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Financial Technology in Public Sector - Opportunities and Challenges of adopting fintech solution

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FinTech – Wide and Exciting Landscape

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FINTECH COVER A BROAD RANGE OF SOLUTIONS

Fintech

- **Online Banking** – Banking services anytime, anywhere
- **Digital Payment** – Pay bills, transfer funds, shop seamlessly
- **Virtual Currency** – Digital money, crypto & stablecoins
- **Money Exchanges** – Send & receive money globally
- **Neobanks** – Digital-first banks with seamless experiences
- **Crypto Platforms** – Invest, trade & store digital assets

FINTECH IS TRANSFORMING FINANCIAL SERVICES IN MANY WAYS

- **PayTech** – Digital payments, mobile wallets & instant transfers
- **RegTech** – Compliance, risk management & fraud detection
- **LendTech** – Digital lending, credit scoring & loan platforms
- **BankTech** – Core banking, APIs & digital infrastructure
- **InsurTech** – Digital insurance, claims & risk management
- **WealthTech** – Investments, robo-advisory & wealth management

OUR FOCUS TODAY

While FinTech covers many exciting areas, given our time today, we will focus on **Municipalities – especially Utility Payments (Water & Electricity)** in support of Government Priorities and Service Delivery.

Customer Journey

2025 – 2030 Strategic Plan

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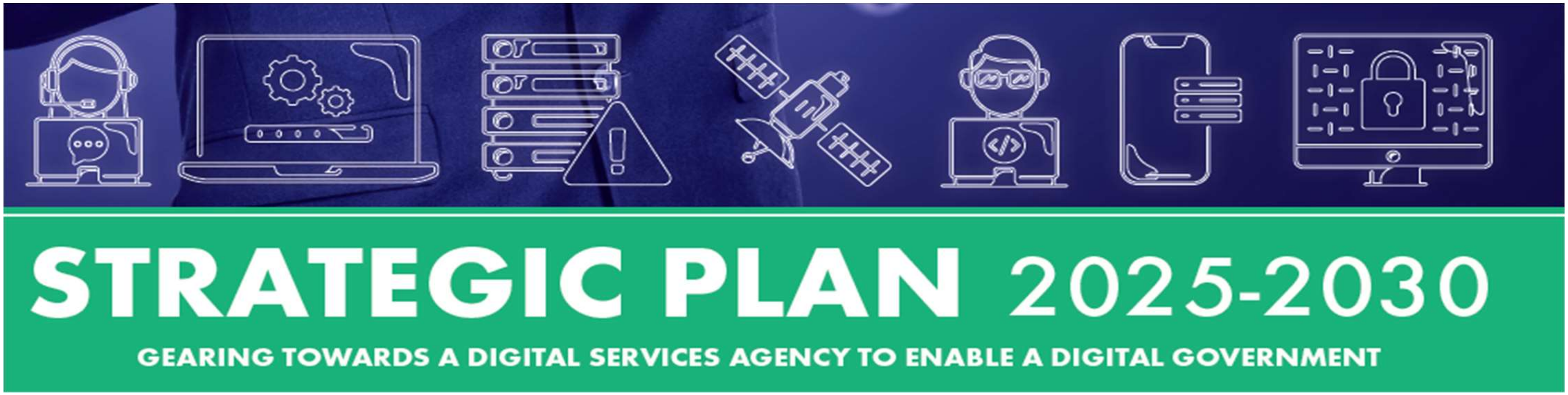

- Deepen Partnership with Municipalities & Industry
- Assist in Revenue Growth & Financial Sustainability
- Assist with Internal and Operational Efficiencies
- Goal - Improved **Trust between the Citizen and Municipality**

Let us not swim upstream or against the tide

"Municipalities don't have a technology problem. They have a revenue collection and citizen service problem. FinTech—combined with SITA's shared digital platform—can solve both."

Municipal Complains – Key Insight

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Approximately **70%** of all complaints received in call centres / contact centres relate to just **5** services.

TOP 5 SERVICES ACCOUNT FOR ~70% OF ALL COMPLAINTS

WATER	ELECTRICITY	BILLING	SANITATION	REFUSE
25%	25%	15%	15%	10%

Other complaints **(30%)** relate to Roads, Parks, Public Transport, Housing, Customer Service and other municipal services.

Utility Payments Transaction Universe

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Stats SA reported approximately **15.3 million** municipal water consumer units and **12.9 million** municipal electricity consumer units in 2022.

UTILITY	CONSUMER UNITS	ESTIMATED MONTHLY PAYMENT EVENTS	ESTIMATED ANNUAL PAYMENT EVENTS
Water	15.3 million	15.3 million	184 million
Electricity	12.9 million	12.9 million	155 million
Total	**28.2 million**	**28.2 million**	**339 million/year**

*Assumption: One payment event per consumer unit per month.

Municipal water and electricity payments represent a potential **transaction universe** of **more than**

330 million

payment events per year,

before considering **prepaid electricity top-ups**, arrears payments, **reconnections, penalties, indigent subsidies** and service-fee payments.

MUNICIPAL CONSUMER DEBT IS SIGNIFICANT AND GROWING

AS AT MARCH 2024

National Treasury reported municipal consumer debt of

R347.6 billion

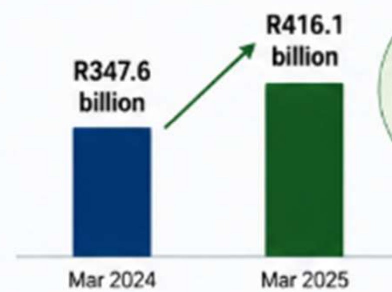
Households responsible for about **R253.6 billion** (approx. 73%)

- Households **R253.6 billion** (73%)
- Other (Businesses, Organs of State, Commercial, etc.) **R94.0 billion** (27%)

AS AT MARCH 2025

Reported municipal consumer debt has increased to

R416.1 billion



Increase of **R68.5 billion** (+19.7%) in one year

KEY TAKEAWAY

FinTech can play a pivotal role in unlocking this transaction potential, improving collection rates, reducing debt and enhancing citizen convenience.

- More Payment Choices
- Faster Collections & Reconciliation
- Better Revenue Assurance
- Improved Citizen Experience
- Reduced Debt & Financial Risk
- Stronger Municipal Financial Sustainability

From Municipal Constrains to Digital Solution

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Enabling FinTech-Driven Municipal Transformation

COMMON MUNICIPAL CONSTRAINTS

Loss of Revenue
High levels of revenue leakage, non-payment and debt.

Ageing ICT Infrastructure
Legacy systems that are costly to maintain and integrate.

Revenue Management Inefficiencies
Manual processes, poor billing, reconciliation and reporting.

Manual Meter Reading Dependencies
Inaccurate readings, estimated billing and high operational costs.

High Non-Revenue Water & Electricity Losses
Illegal connections, leakages and energy losses.

Weak Cybersecurity Posture
Increased risk of data breaches, fraud and system downtime.

Fragmented Payment Ecosystems
Multiple payment channels with low integration and reconciliation challenges.

Limited Analytics & Decision Visibility
Poor data quality and limited real-time insights for decision-making.

Timely Alert / Complaint Management System
No integrated system for proactive alerts and complaint resolution.

SITA – NATIONAL DIGITAL PLATFORM & INTEGARTION

Empowering Municipalities in the FinTech Space

GOVERNMENT CLOUD INFRASTRUCTURE

Secure, Scalable & Resilient

NATIONAL IoT PLATFORM

Smart Meters, Sensors & Devices

CYBERSECURITY SERVICES

Secure by Design, Protect & Prevent

DATA INTEGRATION & APIS

Standardised APIs, Interoperability & Data Exchange

DIGITAL ANALYTICS & AI

Real-time Insights, Predictive Analytics & AI

NATIONAL INFRASTRUCTURE MONITORING

Unified View of Municipal Assets & Performance

ENABLED OUTCOMES FOR MUNICIPALITIES IN THE FINTECH SPACE

- Improved Revenue Collection & Cash Flow
- Integrated Digital Payment Ecosystem
- Reduced Losses (Water & Electricity)
- Better Citizen Experience & Timely Services
- Data-Driven Decision Making
- Enhanced Security & Compliance
- Operational Efficiency & Cost Savings
- Sustainable Financial Management

SITA'S MISSION: INTEGRATE. INNOVATE. EMPOWER. Building a connected, secure and intelligent municipal ecosystem.

Municipal Payment & FinTech Innovation

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Examples of Capabilities – Not Endorsements

PayShap
PayShap
Real-time, low-cost account-to-account payments.

OZOW
Ozow
Instant "Pay by Bank" for municipal bills.

LESAKA
Lesaka
Strong township payment network and merchant ecosystem.

stitch
Stitch
Open Banking APIs for integrating municipal payment channels.

CAPITEC pay
Capitec Pay
Convenient digital payments through one of South Africa's largest retail banks.

These fintech solutions and many others can be integrated into a unified municipal payment ecosystem to deliver convenience, lower costs and better outcomes for citizens and municipalities.

GLOBAL EXAMPLES – DIGITAL PAYMENTS TRANSFORMING LIVES

SINGAPORE

PayNow
Nationwide real-time payments linked to bank accounts and mobile numbers.
Used by 8 in 10 Singapore residents

INDIA

UPI
Real-time, interoperable payments infrastructure used across the nation.
10+ Billion transactions per month

BRAZIL

pix
Instant payments 24/7, transforming financial access for millions.
Over 150 Million users

KENYA

M-PESA
Mobile money that drives financial inclusion and powers everyday payments.
Over 50 Million active users

CHINA

Alipay
Digital wallet platform powering payments, services and lifestyle at scale.
1+ Billion users

LESSON FOR MUNICIPALITIES: Interoperable platforms, instant payments and digital inclusion drive economic growth, improve service delivery and build trust.

Better for Citizens | Stronger for Municipalities | Sustainable for the Future

From Municipal Constrains to Digital Solution

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Especially for Spaza Shops and Township Communities

THE CURRENT REALITY: FRAGMENTED & COSTLY

Citizens and Spaza Shops use multiple channels and devices to make utility payments.

Multiple Platforms. Multiple Costs. Multiple Devices.

- **Bank App** – Data Cost + Service Fee
- **USSD** (*120*...#) – Session Fee
- **Wallet App** – Data Cost + Service Fee
- **Electricity Vendor App** – Data Cost + Token Fee
- **Water Vendor App** – Data Cost + Service Fee
- **Card Payments** – POS Cost + MDR Fee
- **Airtime Top-up for Tokens** – Airtime costs + Service Fee
- **Agent/Spaza Collections** – Commission + Handling Fee
- **Receipts / Reconciliation** – Manual Effort + Time Lost

High costs for citizens • Time-consuming • Confusing • Prone to errors
Poor reconciliation for municipalities • Lost revenue

TIME FOR INTEGRATED SOLUTIONS

THE SMARTER WAY: INTEGRATED & COST-EFFECTIVE

One Integrated Platform. One Channel. Lower Cost. Better Experience.

Municipal Services
- Water
- Electricity
- Billing
- Sanitation
- Refuse

PAY NOW

ONE PLATFORM
All services in one app, wallet, USSD or agent channel.

LOWER COST
Reduced data, transaction and service fees.

SAVE TIME
Faster, simpler and more convenient payments.

SECURE & RELIABLE
Accurate, real-time transactions and instant reconciliation.

INTEGRATION OF:
- Smart Meters
- IoT Platforms
- SITA Pay / Wallet / EasyPay
- Municipal Systems
- Spaza Shops / Agents

Lower cost for citizens • Inclusive & convenient • More payments
Better cashflow for municipalities • Improved service delivery

THE IMPACT OF FRAGMENTATION VS INTEGRATION

TYPICAL CITIZEN PAYMENT JOURNEY (EXAMPLE)

Buy airtime (for tokens) R5 – R10 → Use USSD to buy token R1 – R3 → Vendor App for water R2 – R5 → Vendor App for electricity R2 – R5 → Pay bill (different app or channel) R2 – R5 → Agent/Spaza commission R3 – R8 → No instant receipt / Proof Time Lost

Estimated extra cost per payment journey: R15 – R36
For low-income households, this is a significant burden!

COST COMPARISON PER PAYMENT (EXAMPLE)

	FRAGMENTED (Multiple Channels)	**INTEGRATED** (One Platform/Channel)
Data Cost	High	Lower
Transaction Fees	Multiple Fees	Lower Fees
Channel / Agent Fees	High	Lower
Time to Complete	10 – 15 mins	1 – 2 mins
Total Cost Impact	**R15 – R36**	**R2 – R5**

WHY IT MATTERS

- Citizens save money and time
- Spaza shops reduce complexity and increase trust
- Municipalities collect more, faster and with less leakage
- Supports financial inclusion and digital economy growth

INTEGRATION IS NOT JUST A TECHNOLOGY CHOICE – IT IS A COST, ACCESS AND SERVICE DELIVERY IMPERATIVE.
Let's make payments simple, affordable and accessible for every South African.

Municipal FinTech & Inclusiveness

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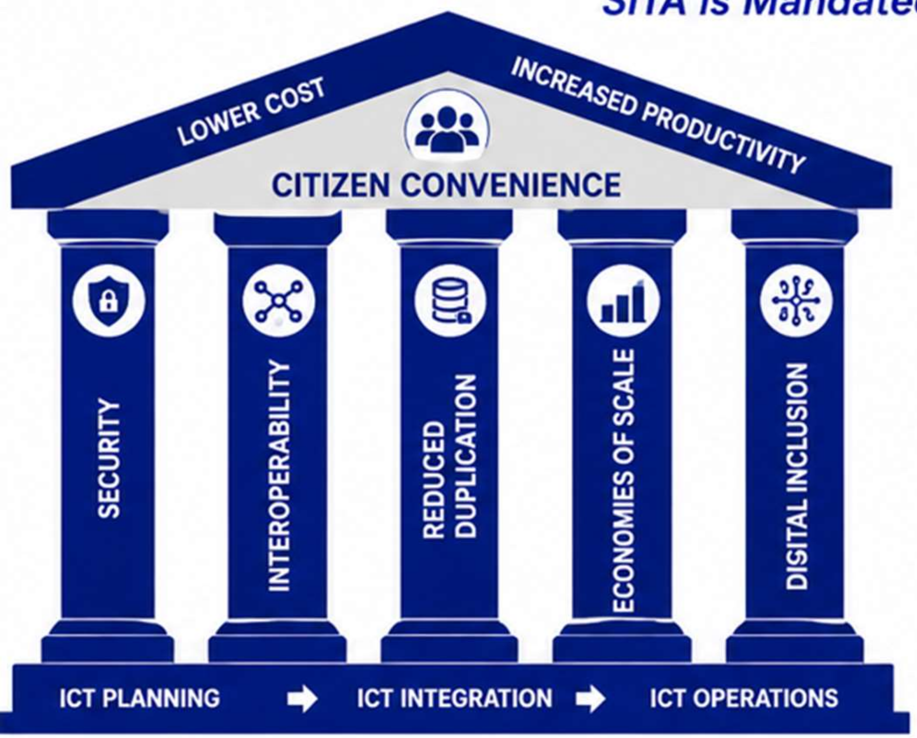
SITA is Mandated – Municipalities are Invited to Partner



SITA IS MANDATED TO ENABLE DIGITAL TRANSFORMATION

SITA is the central enabler of digital government.
We provide the platforms, infrastructure, integration and innovation that municipalities need to deliver better services.

SITA
STATE INFORMATION TECHNOLOGY AGENCY

MUNICIPALITIES ARE INVITED TO PARTNER WITH SITA

Partner with SITA to leverage proven platforms, expertise and innovation.

District & Local Municipalities work together and share infrastructure.

Interoperable Systems integrate, exchange and reuse data.

THE RESULT: SHARED INFRASTRUCTURE. SHARED SUCCESS.

LOWER COST
Shared platforms reduce operational and capital costs.

ECONOMIES OF SCALE
More municipalities, greater value and sustainability.

BETTER SERVICES
Reliable, secure and seamless services for all citizens.

STRONGER COMMUNITIES
Digital inclusion drives economic growth and social development.

LET'S WORK TOGETHER

Let's build a connected municipal ecosystem where costs are lower, services are better, and every citizen benefits.

ONE DIGITAL FUTURE.
ONE NATION.
ONE PURPOSE.

NATIONAL ENABLER

SITA provides the national digital platforms, cloud, integration, cybersecurity, data and shared services.

DISTRICT COORDINATION

District Municipalities coordinate, standardise and support interoperability across local municipalities.

LOCAL DELIVERY

Local Municipalities deliver services efficiently using shared infrastructure and digital solutions.

SHARED INFRASTRUCTURE.
SHARED DATA.
SHARED PROSPERITY.
The Power of Partnership.

STRONGER TOGETHER. SMARTER TOGETHER. BUILDING A DIGITAL MUNICIPAL ECOSYSTEM THROUGH PARTNERSHIP.

Thank You!

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