

THE STATE OF INCLUSIVE **INSTANT PAYMENT SYSTEMS IN AFRICA**

SIIPS 2024 • Case study

ZIPIT Zimbabwe







() WORLD BANK GROUP

Origin story



Challenge

The Republic of Zimbabwe experienced widespread cash shortages around 2010, driving the demand for a solution that could

facilitate real-time digital value exchanges as an alternative to cash. Zimbabwe's payments landscape only enabled non-cash transactions via automated teller machines (ATM), point of sale (POS) devices, and checks, the latter taking up to seven days to settle. Transfers via the real-time gross settlement (RTGS) could also take several days to reflect in recipient accounts. The country needed an innovative solution, especially as mobile money services had not yet been introduced in Zimbabwe.



Adding value

In 2011, the Electronic Payments Association of Zimbabwe (EPAZ) and the Reserve Bank of Zimbabwe (RBZ) collaborated with industry stakeholders to establish the Zimswitch Instant Payment Interchange Technology (ZIPIT). ZIPIT was the second instant payment system (IPS) on the continent, launched the same year as Nigeria's NIBSS Instant Payment and only preceded by Real-Time Clearing in South Africa (launched in 2006). ZIPIT facilitates real-time inter-bank credit push transfers among payment providers within the Zimswitch network, including banks and mobile money operators (MMOs). It is a cross-domain system, enabling transactions between bank accounts and mobile wallets. Financial inclusion through end-user convenience and ease-of-use were key design principles for ZIPIT. The system includes support for transfers via app, and mobile payments via feature phones.

ZIPIT timeline



Source: Zimswitch, 2024

In 2011, Zimswitch launched ZIPIT with RBZ, EPAZ, and Zimbabwe's commercial banks. Over the years, ZIPIT and its participants have embarked on extensive end-user sensitization campaigns, backed by the central bank, to accelerate the slow digital payments uptake. The country's banks have joined ZIPIT gradually, and EcoCash, the country's most popular mobile money service, was a later participant. Today, 17 commercial banks, five deposit-taking microfinance institutions (DTMFs), six MMOs, and one payment service provider (PSP) participate in the system.

ZIPIT 1.0 enabled person-to-person (P2P) transactions, which remains its most popular use case. The service is available via USSD, WhatsApp, or as an option in available mobile banking apps. Over the years, ZIPIT has enabled the transfer of US dollars held in bank accounts in addition to transactions in the local currency, the Zimbabwean dollar (ZWL)—replaced with Zimbabwe Gold (ZWG) from April 2024. Additional participants, such as EcoCash, were brought into the open-loop system based on a mandate that all licensed MMOs integrate with the national switch. Developed to target small and medium-sized enterprises (SMEs), the product enables merchant purchases from customer mobile phones using a merchant code in place of a POS machine. ZIPIT 2.0 enabled payment messages to carry know-your-customer (KYC) information, including ID number, account number, or mobile number. ZIPIT Smart introduced person-to-business (P2B) merchant transactions and quick response (QR) codes. For USSD or app transactions, end users can use a merchant

USSD code, which is linked to a merchant account.

The introduction of ZIPIT 3.0, which went live in the beginning of 2024, aimed to enhance acceptance among micro, small, and medium-sized enterprises. It includes transaction verification before completing a payment to reduce the number of erroneous transactions. ZIPIT has faced hurdles in facilitating merchant and business-to-business (B2B) payments due to the absence of end-to-end payment details for both merchants and customers.

In the pipeline is a module for instant electronic fund transfer (EFT) for bulk transactions, currently done via ZEEPAY, the Zimswitch acquiring system for bulk payments.

Key performance indicators for ZIPIT include the number of participants, growth in transaction volumes and values, and market share in mobile payments.



Governance and operations

Payment system overview

ZIPIT model overview



As a cross-domain system, ZIPIT is available to any licensed PSP, including commercial banks, microfinance institutions (MFIs), MMOs, and other non-bank PSPs. It enables interbank card-based electronic funds transfers (EFTs) to any account or wallet held by a financial institution on the platform. ZIPIT targets both banked customers with either KYC lite or full bank accounts, and mobile wallet holders. Both US dollar and ZWL-denominated transactions are possible via the system. The IPS is operated by Zimswitch Technologies, a private limited company, established in 1994.



ZIPIT transaction flow

ZIPIT's direct participants include commercial banks and MFIs. Indirect participants are non-bank PSPs, including MMOs. They can access the system via a sponsorship arrangement with a commercial bank, which holds trust accounts for clearing. ZIPIT uses an application programming interface (API) gateway for e-money. The central bank mandates participation for MMOs in the 2020 Banking Regulations. Other players are not obligated but encouraged to join.

The Reserve Bank of Zimbabwe's RTGS settles the transactions via a deferred net settlement arrangement that occurs on the day following the transaction (T+1). There are no pre-funded accounts involved in these transactions. The RBZ maintains collateral to cover settlement obligations in case of default. Zimswitch

performs the net settlement calculations and provides information for the positions to settle via the RTGS. Indirect participants settle through their sponsor banks and the trust accounts. ZWL transactions are settled through the RTGS and US dollar (USD) transactions are settled via commercial banks.



Governance

ZIPIT is a Zimswitch solution solely owned by Zimswitch Technologies (PVT)

Ltd. Governance of all Zimswitch solutions including ZIPIT is through the National Payment Systems (NPS) Act. RBZ acquired a 15% stake in Zimswitch in 2020 to assist with interoperability. ZIPIT is therefore jointly owned and has a public-private partnership governance model. Zimswitch is overseen by a board of directors and is licensed by the RBZ National Payment Systems Department to provide clearing services to Zimbabwe. Decisions regarding ZIPIT are made by the Zimswitch board of directors under the regulatory guidance of the central bank. Various stakeholders influence the decision-making process, including RBZ, ZIPIT participants, and other interest groups.

The RBZ, as the regulator, influences the governance and operations of Zimswitch, including key appointments, product approvals, and pricing. Participants, represented by industry associations such as EPAZ, the Banker's Association of Zimbabwe, the Interbank Operations Committee, and the Payment Service Providers Association of Zimbabwe, contribute to requirements and operating rules of the IPS, including limits, pricing, and liability rules. Other interest groups, such as the Retailer's Association of Zimbabwe, and Consumer Council of Zimbabwe, also play a role in shaping decision-making processes. The collaborative decision-making approach ensures that participants have input into the IPS design, an important inclusivity driver.



Functionality

ZIPIT facilitates transactions across all channels, including web-based platforms, mobile applications (including USSD), POS, and ATMs. The PSPs decide which channels to offer their customers. ZIPIT transactions via NFC are limited.

Transactions clear via a card instrument, with API integration for e-money payments. Through the API, the sender's transaction information goes to the partner bank, where it is converted into the ISO 8583 messaging standard that ZIPIT runs on. The PSPs are identified in the clearing messages using bank identification numbers (BINs). Another API is used to enable e-commerce transactions.

Proxy identities (proxy IDs) or aliases include the end user's bank account number, mobile phone number, QR code for apps, and merchant codes for USSD payments. The provision to use QR codes is available under the ZIPIT Smart transaction suite; there have been some transactions, though adoption to date has been limited. There are ongoing conversations within the market about making QR codes interoperable via standardization, since several players offer QR payments. The feature that sets ZIPIT apart in the market is the ability to conduct transactions in both USD and ZWL, which could encourage Zimbabweans to hold dollars in bank accounts rather than in cash. The transaction limits set by the regulator on ZIPIT are US \$500 per transaction and up to US \$1,000 a month.



Technical standards and use cases

ZIPIT operates on the ISO 8583 credit push messaging standard. There are no plans to upgrade to ISO 20022. Developments are underway to offer an ISO 20022 EFT clearing house solution. Workarounds using ISO 8583 have enabled the system to increase the identity information in the payments message without needing to upgrade the standard.

Apart from P2P and P2B bill and merchant payments, ZIPIT facilitates business-to-business payments, salaries, and taxes and fees. Efforts are underway to develop a real-time government-to-person (G2P) option, aligning with the organization's broader strategic objective of financial inclusion. G2P payments are currently routed through a different channel via ZEEPAY and take approximately 10 minutes to reach the recipient account. Once integrated with ZIPIT, G2P transfers will be near instant. There is currently no cross-border transaction capability.



Business model

Zimswitch Technologies (PVT) Ltd. provided the initial start-up funding

for the Zimswitch IPS, supplemented by a technology partner, whose current share stands at 25%. The central bank contributed start-up funds. Switch fees assist in recovering the operational expenses of the IPS. The initiative operates with a for-profit model. End-user fees vary based on what the banks charge their customers, as there is no universal fee structure. Zimswitch charges banks a 1% fee, while banks set their customer fees between 1% and 3%, based on their pricing models and competitive advantages. This is exclusive of a 2% government tax (Zimswitch, 2024). Transaction limits are regularly adjusted to mitigate the impact of inflation rates, ensuring continued accessibility for users across various economic strata.



Scheme rules

ZIPIT's scheme rules are not publicly available. Compliance with anti-money

laundering (AML), countering the financing of terrorism (CFT) and counter proliferation financing (CPF) is mandatory for all participants. This includes adopting a risk-based approach to compliance, guided by legislation and regulatory directives. The risk-based approach has not yet been widely adopted across the continent, making Zimbabwe stand out.

Zimswitch also established a query and dispute management process within the scheme rules, supported by a dedicated system for tracking and resolving end-user queries and disputes. Dispute resolution rules and policies apply to each member, guiding query resolution processes across the entire value chain, including merchants and end users. In terms of the process, the sender initiates the query to their bank, which captures it on a Zimswitch platform and then resolves between the sender and the recipient bank. ZIPIT requires the query to be resolved within 48 hours, after which ZIPIT acts as an arbitrator should the parties not come to a settlement. This process also applies to erroneous mobile money transactions. While centralized monitoring is a step in the right direction, ZIPIT does not yet provide an additional avenue for end users to access recourse mechanisms outside of their PSP.



Volumes and values processed by the payment system

Zimswitch does not collect information for on-us transactions from the IPS, limiting the view to payments made internal to a given PSP. Zimswitch reports quarterly to the RBZ. Information on performance is also available daily.

ZIPIT saw solid growth in volumes between 2020 and 2022, partially correlated with increased digital adoption following the COVID-19 pandemic. Within the last year, transaction volumes decreased from 27.5 million to 13.3 million. Over the same period, value transacted increased from US \$56 million (ZWL 340 billion) to US \$305 million (ZWL 1.9 trillion).¹ This increase in value was driven entirely by inflation of the ZWL. In actual terms, there was a decrease in values transaction (Zimswitch, 2024). Given the currency volatility over the past year, people had less incentive to use the formal financial system. ZIPIT processed the equivalent of 1% of gross national income in 2023, pointing to a continued large opportunity to expand digital payment in the country.



ZIPIT transaction volumes and values

Source: Zimswitch, 2024

1 An exchange rate of ZWL 6,104.7 per US\$ was used, as provided by Zimswitch. Given its volatility, there is no official exchange rate for ZWL on www.oanda.com and the currency has since been replaced by the Zimbabwean Gold (ZWG).

The different currencies used for retail transactions in Zimbabwe introduce hurdles to digital payments uptake, as consumers have a deep distrust in the formal financial services sector due to high inflation. The Zimbabwean local currency is only used for about 20% of all transactions. The US dollar has dominated ever since its introduction into the country in 2009. ZWL has been mostly used to give out change by businesses (Dzoma, 2024). In April 2024, RBZ introduced its sixth currency since 2008, the Zimbabwe Gold (ZWG), to tackle inflation and cash shortages. All PSPs were offline for about a week to deal with the conversion, disrupting the digital ecosystem. Unless clear guidance and risk mitigation procedures are communicated by the regulator, such events can lead to a drop in consumer confidence in the robustness of an IPS.

including Zimswitch and MMOs. Additionally, the 2020 Banking (Money Transmission, Mobile Banking and Mobile Money Interoperability) Regulations mandate the integration of MMOs to the NPS for interoperability.

AML/CFT/CPF and sanctions legislation, including the <u>Money Laundering and Proceeds of Crime Act</u>, the <u>Bank Use Promotion Act</u>, and the <u>Suppression of</u> <u>Foreign and International Terrorism Act</u> also apply. The operator reports regulatory constraints such as restrictive transaction limits stipulated by the regulator to address issues of illegal forex trading prevalent in the market and subject to abuse by the product. There is no open finance or virtual asset regulation in Zimbabwe, but a national QR code is under development.



Regulation

Key pieces of legislation/regulation for participants of the scheme include the

Banking Act, which regulates the financial institutions on the platform and the <u>National Payment Systems</u> <u>Act</u>, which regulates payment service providers,

Inclusivity learnings

According to the AfricaNenda Inclusivity Spectrum, ZIPIT has achieved the progressed level of inclusivity. It facilitates inclusive functionality for key use cases like P2P and P2B transactions and offers its end users their preferred transactions channels. The system provides all-to-all interoperability via a cross-domain model, and the central bank is part of the governance structure. Lastly, all participants of ZIPIT have equal input opportunity into key decisions. To advance to mature inclusivity, ZIPIT must expand its use cases, especially integrating G2P payments. In addition to its monitoring of disputes, it can consider implementing additional recourse avenues to increase trust by end users. Finally, a not-for-loss or cost-recovery business model would ensure that surcharging does not impede uptake by end users. In terms of the regulatory environment, Zimbabwe has an updated banking act and deploys a risk-based approach to AML/CFT/CPF, which is adequate.

In the design and rollout of ZIPIT, several key inclusivity learnings emerged:

- Merchant codes facilitate P2B payments, reducing errors: ZIPIT Smart introduced merchant codes linked to merchant accounts, enabling more seamless P2B merchant transactions. This reduces errors. QR codes are even more convenient, but their uptake is still limited—the next frontier for ZIPIT to explore.
- Establishing a dedicated dispute resolution process increases trust: In the case of an unresolved dispute, ZIPIT introduces an additional channel for end users. The typical resolution process involves the sender initiating a query through their bank, which logs it on the Zimswitch platform and facilitates resolution between the involved banks. If no settlement is reached within 48 hours, ZIPIT acts as an arbitrator to resolve the dispute. By implementing clear and enforceable rules for handling disputes at the participant level, systems like ZIPIT increase confidence and reliability.
- **Multiple currencies increase digitalization:** ZIPIT enables the transfer of both US dollar and ZWL/ ZWG-denominated transactions without the need for conversion. In a country plagued by high inflation and the erosion of trust in PSPs, these features can offer end users more choice and potentially reduce the proportion of currency held in cash.



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