Desktop diagnostic on the state of digital transformation of the public sector in South Africa

October 2024

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1. Introduction

DIGITAL MZANSI

ONE PERSON, ONE GOVERNMENT, ONE TOUCH

There is an evolution of digital transformation we need to keep pace with, and catalyse for the benefit of all South Africans

Basic online presence
Creation of government websites to provide information to the public.

Digital communication channels Introduction of email and early web-based forms to facilitate communication between citizens and government agencies.

Electronic filing systems
Implementation of online systems for filing tax returns, business registrations and other administrative paperwork.

Automated internal processes
Adoption of software for internal government operations such as budgeting, payroll and human resources.

Online services
Access to government services and information through websites and mobile applications.

Digital communication
Platforms for digital communication between government agencies and citizens.

Data integration and sharing
Systems that enable different government departments to share and integrate data, improving coordination and service delivery.

Transparency and open data
Initiatives that provide public access to government data and information, promoting transparency & accountability.

User-centric services
evidence-based and data driven services and programmes using a 360 degree view of citizens.

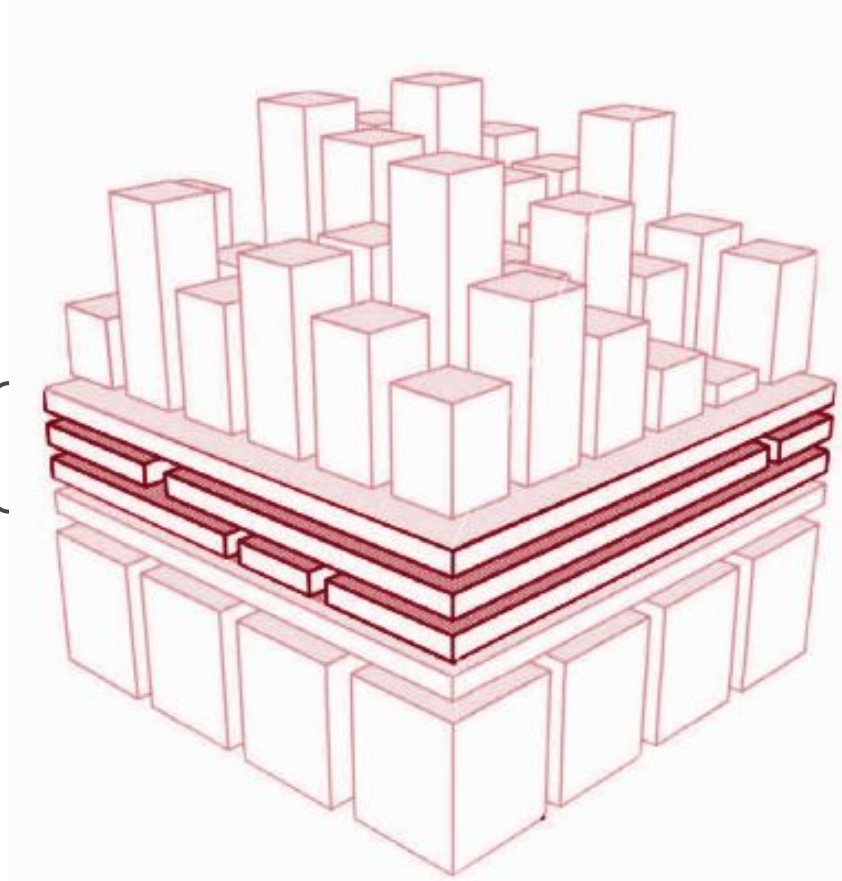
Modular, scalable, interoperable and reusable technologies eliminating duplication through shared technology components. Including digital identity, digital payments and data exchange.

Whole-of-government design and implementation principles of 'breaking down silos' delivered through adaptable institutional structures and mechanisms.

This next generation of digital transformation leverages a ‘stack’ of technology to transform government operations

The Three Layers of a Government Digital ‘Stack’ *(David Eaves, 2023)*

The services layer includes the services provided by government to businesses and people that are accessed through and delivered by digital technologies. Examples include passport renewal, business licensing, and social benefits. These leverage the shared infrastructure layer.



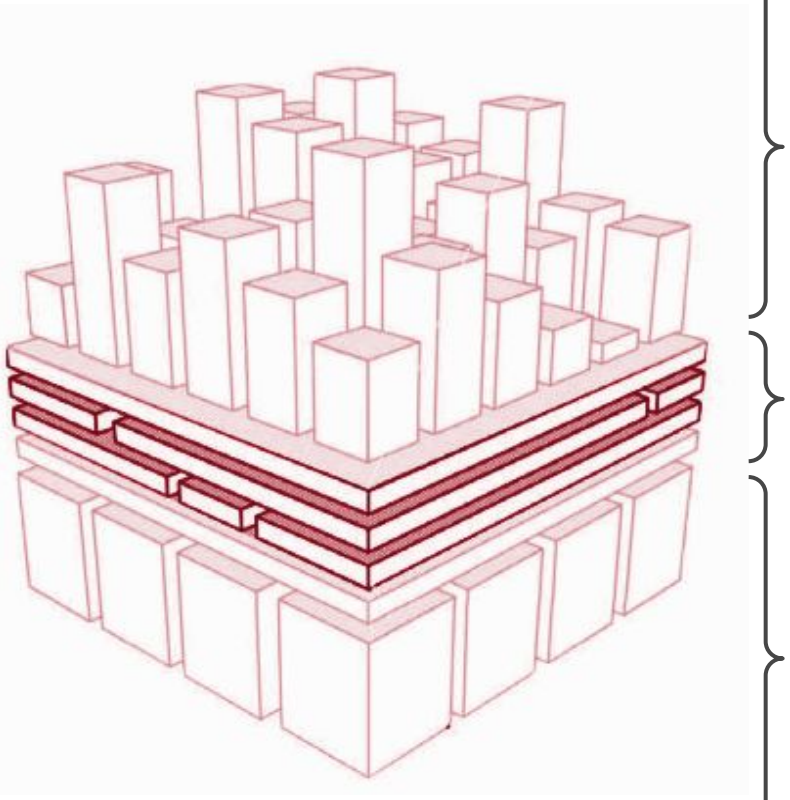
The shared infrastructure layer is made up of digital identity, payment and data exchange solutions that are used by multiple government departments. This is often referred to as *‘digital public infrastructure’*.

The data and hardware layer provides the foundations of the stack. This includes compute and network infrastructure, and master and raw data that is generated by government operations.

… with the frontier underpinned by a Digital Public Infrastructure approach…

The Three Layers of a Government Digital 'Stack'

David Eaves (2023)



Shared Infrastructure that is reused and scalable including digital identity, payments and data exchange. Often referred to as DPI

Source: CDPI

Features of Digital Public Infrastructure

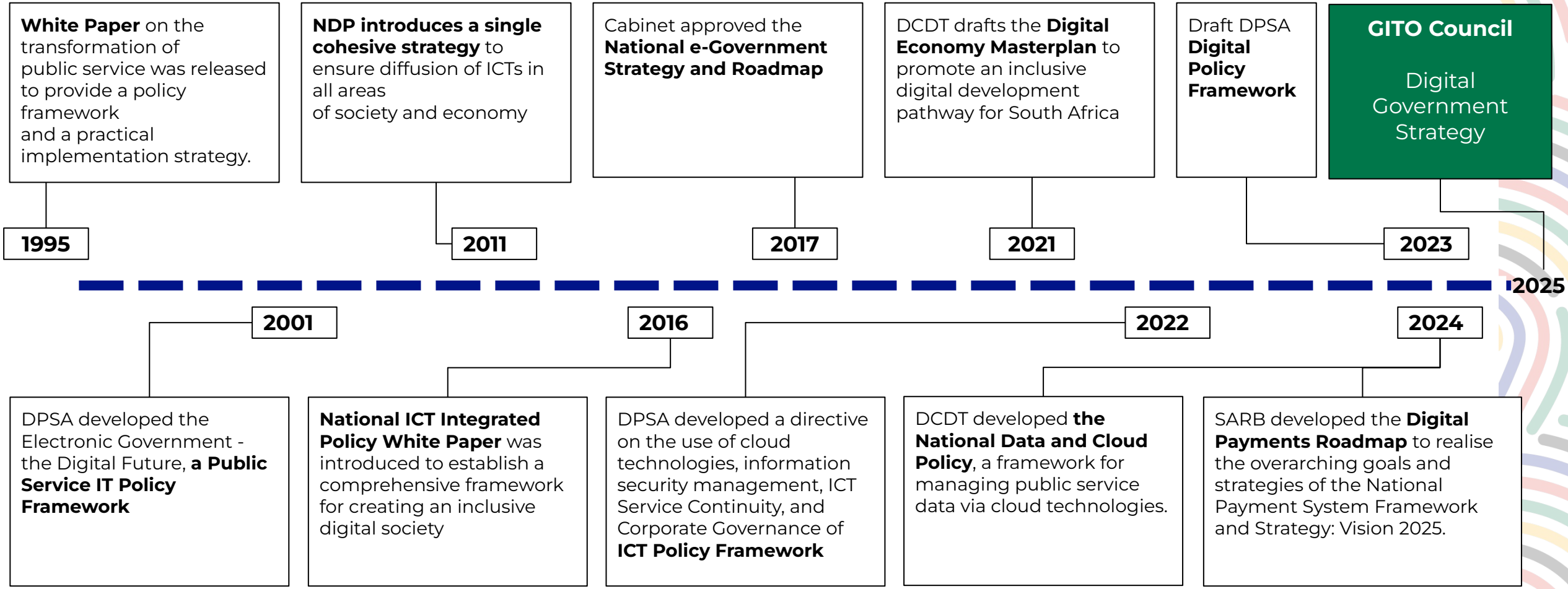
Foundational Categories

1. Verifiable Identity and Registries
2. Data sharing, credentials and AI
3. Signatures and Consent
4. Discovery and Fulfilment
5. Payments

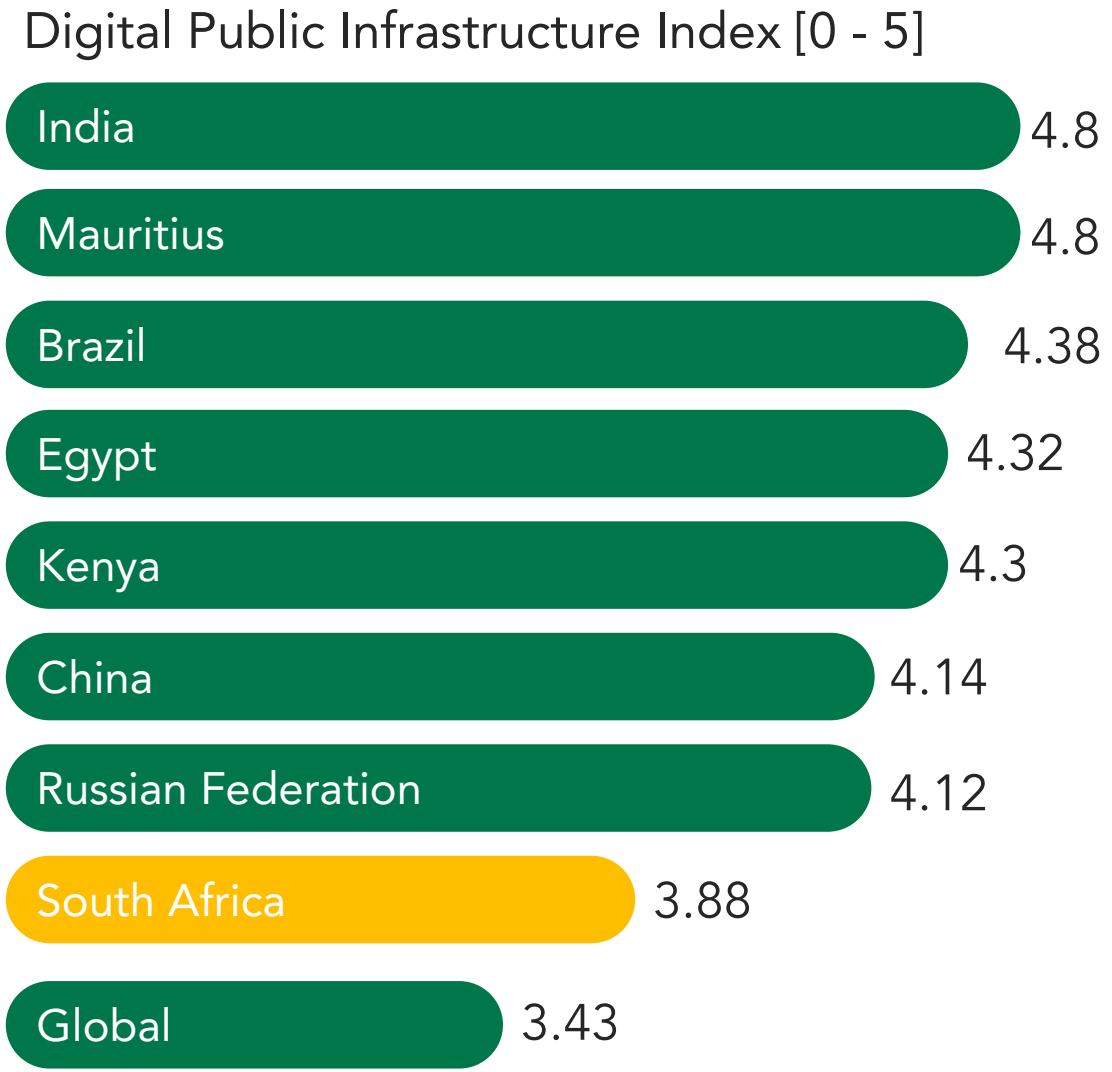
Architectural Principles

1. Interoperability
2. Minimalist, reusable building blocks
3. Divers, inclusive innovation
4. Federated and decentralised
5. Security and privacy by design

Digital transformation is not a new concept in South Africa: the government has been building capacity to support this evolution for over two decades



Despite this proliferation of policies, strategies, and initiatives, South Africa lags behind key peers as revealed by global indexes…



Source: Digital Development Compass

South Africa ranks 103 out of 199 countries in the WB GovTech Maturity index, measuring public sector digital transformation

South Africa ranks 40 out of 193 in the UN's eGovernment index

South Africa ranks 97 out of 194 countries in the Digital Public Infrastructure index

Weaknesses in our DPI Stack were revealed during COVID-19 indicating opportunities to strengthen the design and delivery of a range of government services

Covid TERS was temporarily suspended due to irregularities and the need for resolve verification of identity.

Farming Input Voucher Relief Programme was temporarily suspended due to middle-men abusing the voucher.

The SRD350 grant required new approaches for means testing that required new integrated data and systems.

The PYEI-BEEI could only reach 35,000 early childhood development practitioners out of the targeted 108,000.

	Design		Implementation		
	Beneficiary Identification	Eligibility Verification	Delays in Direct Payments	Distribution of funds	Fraud
National School Nutrition Programme	✓			✓	
Early Childhood Development Grant	✓	✓			
National Student Financial Aid Scheme		✓	✓		✓
Funza Lushaka		✓	✓		
Social Grants		✓			
SRD-350		✓			
Unemployment Insurance Fund		✓	✓		✓
Compensation Fund		✓	✓		✓
EPWP and CWP	✓		✓		
PES	✓		✓		
PYEI (excluding NYS +BEEI)	✓		✓		

Observed opportunities to strengthen in a sample of services; indicative

South Africa's challenges in the digital transformation of the public sector arise from gaps in processes, technology, and human resources

This remainder of this document is organised into three sections. This preliminary analysis will be refined and made more accurate through feedback and during the roadmap development journey.

PROCESSES

- Processes refer to coordination mechanisms, organisational mandates, policies and strategies, and legal and regulatory frameworks.

TECHNOLOGY

- Technology refers to the array of hardware, software, digital platforms, and infrastructure that enable the modernisation of public services.

PEOPLE

- People refers to the digital literacy levels and skills of public servants and people. This considers the ability to design, develop, manage and use technology.

2. Processes

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Government processes are assessed along three dimensions: mandates, policies & strategies, and legal & regulatory frameworks

Dimension	Key finding
Mandates	There are a wide number of government departments with explicit and implicit mandates for digital transformation, potentially creating uncertainty and overlaps.
Policies & strategies	South Africa has a history of impactful digital transformation strategies and policies, however there are concerns for cohesion and their relevance for a modern digital transformation.
Legal & regulatory	South Africa has a comprehensive legal and regulatory environment, however limited regulatory guidance and overlapping regulatory frameworks hinder digital transformation objectives.

2.1. Organisational Mandates

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Numerous government departments are mandated - whether implicitly or explicitly - to support Government's digital transformation

Examples of digital mandates across departments

DCDT (incl. SITA) - Policy & strategy, operation and management

DPSA (incl. CIPS and NSG) - e-Government and capacity building

DPME - Policy development and performance management

National Treasury - Resource allocation and policy research

DHA - Identity, migration and refugee protection

DALRRD - Geographic information system

DSD (incl. SASSA) - NISPIS, and SRD350 and SOCPEN

StatsSA - Official statistics and national statistics system

Consequences for Digital Transformation

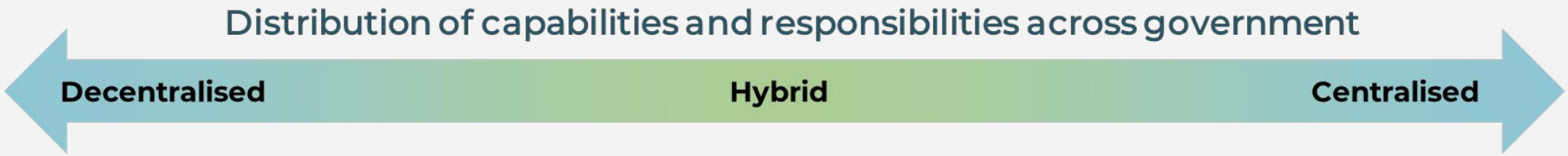
Policy and strategy: risk of uncoordinated efforts, consequently staggering progress and slowing action

Technology coherence: risk of siloed and duplicative technology without shared standards

Technology oversight: uncertainty on how shared infrastructure is developed, managed and owned

Skills development: risks to a unified approach to drive digital transformation, leadings to varying degrees of capacity across Government.

CASE STUDY: International precedence shows a mix of centralised and decentralised capabilities and responsibilities are required to deliver on the needs of the government



Departments and agencies design, develop and manage technologies independently

Pro:

Bespoke technology for bespoke agency needs

Con:

Citizens experience is fragmented

High potential for duplication and wasteful overlap between agencies

Most countries operate a mixed model of some kind, with varying degrees of centralisation.

This often includes a centralised coordinating functions and standards enforcement.

A mixed model balances the advantages and dysfunctions of purer models.

For example: Singapore, Estonia, Brazil and Argentina

A single authority designs, develops and manages technologies on behalf of all other entities

Pro:

Scope for citizen-centred service delivery, with cross pollination, joint demand and economies of scale where agency needs are similar

Con:

Some key agencies with bespoke needs will face challenges

SINGAPORE CASE STUDY: Strong centre in the Smart Nation and Digital Government Office, with agency ownership via Chief Digital Strategy Officers (CDSO)

Distribution of capabilities and responsibilities across government

Decentralised | Hybrid | Centralised

Decentralised functions

CDSOs coordinate across ministry "families"

Service design for specific transactions (e.g. payments layer)

Key services (banking, housing payments, compulsory savings)

Centralised functions

Maintenance of core infrastructure (ID system, tech stack)

Ecosystem Coordination (data policy, Gen AI platform)

Talent Development

Cybersecurity (especially for Critical Info Infra)

ESTONIA CASE STUDY: Strong centre in the Ministry of Economic Affairs/Comms, agency ownership, and intermediate guidance by IT "Centres"

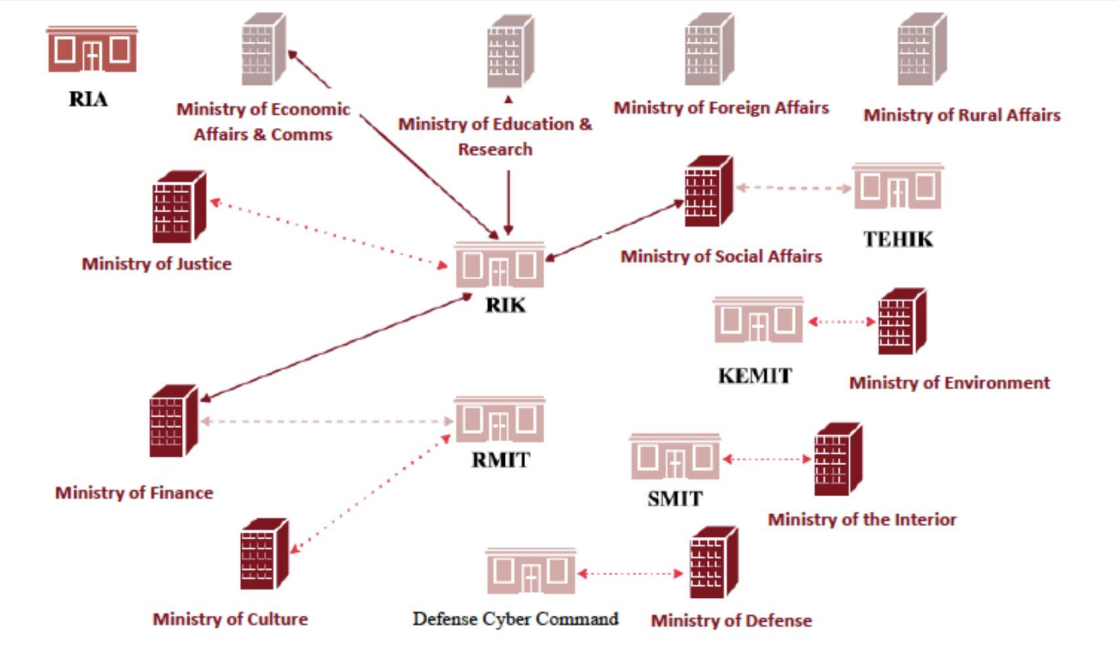
Distribution of capabilities and responsibilities across government

Decentralised — Hybrid — Centralised

Decentralised functions

Ministries coordinate policies and specific UX / service delivery

IT Centres provide guidance for clusters of Ministries (e.g. TEHIK for social affairs, RMIT for finance, tax, culture)



Centralised functions

Maintenance of core infra (X Road, covering both the ID system and tech stack)

Ecosystem Coordination (data policy, telco infrastructure)

Cybersecurity (RIA)

CASE STUDY: The UK's hybrid approach to digital government transformation

Digital government transformation in the UK is part of the new government's "Economic Growth" mission, with strong links to Operation Vulindlela in South Africa.

What is it: The UK's approach to digital government transformation is characterised by a centralised leadership model facilitated by the Department of Science, Innovation and Technology (DSIT). This department is responsible for setting standards, providing guidance, and ensuring consistency across digital initiatives.[1]

What is its impact: The DIST developed the 'Transforming for a Digital Future: 2022 to 2025 Roadmap'. The progress made, as of 2023, has largely been attributed to coordination across Government departments.

- Gov.UK's one login gateway has replaced siloed legacy systems, with over 2 million users and 2.7 million app downloads, supporting 10 live e-gov services.[2]
- The Data Marketplace was developed to enable legal, ethical, and trusted data sharing among government departments.[2]
- A collaborative agreement for Microsoft 365 has been adopted by 10 departments, enhancing teamwork among tens of thousands of public servants.[2]
- Over 600 senior public servants have received training on digital and data essentials, building a cadre of skilled leaders.[2]

What is the lesson: The UK's experience highlights the effectiveness of a centralised leadership model in driving digital transformation within the public sector. By providing a structured framework and central guidance, the DSIT can ensure consistency and standards while allowing individual departments the autonomy to innovate. This approach demonstrates that centralised coordination, combined with flexibility at the departmental level, can lead to significant improvements in efficiency, service delivery, and overall public sector transformation.

Sources: 1. NAO, Available: here | 2. CDDO, Available: here

2.2. Strategy & Planning

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Digital transformation strategies and policies are comprehensive, however there is room to improve collective coherence and ensure delivery of modern infrastructure

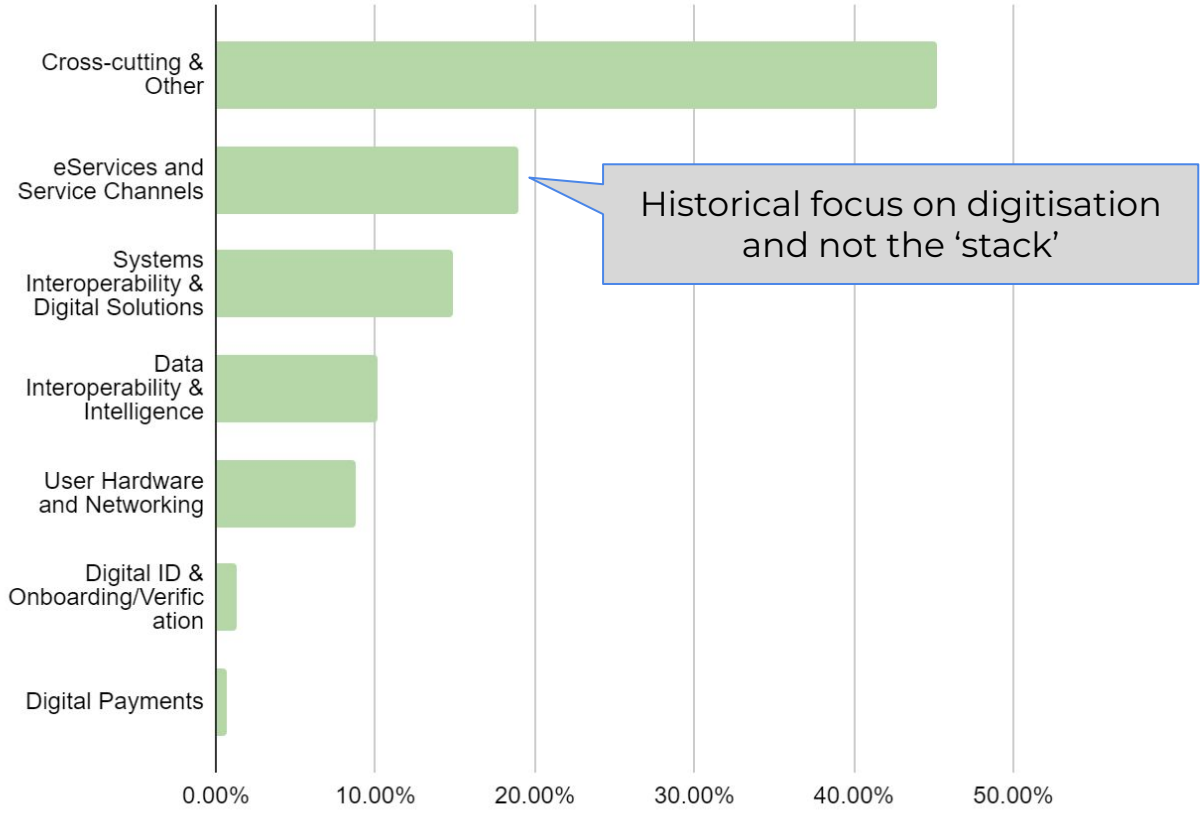
A unified approach with whole-of-government and human-centric principles, utilizing digital tools and data, can effectively address the limitations of individual departmental strategies by ensuring that services are designed to be digital, data-driven, platform-based, open, user-focused, and proactive

Note: Underlying analysis can be found in Annexure 2

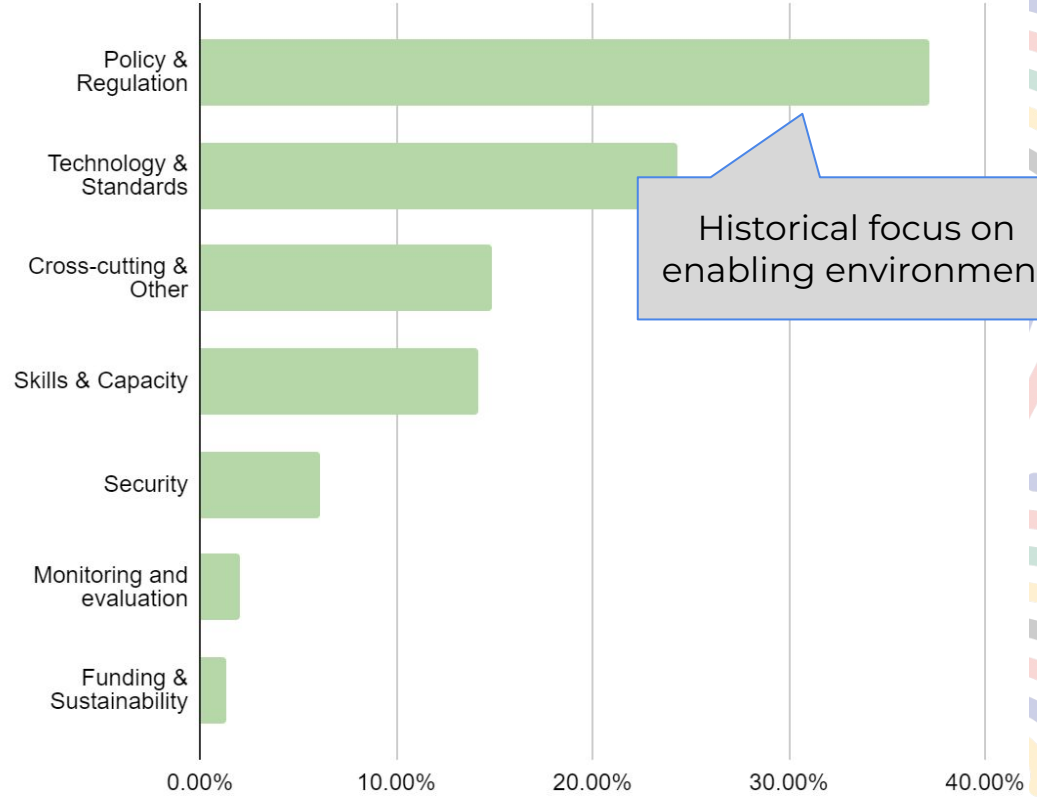
South Africa's digital transformation policies and strategies have focused on delivering ‘e-government’ and its enabler environment, and less so on ‘digital government’

A *preliminary* classification of the count of interventions of PC4IR, DPSA Policy Framework, and e-Government Strategy across two categories reveals the focus of our efforts to date.

Count of interventions by technology



Count of interventions by enabler



2.3. Legal & Regulation

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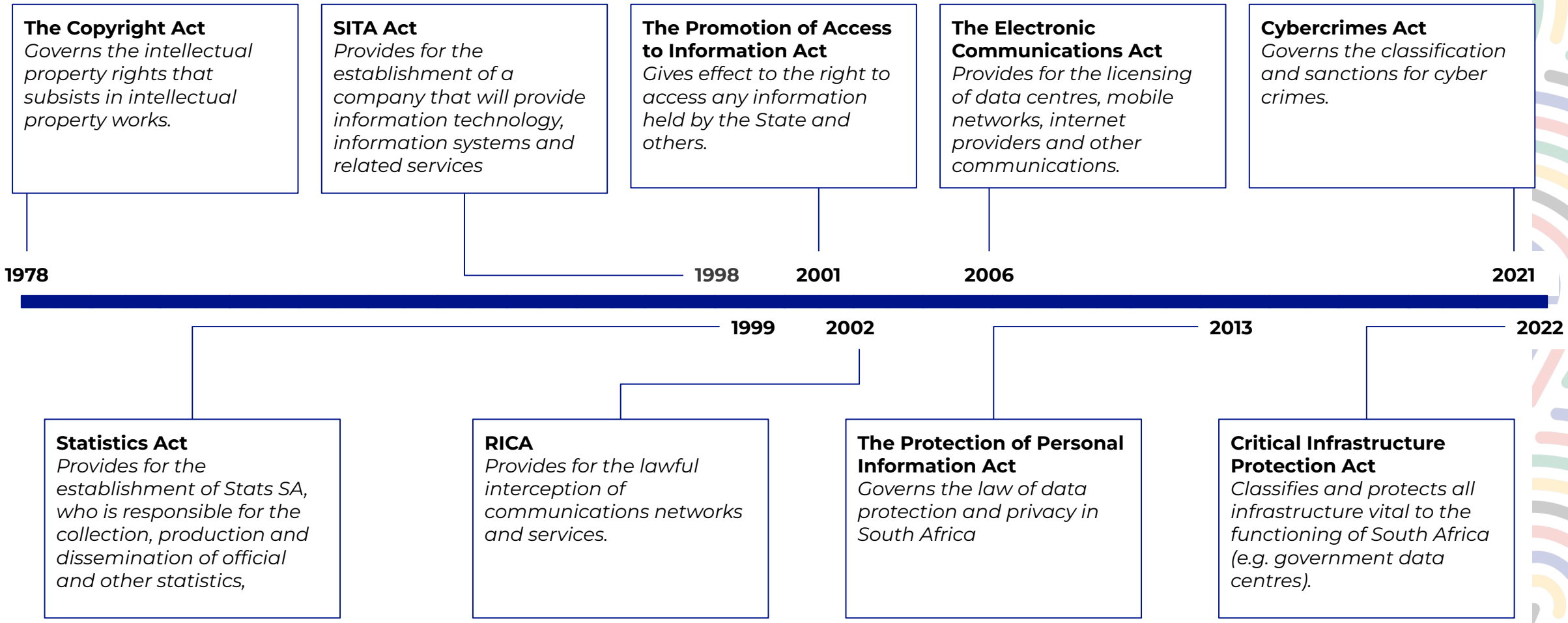
Digital transformation of the public sector is influenced by a complex set of legal and regulatory restrictions that continues to evolve

Administrative data sharing case-study



The regulatory universe for government data is comprehensive, but presents three key challenges for the acceleration of digital government

Limited Regulatory Guidance

The Policies and Laws around the use of data are often prescriptive, containing barriers for the use of government data.

These barriers include sharing restrictions, information classification restrictions or unclear mandates for regulators.

A note of clarity from the Information Regulator on the sharing of government data and personal information for the purpose of government service delivery would be beneficial in serving as precedent.

Policy & Regulatory Issue Overlap

The laws concerning the use of data in South Africa are implemented over a wide timeframe which can lead to contestation of interpretation.

Example: Regulatory overlaps in the governance of data interoperability across government

The Cloud and Data Policy speaks to implementing e-Government through cloud services

National ICT Integrated White paper which speaks to empowering eGovernment with interoperable ICT services.

Upcoming Open Government Data Action Plan will govern government data and set security safeguards.

Overlap in Legislation-Linked Authorities

Many of the Policies and Laws either create working groups, task forces or regulators.

These include POPIA's Information Regulator and the National Cloud and Data Implementation team.

Some policies and laws or empower existing groups with new responsibilities, such as the expansion of the Information Regulator's PAIA responsibilities, or the PC4IR report calling for a harmonised single ICT regulator.

The legal and regulatory impediments to digital transformation outside of data exchange need to be identified and resolved.

Source: Genesis Analytics analysis of the Regulatory Universe for Data Sharing, available upon request.

3. Technology

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Weaknesses in shared infrastructure, limitations in digital ID systems, and disparities in digital service adoption limit the impact of transformation efforts

Dimension	Key finding
e-Government Services	e-Government services aren't always used or trusted, due to variation in quality, an end-to-end single portal to access them. Efforts to harmonise to higher standards are underway.
Shared Infrastructure	There are multiple, concurrent data exchange, digital identity and G2P payments solutions being developed and implemented across government
Systems and Hardware	There are challenges with: scalability and performance, interoperability and integration, cyber-security and privacy concerns, reliability and redundancy

3.1. Services

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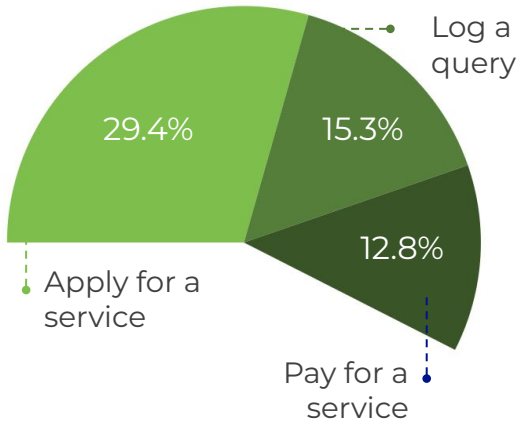
e-Government services aren't always used or trusted, indicating opportunities to make services simpler and more accessible

USE

45.3% of respondents report to have visited a government website. Most frequent activities are:



64.9% stated that they never or rarely successfully complete what they have tried to do on a government website

TRUST

45.8% do not trust government websites

69.5% believe that government websites should be in their home language

Rapid digitisation efforts during COVID-19 likely shifted these perceptions but indicate the historical need for user-centricity and smooth processes

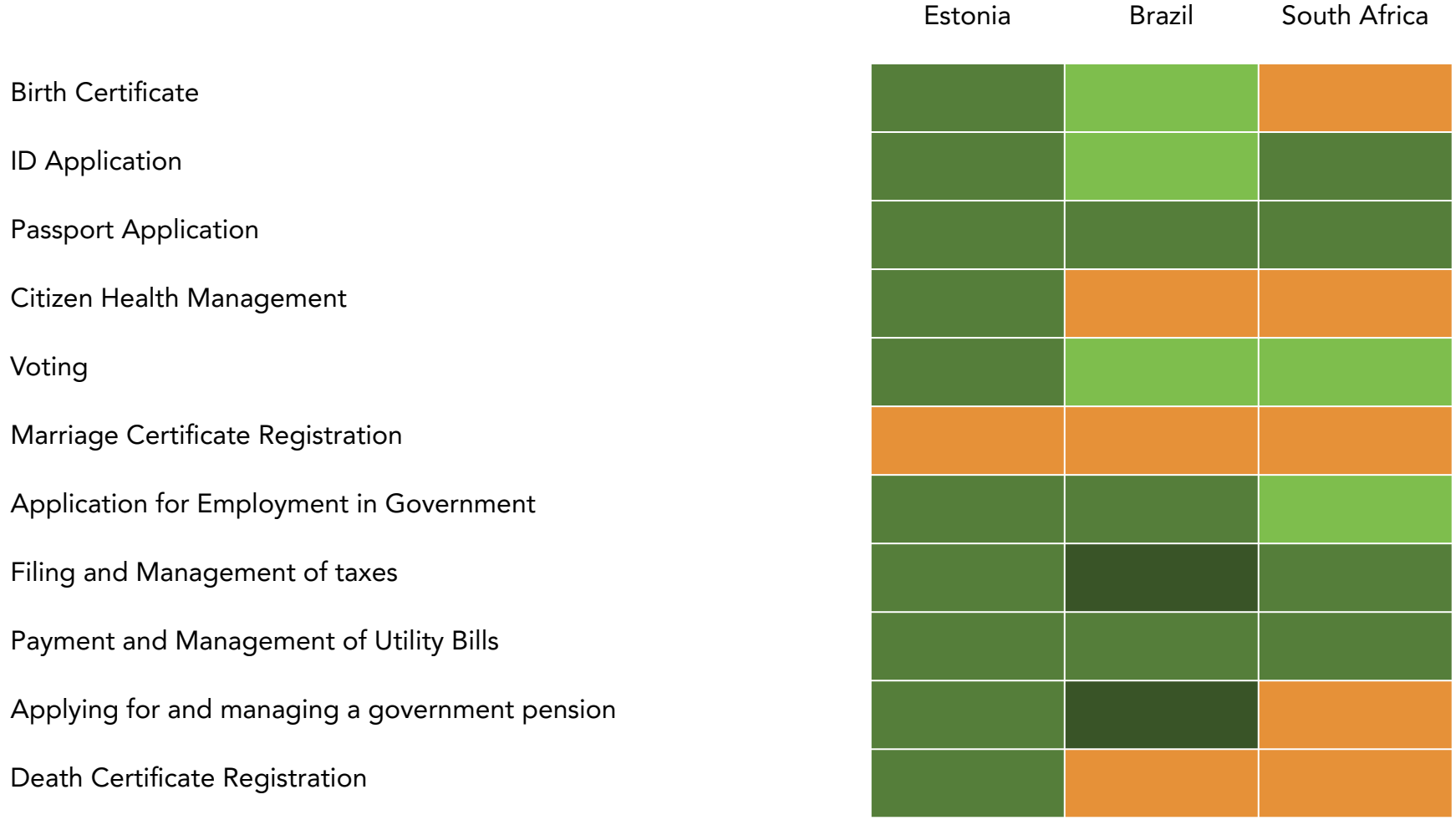
Sources: Nemisa (2020), Highlights of the Environmental Scan, Available here | Nemisa (2020), Digital Skills at the Individual Level, Available here.

A sample of e-government services indicates room for improvement relative to peers

Use

Adoption of e-government services may be stimulated by resolving the most critical needs of people and businesses

Status of indicative major e-government services



Legend: Emerging Presence | Enhanced Presence | Interactive Presence | Transactional Presence | Seamless or fully integrated presence

Multiple websites for accessing services mean citizens navigate a patchwork of in-person and digital processes, reducing accessibility and salience of key services

Consider the parallel processes of filing a tax return, applying for a new passport and applying for government pension.

Information is not saved across these services, so applicants need to input the same information multiple times

The technologies used by these services are not standardised

e FILING

People must register for the e-Filing portal, entering key personal information creating new passwords and security questions.

sassa
SOUTH AFRICAN SOCIAL SECURITY AGENCY

People are required to go to a separate SASSA website where there is an eForms portal for select services.

Home Affairs
easy • efficient • secure

People need to register on the eHomeAffairs portal, requiring additional personal information and document uploads. Internet banking is required to make payment.

SARS
South African Revenue Service

The SARS website can often have slow load times and server errors, especially during peak filing season, leading to frustration and delays.

People need to physically apply for a pension in the presence of a SASSA official and payment methods are primarily in cash.

People will need to finish this process in person at a Home Affairs office or select banks to capture biometrics, take photographs and collect the passport.

South Africa can accelerate digital transformation through a world-class online, single point of end-to-end transaction with government

A vision for a centralised government portal is set out in the National e-Government Strategy. It is envisioned to become the frontend of government and provide a single view of a citizen. Key elements include:

- Comprehensive coverage of all government services
- User-friendly, human-centric design
- A search engine to enable users to easily find services
- Standardised look & feel across national and provincial e-services

Existing e-services portals are yet to deliver the complete 'single sign on' experience with payments and identity functionality. Although a few provincial portals present transactional capabilities, national sites predominantly serve as navigational directories, rather than a centralised access portal.

Examples of service centralisation efforts

At national level, **gov.za** is the official entry point to the South African government and related information. Its main objective is to provide information on the government, its activities and services offered.

The **eservices.gov.za** website aims to make government services more accessible. The site compiles access links to over 194 e-services and access to some services. Some links are out of date. Users often have to register and login when being redirected from the site.

Provinces also set up consolidated portals with varying levels of success. For example the **Gauteng Digital Platform** aims to set up a login-protected 'one stop shop' for provincial e-services, the **Western Cape government website** includes a services directory and **KZNOnline** provided information but can more easily flag services.

Source: National e-Government Strategy and Roadmap (2017). Available here.

CASE STUDY: Colombia's e-citizen digital folder

Similarly to South Africa, Colombia struggled with fragmented and unstructured access to government services. Colombia is overcoming these challenges through a Digital Citizen Folder

Challenge

Access to key government documents and services was an unstructured hybrid of in-person & online channels.

- Public service information was highly fragmented with services spread over 8,000 web pages belonging to different public institutions.
- This approach limited accessibility of valuable personal documents and as a result, prevented easy access to key public services.

Solution

The government launched the Digital citizen folder to centralise and standardise key government services

- The Digital citizen folder is backed by open source interoperability technology called X-Road. The tech is invisible to the user but provides a centralised database on the backend of web platforms, enabling users to access services in one central location.
- It is built with "secure-by-default" and "enter information once" principles, following collaboration with the UK's Digital Government Services team.

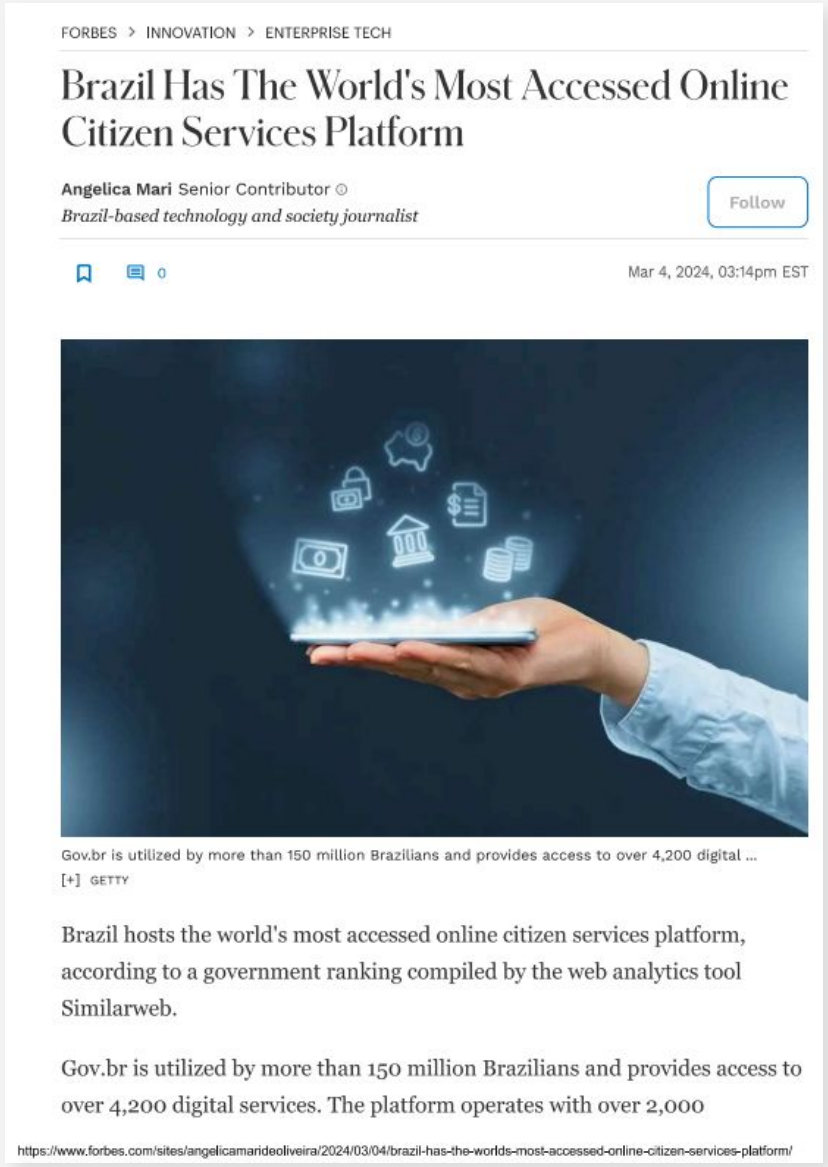
Outcome

The online portal received over 9 million visits and 126,715 sign-ups when it was published in 2021.

- Uptake increased further in 2022, when the service was enabled for the 'Ingreso Solidario' program - a nationwide cash transfer program providing social grants to 4,085,000 households.
- The revamped DCS portal has generated interest and positive responses from peers. Colombia has shared its experience with partners such as Spain, Ecuador, Costa Rica and Peru.

Sources: Tuulas, 2022. Launching citizen-oriented digital services in Colombia. Available here & OECD, 2021. Knowledge sharing on user-centred digital citizen services. Available here.

CASE STUDY: GOV.br



FORBES > INNOVATION > ENTERPRISE TECH

Brazil Has The World's Most Accessed Online Citizen Services Platform

Angelica Mari Senior Contributor
Brazil-based technology and society journalist

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Mar 4, 2024, 03:14pm EST

Gov.br is utilized by more than 150 million Brazilians and provides access to over 4,200 digital ...
[+] GETTY

Brazil hosts the world's most accessed online citizen services platform, according to a government ranking compiled by the web analytics tool Similarweb.

Gov.br is utilized by more than 150 million Brazilians and provides access to over 4,200 digital services. The platform operates with over 2,000

https://www.forbes.com/sites/angelicamarideoliveira/2024/03/04/brazil-has-the-worlds-most-accessed-online-citizen-services-platform/

General

Brazil is one of the leaders in the digitalization of public service

World Bank puts the country in second place among 198 economies

Published on 26/11/2022 - 08:46 By Roberto Camargo - Brasília

click to listen:

0:00 / 2:35

Brazil was recognized as the second most advanced country in the world in digital government. The evaluation is from the World Bank, which measured the current stage of digital transformation of the public service in 198 countries. The country rose five positions in relation to the 2021 ranking.

The offer of digital public services on the gov.br platform, according to the evaluation, already has 140 million users, about 80% of the adult population. A single password is all it takes for citizens to access thousands of digital services and obtain the information they seek.

"This rise is due to the natural execution of a plan that began in 2019. A planning, using international best practices, to provide increasingly easier and citizen-centric public services," explains the Secretary of Digital Government of the Ministry of Economy, Fernando Coelho. All services with a strong economic-social impact are now easily accessed through the gov.br platform.

Benefits for the Government

Eliminate the need to manually verify the information provided by citizens. This also reduces the incidence of errors and fraud, making service delivery easier, faster, and more secure. As a result, there are significant savings in public funds.

Benefits for People

It eliminates the need to fill out forms multiple times, issue certificates, and upload documents when interacting with different government bodies to provide the necessary supporting documents for accessing public services.
A unified digital government system enables various government bodies to communicate with each other and automatically retrieve the required information without repeatedly burdening the citizen.

Sources: Tuulas, 2022. Launching citizen-oriented digital services in Colombia. Available here & OECD, 2021. Knowledge sharing on user-centred digital citizen services. Available here.

3.2. Shared Infrastructure

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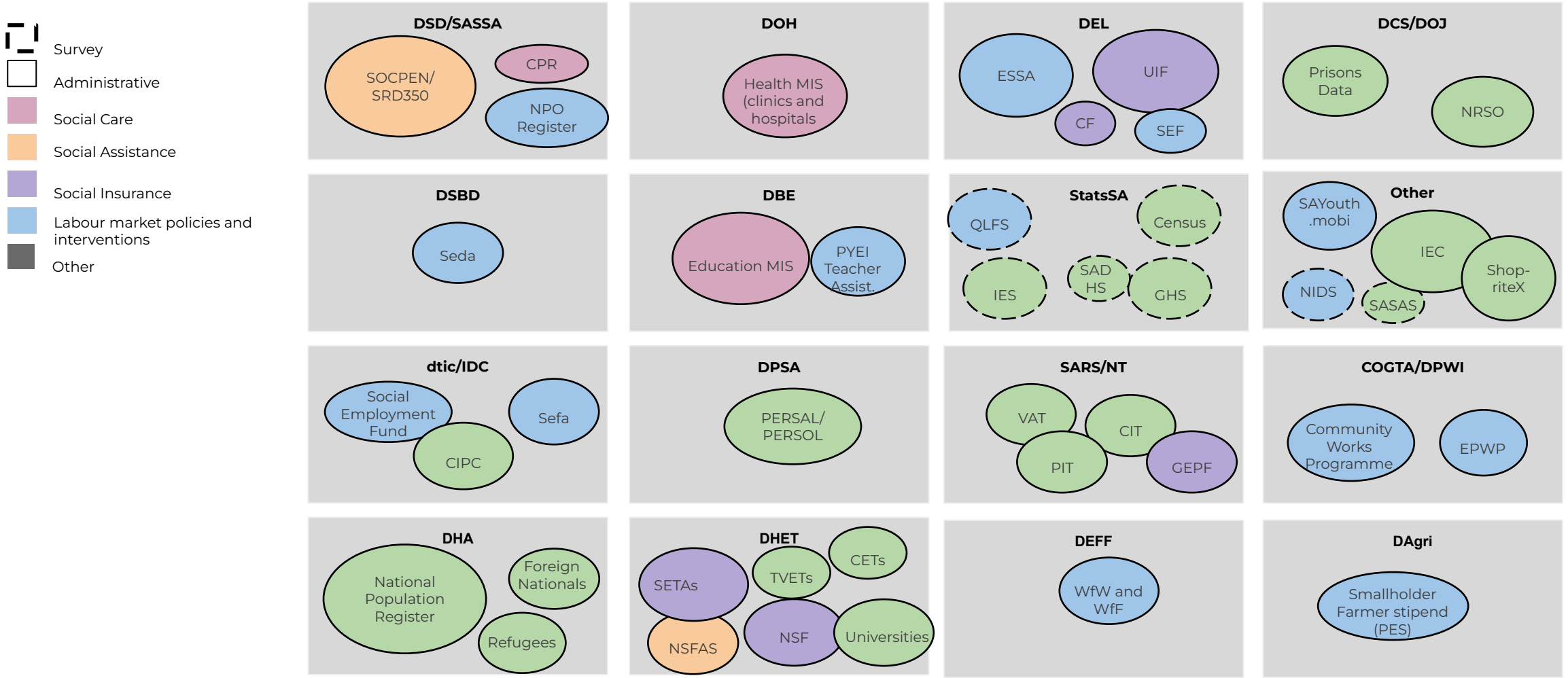
Administrative datasets are scattered slowing government from designing and implementing targeted services that are delivered by multiple departments

For example, government datasets relevant to social services are situated across at least 15 different departments.



Multiple government entities are developing data exchange infrastructure to support intelligence and operations

At least

8

national data exchange initiatives

*This mapping is not exhaustive

An opportunity for shared infrastructure delivering on operational and intelligence-driven data sharing

Notable Initiatives

National Integrated Social Protection Information System (NISPIS) *aims to integrate administrative data created by government departments and agencies in the social cluster.*

Master Social Security System Registry (MSSR) *aims to integrate data on the beneficiaries of social protection programmes from a diverse range of agencies creating a social registry.*

South African Integrated Data Lake (SA-IDL) *aims to integrate and manage administrative data across various sectors for research purposes.. It is likely to be built on infrastructure in the NT Secure Data Facility.*

Southern Africa - Towards Inclusive Economic Development (SA-TIED) *provides anonymized tax data to researchers*

National Policy Data Observatory (NPDO) *collects, stores, and analyses data on socio-economic indicators to support government departments and committees.*

Integrating Social Protection and Jobs and Sustainable Livelihoods *aims to integrate administrative social assistance grants and jobs information to bring people closer to the labour market, with the intention ultimately link to sustainable livelihoods through micro entrepreneurship.*

Additional Initiatives

CIPC and SARS *have already integrated tax and corporate entity information*

DSBD *aims to create a single point of entry for small businesses*

Multiple government departments developed and are using different G2P payments processes creating differences in quality and missed opportunities for cost savings

At least

7

national digital payments initiatives

*This mapping is not exhaustive

An opportunity for an integrated end-to-end onboarding and payments system that complies with Auditor General requirements, is efficient, accurate and pays the right person

Notable Initiatives

SARS *is the largest disburser of refunds to persons and businesses, estimated at R381 billion in 2022/23.*

SASSA *is the largest disburser of funds from government to persons in the country, using two discrete onboarding systems, one through SOCPEN for existing grants and the other for the SRD370 grant (an online platform).*

DBE* *had to develop an approach to pay teacher assistants, that initially used PERSAL to register them. This was largely due to the fact that there isn't a standardised approach to onboard and verify beneficiaries, and process their payments.*

DSD* *had to rely on the support from DGMT to assist them in developing an approach to onboard ECD practitioners eligible for the stipend. Payments were made through the CSD resulting in only 32% of the total budget being spent.*

DALRRD* *leveraged the Vodacom Transversal T15 contracts at National Treasury, appointing Mezzanine to develop a voucher for smallholder farmers, using USSD capability. This had its own challenges.*

SARB/Bankserv *have developed PayShap, a rapid payments protocol that has voucher capability as well as proxy pay features.*

Health *has established MomConnect which is a mobi platform that processes payments to expectant mothers*

** these are Presidential Employment Stimulus Programmes*

Multiple government and non-government entities are developing digital identity solutions

At least

6

primary digital identity initiatives

*This mapping is not exhaustive

An opportunity for a harmonised approach, solution and infrastructure

Notable Initiatives

SARB *is developing a Digital Financial Identity (DFI) and is currently sandboxing this.*

IAMZA *is part of the broader digital identity journey in South Africa which seeks to provide a reliable way to verify their identity online, improving access to essential services such as banking, government services, health and education. IAMZA aligns with SARB's Vision 2025. Moreover a large community from the private sector, the financial services sector, nonprofits and government have been part of establishing the standards and approach to digital identity, including the use of Self-Sovereign Identity (SSI) or Self-Sovereign Digital Identity (SSDI). DHA data represents cornerstone identity information.*

CSIR *has been part of the IAMZA process and are sandboxing digital identity (focusing on SSI).*

SITA and DHA *are collaborating to develop a digital identity for South Africa.*

ABSA *has developed an open-source public-permissioned distributed ledger technology network (blockchain) built specifically for SSDI, as well as the local development of a self-sovereign digital identity management system. Absa's Identity Wallet (a free App) is a safe, secure and trusted place to store digital, verified copies of personal information, stored safely in the identity wallet. Verified credentials can be shared hassle free by scanning a QR code effortlessly sharing verified information securely online with accredited organisations such as banks, telco's, government agencies and more.*

SecureCitizen and DIDx *have partnered to sandbox digital identify creating a hybrid (centralised-and-decentralised) solution that uses both a wallet for SSDI and provides a verifiable credential against the DHA database.*

BOX: Case study - India

India once faced a landscape marked by a patchwork of underlying infrastructure. South Africa's government can draw from India's successful efforts to enhance service delivery through digital transformation.

	India was…	*India now…*	*What South Africa can learn…*
Data exchange	States like Odisha had over 40 programs managed by different departments operating in **silos**, leading to **duplication** of efforts, **inefficiencies in expenditure**, and **frequent inclusion/exclusion errors.**	India implemented an **Information Exchange Layer (Interoperability Engine)**. This facilitated seamless data exchange between different databases and systems, enabling more coordinated service delivery.	• Develop an **interoperability engine** to minimize multiple data exchanges; standardize data formats and protocols across government systems • Identify a **platform owner** (i.e. India's case it's the Department of Finance)
Digital Payments	India's payment ecosystem was fragmented, creating barriers to seamless transfers between platforms. This fragmentation necessitated **multiple account details for different transactions**, complicating the payment process for users.	Unified Payments Interface (UPI) **facilitates interoperability** between various banks and payment service providers, allowing users to make transactions using a **single Virtual Payment Address (VPA)** without needing multiple account details.	• Develop a **single payment platform** for G2P transactions to simplify the process and reduce multiple payment mechanisms. • Drive **financial inclusion** through a simplified government payments structure.
Digital Identity	Citizens carried **separate ID cards** for various government functions, such as taxes, subsidised food, cooking gas, and water. The existing ID systems experienced numerous fake entries, while the neediest individuals were often excluded due to their inability to pay bribes for inclusion.	Indian government launched the Aadhaar project to provide a **unique, biometric-based identification number** to every resident of India. This system was designed to be robust enough to eliminate duplicate and fake identities, ensuring that benefits reached the intended recipients without leakage.	• Develop and enforce **national standards** for biometric data and identity verification. • **Prioritise an interoperability framework**, this allowed Aadhaar to integrate smoothly with various govt services.

BOX: Case Study - GOV.br developer toolkit

GOV.br provides a unified methodology and developer toolkit for the registration and management of e-Government services, which serves as a one-stop shop for all service-related requirements, making the process as simple as possible for the end-user.

Services catalogue	Why it matters to Government
Log in and access Gov.br service editing area	Enables a single portal for all Government bodies to develop and edit services, as well as register new agencies
Register a new service on the Gov.br Portal	Provides information and links to complete the 8 step process for registering a new service
Change a service already registered with Gov.br	Provides information and links to complete the 7 step process for updating existing services
Functions, standards and limits of service questionnaire fields	Sets unified standards for all new and updated services and supports an interoperable digital Government ecosystem
Procedures performed only by administrators	Provides support on service management, including how to register a new agency on the portal
FAQs - Troubleshooting and other procedures	Catalogues frequently asked questions pertaining to troubleshooting and performing service related procedures

A unified set of standards premised on:

- Basic Data requirements
- Service provider requirements
- Key requirements for each step of the application process
- Additional information requirements
- Legislative requirements

These standards allow for a single process for registering a service/agency, enabling an efficient and simple user journey for government officials

Provides a host of support services for service and data management, incl. Registration, UI design, change of key information, and de-registration of a service

Source: Gov.br. Available here.

3.3. Systems & Hardware

DIGITAL MZANSI

ONE PERSON, ONE GOVERNMENT, ONE TOUCH

Master data are a collection of all the critical business data within a government entity with several uses

What are Master Data

Master data are a collection of all the critical business data within a government entity.

This data is slow-moving and helps to manage processes and operations

- Customer data – names, contact information, purchase history, etc.
- Product data – product names, descriptions, specifications, pricing, etc.
- Supplier data– supplier names, contact details, products supplied, etc.
- Employee data– employee name, roles, departments, etc.
- Location data– information about various business locations.

Purposes of Master Data

Operational consistency and accuracy – Master data lists ensure that all systems and departments within an organization use the same, accurate data for key entities like customers, products, suppliers, and employees. This reduces errors and inconsistencies that can occur when different parts of the organization use different versions of the same data.

Facilitating sharing – When different systems or departments need to share data, master data lists act as a common reference point. This simplifies the integration of data across various platforms, making it easier to synchronize and maintain consistency.

Enhanced reporting and analytics – Accurate master data is essential for reliable reporting and analytics. Master data lists ensure that reports and analyses are based on consistent, high-quality data, leading to better insights and more informed decision-making.

Operational efficiency – By maintaining accurate and consistent data, Master data lists streamline business processes. For example, accurate customer data can improve order processing and delivery, while accurate product data can enhance inventory management.

Regulatory compliance – Many industries have strict regulatory requirements related to data management. Master data lists help organizations meet these requirements by maintaining standardized and accurate records, which are essential for audits and regulatory reporting.

There is room to strengthen the maintenance of master data in South Africa to improve systems interoperability and reduce leakages and fraud

Challenges in Master Data Maintenance in South Africa
Limited Investment in and Inconsistent Approaches to Maintenance: departments differ in the extent to which they prioritise the maintenance of these lists, and their approach to doing. Different departments may maintain their own versions of master data, leading to isolated data silos.
Limited Technical Expertise and Unclear Responsibilities: limited investment in ICT skills to manage master lists, resulting in one person being responsible to manage several domains with little awareness of the importance, or how.
Consequence for Digital Transformation
Fraud, Ghost Workers and wasted expenditure: Poor controls can result in the addition of staff or assets to falsely budget requirements and operational expenses. If there are no auditable lists this can lead to purchasing of items resulting in fruitless and wasteful expenditure.
Poor Data Quality: Poor data quality, such as duplicate entries, incomplete records, or inaccurate information creating barriers to effective monitoring and evaluation, and policy design.
Impediments to interoperability: Inconsistent versions of master data and a lack of standards create 'multi-versions of the truth' and prevent effective systems interoperability.

Equivalent data and quality standards of facility master data would have enhanced South Africa's COVID-19 response by enabling a faster and more accurate assessment of potential points of services, and the resources available at these points of service.

BOX: Efforts to modernise systems like the integrated financial management system have faced cost overruns and significant delays

For example: The cabinet-mandated Integrated Financial Management System (IFMS) project aims to replace ageing and siloed financial, human resource, payroll, and supply chain management systems across the South African government. The project involves the National Treasury (NT), Department of Public Service and Administration (DPSA) and the State Information Technology Agency (SITA). The aim is to implement it in 160 departments and be phased module by module, starting with pilot implementations in two national and two provincial departments. Despite its potential benefits and some notable progress, the IFMS project has faced significant delays since its inception in 2005 and remains incomplete.

CHALLENGES TO THE IMPLEMENTATION OF IFMS:

- *Governance and Management Issues:* One of the primary challenges has been the complex and often unclear governance structure, which led to protracted delays. The project management role shifted multiple times, causing coordination and accountability issues. Additionally, effective implementation required coordination among various stakeholders, including National Treasury, DPSA, SITA, and other governmental departments. The lack of a unified approach has been a critical barrier to achieving the streamlined and modernised administrative functions envisioned by the IFMS project.
- *Technical and Operational Hurdles:* The integration of diverse systems into a unified platform proved to be technically challenging. The need to cater to different functionalities across national and provincial departments added to the complexity. Additionally, the aging and archaic nature of current legacy systems further complicates modernization efforts.
- *Political will:* A significant challenge mentioned in the meeting is the perceived lack of political will to push forward with the IFMS implementation. This has been a longstanding issue, as indicated by the project's stagnation over 17 years. Resistance to change within various levels of government and the slow pace of decision-making processes have been critical barriers.
- *Cost Overruns and Financial Management:* The project has experienced significant cost overruns. Initially projected to cost R4.2 billion, the expenditure was revised multiple times, with R1.7 billion already spent by 2015 without substantial progress. This financial mismanagement led to scrutiny and calls for reassessment of the project's viability.
- *Technology and Vendor Lock In:* The reliance on specific vendors, such as Oracle, for critical software and maintenance services presents a challenge of vendor lock-in, where the government may face limited flexibility and higher costs due to dependency on a single supplier. This situation is further complicated by contractual negotiations and the need to align with modern cloud-based solutions, which are still under discussion.

Source: Parliamentary Monitoring Group, Available: here

4. People

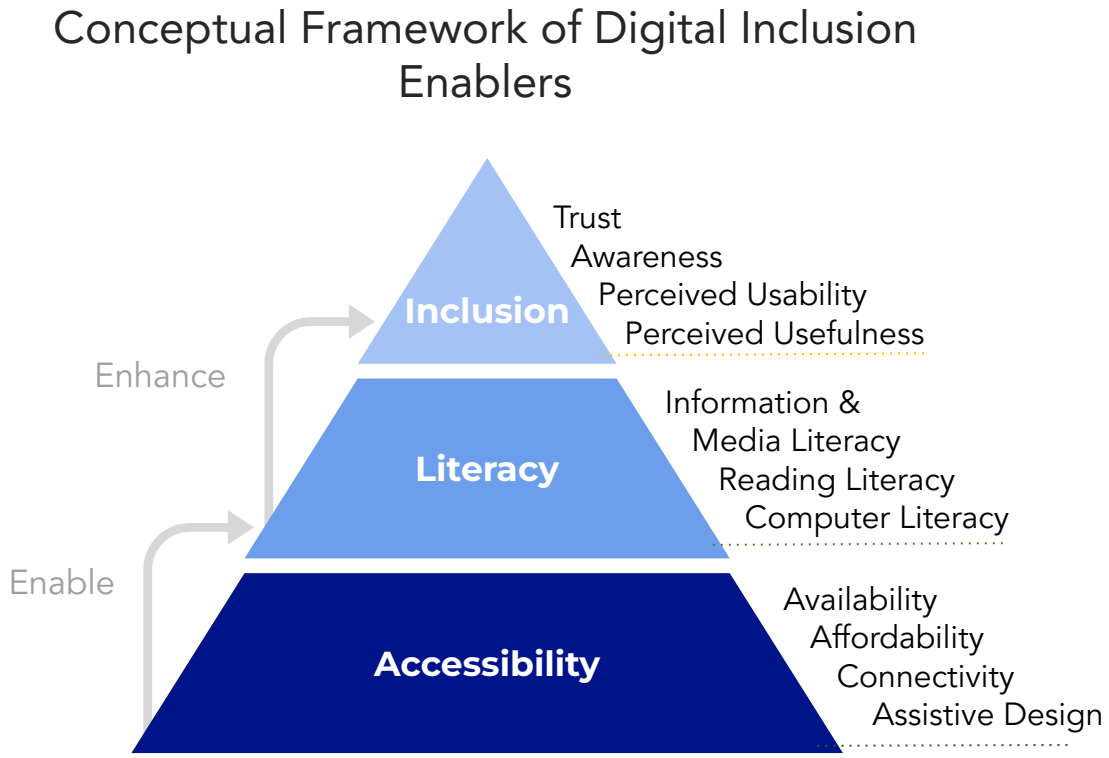
DIGITAL MZANSI

ONE PERSON, ONE GOVERNMENT, ONE TOUCH

Digital government transformation requires capacity in all spheres of society: Government, private sector and the broader South African population

Dimension	Key finding
Population	South Africans have broad access to the internet and devices, however inclusivity in service design should remain a top priority
Government	Government departments differ in their capacity to innovate, manage and maintain technology, with a bottleneck in SITA's ability to service government.
Ecosystem	South Africa hosts a rich non-government ecosystem for technology development and maintenance in leading industries, that could be harnessed into a GovTech ecosystem.

Uneven digital skills across the population need to be considered when designing government services to ensure accessibility and inclusiveness



Digital, social and economic exclusion are felt differently across geographies

71.2% and 55.5% of respondents in peri-urban and rural areas respectively perceived digital social exclusion. In rural communities the strongest factor associated with exclusion was first language, indicating the need for content to be translated into local languages.

Limited digital skills hinders digital inclusion, with age as a key differentiating factor

- More than 50% of participants report having only basic digital skills, and less than 20% have intermediate or advanced digital skills. ±35% of respondents said they were unable to comprehend digital information
- Younger people are less likely to have advanced digital skills (with basic digital skills more likely). YNEET have lower levels of all digital skills. Retired populations have significantly lower levels of digital skills

The majority of the population use smartphones to connect to the internet

86.4% of respondents own a smartphone while only 38.2% own a laptop. In relation to assistive design, government sites must have mobile accessibility.

Nemisa (2020), Digital Skills at the Individual Level. Available here

Digital skills in government must be strengthened to deliver on the promise of digital transformation

The National Digital and Future Skills Strategy (NDFSS) highlights three specific digital skill gaps in government that must be overcome, although plans to address these gaps have not yet been implemented

Systems & database skills	Data management & analytics	Digital leadership and strategy
For technical specialists	For frontline staff	For public service leaders
Includes upskilling for a range of IT professionals including solutions architects, business systems specialist, network engineers, cybersecurity analysts, data centre operations managers, software developers and more.	Focusing on data management and basic data analytics for everyday use, at sites providing touch-points between people and the state, such as SASSA service points, health care facilities, drivers' licence testing centres and more.	Including understanding the role of public institutions in guiding digital transformation; technological transitions; international strategies and approaches for transforming public services through digital technologies, and more.

There are ancillary challenges to government digital skills that also need to be addressed - beyond just skill gaps.

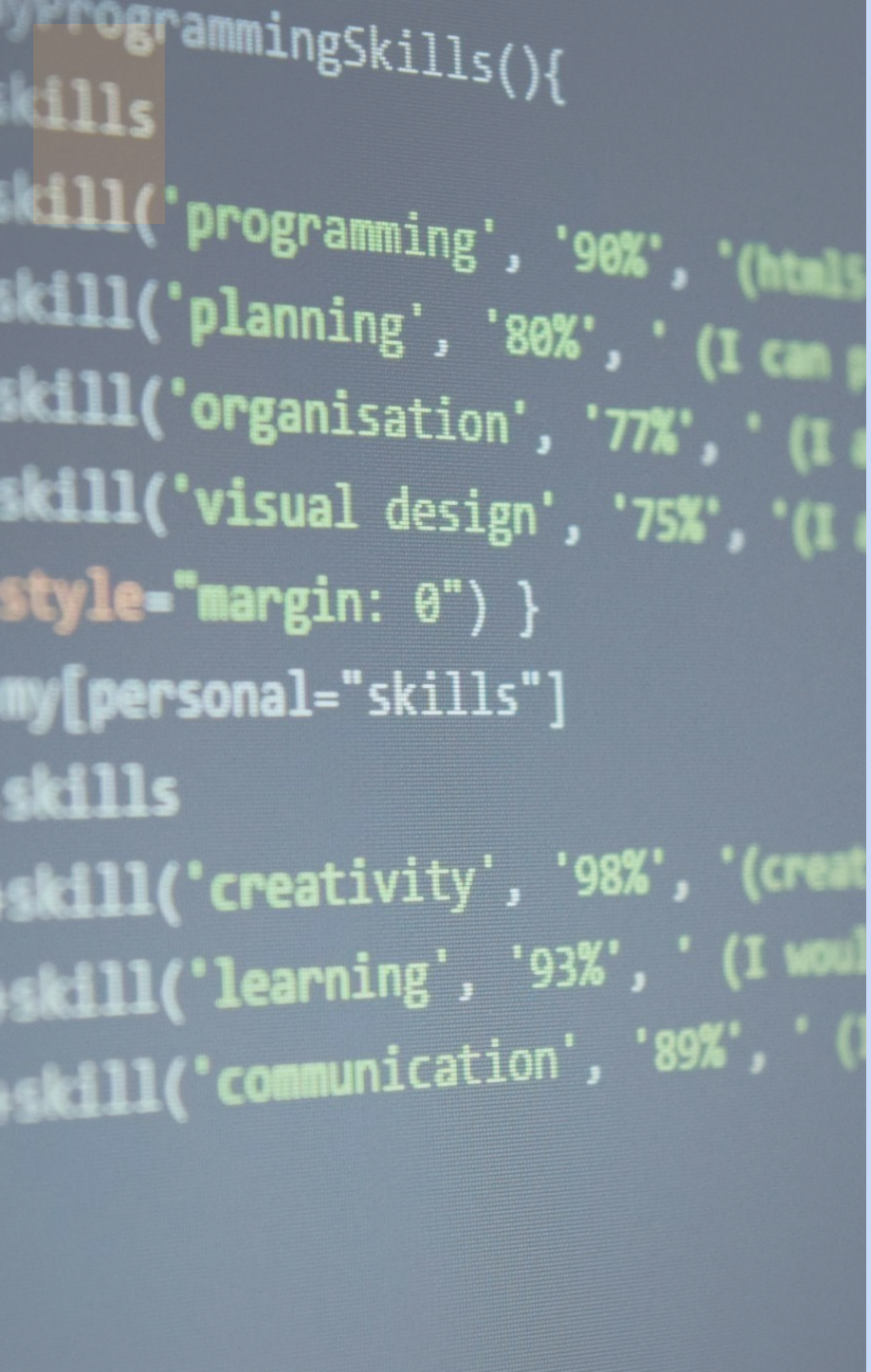
Lack of comprehensive information

To date, a comprehensive government digital skills audit has not been conducted.

Over-concentration of digital skills

Digital skills are typically concentrated in IT departments rather than dispersed across the organisation.

DCDT, 2022. Implementation Programme Guide for the National Digital and Future Skills Strategy of South Africa. Available here.



Case study: SITA is making progress in advancing digital skills within their organisation, although acceleration is needed.

SITA achieved a digital capability score of 67%, reflecting the proficiency level of employees and organisational readiness for technological development based on the individual employee skills audit.

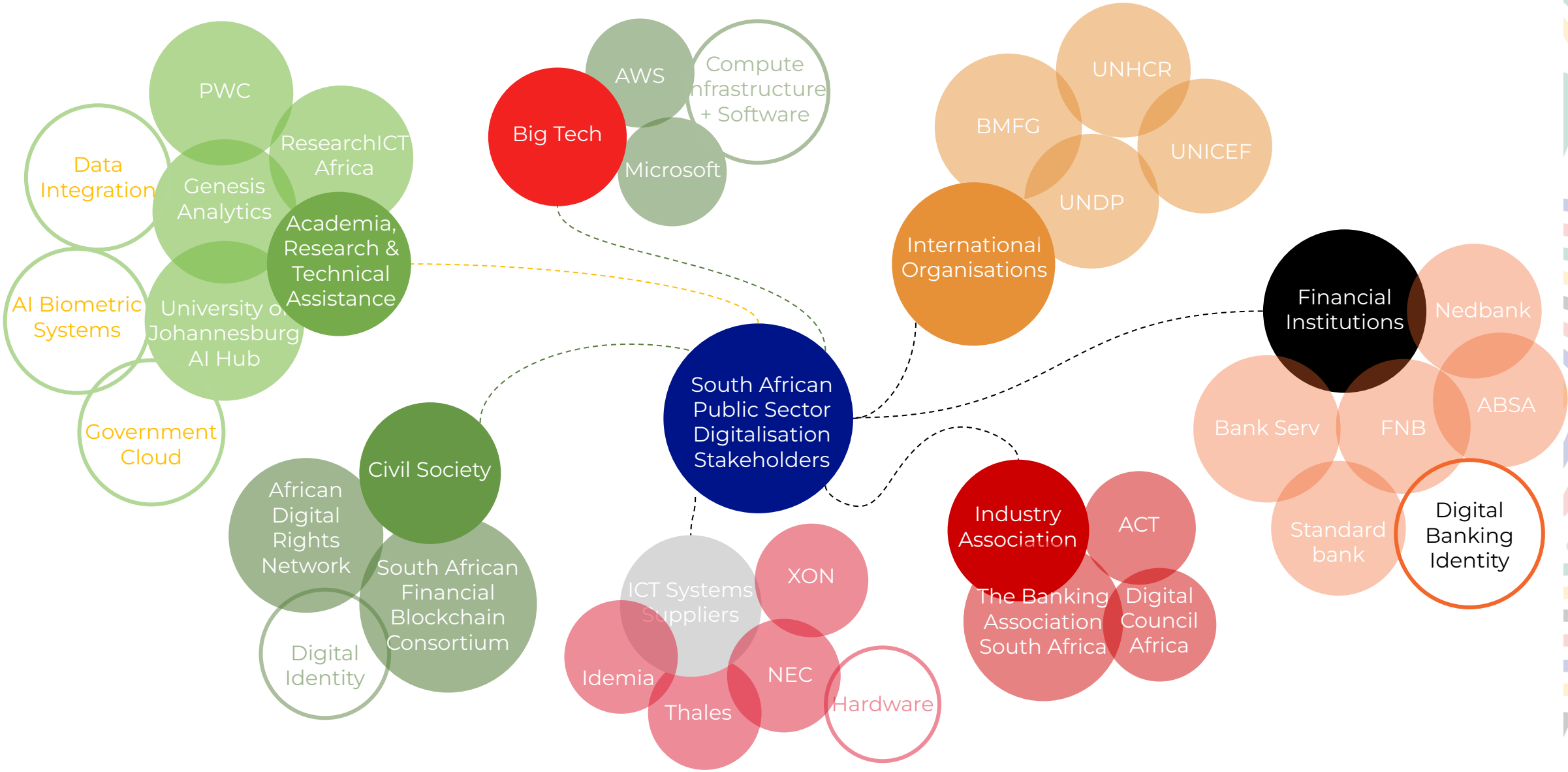
The individual skills audit leads directly into the development of a Workplace Skills plan, which allows for targeted training to fill gaps in relation to soft as well as as basic and advanced digital skills.

- 75% of SITA employees received training against the Workplace Skills plan in 2022-23.
- SITA aims to have 85% and 90% of employees trained against the Workplace Skills plan in 2024/5 and 2025/6 respectively.

SITA underspent their skills and capabilities development budget by ±50% in 2023/4. Continued challenges in the governance of SITA has slowed digital transformation efforts.

Source: NEMISA 2020: South Africa Organisational and Government digital skills Survey; SITA (2023), Annual Report

A slowly growing ecosystem of non-government stakeholders with an interest in digital transformation can be formally coordinated



THANK YOU

A

Introduction Annexes

DIGITAL MZANSI

ONE PERSON, ONE GOVERNMENT, ONE TOUCH

South Africa's digital public infrastructure is fully synchronised to operate together while protecting user privacy and control – score: 3.88 out of 5

Digital Public Infrastructure	3.88

Identification	*Score*
Is there a national digital identity legal or policy framework, or an operational system in place?	0
Is there a national ID (or similar foundational ID) system?	5
Are records in the national ID system stored in a digitised (electronic) format?	5
Is there a digital signature regulation and PKI to support service delivery?	3.34
Is there a digital ID that enables remote authentication for (fully) online service access?	0
Total Score	2.71

Payments	*Score*
Is there a Treasury Single Account (TSA) supported by Financial Management Information System (FMIS) to automate payments and bank reconciliations?	5
Are e-payment services available?	5
Total Score	5

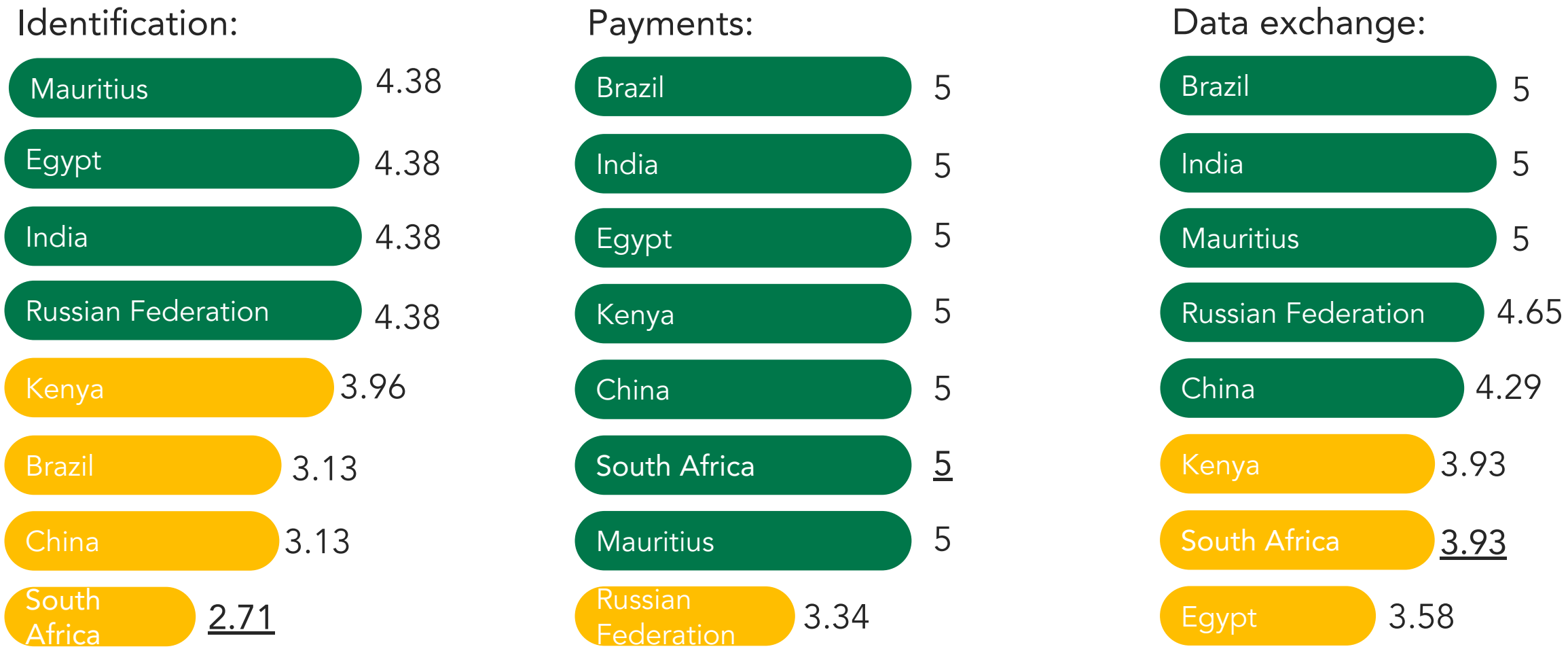
Data Exchange	*Score*
Is there a debt management system (DMS) in place?	5
Is there a Public Investment Management System (PIMS) in place?	0
Is there a government interoperability framework?	5
Is there a Tax Management Information System in place?	5
Is there a Customs Management Information System in place?	5
Is there a Human Resources Management Information System with self-service portal?	5
Is there a dedicated government entity in charge of data governance or data management?	2.5
Total Score	3.93

1 = **Basic** (data is limited, siloed, paper-based) 2 = **Opportunistic** (Some data is shared via image-based PDF) 3 = **Systematic** (Data is shared via machine-readable PDFs and spreadsheets)

4 = **Differentiating** (there is a standard for publishing data that is increasingly adhered to. Majority of data is available) 5 = **Transformational** (public data is published in a structured way by default that is API accessible)

Source: Digital Development Compass.

The components of the DPI score has been indexed across countries, with South Africa lagging behind with a score of 2.71 for Identification.



Source: Digital Development Compass.

South Africa's government has a shared vision and strategy which is vocally encouraged– score: 3.68 out of 5

Government	3.68

Implementation Capacity and Systems	
	Score
Does the digital strategy have mechanisms for implementation/operational objectives?	2.5
Is there a government Open-Source Software (OSS) policy /action plan for public sector?	2.5
Is there a government entity focused on GovTech?	5
Is there a whole-of-government approach to public sector digital transformation?	5
Is there a government strategy/program to improve digital skills in the public sector?	2.5
Is there a government entity focused on public sector innovation?	5
Total Score	3.5

Leadership and Strategy	
	Score
Collaboration in the area of digital products and services?	2.5
Are there mechanisms for experimentation foreseen in ICT/digital regulation?	5
Is there an overarching national digital strategy/digital transformation policy in place?	5
Is broadband considered as part of the universal access/service definition?	5
Is there a national e-government strategy or equivalent?	2.5
Is the national digital strategy explicitly SDG-oriented?	5
Is there a holistic innovation policy or one tailored to the ICT/digital sector?	5
Does the national digital strategy include mechanisms for multiple sectors of the economy?	5
Does government have a national strategy on disruptive/innovative technologies?	5
Is there a GovTech / digital transformation strategy?	3.34
Is there a strategy and/or program to improve public sector innovation?	2.5
Government effectiveness	2.5
Total Score	3.96

1 = **Basic** (Limited capacity) 2 = **Opportunistic** (First digital initiatives in siloes) 3 = **Systematic** (Shared vision and strategy)

4 = **Differentiating** (Embedded in decision-making; codified in administrative acts) 5 = **Transformational** (Digital government)

Source: Digital Development Compass.

South Africa's government has a shared vision and strategy which is vocally encouraged– score: 3.68 out of 5

Government	3.68

Open Government	
	Score
Coverage	2.77
Are there ethics/rules in place that apply to the ICT regulator's staff, including the Head/Chairperson and the Members/Commissioners?	5
Openness	2.91
Are there RTI laws to make data /information available to the public online or digitally?	5
Is there an open government website/portal?	5
Is there an open data portal?	5
Does the government publish its citizen engagement statistics and performance regularly?	0
Is there control of corruption?	1.81
Total Score	3.48

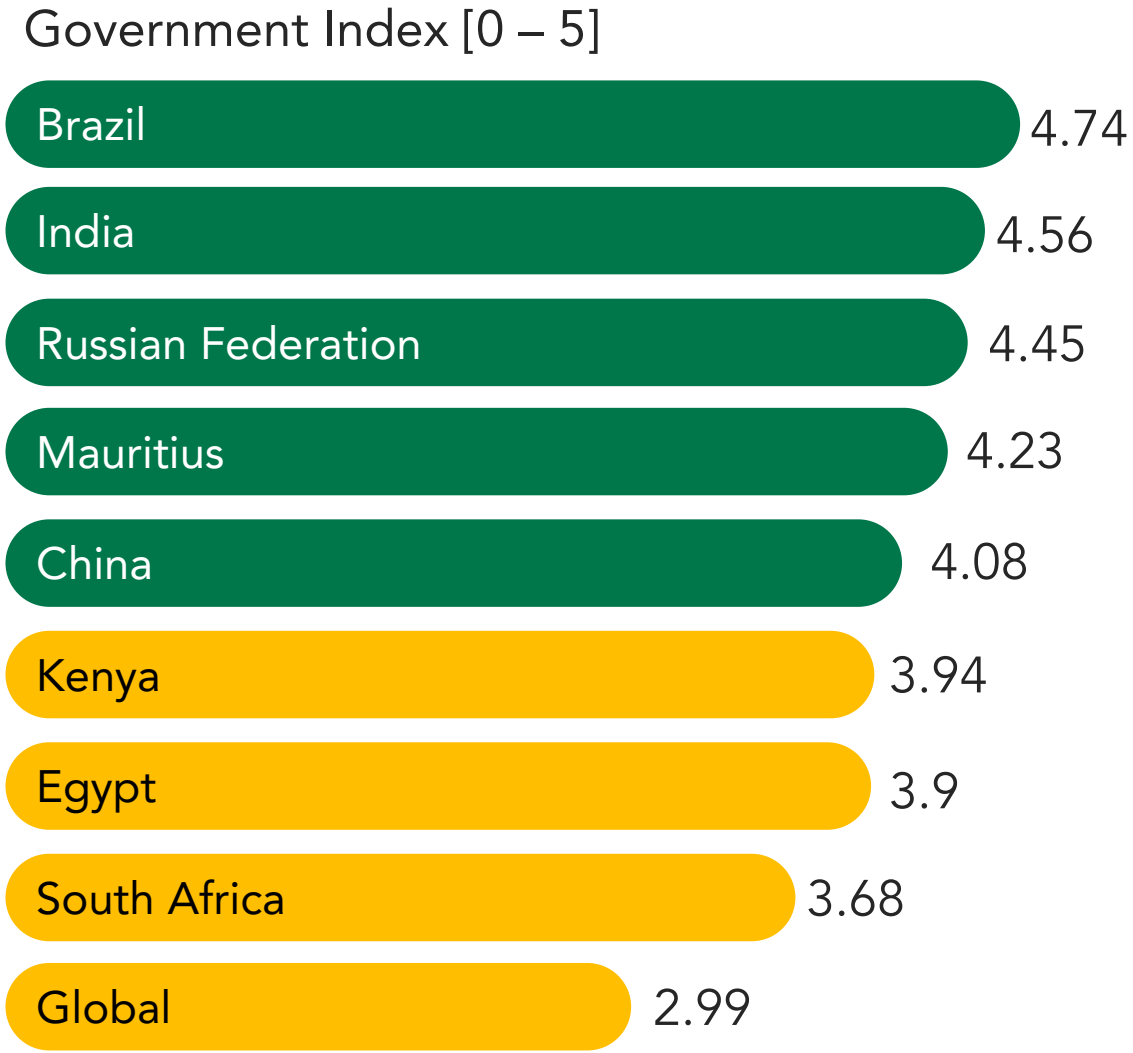
Digital Public Services and Platforms	
	Score
Online Service-Index (OSI)	3.75
Is there an e-procurement portal?	5
Is there an online public service portal?	5
Is there a tax online service portal?	5
Is there a customs online service portal?	2.5
Is there a social insurance/pension online service portal?	5
Is there a job portal?	0
Is e-filing available for tax and/or customs declarations?	5
Total Score	3.75

1 = **Basic** (Limited capacity) 2 = **Opportunistic** (First digital initiatives in siloes) 3 = **Systematic** (Shared vision and strategy)

4 = **Differentiating** (Embedded in decision-making; codified in administrative acts) 5 = **Transformational** (Digital government)

Source: Digital Development Compass.

South Africa has a government index of 3.68; ranking 78 out of 194 countries



South Africa ranks has a Government score of 3.68, lagging behind as compared to other countries. The score translates that South Africa has systematic digital public services and platforms, implementation capacity and systems; and leadership and strategy

South Africa ranks 78 out of 194 countries in the Government index

Source: Digital Development Compass

B

Processes Annexes

DIGITAL MZANSI

ONE PERSON, ONE GOVERNMENT, ONE TOUCH

Annexure 2: Policy and strategy analysis continued

Policy/Strategy	Focus	Relevance	Coherence	Efficiency	Effectiveness	Sustainability	Impact
e-Government Strategy and Roadmap (2021)	Strong focus on digital identity, system interoperability, and digital skills; moderate on data and cybersecurity.	Essential for improving public service delivery through digital means.	High internal coherence; Coherent with national digital goals and international best practices.	Efficiency hindered by legacy systems and lack of interoperability among departments.	Variable effectiveness, with some successful implementations and others lagging. Uneven adoption	Needs continuous funding, training, and technological upgrades.	Positive impact on service delivery, but uneven across different regions and services.
South African Reserve Bank Digital Identity Strategy (2021)	Focuses on inclusive payments and digital identity	Relevant for securing digital transactions and financial services.	Coherent with national financial inclusion and digital security policies.	Needs efficient implementation frameworks and regulatory oversight.	Early stages, effectiveness yet to be fully assessed.	Sustainable with support from the financial sector and regulatory frameworks.	High impact potential on financial security and inclusion.
4IR Strategic Implementation Plan (2022)	Focuses on digital integration, system interoperability, and digital skills.	Highly relevant for leveraging technological advancements in various sectors.	Coherent, aligned with national and global 4IR trends.	Efficiency dependent on effective coordination and monitoring mechanisms.	Early stages of implementation, with varying levels of progress across sectors.	Requires sustained investment and cross-sector collaboration.	Significant potential impact on economic development and innovation.

Annexure 2: Policy and strategy analysis continued

Policy/Strategy	Focus	Relevance	Coherence	Efficiency	Effectiveness	Sustainability	Impact
National Digital Health Strategy (2019)	Strong focus on digital health integration/interoperability	Highly relevant for healthcare improvement by leveraging technology in service delivery.	High coherence with health sector policies.	Efficiency affected by legacy systems.	Effective in pilot programs; challenges in scale-up.	Sustainable with ongoing investment.	Positive impact on healthcare delivery.
National Digital and Future Skills Strategy (2020)	Strong focuses on digital skills; moderate on system interoperability and data.	Crucial for preparing the workforce for a digital future.	Coherent with educational and economic development policies.	Efficiency can be improved with better coordination among educational institutions and industry.	Early stages of implementation, effectiveness yet to be fully realized.	Requires ongoing investment in education and training programs.	High potential impact on employment and economic growth.
National Digital Health Strategy (2020)	Focus on digital integration and system interoperability; moderate on data and intelligence.	Vital for modernizing healthcare delivery and management.	Coherent with national health objectives and international health IT standards.	Efficiency challenges due to integration with existing health systems and data interoperability issues.	Mixed effectiveness, with successful pilot projects but uneven nationwide implementation.	Sustainable with continuous funding and technological support.	Significant potential impact on healthcare access and quality.

Annexure 2: Policy and strategy analysis continued

Policy/Strategy	Focus	Relevance	Coherence	Efficiency	Effectiveness	Sustainability	Impact
National Cybersecurity Policy Framework (2015)	Strong focus on cybersecurity; moderate on system interoperability; limited on other areas.	Highly relevant given the rise in cyber threats globally and within South Africa.	Strong internal coherence but challenges in aligning efforts across governmental and private entities.	Compromised by bureaucratic processes and lack of streamlined coordination.	Limited by resources, skilled personnel, and public awareness.	Questionable without continuous investment and updates.	Mixed impact, raised awareness but significant gaps in readiness and response.
Integrated ICT Policy Framework (2016)	Broad focus on digital integration, system interoperability, and digital skills	Critical for integrating ICT into national development goals.	Coherent, aligns with national development goals and international standards.	Efficiency improved by integrating multiple ICT initiatives but needs processes that are more streamlined.	Progressing but hampered by implementation challenges and resource constraints.	Needs sustained investment and capacity building for long-term success.	Positive impact on ICT development, but regional and sectoral disparities exist.
National e-Strategy (2017)	Focuses on digital integration, digital skills, and inclusive payments	Highly relevant for digital transformation and economic growth.	Coherent, though overlaps with other policies exist. Requires better coordination among stakeholders.	Efficient in concept but practical execution faces bureaucratic hurdles.	Moderate effectiveness, with some successes but also significant implementation gaps.	Sustainability depends on ongoing support and updates to address technological advancements.	Encouraging digital growth, yet facing challenges in reaching underserved areas.

Annexure 2: Policy and strategy analysis continued

Policy/Strategy	Focus	Relevance	Coherence	Efficiency	Effectiveness	Sustainability	Impact
DPSA Digital Policy Framework (2023)	Focuses on digital identity, system interoperability, and digital skills; moderate on cybersecurity and data.	Relevant for transforming public service through digital technologies. Key to improving public service efficiency.	Coherent with public service and digital transformation goals.	Effective in driving initial changes; widespread adoption challenges.	Effectiveness limited by resistance to change and lack of digital skills in the public sector. Requires ongoing support and adaptation.	Sustainable with long-term investment in training and infrastructure	Potentially high impact on public service efficiency and transparency. Impact hindered by Slow adoption and integration across public service sectors.
SARB Digital payments Roadmap (2024)	Strong focus on promoting digital payments and enhancing financial inclusion.	Highly relevant for financial inclusion, Relevant to current financial trends and the need for digital transformation in payments.	Generally coherent, aligning with national economic goals and digital transformation strategies.	Efficiency in promoting digital payments is evident, though challenges in adoption rates persist.	Effective in setting guidelines and frameworks, but impact on widespread adoption needs evaluation.	Likely sustainable with ongoing regulatory support and technology advancements.	Positive impact on financial inclusion and modernization of payment systems, but full impact needs monitoring.
National Data and Cloud Policy(2024)	Strong focus on data and intelligence; moderate on system interoperability and cybersecurity.	Critical for data governance and leveraging cloud technologies.	Coherent with data protection and digital transformation policies.	Needs streamlined regulatory processes and better infrastructure support.	Implementation in progress, effectiveness not fully realized yet.	Sustainable with continuous updates and adherence to international standards.	Potentially high impact on data security and digital services efficiency.

C

Technology Annexes

DIGITAL MZANSI

ONE PERSON, ONE GOVERNMENT, ONE TOUCH

Identity management is South Africa is undergoing a modernisation and digitalisation wave, with mixed results

ID element	*First wave*	*Second wave*	*Status*
Biographic data	National Population Register (NPR) developed, which manages biographical information in compliance with the ID Act.	National Identity System (NIS) aims to collate a multiple information systems	Still underway. Historical cybersecurity challenges.
Biometric data	Home Affairs National Identity System (HANIS) stores and processes biometric data including refugees, asylum seekers and permanent residents. ±1980-1986	Automated biometric identification system (ABIS) kicks off in 2016	Still ongoing, with noted procurement and corruption challenges. Delayed.
Identity documents	Green identity book developed, as Department of Home Affairs expands to serve the whole country in 1994.	Smart identity card rolled out.	Success, some inclusion concerns, e.g., many DHA offices in rural areas can't process biometrics.
Digital Identity		Emergence of multiple digital identity initiatives ongoing concurrently	Provision for digital identity contained in forthcoming identity bill

Sources: PwC/Bankserv, 2021. Digital Identity - A South African Journey. Available here; PMG, 2023. ABIS update. Available here; PMG, 2019. HANIS & Automated Biometric Identification System (ABIS). Available here.; RIA, 2022. Digital Identity Policy Brief. Available here.; RIA, 2021. Digital Identity in South Africa, Available here.

Of the 16 ‘must have’ digital ID indicators, South Africa satisfies 13

Attribute	Indicator	Available in SA
Interoperable and extensible	Individuals can authenticate themselves or their documents digitally	Banks
Interoperable and extensible	Policy preference for a government-wide digital and interoperable ID system exists	Yes
Transparency, accountability and oversight	The ID serves as a legal proof of an individual’s identity	Yes
Transparency, accountability and oversight	Institutional governance structure and its accountability are established	No but currently underway
Transparency, accountability and oversight	ID authority is subject to general oversight of the courts	Yes
Transparency, accountability and oversight	Accountability of the ID executors to the ID authority is established	Yes
Transparency, accountability and oversight	Legally-binding redressal framework for ID-related malpractice is established	Yes
Transparency, accountability and oversight	Procedural rules for collection, storage and sharing of personal data related to ID system are established	Yes
Transparency, accountability and oversight	Government exemptions/exceptions for using ID system and its data for national security, public order or other government interests are codified in law	Yes
Privacy, security and protection	Personal data linked to the ID is under the purview of the DPA and protected by law	Yes
Privacy, security and protection	Procedural rules for the ID (enrolment, data processing, issuing credentials, etc.) are established	Yes
Privacy, security and protection	There exists a process to notify individuals and general public about personal data related to ID system leaks or threats	Yes
Non-discrimination and inclusion	Processes to access, review, edit and delete one's ID data are transparent	Yes
Non-discrimination and inclusion	Enrolment in DID is possible without discrimination	No
Non-discrimination and inclusion	DID is not the only legal document to serve as a credential for accessing basic human rights	Yes
Non-discrimination and inclusion	Cost of enrolling for the DID is affordable	No

Source: UCL Institute for Innovation and Public Purpose. Available here.

Of the 14 ‘must have’ digital payment indicators, South Africa satisfies 14

Attribute	Indicator	Available in SA
Interoperable and extensible	Payment system policy prefers interoperability between PSPs	Yes
Interoperable and extensible	Payment system facilitates cross-domain and/or domain-specific interoperability	Yes
Interoperable and extensible	Payment system has the infrastructure to facilitate (near) real-time settlement of transactions between users	Yes
Interoperable and extensible	Documentation for PSPs to use RTPS architecture is publicly disclosed	Yes
Transparency, accountability and oversight	RTPS is governed by a central bank/ financial regulator	Yes
Transparency, accountability and oversight	RTPS is transparent about the rules and conditions of participation	Yes
Transparency, accountability and oversight	Non bank RTPS services are subject to payment system rules	Yes
Privacy, security and protection	Procedural rules for the RTPS's data handling are established	Yes
Privacy, security and protection	Fraudulent transactions on the RTPS are proactively prevented and managed	Yes
Privacy, security and protection	RTPS is subject to relevant security compliance and consumer protection laws	Yes
Privacy, security and protection	There exists a process to notify individuals and general public about personal data related to the RTPS data leaks or threats	Yes
Non-discrimination and inclusion	RTPS enables key transaction types for financial inclusion: P2P, G2P payments	Yes
Non-discrimination and inclusion	Transactions are enabled through multiple access channels and non-digital means	Yes
Non-discrimination and inclusion	Transaction fee for retail users is low/none	Yes

Source: UCL Institute for Innovation and Public Purpose. Available here.

Of the 8 ‘must have’ data exchange indicators, South Africa satisfies zero

Attribute	Indicator	Available in SA
Interoperable and extensible	Semantic interoperability within the DES is facilitated through either policy or technical means	No
Interoperable and extensible	Data is shared in (near) real-time through the DES	No
Interoperable and extensible	Technology architecture of the DES is scalable	No
Transparency, accountability and oversight	A public-interest entity governs the development and operations of the DES	No
Transparency, accountability and oversight	Use of the DES is subject to transparent enrollment and participation conditions	No
Transparency, accountability and oversight	Data exchange instances within the DES can be monitored in public-interest	No
Privacy, security and protection	Procedural rules for the DES (access restrictions, protections, etc.) are established	No
Capacity and coordination	Data exchange across government is implemented by a coordination unit	No but underway

Source: UCL Institute for Innovation and Public Purpose. Available here.