MAURITIUS NATIONAL ID SCHEME (MNIS) CASE STUDY

"With an efficient and secure system of identification and authentication, MNIS paves the way for the modernisation and digitisation of Government services by providing the infrastructure for streamlined and reliable Citizen to Government transactions."

Dr. Navinchandra Ramgoolam
Prime Minister of Mauritius
(at the official launch of the new National Identity Scheme on 17 September 2013)

SUMMARY

Client: The Prime Minister's Office, Government of Mauritius (GoM)

Challenge: Prior to the new system implemented by CrimsonLogic, Mauritius residents were issued paper cards or documents for identity purposes. These paper documents were widely distributed and susceptible to tampering. In addition to the risks of identity theft, different government agencies and Ministries had disparate databases that were updated manually, making the data inconsistent across agencies. Mauritians were required to present multiple documents in order to verify their identities when transacting with the government and businesses.

Solution: The Mauritius National ID Scheme (MNIS) was designed to serve as a strong foundation for the synergistic delivery of all Government eServices in Mauritius. CrimsonLogic's National Identity Scheme streamlines and re-establishes the citizen registry with updated data sets for deployment of a secured Central Population Database. A Public Key Infrastructure (PKI) was also instituted to increase integrity for the data on the new ID cards issued.

Benefits: The MNIS provides a secure and reliable foundation for consolidated management of citizens' civil status information leading to the realisation of 'One Citizen, One Identity'. Through an integrated and trusted platform for identification, verification and authentication of citizens and residents, MNIS enables streamlined transactions and operations with Government digitised eServices. Benefits range from improved efficiency in public administration across all Government agencies, eliminating multiple identities, and bringing greater convenience to the citizens.

BACKGROUND

Prior to 2013, Mauritius's national registry comprised three sets of handwritten ledgers dating back to the 1800s: for births, deaths and marriages. These manual entries are susceptible to human errors. Data sets were often incomplete and not updated, such as surnames not updated after marriages.

The Government of Mauritius saw the urgency to modernise the National Identity Card Division to meet with constituents' increased expectations and needs. The country was in need of a scheme to ensure the national registry data's validity and availability, to be implemented together with smart cards as national identities. Thus the Mauritius National Identity Scheme (MNIS) project was launched in October 2012, with a core objective of 'One Citizen, One Identity'.

SOLUTION

MNIS enables Mauritians to go online to perform tasks that once required face-to-face interactions, like applying for government welfare or refinancing a mortgage. These online transactions require a secure and reliable national electronic identification and authentication system to process.

The scheme needed a central population database that is based on the policy of data standardisation and governance. A Legal & Policy sub-committee was initiated to oversee an intensive period of profiling the current data's state of integrity and the extent of inaccurate population data proliferated across agencies. Recommendations made at the end of the study were approved and implemented in the new Central Population Database (CPD). With the establishment of data standardisation and a policy of data governance, data integrity, consistency and privacy became a reality. This forms the basis of unique identification for future exchanges amongst government agencies and between government and citizens.

The MNIS is built on a Public Key Infrastructure (PKI) where Certificate Authority (CA) provides the anchor of trust. The data signed in the smart chip of the new Identity Smartcard can be verified with MNIS CA that it is indeed issued by the Government of Mauritius and has not been tampered with, improving the trust-worthiness of the new card.
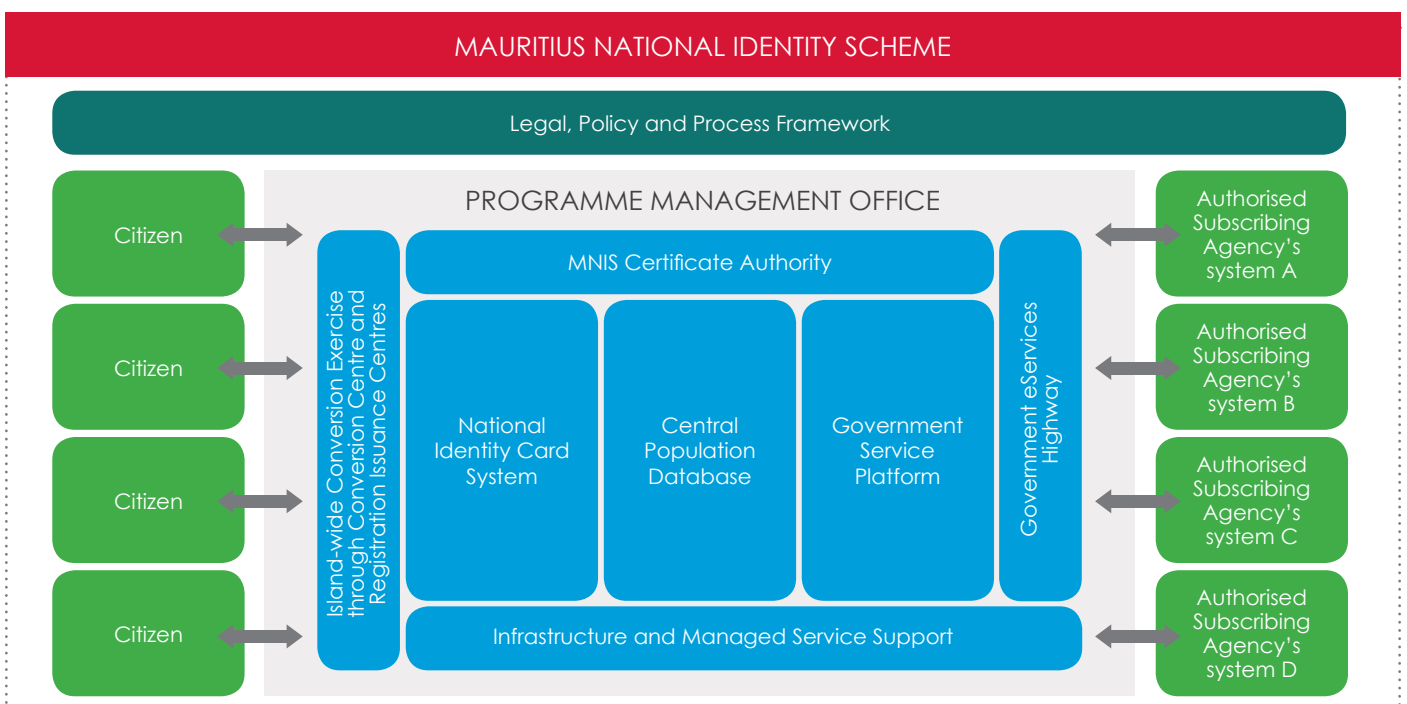
The conversion process is equally important. For Mauritius, the conversion exercise started on 1 October 2013 with the issuance of the new smart card ID to the citizens in exchange for their old paper ID cards in Conversion Centres across the island. Citizens can also go to the Registration & Issuance Centres (RICs) for new registration, issuance, replacement, renewal and other supporting services.

The new National Identity Card system provides the full functionalities of Registration, Card Personalisation, Production and Issuance with biometrics capacities. Every new smart ID card contains a signed digital digest of an agreed set of the citizen's data on the chip. Verification of this signature with the Signing Certificates and MNIS CA certificates, allows detection of any tampering attempts. Successful verification provides assurance that the data in the chip has not been tampered with and the data is indeed from the MNIS system.
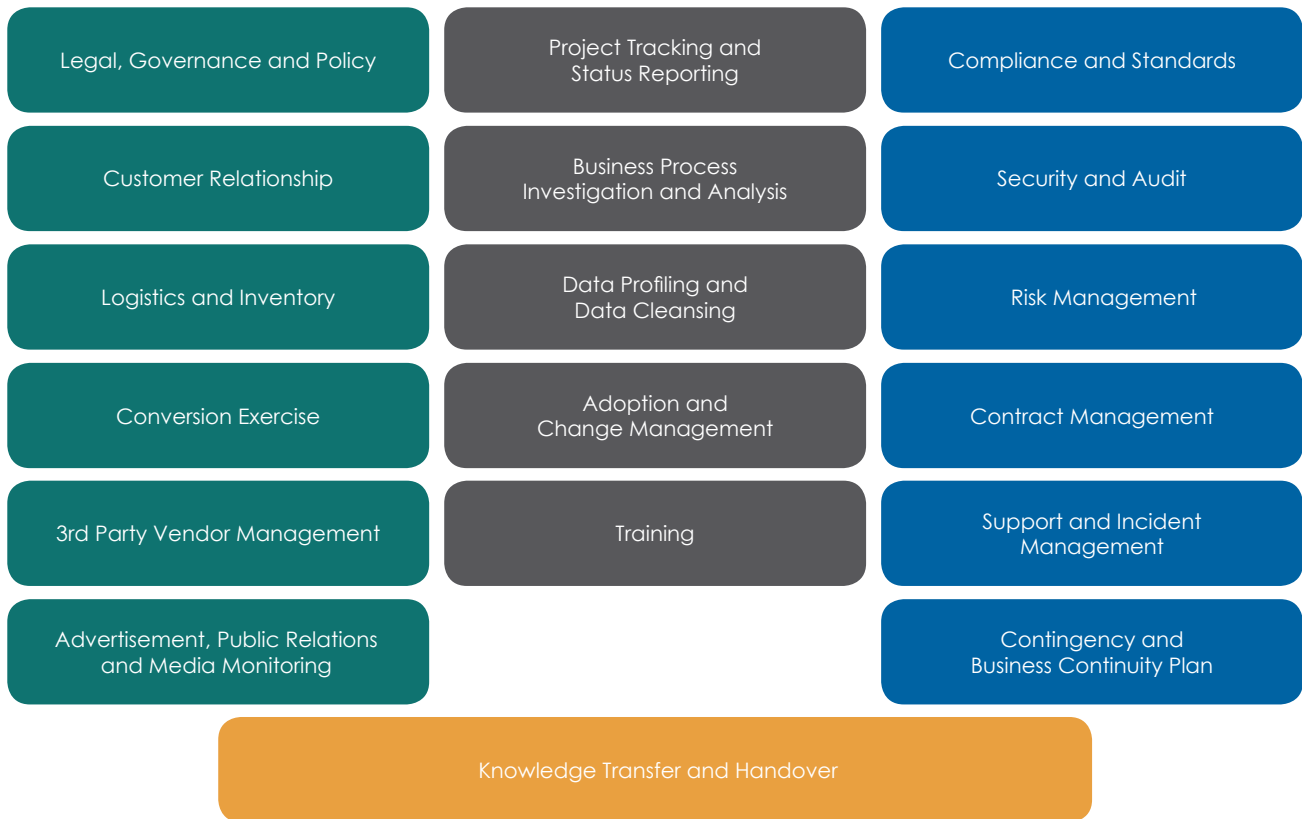
With trusted validating facilities established, along with the issuance of a secure smart card ID for each citizen, Government Agencies can now offer eServices through the Government Service Platform (GSP). With accurate up-to-date data, validation is made possible whenever there are doubts with regards to the real owner of the new ID card.

This is a major leap in the improvement of public administration in terms of turnaround time and will lead to operation efficiency across all government agencies. With data standardisation, trusted data sources will now become a reality which will address the array of unreliable data sources of the old system. With GSP, inconsistencies of non-trusted data source will become a thing of the past as agencies will now be able to subscribe to eServices provided by the rightful and appointed agencies. The GSP system also offers the flexibility of enabling external interaction with the private sectors.

Besides the technology, there are also other processes established to successfully launch the MNIS Project, such as: Adoption and Change Management, Security & Audit, Investigation and Analysis, Risk Management, Advertisement and Public Relations, Business Continuity Plan and Operational Processes, Legal, Governance and Policy, Logistical Support, Managed Service & Support and Customer Relationship.

MAURITIUS NATIONAL IDENTITY SCHEME

Legal, Policy and Process Framework

PROGRAMME MANAGEMENT OFFICE

Citizen

Citizen

Citizen

Citizen

Island-wide Conversion Exercise through Conversion Centre and Registration Issuance Centres

MNIS Certificate Authority

National Identity Card System

Central Population Database

Government Service Platform

Government eServices Highway

Infrastructure and Managed Service Support

Authorised Subscribing Agency's system A

Authorised Subscribing Agency's system B

Authorised Subscribing Agency's system C

Authorised Subscribing Agency's system D

MNIS PROGRAMME MANAGEMENT OFFICE

Legal, Governance and Policy	Project Tracking and Status Reporting	Compliance and Standards
Customer Relationship	Business Process Investigation and Analysis	Security and Audit
Logistics and Inventory	Data Profiling and Data Cleansing	Risk Management
Conversion Exercise	Adoption and Change Management	Contract Management
3rd Party Vendor Management	Training	Support and Incident Management
Advertisement, Public Relations and Media Monitoring		Contingency and Business Continuity Plan

Knowledge Transfer and Handover

BENEFITS

The MNIS generates multi-faceted benefits for the government, businesses and individuals.

For Citizens of Mauritius

- Enhance experience and trust for citizens when transacting with government agencies

- Provide Mauritians with the peace of mind that their new smartcard ID is unique to each individual and is safeguarded by the MNIS security mechanism to prevent identity impersonation or thefts

- Updating citizen data is now more streamlined and controlled, effectively saving time and manpower costs resulting from errors in data

- Enable eGovernment and eCommerce services in the digital economy enabling with a multitude of innovative and efficient eCommerce transactions, all conducted in a trusted and secure environment. For example, banks and telecommunications companies will be able to verify the identities of their customers through the Government Service Platform in the future if they choose to subscribe to the eServices provided by Government Agencies.

For Government of Mauritius

- One Citizen One Identity - the removal of duplicate, multiple and invalid identities through the creation of a secured Central Population Database (CPD)

- A reliable system of identification and verification with fingerprint biometrics

- New Data Governance and Policies identified and implemented to address data usage, data protection and privacy matters.

- Faster validation for eServices and improved general public administration

- Provides a strong foundation for the future implementation of Government eServices

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