2026 parallel rate).



- ◆ **Growth metrics:** Registered users grew sharply in 2024, with 562,000 new subscriptions reported for the year. Cumulative transaction value reached SDG 163 trillion through the end of 2024, and the app recorded more than 360 million financial transactions by the end of 2023 (cumulative value above SDG 65 trillion at that point). Bankak's roughly 60,000 monthly Android downloads dwarf competitors. Its user base exceeds its nearest competitor by 10x, representing structural dominance rather than mere leadership.
- ◆ **Competitive advantage:** Dominant market leader and de facto national payment infrastructure. Its integration with almost all banks and utilities makes it indispensable.
- ◆ **Vulnerability:** A severe single point of failure. Its centralized architecture has suffered persistent technical failures, and any server outage can paralyze digital commerce nationwide. In October 2026, Bankak suffered a five-day outage, disrupting medicine bills, travel tickets, and car purchases for millions of users.

Fawri (Faisal Islamic Bank)

- ◆ **Leadership and founding:** Launched by Faisal Islamic Bank (FIB), one of Sudan's largest Sharia-compliant banks.
- ◆ **Reach and accounts:** Requires an FIB account. Positioned as the second-largest bank-linked app in Sudan with approximately 1 million installs on Google Play.
- ◆ **Products and services:** Over 35 banking services including transfers, bill payments, QR payments, and cardless withdrawals. FIB has partnered with Visa to bring Visa Pay to Sudan.
- ◆ **Tech stack:** The app is developed by "MUZUN NET W.L.L," a Bahrain-based developer, indicating a reliance on regional tech expertise.

O-Cash (Omdurman National Bank)

- ◆ **Reach and accounts:** Approximately 1 million users. Used as a funding source for digital wallets like Zakhir. Omdurman National Bank was the first bank connected to the reactivated National Payment Switch, enabling interoperability. O-Cash has emerged as a key alternative during Bankak outages, with markets in northern Sudan (such as Wadi Halfa) increasingly relying on it.
- ◆ **Products and services:** Standard mobile banking services, including integration with the national switch (EBS) and other digital wallets.
- ◆ **Partnerships:** Omdurman National Bank provides guarantees for Hypernova (which operates Cash), allowing it to extend services to areas without bank branches.

Fintech Natives: The Agile Innovators

Cashi (by Alsoug)

- ◆ **Leadership and founding:** Co-founded by Tarneem Saeed (CEO) and Nina Saeed. Launched in 2022 as a payment solution for Alsoug, Sudan's leading e-commerce platform (founded 2016). Licensed as a FIMP (2024/FIMP/2) under Hypernova Co.
- ◆ **Reach and wallets:** 3.1 million+ app downloads. Serves over 10,000 merchants, growing to 100,000 Cash Lite merchants. The strongest competitor to Bankak.



- ◆ **Products and services:** Bill payments, airtime, merchant payments (CashiPax), bank-to-bank transfers, and school fees. Notably, it is a popular channel for receiving remittances from abroad. Cashi operates a merchant-led model, turning small merchants into "mini-banks" by giving them CashiPax POS systems. These merchants (called Cashi Points) provide bill payment, local remittances, cash-in/cash-out, and humanitarian cash transfer redemption.
- ◆ **Revenue:** Processes over 1.6 million transactions, with a Total Payment Volume (TPV) of about USD 2.1 million in a recent 30-day period. Revenue per POS terminal is estimated at USD 15.33.
- ◆ **Tech stack:** Integrates a custodial wallet with multi-chain digital-dollar support (USDT, USDC) and a Visa card layer, supporting networks like Ethereum, Solana, and Tron.
- ◆ **Competitive advantage:** Asset-light, merchant-led distribution network. Its massive agent network (pharmacies, fuel stations, groceries) allows for easy cash-out anywhere, solving a critical pain point. Backed by IFC and Fawry. The IFC has partnered with Cashi to expand digital payments into Chad.

Zakhir

- ◆ **Leadership and founding:** Developed by Monitor Integrated Solutions LLC (UAE-based). Licensed in 2025 (2025/FIMP/2).
- ◆ **Reach and wallets:** A fully digital wallet allowing online account opening without visiting a branch.
- ◆ **Products and services:** Transfers, bill payments, airtime top-ups, and merchant payments. Funded via agents or bank wallet apps like Fawri and O-Cash.
- ◆ **Competitive advantage:** Simplicity and speed of onboarding. By removing the need for a pre-existing bank account, it directly targets the vast unbanked population.

Taqseet

- ◆ **Leadership and founding:** A buy-now-pay-later platform for everyday essentials, helping users build credit in the process.
- ◆ **Early metrics:** In 40 days: 112 customers, 6 merchants, SDG 2.6 million in GMV, and USD 80 in revenue.
- ◆ **Funding:** Raising USD 500,000 pre-seed, with USD 200,000 allocated to lending capital for the first 1,000 customers at USD 200 ticket sizes.
- ◆ **Market context:** 96% of Sudanese people are invisible to formal credit, and there is not a single digital lending product in the country. Yet Sudan has a rich informal lending culture, Taqseet (installment buying) and Daftar (shop tabs), that demonstrates latent demand.

Comparative Summary

Player	Category	Reach	Key advantage	Primary weakness
Bankak	Bank app	10M+ subscribers / 7M active	Dominant leader, integrated with almost everything	Centralized single point of failure
Cashi	Fintech native	3.1M+ downloads / 100k merchants	Massive agent network, easy cash-out, strong remittance channel	Limited direct bank transfer options



Player	Category	Reach	Key advantage	Primary weakness
Bede (Zain)	Telco	~220k downloads	USSD for feature phones, deep mobile penetration	Slow early adoption, limited to Zain users
SAH (Sudani)	Telco	867k users (early)	Instant account opening, true interoperability	New entrant, unproven at scale
Fawri (FIB)	Bank app	1M+ installs	Strong Sharia-compliant brand, wide service range	Requires FIB account
Zakhir	Fintech native	N/A (new)	Fully digital onboarding, no bank account needed	New entrant, limited brand awareness
MTN MoMo	Telco	Est. 3.2M subscribers	Pan-African mobile money experience	Infrastructure damaged by war
Taqseet	Fintech native	112 customers (early)	First digital lending platform, builds credit history	Pre-seed stage, limited capital



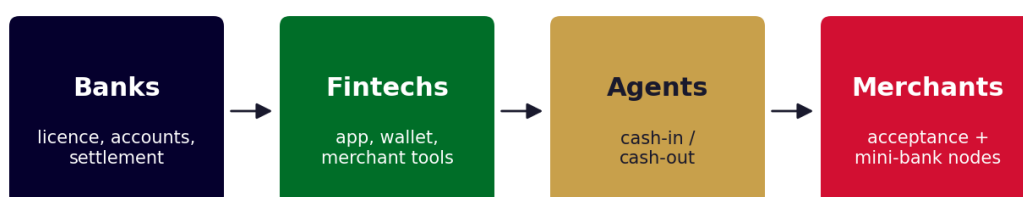
PART IV

The Ecosystem

Banks, fintechs, agents and merchants: who does what

Agents, Merchants and Banks

The relationship between agents, merchants, banks, and fintechs in Sudan is a fragmented, wartime-adapted ecosystem where roles blur and informal networks fill institutional gaps. Banks provide the regulatory cover and account infrastructure; fintechs supply the technology and user interfaces; agents and merchants act as the physical last mile, handling cash-in/cash-out and merchant acceptance.



› war inverted this chain: informal agents and supermarkets became financial nodes before the formal rails recover

Figure 3. The value chain of Sudanese digital finance

The Regulatory Foundation (and Its Gaps)

The legal framework governing these relationships is incomplete. The Banking Agency Licensing Regulation (2026) formally allows banks to deliver services through licensed agents (individuals or companies) outside traditional branches. Agents can offer deposits, withdrawals, local transfers, and bill payments, subject to CBOS approval and AML/CTF compliance. However, this framework is new. The World Bank noted that as of 2022, Sudan had no comprehensive legislation recognizing agency banking; a draft regulation had been under discussion for years. The 2013 circular allowed agents only for e-wallet services. This regulatory delay meant that much of the agent activity that emerged, especially after the war, operated outside formal oversight, with agents charging unregulated fees and no clear consumer protection.



Banks as Infrastructure Providers

Banks occupy the top of the value chain. They hold the banking licences, the customer accounts, and the settlement infrastructure that fintechs need to operate. The Bank of Khartoum's Bankak is the clearest example: it is a bank-owned app that has become the de facto national payment infrastructure, with 10 million subscribers and 4,000+ agents (pre-war estimate). Other banks play similar roles:

- ◆ Faisal Islamic Bank operates Fawri and has partnered with Visa to bring Visa Pay to Sudan, positioning itself as a Sharia-compliant digital payments hub.
- ◆ Omdurman National Bank provides O-Cash and has been the first bank connected to the reactivated National Payment Switch, enabling interoperability. O-Cash has emerged as a critical alternative during Bankak outages, with markets in northern Sudan increasingly relying on it.
- ◆ Arab & Gulf Bank (AGB) partnered with MDP and Visa to launch a digital banking app and debit card. AGB is also the banking partner for Sudani Fintech (SAH).

Banks also act as guarantors and sponsors for fintechs. Omdurman National Bank provides guarantees for Hypernova (which operates Cashi), allowing it to extend services to areas without bank branches.

Fintechs as the Technology and User Interface Layer

Fintechs sit between banks and end-users, providing the app, wallet, and merchant management systems. They fall into three categories.

Bank-led fintechs (Bankak, Fawri, O-Cash) are essentially digital banking channels. They rely on their parent bank's balance sheet and licence but have developed their own merchant and agent networks.

Telco-led fintechs (Bede by Zain, SAH by Sudani) leverage mobile subscriber bases. Sudani Fintech (SAH), a joint venture with Africa Gulf Bank, launched in April 2026 and reached 867,000 users by offering instant basic bank account opening upon registration.

Independent fintechs like Cashi (by Alsoug) are the most agile. Cashi operates a merchant-led model: it turns small merchants into "mini-banks" by giving them CashiPax POS systems. These merchants (called Cashi Points) provide bill payment, local remittances, cash-in/cash-out, and even humanitarian cash transfer redemption. Cashi has a 10,000+ merchant network and is explicitly designed to work with multiple banks, not just one.

Agents and Merchants: The Physical Last Mile

This is where the ecosystem becomes most complex, and most vulnerable.

Agents are typically small convenience stores, pharmacies, or fuel stations that act as cash-in/cash-out points. In Bankak's case, informal agents emerged during the war to meet cash withdrawal demand, charging inflated fees because the formal agent network was inadequate. In



Darfur, informal Bankak agents have charged commissions of up to 40% to convert bank transfers to cash.

Merchants serve a dual role. They are both acceptance points (accepting digital payments via QR or POS) and distribution nodes (acting as agents for cash-out). Cash's model explicitly treats merchants as banking nodes: "a piece of software that turns a small merchant into a mini-bank." As Sudan remains a cash-reliant society, Cash Points serve as a means to bring cash into the formal economy, a rail for anyone who wants money collected or moved.

The agent-merchant overlap is significant. A pharmacy that accepts Cash payments also functions as a Cash Point where users can cash out. This blurring of roles is both efficient (one location serves multiple functions) and risky (no clear regulatory separation between payment acceptance and cash handling).

The Nature of the Relationships

Banks to fintechs: dependency and control. Fintechs need bank licences and settlement rails; banks need fintechs' agility and user experience. Banknbox and ASD Smart are building a unified payment platform that connects isolated banking apps through a centrally licensed switch approved by the CBOS, creating a "shared infrastructure layer" for the first time. This suggests banks and fintechs are moving toward interoperability rather than siloed competition.

Fintechs to agents and merchants: mutual benefit, uneven power. Fintechs provide the technology and brand; agents and merchants provide the physical presence and liquidity. Cash's 10,000+ merchant network is its core competitive advantage: it enables easy cash-out from any location, which Bankak struggles to match in rural areas. But agents bear the liquidity risk: they must have enough cash on hand to serve withdrawals, and during payment surges, private agents frequently face liquidity shortages.

Agents and merchants to banks: often informal and unregulated. Until the 2026 regulation, agents had no formal legal status. Even now, the CBOS requires banks to obtain prior approval before engaging agents and to implement internal risk management systems for agent oversight. But enforcement is weak, and informal agents continue to operate outside the system.

The War's Distortion of Relationships

The conflict has inverted normal ecosystem dynamics. Instead of fintechs expanding through formal agent networks, informal agents have become essential because the formal banking system collapsed. Data centres were destroyed, the Central Bank was set alight, and the EBS national switch lost clearing capabilities. In this vacuum, supermarkets became financial nodes, refugees running small cash-out points became part of cross-border settlement networks, and airtime transfers emerged as a parallel currency system used by 68% of the population.

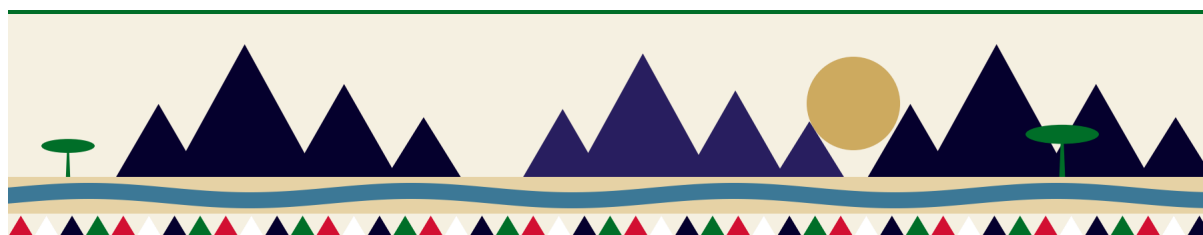
The liquidity crisis is the binding constraint. Even where agents exist, they often lack cash. Informal withdrawal fees range from 10% to 50% depending on location and liquidity. This makes agents and



merchants price-makers in the informal economy, extracting rents that formal fintechs cannot capture.

Summary: Who Does What

Actor	Primary role	Relationship with fintechs	Key vulnerability
Banks	Licence holder, settlement, account infrastructure	Sponsor and infrastructure provider; fintechs depend on bank rails	Single point of failure (EBS, Bankak outages)
Fintechs	App, wallet, merchant management, user interface	Technology layer; bridge banks and end-users	Regulatory gaps, dependence on bank sponsorship
Agents	Cash-in/cash-out, last-mile liquidity	Distribution channel; often informal and unregulated	Liquidity shortages, no consumer protection
Merchants	Payment acceptance, dual role as agents	Acceptance network and distribution node	Blurred role creates regulatory ambiguity



PART V

The People

Who uses digital finance, why, and what makes them switch

Customer Dynamics

Demographics: A Young, Male-Dominated, and Urban Market

Sudan's fintech customer base skews young, male, and relatively educated, though the war is slowly broadening it.

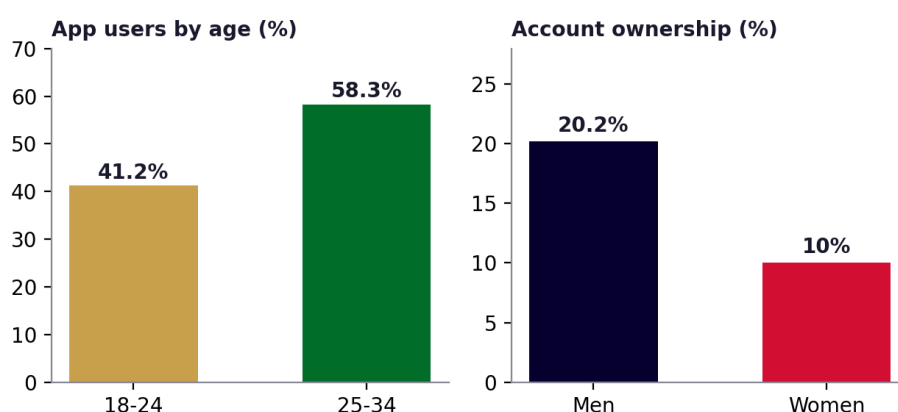


Figure 4. Age profile of app users and account ownership by gender

Age. Of all financial service app users in Sudan, 58.3% are in the 25 to 34 age group, followed by 41.2% in the 18 to 24 group. Younger cohorts (18 to 35) show increasing engagement, driven by the adoption of digital banking services, while older age groups (36+) show a steady decline.

Gender. Men are significantly more likely to own smartphones, while women are more likely to own no phone at all. Account ownership reflects this: 20.2% for men versus just 10% for women. Women also face additional social barriers, including family disapproval of internet use (5%) and lack of knowledge on phone usage. However, mobile money increases women's financial autonomy by 16 percentage points in Sudan (a 38% gap reduction), one of the strongest effects in the Sahel, but this depends on agent density above 1 per 2,000 inhabitants. Sudan is far below that threshold.

Education and income. Users are overwhelmingly educated: in one survey, 38% held a Master's degree, 24.1% a Bachelor's, and 14.1% a PhD. Employees were the largest occupational group (55%).



Monthly income concentrated in the SDG 10,001 to 20,000 bracket (29.6%), with 21.9% in the SDG 20,001 to 30,000 bracket.

Geography. While 63% of Sudan is rural, banking services remain concentrated in urban areas, leaving rural communities with limited access. Mobile money agents (est. 70,000) and POS terminals (33,000) provide a more widespread alternative.

Preferences: Dominance, Interoperability, and Trust

Customer preferences are shaped by the wartime reality of cash scarcity, forcing trade-offs between reliability, cost, and accessibility.

Platform dominance. Bankak is the overwhelming market leader, used by 89.5% of participants in a recent study, versus 15.5% for its closest competitor. Its dominance stems from ease of use, interface design, service quality, and system stability.

Payment method preferences. Among digital payment options, 48% of respondents chose Bankak, while 44% chose airtime credit transfers. For those with a Bankak account, 63% prefer digital transfers, compared to 51% among airtime users.

Key switching drivers. Users are actively considering switching due to:

- ◆ **Frequent outages:** Bankak and Fawry suffer network failures, disrupting transfers and payments. In October 2026, Bankak suffered a five-day outage, increasing demand for cash and driving some users to O-Cash.
- ◆ **Perceived discrimination:** Complaints about "foreign faces" policies at Bank of Khartoum have driven some users, particularly from Darfur, to Bank of the Future.
- ◆ **Practical needs:** USSD preference for low-data phones and unstable connectivity drives consideration of alternatives like Cashi or SAH.

Trust and security. Trust is a critical factor, with a strong positive relationship between trust/security and customer satisfaction. However, the rapid shift to digital has outpaced security systems, leading to account hacking and fraud. Authorities recorded more than 2,000 reports of electronic fraud in just two months, with fake pages impersonating well-known banks to steal customers' banking data.

Switching Probabilities: High Churn Potential Amid Fragility

Switching probabilities are elevated due to systemic fragility, though Bankak's entrenched position acts as a strong counterweight.

High likelihood of consideration. Outages have led to "some users considering switching to other financial applications." Traders have refused to sell unless paid in cash, creating indirect pressure on digital platforms.

Barriers to actual switching. Despite frustrations, Bankak's ubiquity, being accepted by "shops, pharmacies and medical centres," makes it difficult to abandon entirely. It has become "the only effective money transfer solution" for many.



Interoperability as a catalyst. The lack of interoperability between Bankak, Fawry, and other platforms is a major friction point, with experts calling for a national interoperable payment system similar to Kenya's M-Pesa model. Until this is resolved, switching costs remain high. Banknbox and ASD Smart signed a strategic partnership in February 2026 to build an interoperable instant payment platform using a centrally licensed transaction switch approved by the CBOS, designed to enable real-time interbank transfers and payment acceptance across mobile apps, POS devices, and e-commerce platforms.

Other Diagnostics: Adoption Barriers and Usage Patterns

Adoption barriers. The top barriers to digital financial adoption include:

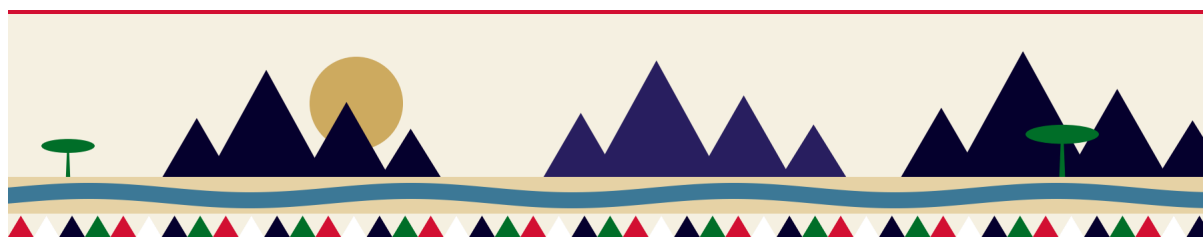
- ◆ **Cost:** Cost of handsets is the most popular barrier across all segments; airtime costs are also a major issue.
- ◆ **Connectivity:** Limited or no network coverage affects 48% of respondents; internet penetration is just 28.7%.
- ◆ **Digital literacy:** 15% do not know how to use the internet independently; financial literacy is between 0% and 24%.
- ◆ **Liquidity:** Private agents frequently face liquidity issues during payment surges, reducing cash transfer effectiveness in rural areas.

Usage frequency. 49.6% of Bank of Khartoum app users report using it daily. The app processed over 360 million financial transactions by end of 2023, with total value exceeding SDG 65 trillion.

Informal workarounds. 68% of the population uses airtime credit transfers as a workaround for formal digital payments. Informal withdrawal fees range between 10% and 50% depending on location and liquidity.

Revenue potential. Annual mobile money revenue could reach USD 2.15 billion at just USD 50 per user across 43 million unbanked adults. This is a theoretical calculation, not an actual revenue figure.

Fees paid by recipients. Among digital transfer recipients, 15% of Bankak users paid fees to access their money, versus 35% of airtime users, making airtime significantly more costly. Households paying no transaction fees show 59% preference for digital cash, versus 32% for cash-in-hand and 9% for in-kind.



PART VI

The Money

Is digital simply a rail, or does value circulate in it?

The Cash-Digital Dance

The "cash-digital dance" in Sudan is not a transition from one to the other, but a tense, interdependent coexistence. Digital value is not just a rail for cash; it has become a separate, circulating monetary layer, but one that remains deeply tethered to, and often subordinate to, physical cash.

Cash as the Undisputed King

Physical cash, not digital balance, is the ultimate store of value and unit of account in wartime Sudan. The SDG 100 note in your pocket is worth more than the SDG 100 in your phone, even if the numbers match. This is not a perception but a hard economic fact: merchants ask for "cash?" first because digital balances are treated as a promise of value, not value itself. The cash-out process is where this hierarchy is most brutally enforced. Converting digital money to paper via Bankak or agents costs 6% to 8% more than cash transactions, with conversion fees of 7% to 10% (down from 15% in 2024). In areas of extreme liquidity crisis, like Al-Fashir under siege, more than half of transferred funds could be deducted as fees alone.

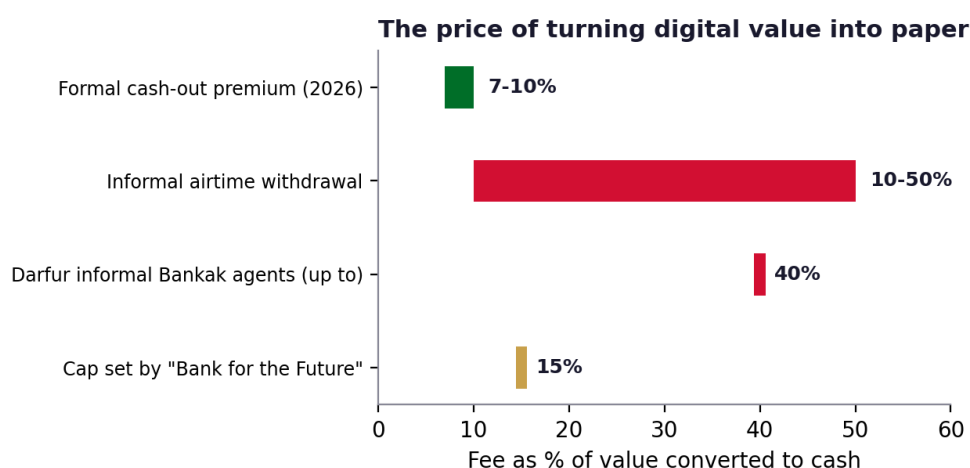


Figure 5. What it costs to convert digital value into cash



Digital Value as a Parallel, Circulating Layer

Despite this, digital value does circulate. Bankak has become a "parallel circulation network" where everything from bread to transport fares and rent is paid digitally. This is not merely a rail for cash transactions; it is a distinct monetary system with its own velocity. A 2026 analytical model estimated the total digital liquidity circulating in Sudan at SDG 4 to 26 trillion, equivalent to USD 3 to 7 billion at parallel exchange rates. The formal e-money framework, established by the CBOS's 2020 Mobile Payment Regulation, defines e-money as "monetary value in Sudanese currency stored on a tangible or intangible electronic medium" and requires operators to maintain a 100% float, a safeguard deposit equal to the value loaded into wallets.

The Airtime Currency: Digital Value Outside the Formal System

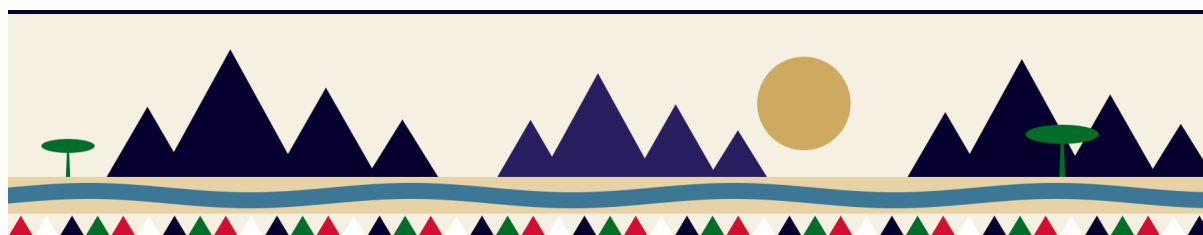
The most extreme form of digital value circulation exists outside licensed fintech rails altogether. Airtime credit transfers function as a de facto currency used by 68% of the population. Users buy airtime, send it to an agent, and receive cash in return: an informal, unregulated transfer system where agents set their own fees. This is described as "airtime money" (naqud ta'ira), money that "circulates and moves outside the banking system and outside government control." It shares the characteristics of money as a medium of exchange and store of value, and its persistence shows that digital value circulation is not dependent on formal fintech infrastructure.

The Nature of the Tether: Digital Value Cannot Fully Detach

The critical insight is that digital value circulates, but it cannot fully detach from cash because the monetary system itself has fractured into dual pricing. The SAF's rollout of new banknotes, ostensibly to restore stability, was used to demonetize currency in RSF-controlled areas, creating a situation where old and new notes, and cash versus digital balances, carry different values. Traders in Nyala, for instance, stopped accepting Bankak transfers entirely at one point, relying exclusively on old-currency cash, because digital balances were seen as less trustworthy. The RSF-aligned "Bank for the Future" has expanded its informal transfer network, with a decree setting a 15% commission cap on digital money transfers via Bankak in areas under its control.

THE CENTRAL INSIGHT

In this environment, digital value is not a superior form of money. It is a substitute that emerges precisely when cash is scarce, and whose value collapses the moment cash becomes available.



PART VII

The Promise

Strengths and opportunities: the scale of the prize

Strengths and Opportunities

Market Fundamentals: The Scale of the Prize

The core strength is the sheer size of the unbanked population and the digital infrastructure already in place to reach them.

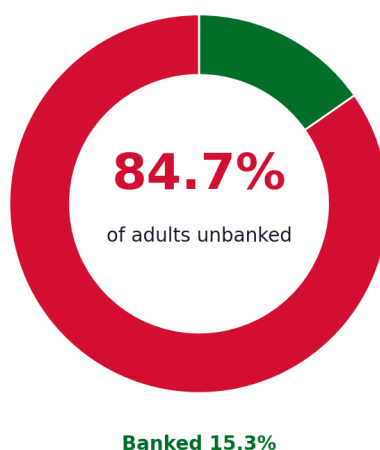


Figure 6a. Share of Sudanese adults with and without a bank account

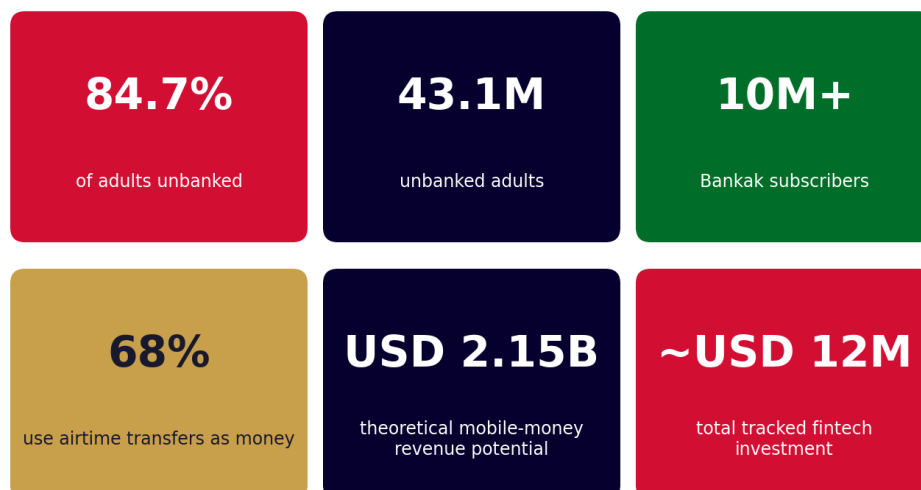


Figure 6b. Sudan's fintech opportunity in six numbers

- ◆ **43.1 million unbanked adults.** Sudan has the lowest financial inclusion rate in Sub-Saharan Africa, with 84.7% of its 50.8 million population unbanked. Only about 15.3% of adults have a bank account despite 38 licensed banks.
- ◆ **21.6 million mobile connections (early 2025).** Digital rails exist, though at a reduced scale compared to pre-war levels. DataReportal reported 21.6 million cellular mobile connections active in Sudan in early 2025, equivalent to 42.4% of the total population. A separate source reported 17.8 million mobile lines active at the end of 2025, representing 34.1% of the population. The pre-war figure (2022) was 34.7 million subscriptions.
- ◆ **USD 10.69 billion banking market by 2029.** The formal banking sector is projected to reach USD 10.69 billion by 2029, growing at a 6.85% CAGR. The 79% cash-to-deposit ratio highlights the enormous digitization gap still to be captured.
- ◆ **USD 2.15 billion annual mobile money revenue potential.** At just USD 50 per user across 43 million unbanked adults, annual mobile money revenue could reach USD 2.15 billion. This is a theoretical potential, not an actual revenue figure.

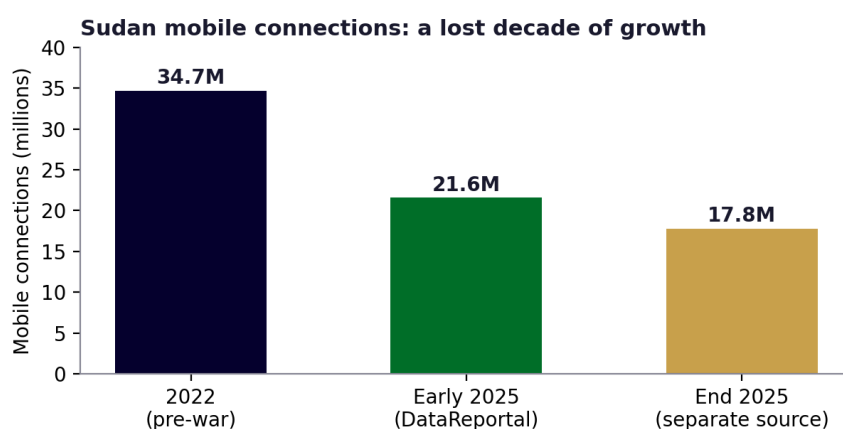


Figure 7. Mobile connections, pre-war to end 2025



Incumbent Infrastructure: Bankak and the Telecom Backbone

Despite wartime damage, critical infrastructure exists that can serve as the foundation for scaling.

- ◆ **Bankak's dominance.** The Bank of Khartoum's Bankak app has become the de facto national payment infrastructure, with over 10 million subscribers and approximately 7 million active users. It operates through 4,000+ agents (pre-war estimate) and 300 ATMs. The app recorded over 360 million financial transactions and SDG 163 trillion in transaction value through end of 2024.
- ◆ **Telecom operators as distribution engines.** Three operators control the digital gateway to consumers: Zain Sudan (largest footprint, about 11.1 million users), MTN Sudan (est. 3.2 to 8.8 million users, requiring verification), and Sudani (about 7.9 million users in Sudan).
- ◆ **Existing regulatory framework.** The CBOS has already established licensing frameworks for fintechs and mobile payment institutions, meaning the regulatory scaffolding is ready for new entrants. At least five FIMP licences have been issued as of 2025.

Opportunity 1: The First-Wallet Land Grab

With 43 million unbanked adults and minimal competition, the first-wallet opportunity is enormous. Telcos are positioned to win because they have far more SIMs than banked adults. The country is estimated to be only 2 to 3 years behind where it should be, not a decade, meaning the window to establish market leadership is still open. New players like NilePay and Trinity Technologies are already in the pipeline.

Opportunity 2: Telco-Led Mobile Money at Scale

Telco-led mobile money is the most scalable model because it does not require a pre-existing bank account. Zain's Bede (launched April 2025) and MTN's MoMo offer transfers, bill payments, merchant payments, and cash-in/cash-out. The roadmap for 2026 to 2027 includes remittances, microfinance, and interoperability. The CBOS has also issued USSD regulations to ensure feature-phone users can access services without internet, unlocking the rural and low-income segments.

Opportunity 3: Formalizing the Remittance Corridor

Sudan received approximately USD 900 million in officially recorded remittances in 2024, but a significant share still moves through informal networks. Sudan is estimated to lose between USD 4 billion and USD 6 billion annually due to the decline in remittances through official banking channels, with the gap between official and parallel exchange rates exceeding 70% (parallel rate: about SDG 3,575/USD; commercial bank rate: about SDG 2,400/USD as of February 2026). The Ministry of Finance is finalizing an electronic payment framework that will connect with mobile banking applications in Saudi Arabia, where a large Sudanese diaspora resides. This represents a multi-billion-dollar opportunity to redirect informal flows into regulated channels.

Opportunity 4: Digital Lending, a Blank Slate

96% of Sudanese people are invisible to formal credit, and there is not a single digital lending product in the country. Yet Sudan has a rich informal lending culture, Taqseet (installment buying)



and Daftar (shop tabs), that demonstrates latent demand. Startups like Taqseet are raising USD 500,000 in pre-seed funding to build digital lending infrastructure, with USD 200,000 allocated to lending capital for the first 1,000 customers at USD 200 ticket sizes. The CBOS has mandated that banks dedicate at least 12% of their lending budgets to microfinance, but actual deployment is barely 2.5%, a massive gap waiting to be bridged by fintech.

Opportunity 5: Interoperability as Shared Infrastructure

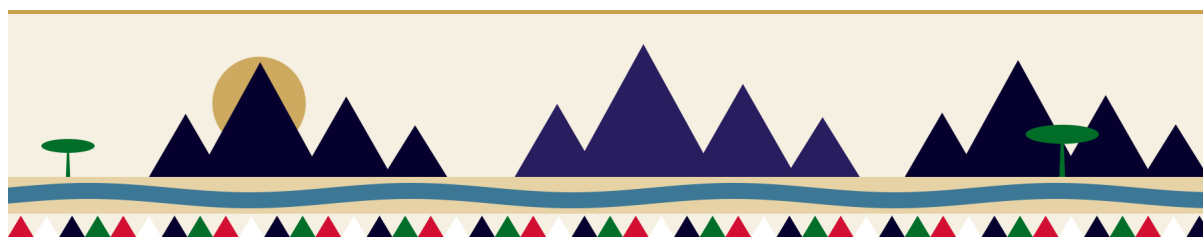
Sudan's banking apps and mobile wallets currently operate in fragmented silos, forcing users to navigate multiple platforms. Banknbox, an Egyptian fintech, has partnered with local firm ASD Smart to launch an interoperable instant payment platform by end of 2026. The platform will use a centrally licensed transaction switch approved by the CBOS, enabling real-time interbank transfers and payment acceptance across mobile apps, POS devices, and e-commerce platforms. ASD Smart confirmed its plan to connect several Sudanese banks to the new platform before the end of 2026. Rather than competing with Bankak, it will serve as a "shared infrastructure layer" enabling interoperability between different e-wallets and banks for the first time on a broad market scale.

Opportunity 6: Shariah-Compliant Fintech

Sudan's entire banking system is Sharia-compliant, making Islamic finance not just a preference but a regulatory requirement. This creates both a barrier to entry for non-compliant foreign players and a competitive advantage for fintechs that design Shariah-compliant products from the ground up. The CBOS has also issued green finance regulations, directing financial services providers to define strategies for Inclusive Green Finance (IGF), opening avenues for fintechs in climate resilience and sustainable finance.

Supporting Enablers: Regulatory and Institutional Momentum

The CBOS has upgraded its General Directorate for Financial Inclusion, with a mandate covering MSME finance, consumer protection, a National Financial Inclusion Strategy, and digital transformation. International partnerships are also materializing: Visa plans to open a local office in Sudan and has partnered with Zain Sudan. Ethio Telecom's Telebirr is negotiating to link its mobile money platform with Sudan's payment systems under the PAPSS framework, while Sudapost has partnered with Nahda to expand digital financial services through its nationwide postal network.



PART VIII

The Peril

Challenges, obstacles and risks

Challenges, Obstacles and Risks

Security and Conflict Risks: The Overarching Threat

The war between the Sudanese Armed Forces (SAF) and the Rapid Support Forces (RSF) is the primary risk multiplier. It has fragmented the country's financial system, with the RSF launching an unlicensed "Bank for the Future" platform in areas where commercial banks have been suspended since April 2023. The CBOS has warned that this app lacks a banking licence, breaches national law, and violates the Anti-Money Laundering and Terrorist Financing Act, leaving users with no legal recourse if funds are lost or stolen.

The conflict has also created dual banking systems in practice, where different payment platforms operate under different authorities, complicating payroll, business operations, and any hope of national interoperability. The RSF-aligned "Future Bank" has expanded its informal transfer network through agents in Uganda, increasing exposure to money laundering and terrorist financing risks.

Economic and Financial Risks: Hyperinflation and Currency Collapse

Sudan's macroeconomic environment is catastrophic. Inflation soared to 170% year on year in 2024 from 66% in 2023. By January 2026, annual inflation stood at 60.26%, with food and beverages rising 61.52% year on year. By March 2026, inflation had slowed to 40.22%, down from 56.39% in February. However, by April 2026, inflation rose again to 45.84%. The 2026 budget targets an average inflation rate of 65%, compared to 101.9% in 2025. The country faces hyperinflation, a widespread informal sector, smuggling, parallel currency markets, unsustainable government debt, and extremely low foreign exchange reserves.

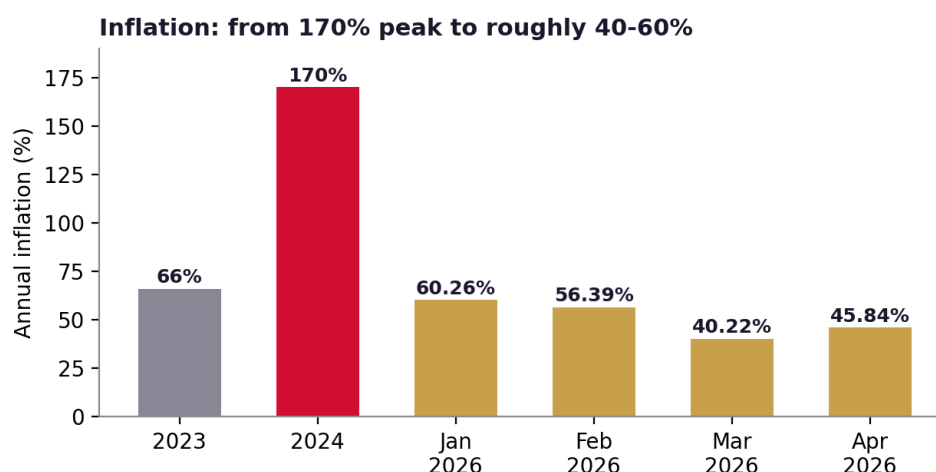


Figure 8. Annual inflation, 2023 to April 2026

This environment creates several fintech-specific risks:

- ◆ **Digital value erosion:** The CBOS raised the daily transfer limit to SDG 3 million specifically because inflation had eroded the digital value of the currency.
- ◆ **Cash preference persists:** Despite digital adoption, hyperinflation and the systematic looting of banks by warring parties have reinforced cash's role as a store of value. Merchants refuse to sell unless paid in cash, and the demand for physical banknotes increases whenever digital outages occur.
- ◆ **Fiscal-monetary fragmentation:** There is persistent institutional fragmentation in financial oversight and limited coordination between fiscal and monetary authorities, weakening policy effectiveness.

Infrastructure and Connectivity Risks: A Destroyed Backbone

The war has devastated Sudan's telecommunications and power infrastructure, which fintech fundamentally depends on.

- ◆ **Telecom destruction:** Communications infrastructure has been heavily impacted by direct damage to telecom towers, a deteriorated national power grid, and extensive looting of communications assets. The February 2024 nationwide telecommunications shutdown left almost 30 million Sudanese without access to internet or telephone services for more than a month.
- ◆ **Payment system collapse:** The Electronic Banking Services (EBS) company, which operated the national switch connecting all banks, lost its clearing capabilities, and this remains unresolved. ATMs, POS machines, interbank settlement systems, and banking apps have all been disrupted. The CBOS is now procuring a National Instant Payment System (NIPS) to replace the failed infrastructure.
- ◆ **Power dependency:** Network coverage is estimated at 80% (23.93 million subscribers), but the national electricity grid covers just over 60%. A substantial share of telecom infrastructure operates off-grid, using hybrid solar-diesel-battery configurations.



- ◆ **Internet blackouts:** The SAF has shut down mobile and terrestrial internet in RSF-controlled western areas, limiting communications and financial systems, and hampering humanitarian cash transfers.

Regulatory and Legal Risks: Gaps, Uncertainty, and Enforcement

Sudan's regulatory framework for fintech is evolving but remains incomplete, fragmented, and inconsistently enforced.

Data privacy vacuum. Sudan currently has no legal framework governing data privacy or AI, despite pushing citizens onto digital financial platforms whose servers sit outside Sudanese jurisdiction. The resulting financial data generates metadata (who transacts with whom, when, and from where) which constitutes a wartime security exposure well beyond ordinary commercial privacy concerns. The Cabinet reviewed three draft laws in July 2026 but none have been enacted.

Regulatory tightening and unpredictability. In July 2026, the CBOS ordered all banks and licensed fintechs to secure prior approval before entering into any contractual, operational, or technical relationships, or executing data exchanges. The CBOS subsequently revoked Al-Asjad's licence and later cancelled the licence of "Sudan Pay Digital" for mobile payments, reflecting intensified scrutiny.

Agency banking gap. The existing legal framework does not provide specific recognition of agency banking, and there are no clear regulations on outsourcing financial services. The circular on electronic payment systems of 2013 allowed outsourcing only after central bank authorization, but major issues remain with the undeveloped legal and regulatory framework.

Cryptocurrency ambiguity. The CBOS warned in March 2022 that cryptocurrencies are not money or property and carry high risk. Only the pre-Bitcoin Electronic Transactions Act 2007 plus AML circulars apply, meaning there is no specific legal framework for virtual assets.

Cybersecurity and Fraud Risks: A Growing Threat

The rapid shift to digital finance has outpaced security systems, creating a fertile environment for fraud and cybercrime.

- ◆ **Unlicensed apps as fraud vectors:** The CBOS warned of risks including the lack of legal recourse in cases of lost or compromised passwords, and the absence of guarantees in the event of theft or loss of deposited funds.
- ◆ **SIM swap and social engineering:** As USSD banking adoption grows, fraud risks including SIM swap attacks, social engineering, PIN compromise, identity misuse, and weak customer awareness are becoming more serious.
- ◆ **Scale of fraud:** Authorities recorded more than 2,000 reports of electronic fraud in just two months, with fake pages impersonating well-known banks to steal customers' banking data.
- ◆ **Duplicate transactions and balance discrepancies:** Following Bankak and Fawry outages, experts warned of duplicate transactions, deductions without completed transfers, and discrepancies between balances, calling for clear systems to reconcile failed transactions.



Social and Human Capital Risks: Exclusion and Illiteracy

Sudan's fintech sector faces profound human capital constraints that limit both adoption and the talent pipeline.

- ◆ **Financial illiteracy:** Sudan has a financial literacy rate between 0% and 24%, the lowest bracket according to S&P Global. The CBOS Governor has acknowledged that "most Sudanese adults remain unbanked" and that reliance on cash, informal saving groups and unregulated lenders "creates inefficiencies, limits economic growth, and weakens our ability to manage the economy."
- ◆ **Gender gap:** Women face additional barriers including lack of knowledge of how to use a mobile phone, families not approving women owning a phone or accessing the internet, and lower smartphone ownership. Across all segments, women were less confident in using a mobile phone or mobile internet.
- ◆ **Device and connectivity barriers:** Access to mobile banking is limited due to a significant number of beneficiaries lacking smartphones and widespread limited internet connectivity. The cost of handsets and airtime are major barriers, as is lack of network coverage.
- ◆ **Talent outflows:** Sudan faces significant talent outflows, with founders spending years chasing support instead of building equity-backed ventures. Women-led startups struggle even more for capital, receiving just 6.8% of funding across Africa.
- ◆ **Displacement:** The IOM recorded approximately 9.26 million internally displaced persons across all 18 states, concentrating labour-market disruptions and household income losses across urban and rural areas.

Market and Operational Risks: Fragile Economics and Limited Capital

Liquidity crises. Private agents frequently face liquidity issues during payment surges, reducing cash transfer effectiveness in rural areas. The lack of money agents allowing people to cash out was identified as a key supply-side barrier, and where agents do exist, they are disincentivized because informal airtime credit transfers offer higher margins.

Informal competition. 68% of the population uses airtime credit transfers as a workaround for formal digital payments, with informal withdrawal fees ranging between 10% and 50% depending on location and liquidity. This parallel system competes directly with formal fintech, and agents have little incentive to support mobile money when airtime transfers are more profitable.

Venture capital scarcity. Sudan is a conflict-affected country with 71% poverty and deep infrastructure gaps. The regulatory environment is evolving but uncertain, and scoring models for lending will take years to reach high accuracy. Lending in fragile markets carries obvious and real risks. Sudan's fintech sector has raised only approximately USD 12 million in total tracked investment, a fraction of what Nigeria or Kenya attract annually. Notable deals include Alsoug's USD 5 million raise (the first major international tech investment after sanctions were lifted) and Elevate's USD 6.5 million with participation from Visa and Y Combinator.



Infrastructure financing gap. A bank with substantial paid-up capital may still suffer from accumulated losses, impaired assets, weak liquidity, or an inability to finance its operations. Network continuity, cash liquidity, internet reliance, cybersecurity, and customer confidence all remain challenges.

Risk Matrix Summary

Risk category	Severity	Likelihood	Fintech-specific impact
Conflict and security	Critical	Very High	Fragmented systems, unlicensed competitors, no legal recourse
Economic (hyperinflation)	Critical	Very High	Currency erosion, cash preference, unstable unit economics
Infrastructure damage	Critical	Very High	Service outages, power dependency, internet blackouts
Data privacy vacuum	High	Very High	Wartime metadata exposure, ungoverned AI risks
Regulatory uncertainty	High	High	Licence revocation, partnership vetting, enforcement gaps
Cybersecurity and fraud	High	High	2,000+ fraud reports in 2 months, SIM swap, duplicate transactions
Social exclusion	High	Very High	0-24% financial literacy, gender gap, device barriers
Capital scarcity	High	High	71% poverty, uncertain regulation, talent outflows

These risks are not independent; they form a vicious cycle. Conflict destroys infrastructure, which causes outages, which erodes trust, which pushes users back to cash and informal channels, which starves fintechs of revenue, which limits investment in security and resilience, which makes the next outage more damaging. Breaking this cycle requires simultaneous progress on security, infrastructure, regulation, and financial literacy, none of which can be achieved in isolation.

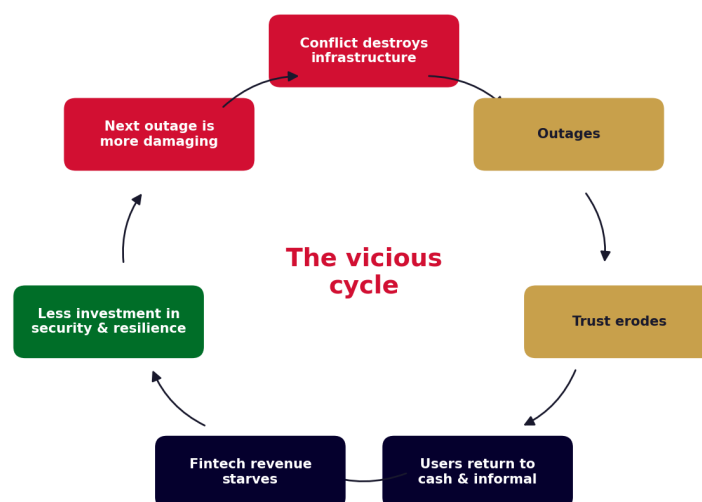
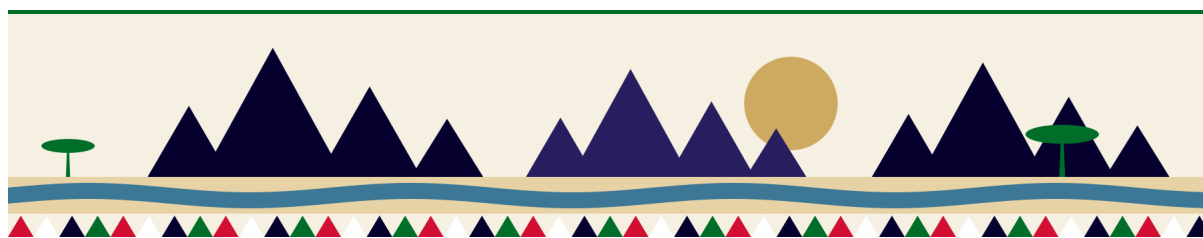


Figure 9. The vicious cycle of fragility



PART IX

The Place

Sudan's position in the Pan-African fintech evolution

Sudan's Position in the Pan-African Fintech Evolution

Sudan occupies a paradoxical position in the Pan-African fintech evolution: it is simultaneously one of the continent's most underdeveloped markets by conventional metrics and one of its most compelling frontier opportunities. The country is not a follower on the established path of African fintech development; it is a parallel case, where wartime destruction has forced a digital leapfrog that bypasses the traditional sequencing seen elsewhere on the continent.

The Continental Context: Where Sudan Sits

Africa's fintech evolution has unfolded in distinct waves. Fintech 1.0 (1990s to early 2010s) built foundational rails through companies like Interswitch, deploying card schemes, ATMs, and core banking systems. Fintech 2.0 (mid-2000s to 2010s) shifted distribution toward telco-led mobile money platforms like M-Pesa, which leveraged agent networks to drive mass financial inclusion. Fintech 3.0 (2017 to present) is characterized by digital banks, super-apps, and integrated ecosystems.



Figure 10. The three waves of African fintech, and Sudan's leapfrog

By conventional measures, Sudan is absent from this trajectory. In the Global Fintech Index, Sudan ranks 45th globally with a score of just 14.3%, far behind African leaders like Nigeria (30.3%) and Kenya. A digital financial inclusion index covering 39 African countries showed Sudan declining between 2014 and 2022, while Kenya, Lesotho, and Botswana improved. The GSMA's Mobile Money



Prevalence Index classified Sudan as having progressed only from "very low" to "low" prevalence in 2024, one of the few countries to make even that marginal step.

Yet these rankings capture a pre-war reality. Sudan's USD 10.69 billion banking market projected by 2029, with a 79% cash-to-deposit ratio and 43.1 million unbanked adults, represents the largest untapped fintech market in Sub-Saharan Africa, and the country is estimated to be only 2 to 3 years behind where it should be, not a decade.

Sudan's Integration with Pan-African Systems

Sudan's engagement with continental financial infrastructure is aspirational but nascent. The most significant vehicle is the Pan-African Payment and Settlement System (PAPSS), which by early 2026 connected over 19 central banks and more than 150 commercial banks. Sudan's Finance Minister, Dr. Jibril Ibrahim Mohamed, has been an outspoken advocate: "With PAPSS [...] we pay with our own currencies. This, of course, will bring about stability of the exchange rate [...] and you will expand trade between African countries." He framed PAPSS as a tool to reduce reliance on external debt and move beyond "Western-dominated" SWIFT.

On the ground, however, Sudan's participation remains limited. The AfDB's 2026 Sudan Country Focus Report identifies PAPSS participation as a medium-to-long-term goal, contingent on restoring macroeconomic stability, strengthening regulatory enforcement, and building supervisory capacity. The report notes that "fragmented regulation, weak institutional coordination, and limited supervisory capacity continue to hinder effective integration."

Regionally, Sudan is part of the Horn of Africa Digital Market Integration (HDMI) Project, an IGAD initiative covering Djibouti, Ethiopia, Somalia, South Sudan, and Sudan, funded by the African Development Fund. HDMI aims to create a single digital market, develop a Horn of Africa Switch for payment systems, and harmonize digital regulations. This is potentially transformative: it would connect Sudan to regional payment infrastructure and create interoperable rails with its neighbours.

The Paradox of Sudan's Position

Sudan's fintech trajectory is inverted relative to the rest of Africa. In Kenya, Nigeria, and Egypt, fintech grew from mature banking sectors outward. In Sudan, the war destroyed the banking system and forced fintech adoption as a survival mechanism. The result is a market where:

- ◆ Digital adoption has surged (Bankak's subscriber base grew from 2.8 million in October 2024 to over 10 million by September 2026).
- ◆ But the infrastructure is collapsing (EBS switch non-functional, RTGS severely disrupted).
- ◆ And the regulatory framework is incomplete (no data privacy law, no formal agency banking framework, a draft national payments law still under development).

This creates a unique dynamic: Sudan is building a fintech ecosystem from the rubble of a collapsed financial system, rather than upgrading an existing one.



Comparative Insights: Sudan vs. Continental Leaders

Dimension	Sudan	Kenya (M-Pesa model)	Nigeria (Paystack/OPay model)	Egypt (Fawry model)
Financial inclusion	15.3% banked	~80%+ (mobile money)	~64%	~27%
Dominant model	Bank-led (Bankak)	Telco-led (M-Pesa)	Fintech-led (OPay)	Bank/fintech hybrid
Regulatory maturity	Early-stage, incomplete	Advanced, sandbox	Advanced, sandbox	Advanced, sandbox
Cross-border integration	Aspirational (PAPSS, HDMI)	Deep (Pesalink)	Deep (multiple IPS)	Emerging (Instapay)
Investment climate	Nascent (~USD 12M tracked)	Mature	Mature	Mature

Sudan's fintech funding ecosystem tracks just USD 12 million in total investment, a fraction of what Nigeria or Kenya attract annually. Yet notable deals signal growing interest: Alsoug raised USD 5 million in 2021 (the first major international tech investment after sanctions were lifted), Elevate raised USD 6.5 million with participation from Visa and Y Combinator, and CashI partnered with the IFC to expand into Chad.

How Sudan Fits (or Doesn't) the Pan-African Evolution

Sudan is not following the standard Fintech 1.0, 2.0, 3.0 sequence. It is skipping stages:

- ◆ It never fully developed Fintech 1.0 rails: the banking system remained concentrated in Khartoum and served only 15% of the population.
- ◆ It bypassed Fintech 2.0's telco-led model: mobile money operators like MTN MoMo and Zain's Bede launched later and have smaller user bases than bank apps.
- ◆ It is now leapfrogging into Fintech 3.0 features (interoperability platforms such as Banknbox/ASD Smart, digital lending such as Taqseet, and cross-border remittance channels such as CashI-IFC) without the foundational infrastructure that supports them elsewhere.

The Banknbox-ASD Smart interoperability platform, launching by end of 2026, is emblematic: it will create a "shared infrastructure layer" connecting isolated banking apps and wallets, using a centrally licensed transaction switch approved by the CBOS. CEO Bassem Mahmoud describes it as "not competing with Bankak" but enabling "interoperability between different e-wallets and banks for the first time on a broad market scale."

The Shariah-Compliance Factor

One area where Sudan leads rather than follows is Shariah-compliant fintech. Sudan's entire banking system is Sharia-compliant, a regulatory requirement, not a preference. This creates a barrier to entry for non-compliant foreign players while giving Sudanese fintechs a competitive advantage in Islamic finance innovation. This positions Sudan as a potential laboratory for Islamic fintech models



that could be exported to other Muslim-majority African markets, a niche where it can punch above its weight.

The Trajectory: 2 to 3 Years Behind, but Accelerating

The consensus among analysts is that Sudan is 2 to 3 years behind where it should be, and not irreversibly so. The fundamentals are compelling: millions of mobile connections, a USD 2.15 billion annual mobile money revenue potential at just USD 50 per user, and a first-wallet land grab waiting to happen. Telcos are positioned to win because they have far more SIMs than banked adults.

The IFC's partnership with Cashi to expand into Chad, a market where only 10% to 15% of adults have a bank or mobile money account, signals that Sudanese fintech is beginning to export its model to similarly underbanked markets. This is a reversal of the usual direction: instead of importing fintech solutions from Kenya or Nigeria, Sudan is developing solutions for fragile, low-connectivity environments that may prove more relevant to other conflict-affected and underbanked African states.

DIVERGENCE WITH PURPOSE

Sudan's position in the Pan-African fintech evolution is not one of convergence, but of divergence with purpose. It is building a different kind of fintech, one designed for cash scarcity, infrastructure fragility, and Shariah compliance, that may ultimately offer lessons the rest of the continent cannot ignore.



PART X

The Path

Recommendations to stakeholders

Recommendations to Stakeholders

African Union (AU)

The AU should position Sudan's fintech reconstruction as a continental priority, integrating it into existing frameworks like PAPSS and the Horn of Africa Digital Market Integration (HDMI) Project. The AU can leverage its convening power to:

- ◆ Facilitate PAPSS integration by providing technical assistance and political cover for Sudan's Central Bank to connect, despite ongoing conflict.
- ◆ Support the HDMI Project as a vehicle for cross-border interoperability with Ethiopia, Djibouti, and Somalia, creating a regional digital market.
- ◆ Advocate for humanitarian digital payment corridors that allow remittances and aid to flow through regulated channels, reducing reliance on informal networks.

Warring Factions (SAF and RSF)

Both parties must recognize that financial infrastructure is critical civilian infrastructure. The SAF and RSF should:

- ◆ Designate banking and telecom infrastructure as protected assets, ceasing attacks on data centres, telecom towers, and power grids that sustain digital payments.
- ◆ Permit humanitarian digital cash transfers across front lines, allowing agencies like WFP and IOM to deliver assistance through mobile wallets rather than physical cash, which is vulnerable to looting.
- ◆ Facilitate the reunification of the national payment switch by allowing the EBS to restore clearing capabilities, or supporting the CBOS's National Instant Payment System (NIPS) procurement process, even if only for civilian transactions.

Central Bank of Sudan (CBOS)

The CBOS must balance regulatory tightening with enabling innovation to avoid stifling the fragile ecosystem.



- ◆ Establish a regulatory sandbox for fintechs to test products (digital lending, cross-border remittances) under supervised conditions.
- ◆ Accelerate the National Payments Law to provide legal certainty for interoperability, agency banking, and e-money issuance. The NIPS procurement process is a positive step, but a legislative framework is still needed.
- ◆ Enact comprehensive data protection regulations to govern the metadata generated by digital transactions, which poses wartime security risks. The three draft laws reviewed by Cabinet in July 2026 should be fast-tracked.
- ◆ Formalize agent banking by implementing the 2026 licensing regulation fully, with clear consumer protection standards for agents.
- ◆ Publish clear guidelines on cryptocurrency and virtual assets, clarifying their legal status and AML/CFT obligations.
- ◆ Strengthen the FIU's capacity to monitor suspicious transactions across mobile money platforms, given the proliferation of unlicensed apps in RSF-controlled areas.

Investors

Sudan represents a high-risk, high-reward frontier market. Investors should:

- ◆ Adopt a long-term horizon (5 to 10 years) and structure investments as staged tranches tied to regulatory milestones and security improvements.
- ◆ Focus on asset-light models (merchant-led distribution, USSD-based services) that can survive infrastructure shocks.
- ◆ Partner with development finance institutions (IFC, AFD, FMO) to de-risk investments through blended finance and guarantees.
- ◆ Prioritize Shariah-compliant structures, as the entire banking system is Sharia-compliant, and this is a competitive advantage.
- ◆ Invest in interoperability infrastructure (like the Banknbox-ASD Smart platform) that creates shared rails rather than siloed apps.

Executives (Banks and Telcos)

For bank executives:

- ◆ Invest in resilience: distributed cloud architectures, offline-first wallets, and redundancy for the national switch are not optional; they are existential. The Bankak five-day outage in October 2026 demonstrates the cost of centralised failure.
- ◆ Open APIs to fintechs: partner with agile startups rather than competing; Bankak's dominance makes it a target for disruption.
- ◆ Expand agent networks in rural areas: 63% of Sudan is rural, and bank branches are concentrated in cities.

For telco executives:



- ◆ Leverage USSD for mass adoption: with far more SIMs than banked adults, telcos have the distribution advantage.
- ◆ Integrate with banks: partner with banks for settlement and regulatory compliance, as Sudani did with Africa Gulf Bank.
- ◆ Invest in hybrid energy (solar-diesel-battery) for telecom towers to ensure network uptime during power outages.

Startup Founders

- ◆ Solve the data problem: the biggest barrier to digital lending is the absence of credit data. Build alternative scoring models using mobile money transaction histories, airtime usage, and merchant records.
- ◆ Target the informal sector: 68% of the population uses airtime transfers. Build products that formalize these flows (for example, a digital daftar for shop tabs).
- ◆ Design for offline-first: use USSD, SMS, and agent networks rather than requiring smartphones and constant connectivity.
- ◆ Secure regulatory cover: partner with a bank or telco for licensing, as standalone fintech licences are still nascent.
- ◆ Focus on unit economics: customer acquisition costs are high in a cash-based economy. Use merchant networks and agent-led distribution to lower CAC.

Development Partners (IFC, UNDP, AFD, etc.)

- ◆ Fund digital public infrastructure: support the NIPS procurement, digital ID, and PKI systems that enable all fintechs.
- ◆ Provide concessional financing for microfinance institutions and fintechs targeting the unbanked, as AFD is doing with the CBOS.
- ◆ Support regulatory capacity building: fund technical assistance for the CBOS, FIU, and data protection authorities, particularly for the three draft laws under Cabinet review.
- ◆ De-risk private investment through guarantees, first-loss capital, and blended finance structures.
- ◆ Invest in financial literacy programmes, particularly for women and rural populations, to address the 0% to 24% financial literacy rate.

Media

- ◆ Avoid "disaster narrative" framing: highlight the resilience and innovation of Sudanese fintechs (Cashi, Bankak, Taqseet) as much as the challenges.
- ◆ Report on consumer protection issues: investigate fraud, unlicensed apps, and informal agent abuses to protect users.
- ◆ Cover the interoperability story: the Banknbox-ASD Smart platform and the NIPS procurement are underreported but critical developments.



- ◆ Amplify the "forced digitization" story: Sudanese citizens have outpaced official institutions in creating survival mechanisms. This is a powerful narrative of agency, not just victimhood.
- ◆ Hold stakeholders accountable: track CBOS licensing decisions, bank performance, and the implementation of regulations.

The People of Sudan

- ◆ Protect your data: with no privacy law, be cautious about sharing personal information on unlicensed apps. Verify that platforms are CBOS-licensed.
- ◆ Use regulated channels: prefer Bankak, Cashi, Fawri, and licensed mobile money services over informal airtime transfers, which carry high fees (10% to 50%) and no recourse.
- ◆ Demand transparency: insist on clear fee disclosures and receipts for all digital transactions.
- ◆ Report fraud: use bank hotlines and the FIU to report suspicious activity. More than 2,000 fraud reports were filed in just two months; collective reporting strengthens enforcement.
- ◆ Build digital literacy: share knowledge within families and communities, especially with women and older adults who face the highest barriers to adoption.
- ◆ Engage with civil society: support organizations advocating for consumer protection and data privacy in digital finance.

Summary: Priority Actions by Stakeholder

Stakeholder	Top priority	Timeline
AU	Integrate Sudan into PAPSS and HDMI	Medium-term (1-3 years)
Warring factions	Protect banking/telecom infrastructure, allow humanitarian digital transfers	Immediate
CBOS	Enact National Payments Law, data protection law, agent banking regulation; complete NIPS procurement	Short-term (6-18 months)
Investors	Deploy staged capital into asset-light fintech models	Ongoing
Bank executives	Invest in resilience (distributed architecture, offline-first)	Short-term
Telco executives	Scale USSD-based mobile money, partner with banks	Short-term
Startup founders	Build credit data infrastructure, target informal sector	Ongoing
Development partners	Fund digital public infrastructure and de-risk private capital	Ongoing
Media	Reframe narrative toward resilience and accountability	Immediate
The People	Adopt regulated channels, protect data, report fraud	Immediate

The window for action is narrow. Sudan is 2 to 3 years behind where it should be, not a decade, but that gap will widen if infrastructure remains destroyed, regulation remains incomplete, and trust continues to erode. Each stakeholder has a distinct role, but the overarching imperative is the same: build a financial system that works for all 50 million Sudanese, not just the 15% who have bank accounts today.



PART XI

The Final Word

A story of survival, adaptation and ingenuity

Final Word

What emerges from this diagnosis is not a story of fintech in the conventional sense. It is a story of a financial system being rebuilt in real time by its own users, forced into digital rails not by choice but by the collapse of every alternative. Sudan's fintech sector is not following the African playbook; it is writing a different one, from the rubble of a broken state.

The Central Diagnosis

Sudan's fintech ecosystem is defined by a fundamental paradox: digital finance has become indispensable precisely because the formal financial system has been destroyed, yet it cannot reach its potential because the same conditions that make it necessary also make it fragile.

What we found:

- ◆ 84.7% of Sudanese adults are unbanked, but millions of mobile connections create the largest first-wallet opportunity in Africa.
- ◆ Bankak dominates with over 10 million subscribers, but its centralised architecture is a single point of failure that can paralyse the nation, as demonstrated by the October 2026 five-day outage.
- ◆ Digital value circulates, not just as a rail for cash but as a parallel monetary layer with its own velocity, yet it remains subordinate to physical banknotes and subject to a 7% to 10% cash-out premium.
- ◆ 68% of the population uses airtime transfers, an informal digital currency that competes directly with formal fintech and thrives because the formal system cannot meet demand.
- ◆ Regulation is evolving but incomplete: no data privacy law, no fully operational agency banking framework, unpredictable licensing decisions, and a national payments law still in draft, though the NIPS procurement represents a concrete step forward.
- ◆ The war has destroyed infrastructure but also accelerated adoption, creating a market where necessity has outpaced institutional readiness.



The Historical Arc

Sudan's fintech journey did not begin in 2023. It began with colonial banks that excluded the local population, was shaped by Islamisation in the 1980s, and took its first digital steps with the Electronic Banking Services company in 1999. Bankak's launch in 2014 was the true inflection point: a bank-led mobile app that became the de facto national payment infrastructure because the formal banking system never reached beyond 15% of the population.

The war did not create Sudan's fintech opportunity. It exposed it. The 43 million unbanked adults, the 79% cash-to-deposit ratio, the USD 2.15 billion annual mobile money revenue potential: these existed before April 2023. The war simply made digital finance the only viable option for millions, transforming a latent opportunity into an urgent necessity.

The Verdict

Sudan is 2 to 3 years behind where it should be, not a decade. The fundamentals are compelling:

- ◆ A dominant incumbent (Bankak) that has proven digital adoption at scale, with cumulative transaction value of SDG 163 trillion by end of 2024.
- ◆ A USD 10.69 billion banking market by 2029: the formal sector is projected to grow despite the war.
- ◆ A USD 2.15 billion annual mobile money revenue potential at just USD 50 per user across the unbanked population.
- ◆ Shariah compliance as a competitive advantage, not a barrier.
- ◆ A growing pipeline of fintechs (Cashi, Zakhir, Taqseet, NilePay) building for the realities of cash scarcity and infrastructure fragility.
- ◆ A concrete interoperability initiative (Banknbox-ASD Smart) and a National Instant Payment System procurement under way.

Yet the obstacles are equally real: inflation of 40% to 60% in early 2026, millions of mobile subscriptions lost, 2,000+ fraud reports in two months, 0% to 24% financial literacy, and a data privacy vacuum that exposes users to wartime security risks.

The window is open, but it is finite. The first-wallet land grab will not wait indefinitely. Telcos are positioned to win, but they must move now. Banks must open their rails. Regulators must provide clarity without stifling innovation. Investors must accept long horizons and staged capital. Development partners must fund the digital public infrastructure that no single player can build alone.

The Final Word

Sudan's fintech sector is not a story of technology. It is a story of survival, adaptation, and the relentless ingenuity of a people who have been failed by their institutions. The airtime currency, the informal agents, the merchant-led cash-out networks: these are not distortions of a functioning system. They are the system, built from the bottom up by Sudanese who cannot wait for the state to be rebuilt.



The international community often frames Sudan as a humanitarian catastrophe. It is. But it is also a laboratory for financial innovation in the hardest conditions on earth. The solutions being built here (offline-first wallets, USSD-based banking, merchant-as-agent models, Shariah-compliant fintech) are not just for Sudan. They are for every fragile, underbanked, conflict-affected market on the continent and beyond.

Sudan's fintech evolution will not be linear. It will be messy, improvisational, and punctuated by setbacks. But it will also be authentically Sudanese: resilient, community-driven, and deeply rooted in the informal networks that have sustained the country through decades of neglect and war.

The task ahead is not to build fintech for Sudan. It is to build fintech with Sudan, recognising that the answers are already emerging from the rubble, and that the people who have survived this far are the ones best placed to build what comes next.

“Sudan's fintech sector is a paradox of necessity and fragility: a market of 43 million unbanked adults where digital finance has become the only lifeline, yet remains constrained by war, infrastructure collapse, and regulatory gaps that only coordinated action can bridge.”



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