Insights on DFS Security Labs Implementation in Africa

Zimbabwe's Journey

Zimbabwe DFS Landscape

Birds eye view

01

Advent

Introduced in 2009, mobile money was quickly adopted by Zimbabweans, reaching 45% penetration

02

2019

mobile money payments accounted for 81.2% of all digital payments in Zimbabwe

03

2025

mobile money payments accounted for 86.7% of all digital payments in Zimbabwe

04

2026

97.5% mobile penetration rate, and mobile accounts for more than 87% of all digital transactions

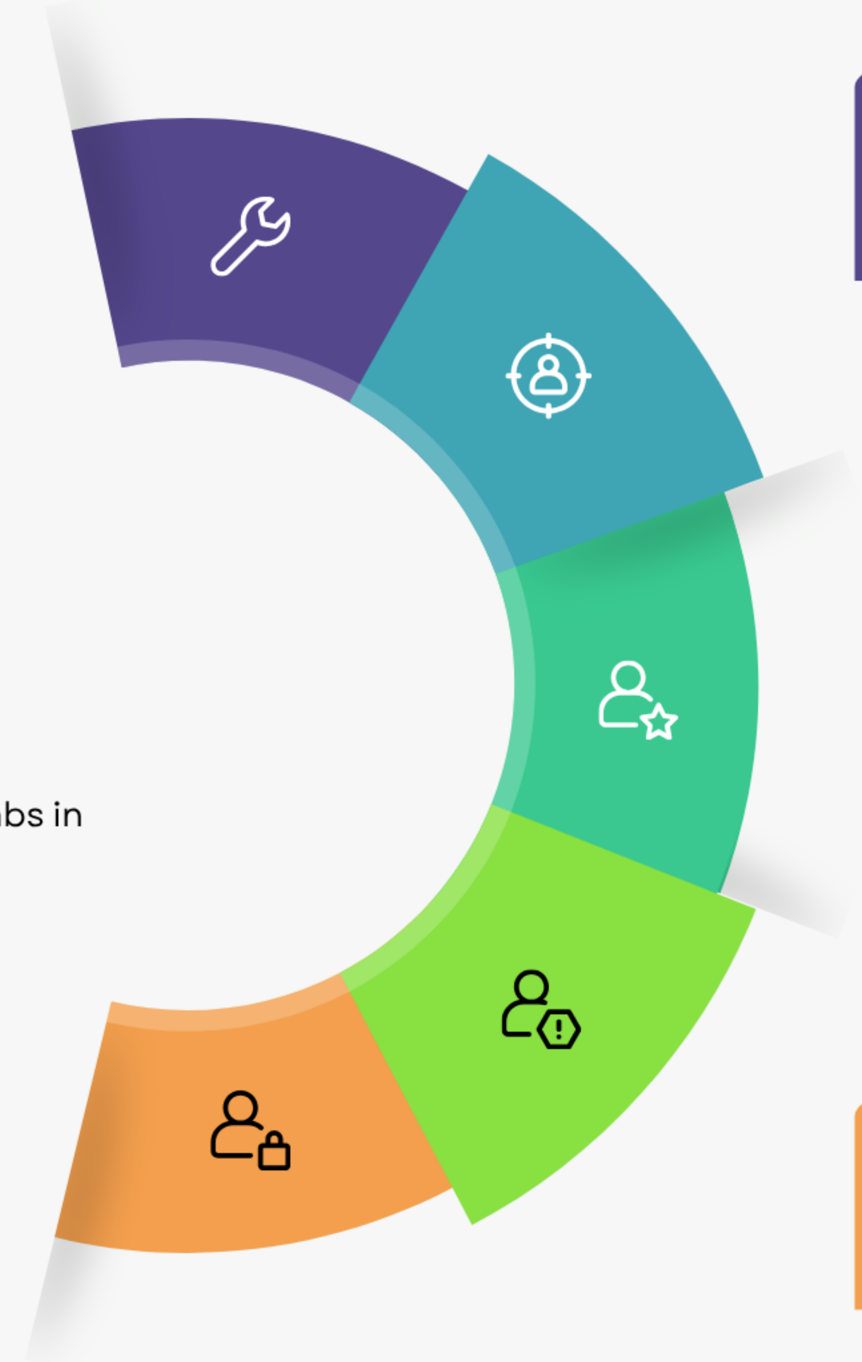
05

Consequence

A significant increase in mobile money scams prompted the government to set up an interagency task force to mitigate the threat.

Why DFS Lab

The business case for DFS labs in africa



01 **Confidence**

Build Confidence and trust in the use of DFS services

02 **Uniformity and Standadisation**

Ensure guidelines and best practices for DFS application security

03 **Adress vulnerabilities**

Mitigate security vulnerabilities in DFS applications

04 **Effective Regulation**

Address unlicensed digital investment schemes (Ponzi schemes)

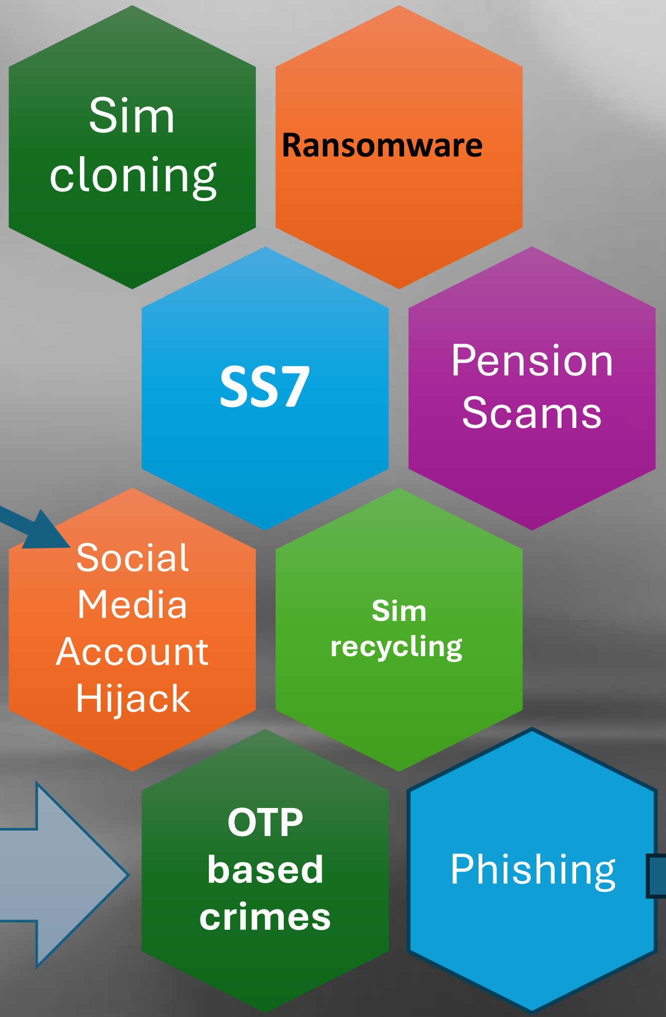
05 **Emerging Technologies**

Manage impact of new technologies on security and consumer protection

Current Cyber-related Crimes in Zimbabwe

Whatsapp Fraud

1. Obtain OTP
2. Install the account on another device
3. Restore contacts from online backup
4. Initiate conversations
5. Request for financial assistance



How do Scammers know one has been paid a pension?

DFS

Signalling System Number 7

I. Intercept Messages
II. Re-route calls
III. Location Tracking

BEC

1. **Impersonation of Supplier**
2. **Redirection**
3. **Change of banking details**

In the Absence of Mitigation

Senior citizens target of multiple financial scams

admin • Herald • January 12, 2024 • 0 Comments

What has Zimbabwe doing?

- MOU between the Telecoms regulator and the Central Bank. A standing Committee convenes quarterly
- Joint guidelines that attempt to mitigate SS7 and DFS-associated risks
- Collaboration between the ITU and Telecom Regulator POTRAZ
- Advocacy at the highest level of Government
- Targeted awareness campaigns for the Elderly

EVOLUTION OF THE DFS LAB

Our DFS Journey

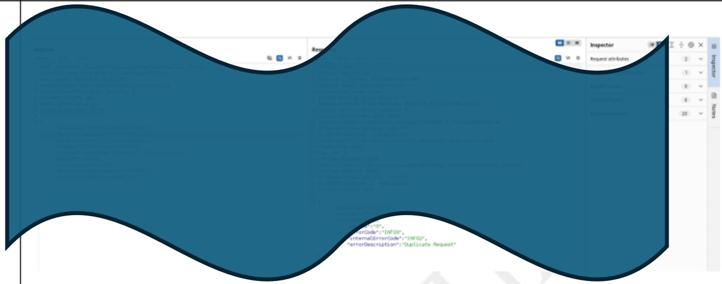
PHASE 1
2022- 2023
- POTRAZ set up DFS team
- Testing equipment acquired
- First DFS clinic conducted online

PHASE 2
2023-2024
- Testing manuals and SOPs development and walk through
- Mobile apps for testing selected
- Testing equipment verification

PHASE 3
2024-25
- Training of USSD , android and iOS testing
- Independent testing by DFS team
- Verification of test results

PHASE 4
ENFORCEMENT
- 9 months period oversight
- 10 applications tested in 2025
- Lessons learnt on threats and vulnerabilities

	transferred over HTTP or other non-encrypted protocols, then it could easily be intercepted or even modified by an attacker.
Result	PASS
Evidence	
Recommendation	N/A

Test	Replaying a request (e.g. a money transfer) that was captured by a man-in-the-middle proxy should not result in the same request being executed twice. The risk is that an attacker intercepting a request for a money transfer could replay it to steal money from the victim.
Result	PASS
Evidence	
Recommendation	

DFS testing in Zimbabwe

01 Applications Tested

Over Ten Banking Apps have been tested in Zimbabwe

02 Recomendations

Recommendations extended to the banks for remediation

03 Remediation

All banks have submitted evidence of the remediation of time-bound plans to remediate

The Future of DFS Security

Essential components for building a secure DFS future

1 Regulation

Ensuring that the regulatory framework is fit for the digital age.

2 Fragmentation

Removing fragmentation in the Digital Single Market for financial services and improving its functioning.

3 Localisation

Reorient cybersecurity support to better match the reality of digital financial services ecosystems across Africa.

4 Risk Prioritisation

National policymakers must prioritize understanding where people face the greatest threats of financial loss in the local context

5 Consumer Focus

Build the capacity of consumers

6 MSMEs

Build the capacity of financial service providers and MSMEs leveraging DFS