

City Data Strategy

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Cape Town in context

The city:

- 5 million residents
- Growing at 3% per annum
- 2nd biggest economy in SA
- 23% unemployment (lowest in SA)
- Three spheres of government serving residents

City government:

- Annual budget of \$3.7 billion
- 84% opex,16% capex
- Approx. 30,000 staff
- Three utilities, metro
 police, some housing and
 transport functions





Census 2022



Data Strategy takes its lead from the five year strategy (2022-2027)



16.3.A. Data project:

The City will implement the second phase of its Data Strategy, which is essential for a modernised, open and transparent city government and improved service delivery.

and

Internal data strategy (2018)



Data Strategy 2018

Fundamental, basic ideas:

- 1. Data are a shared asset
- 2. Data are a collection of public goods
- 3. Data should be multi-use, across departments, spheres of government and with the public

Driven by working groups reporting to a Data Coordinating Committee and a Chief Data Officer (CDO)

Data Science team coordinated action and building enabling tools and data pipelines was critical

Secured donor support for implementation



	ENABLER	Objectives
Six pillars responding to key challenges	Valuing Data:	An organisation that recognises the value of data for strategic and operational decision making.
	Data Collaboration:	An environment where data is treated as a shared public good – to be used in the ways that best enable the CCT to meet the ever-evolving needs of its customers.
	Data Partnerships:	Harness external expertise and support to enhance CCT's technical data capabilities in a cost effect way, as well as to gain insights through the utilisation of CCT data.
	Data Capabilities:	Drive data-driven decision making by enhancing the data generation, management and analytics capabilities of CCT staff.
	Data Architecture:	A sustainable and enabling data architecture that is Forward Looking and able to support the growing need for new environments (both internal and external) for data sharing and analytics.
	Data Governance:	Improved data governance to ensure one source of the truth, taking into account the need for data quality, integrity and security.

Building up Data Science capability

Data Science is an **interdisciplinary field** that uses various **scientific methods** to extract **insights** and **knowledge** from **structured** or **unstructured data**.





Use case approach

Build support and understanding through projects that meet immediate needs.

Demonstrated how to implement an end-to-end modern data approach.

Examples:

- Cost Benefit Analysis
- Data driven COVID-19 response
- Informal settlements data collection
- Data driven electricity asset management
- Dashboards (describe, visualise)
- Using machine learning to detect outliers and changes





Revenue Dashboard











Public Data Strategy (2023)



Data Strategy Vision Data is used to deliver better public services to all people in Cape Town



Governance Structure

The governance of the data strategy requires a formal decision making body and a technical working group that brings together specialists from across the organisation



Data Governance Committee

- Provides the strategic direction for the data governance and strategy implementation
- Serves as the ultimate advisory authority on data
- Resolves differences or disputes (escalate to CM as needed)
- Guide the work of the Data Working Group

Chief Data Officer

- City-wide leadership on data
- Provides technical and strategic leadership
- Serve as the interface on data strategy with the Mayor, City Manager and Executive team.

Reflections and lessons

- A **clear strategy** is essential but not sufficient:
 - Building a team of skilled **people**
 - Build data analytics environment/infrastructure
 - Make use of **open source** tools
 - Analysis ready **data sets**
- Building the use of data and evidence into key **decision making processes**
- Tension between traditional IT and modern data approaches
 - Data access
 - Role of procurement vs capacity led approaches
 - Project methodology
- Leadership support & clear decision making authority
- Reforms take **persistence** over time (but this is a moment of technological change)
- We can go further on **Open Data**
- Much more to be done on **data sharing across governments/agencies**

Opportunity for developing cities to "leap frog" to modern data approaches?

Thank you

