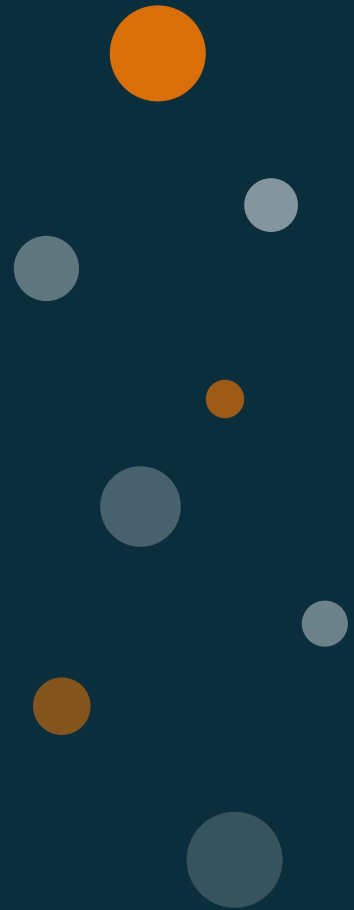


WSO2CON AFRICA 2026

Modernizing Central Banks with WSO2

Scaling Instants with WSO2 API Management & Identity

Simon A. Manangu · Payment Systems Analyst



How Central Banks Operate

- **Monetary policy.** Safeguards price stability and a stable shilling.
- **Supervision.** Regulates and supervises banks & financial institutions.
- **Financial stability.** Keeps the financial system sound and resilient.
- **Payment systems.** Oversees — and operates — national payment & settlement rails.

WHERE IPS FITS

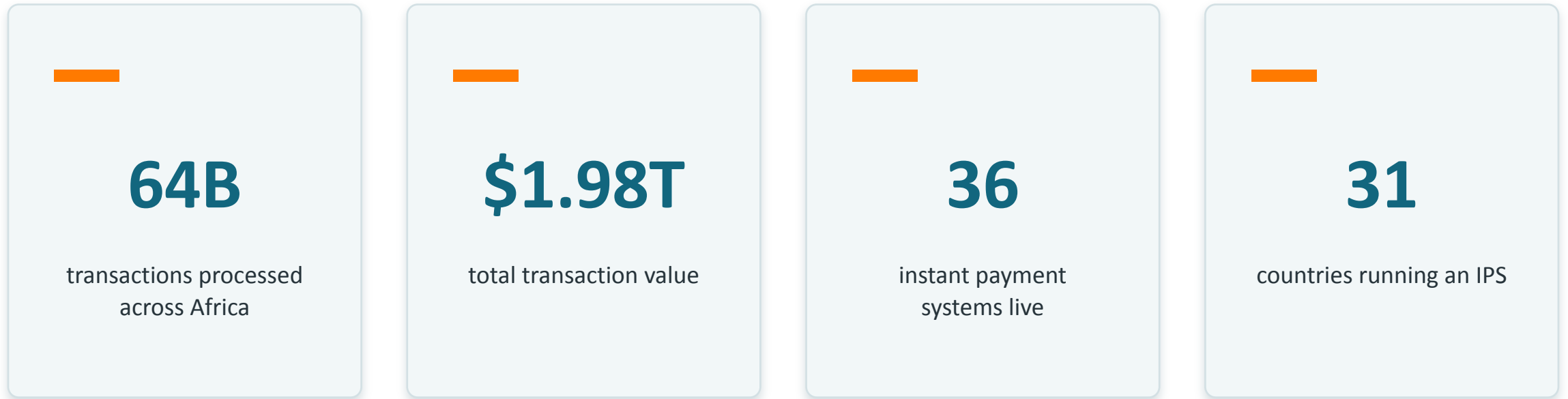
Central Payment Infrastructure

A Country's real-time retail switch that lets any bank or MNO transact instantly with any other.

POWERED BY

WSO2 API Manager
WSO2 Identity Server

IPS in numbers across Africa — 2024



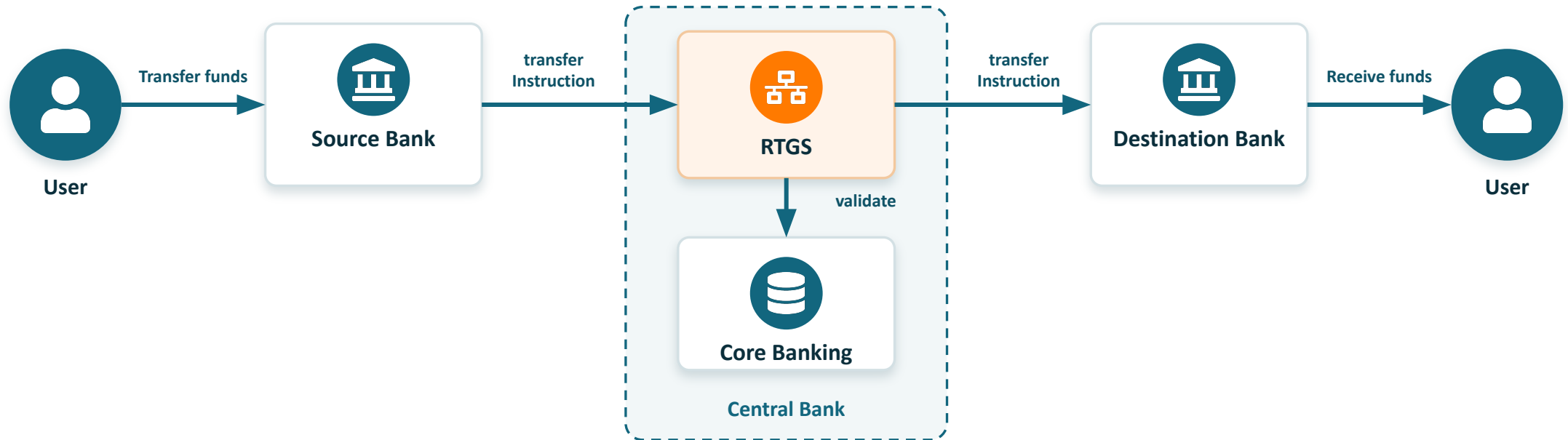
Grew at an average 26% a year in value and 35% a year in volume since 2020.

SIIPS: State of Inclusive Instant Payment Systems in Africa 2025 — AfricaNenda Foundation, World Bank & UN Economic Commission for Africa (UNECA).

How the platform evolved



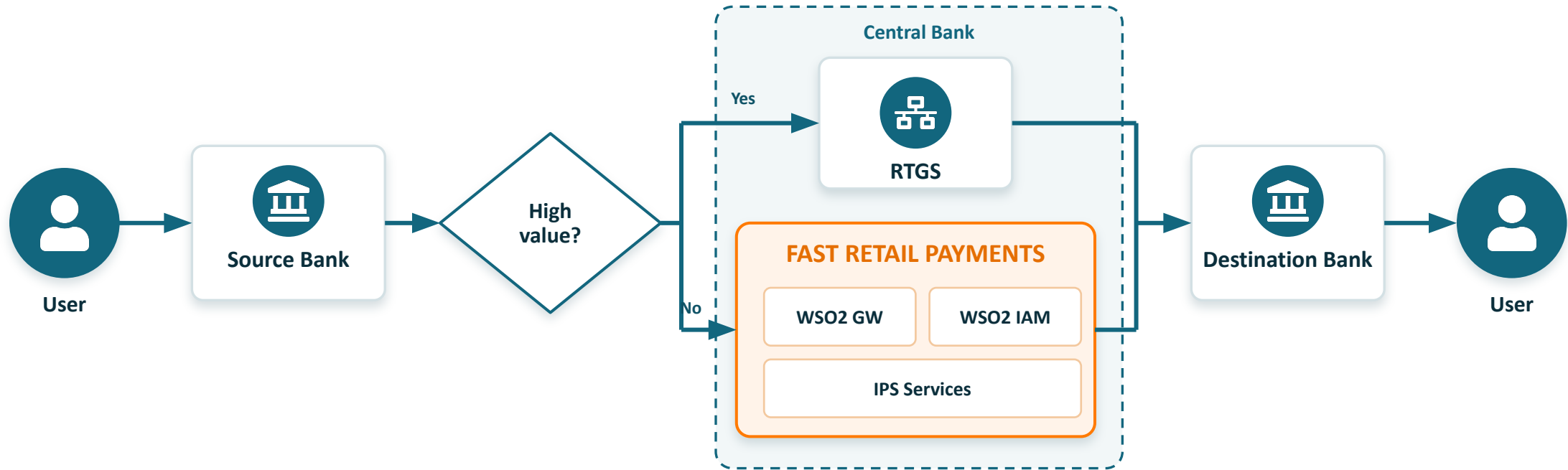
RTGS for instant payments



The challenge

- **Costly per transaction.** High fees make everyday payments uneconomical.
- **Wrong tool for retail.** Built for high-value settlement, not mass retail.
- **Bilateral arrangements.** Mobile-money interoperability ran on one-to-one deals.

IPS for instant, low-value payments



How it works

- **Under the hood.** IPS services leverage WSO2 Gateway and WSO2 IAM.
- **Instant & low-cost.** Real-time settlement unlocks everyday small-value payments.

The impact of IPS

For participants

Banks, MNOs & fintechs

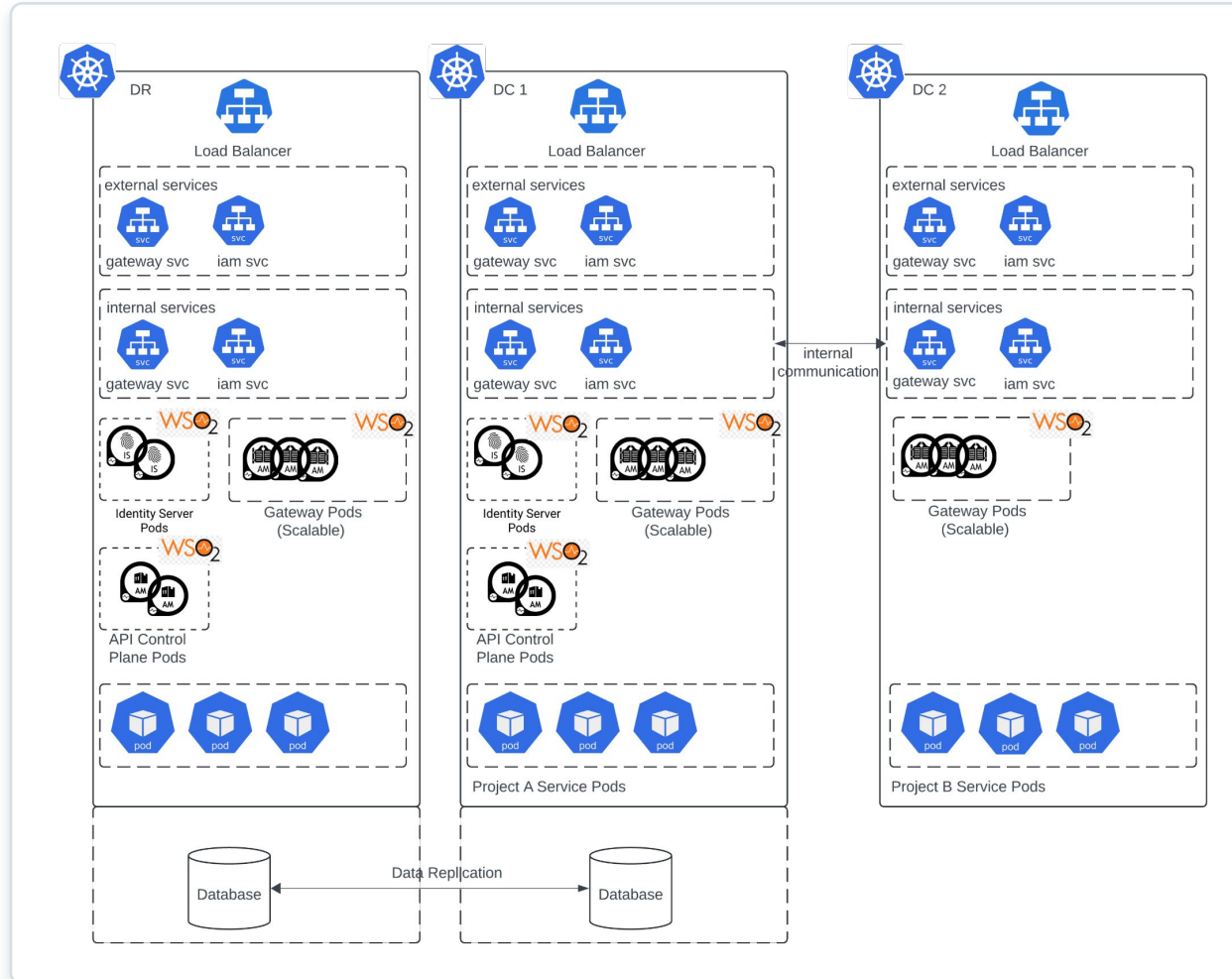
- **No bilateral agreements.** One connection replaces many one-to-one deals.
- **Faster, cheaper access.** Quicker onboarding to the national rail.
- **A level playing field.** Smallest fintech to largest bank, same platform.

For citizens

Everyday Tanzanians

- **One account reaches all.** Send to anyone, on any provider or network.
- **Instant & affordable.** Low-cost transfers that settle in real time.
- **Financial inclusion.** A digital rail designed to leave no one behind.

WSO2 Reference Distributed Architecture



Highlights

- **Active-active.** Runs across two data centres (DC1, DC2) with a DR site.
- **Scalable gateways.** WSO2 API Gateway pods scale horizontally with demand.
- **Federated identity.** WSO2 Identity Server handles SSO across institutions.
- **Tiered services.** Separate external and internal service layers per cluster.
- **Resilient by design.** Cross-DC data replication keeps the rail always on.

Why WSO2



API Management

- Secure exposure of payment APIs
- Faster, standardized bank & DFSP onboarding
- Throttling, rate-limiting & observability at the edge



Identity & Access

- Federation across many institutions
- Seamless single sign-on experience
- Centralized, auditable access control

The capabilities that let a central bank onboard participants fast — and keep the rail secure.

LOOKING AHEAD

What's next

1

Extend the platform

Bring more participant-facing services onto API Management over time.

2

Enable open banking

Open up regulated APIs for consent-based data sharing and third-party payment initiation.

3

Explore AI & agents

Assess agentic capabilities for central banking — and what we'd want from a platform vendor.

Today banks connect to the central bank. Tomorrow, the platform carries the whole ecosystem.

Asante sana

Thank you — questions welcome

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