Singapore: Data governance profile



1. Vision and policy intent

The Singapore Government's vision is for a Secure, Smart Nation, to be realised through a whole-of-nation approach that brings data and digitalisation together. It wants to use digital technologies to transform the way government works. To be "digital to the core", the Singapore public sector needs to harness data as a strategic asset.

Data science and Artificial Intelligence (AI) are tools that can be applied to those data assets to further enrich their value and to improve digital infrastructure and services. The Government is now putting in place the policies, processes, systems and people to enable the public sector to systematically acquire, manage, and exploit data at an industrial scale.

For more detailed information on Data Stewardship and Governance in the Singapore Department of Statistics see Statistics Singapore Newsletter Issue 2, 2023

2. Data Management: policies, rules & institutions

The Smart Nation and Digital Government Office (SNDGO), formed in 2017, drives government digital transformation. The Government Data Division was established in the SNDGO to oversee policies on government data and achieve the aim of a public service that is 'digital to the core'.

The <u>Public Sector (Governance)</u>
<u>Act (PSGA) 2018</u> supports a
whole-of-government approach to
the delivery of public services. It
establishes a consistent
governance framework across
public agencies. The PSGA
provides authority for data
sharing between public sector
agencies while introducing
penalties for unauthorised
disclosure, improper use of
information and unauthorised reidentification of anonymised
information.

A new Government Data Strategy introduced in 2018 employs an Integrated Data Management Framework for 5-stage data handling.

3. Data custodians and data stewardship

The <u>Department of Statistics</u> (DOS) oversees Singapore's national statistical service's quality and integrity, guided by the <u>Statistics Act 1973</u>. The Chief Statistician, is the national statistical coordinator responsible for: coordinating statistical activities; advising on gathering, compiling, analysis and use of statistics; developing national statistical standards, definitions, classifications, and procedures; and promoting observance of these.

DOS engages with data users, provides advice, and promotes national statistical standards. The Statistical Best Practices 2020 handbook sets data quality standards and methods.

The Government Data Division (GDD) improved the Government Data Architecture in 2019 with Single Sources of Truth and Trusted Centers. DOS is a Trusted Centre for individual and business data, sharing data under the PSGA for policy analysis and service delivery. Singapore has also developed guidance for industry through a Trusted Data Sharing Framework which is a wholly voluntary framework to overcome concerns about data sharing and parallels the ASEAN Data Management Framework.

4. Data sharing, accessibility and integration

DOS's data stewardship role has evolved and grown from producing official statistics to a wider role encompassing technological innovations including AI/ML: developments and the use of registers as well as integrating data from across government and providing data for policy analysis and service delivery.

As a Trusted Centre in the Government Data Architecture, DOS collaborates to ensure data quality; exercises oversight over the SSOTs on their adherence to data quality standards; advises users on the availability and suitability of data; and supports the strategi use of data and information in making data-driven decisions and providing services for the public.

The <u>Core Operations Development Environment and eXchange</u>
(<u>CODEX</u>) is a shared digital platform between government agencies and private sector entities to develop better, faster and more cost-effective digital services. It comprises common standards and formats to enable data sharing; a shift of less sensitive government systems and data to cloud services; and technology stack that includes a suite of shared software components and infrastructure.

5. Data sharing risks & mitigation

DOS's functions are governed by three main legislations:

- The Statistics Act 1973 is the primary piece of legislation that governs our statistical activities; it provides the mandate for data collection and safeguards the information collected from individuals and companies in accordance with the Act.
- The Public Sector (Governance)
 Act 2018 enables data sharing
 of administrative data within
 government for policy making
 and service delivery, while
 imposing strong safeguards
 such as criminal penalties on
 public officers who commit acts
 of data misuse or disclosure
 without authorisation.
- The Official Secrets Act 1935 governs the disclosure of official documents and information.

The government addresses trust and security concerns around data sharing in the private sector through protection policies overseen by the <u>Personal Data</u> Protection Commission.

The <u>Personal Data Protection Act</u> <u>2012</u> applies to Singapore's private sector.