Resilience, through data
ABOUT THE DATA E<<CHANGE CANVAS

Why data, why resilience, why now?

There are new data requirements needed for cities if they are to withstand the shocks and stresses of the next decade. The COVID-19 health pandemic has taught us that.

We didn't know we needed the new requirements, until we needed them.

The business case for collecting and sharing data has been re-written, and as we rebuild our economies, the opportunities for data to be an accelerator to this rebuild are many.

We believe more cities need to rebuild their data strategy to be more 'resilient'. And we believe this can be achieved through greater 'data exchange'.

This Canvas helps achieve that, by defining a series of capabilities.

The idea of upgrading a data strategy to be more resilient is not one that seeks to change the data agenda, but rather provide support to existing efforts.

We want cities to create insights and generate value from data, particularly in times of crises. We also want cities to make the best possible decisions in how taxpayers money is spent.

Data exchange can support this goal of building greater value of and from data.

Building resilience through data

Data, for the purpose of exchange, may be the biggest opportunity you could exploit to build resiliency in your city and make the best decisions.

Investing in data gathering, procuring data, building data literacy and establishing sharing and exchange systems should be a critical part of your economic rebuild.

Your ability to facilitate data exchange across complex systems, and allowing stakeholders to share data between and across silo's and boundaries will allow value to be unlocked.

And the more you catalyse data exchange opportunities, by letting people work on data 'things' together, is key to the resilience of your city.

Why data exchange?

There is a powerful opportunity to accelerate city resilience with data exchange - the process of building capability and infrastructure to deeply collaborate on and create value from data to solve complex problems.

This requires a necessary mind shift from not just valuing the opening and sharing of data, but to one that values deep collaboration and exchange.

Data exchange builds on the concepts of 'open data' and 'data sharing'. It does not replace them.

Audience

This resource has been developed for use by local government first and foremost, however it will also be of value to private and third sector organisations interested in starting their data exchange journey.

The outcomes of successful data exchange activities are likely to create value to the community overtime, and should involve both citizens and businesses as much as possible.

Using the Canvas

The Canvas presents a range of 'process' related prompts, that represents various attributes of a data exchange journey for an organisation/community.

The Canvas has no starting point, so allows you to begin where you feel most comfortable.

We encourage you to scan the prompts and start identifying those that confirm your current actions, and those you are yet to advance.

There is no right or wrong, and you may find you are scattered across the Canvas in terms of where your data exchange journey currently sits.

Whilst not a formal maturity model, the Canvas does provide a structure that represents advancement of capability.

This Canvas is not a 'solution', but rather a capacity building tool, so should be used in this context.

"...data exchange is the process of building capability and infrastructure to deeply collaborate on and create value from data to solve complex problems..."
ON PEOPLE:
- You are identifying who should take a lead on information management
- You are considering building a capability within the organisation to advance data gathering and analytics

ON PROCESS:
- You know you should be undertaking a data audit, but are yet to commence
- You have various data management processes in place but are yet to centralise/federate them
- You have an appetite to pursue data analytics to make better decisions, but yet to have senior leadership support
- You have not yet shared data with other organisations

ON POLICY:
- You are researching and preparing background material for a data sharing policy
- You are drafting policies around data, but yet to have them approved or published

THE CANVAS

THEN

ON PEOPLE:
- You have assessed your level of data maturity
- You have identified data literacy as an opportunity

ON PROCESS:
- You are familiar with the data you have available, and whether it is suitable for sharing
- You are building the business case for procuring data
- You are on the receiving end of other’s data sharing agreements, and are yet to pro-actively lead with data sharing as an option

ON POLICY:
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NOW

ON PEOPLE:
- You are forming cross-functional teams for data exchange
- You are stewarding the support of Department heads to commit to data sharing and exchange

ON PROCESS:
- You are seeking approval for a data sharing policy
- You are procuring the data that helps generate the best insights
- You are sharing data across teams internally through pilot projects
- You are aware of the responsibilities in sharing data sets

ON POLICY:
- Data access authority articulated
- Risk analysis and management in place
- Privacy and security policies approved and published
- You are considering opportunities of how data monetisation could be an opportunity

NEW

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NEXT

ON PEOPLE:
- Teams, across departments, are formulating questions that can drive data exchange opportunities within and external to your organisation
- Empowering the community to participate in this process

ON PROCESS:
- You are thinking in ‘data communities’
- You are adopting a community approach to insights generation, sharing and exchange
- You are sharing insights, and not just data
- You are facilitating ‘data exchange’

ON POLICY:
- You have a fully functioning data sharing policy
- You are embedding data standards into the procurement of goods and services
- Monetisation of data assets is a key part of your thinking
READY TO START?
Identify | Engage | GO!

Here’s your quick start guide to making a jump on your data exchange journey. Use any of the opportunities identified on your Canvas to advance:

1. Identify a problem - that will make a BIG difference in your community that will require collaboration
2. Engage an ecosystem - who are the organisations with a vested interest in solving the problem, and have relevant data and resources (funding, skills, intelligence) to contribute
3. Lay some foundations for data exchange - such as privacy, security, ethics, program governance, advocacy and monetisation.

SOME KEY RESOURCES
Mobilise | Share | Exchange

The Data Exchange Canvas is but one tool to support your data exchange journey. Here are ten resources we recommend you use to accelerate this opportunity.

1. Top 10 Trends in Data and Analytics for 2020 | Gartner
2. What Managers Need to Know about Data Exchanges | MIT Sloan
3. Data Systems, How third party information can enhance data analytics | Deloitte
4. The Five Safes | fivesafes.org
5. Best Practice Guide to Applying Data Sharing Principles | Australian Government
6. City Data Sharing Toolkit | Future Cities Catapult
7. Data Exchange Whitepaper | Civic Analytica
"...it doesn't matter what the next crisis is - you have to be able to share data to solve problems..."

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