Infoxchange

DATA READINESS

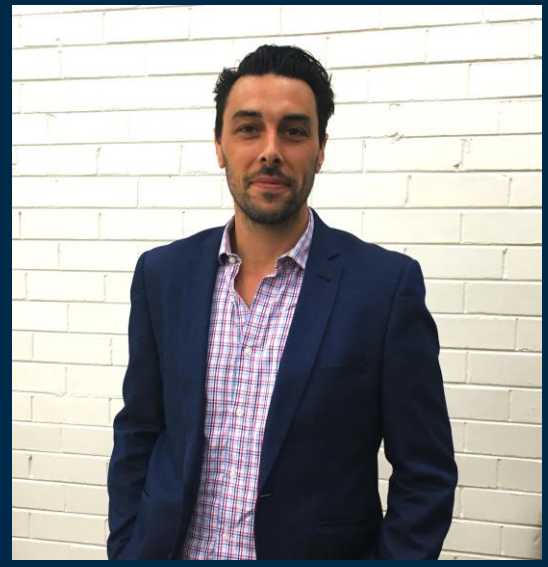
Sam Headberry, Senior Consultant April 2018

WHO AM I

- 12 years in the NFP sector
- Focus on housing and homelessness
- Data geek
- Believes Business Intelligence will drive better results for service users
- Wants a Harley Davidson

SAM HEADBERRY

SENIOR CONSULTANT, INFOXCHANGE

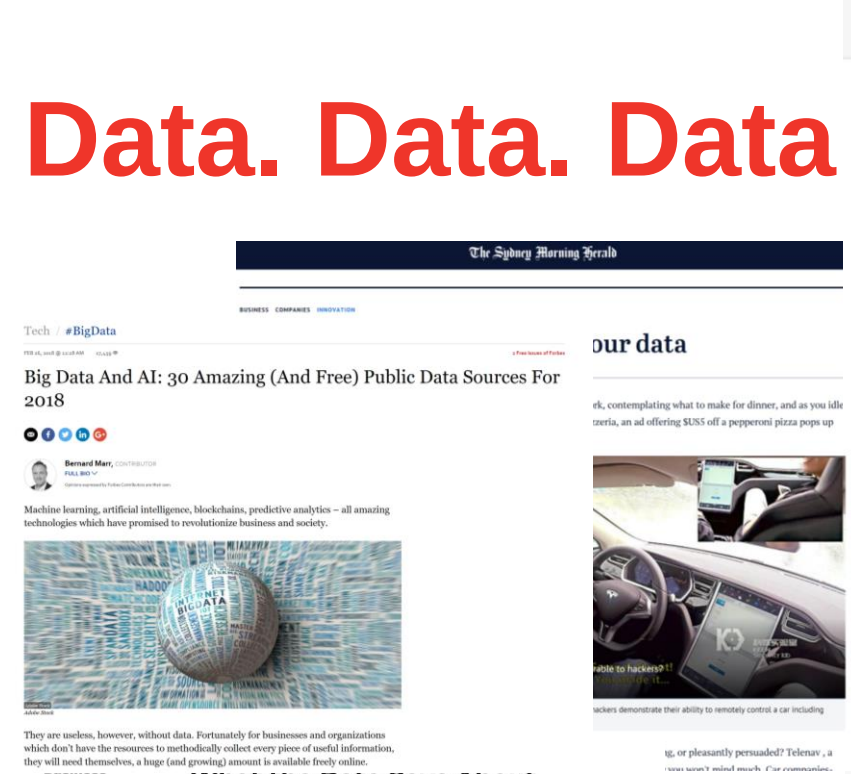


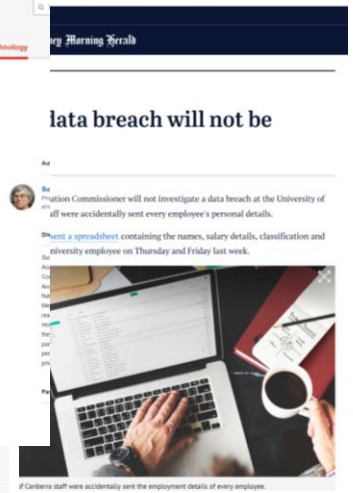
Agenda

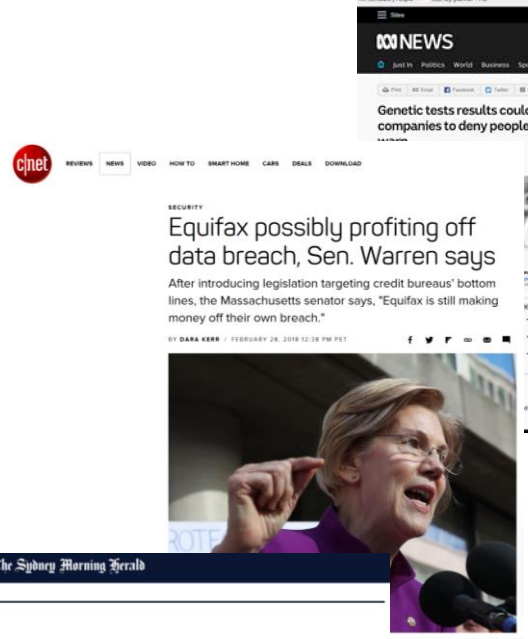
- Barriers in the community sector
- Data Foundations
  - Understand your data
  - Organise your data
  - Explore your data
- Basic tips and tricks
- Data capability assessment

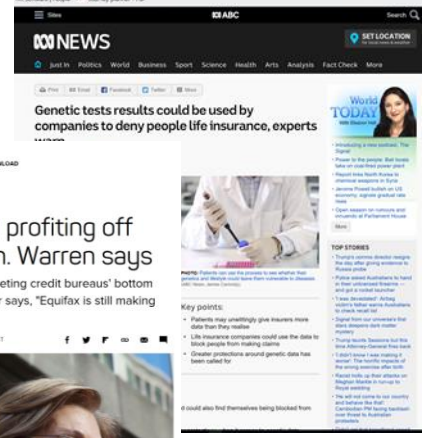
WHY ARE WE HERE?

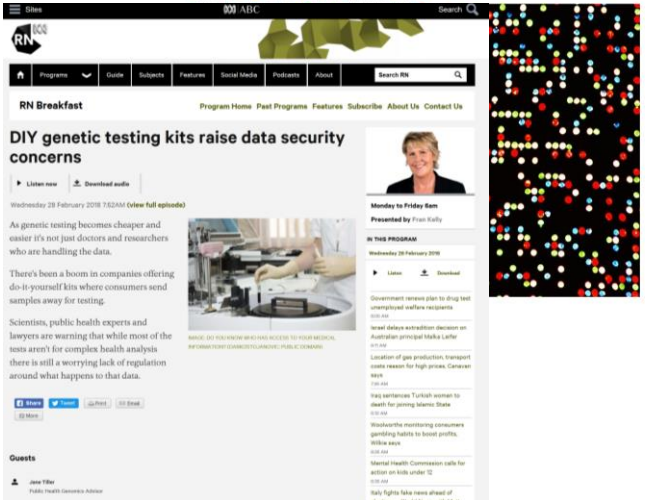
Data. Data. Data

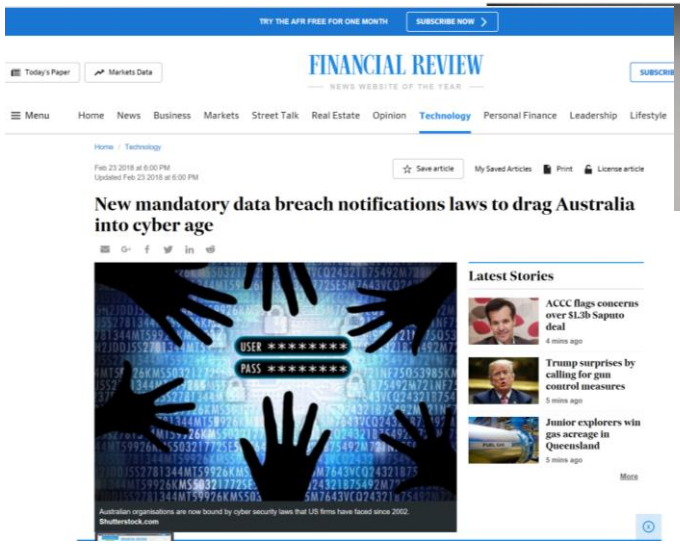


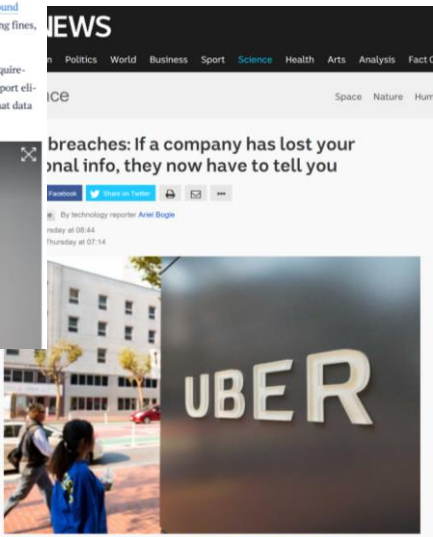






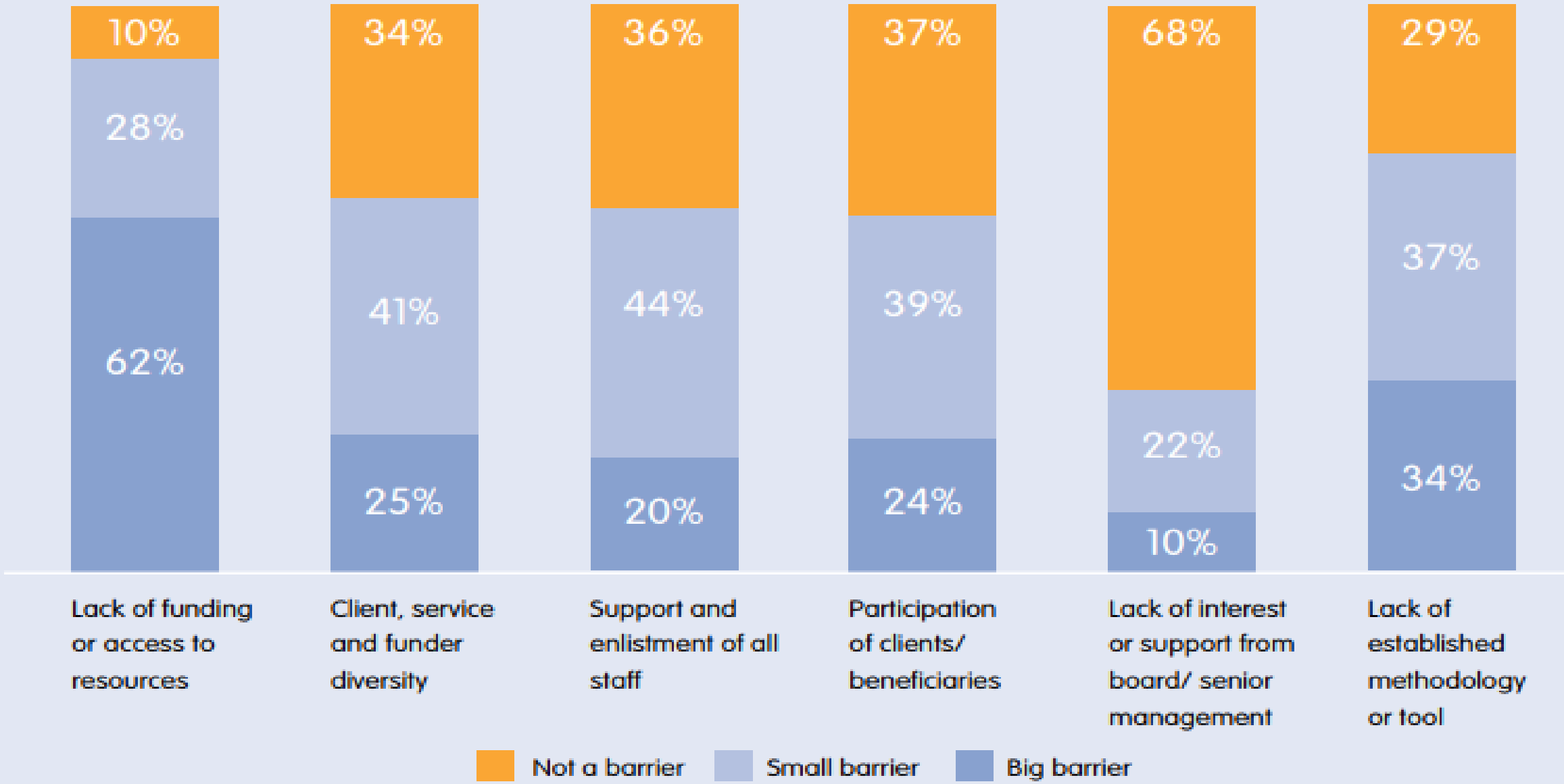






Barriers for the community sector

Figure 3: Perceived barriers to outcomes measurement



Source: Centre for Social Impact, UWA Outcomes Measurement in the Western Australian Community Sector Survey.

Survey respondents report that strategic, leadership, and organizational hurdles often determine the degree to which they can use data and analytics effectively

Which of these have been among the TOP 3 most significant challenges to your organization's pursuit of its data and analytics objectives?

● High ● Moderate ● Low

	Barriers	Overall %	High tech and telecom	Retail	Manu-factur-ing	Public sector	Health care
Strategy, leadership, and talent	Constructing a strategy	30	●	●	●	●	●
	Ensuring senior management involvement	42	●	●	●	●	●
	Securing internal leadership for data and analytics projects	33	●	●	●	●	●
	Attracting and/or retaining appropriate talent (both functional and technical)	21	●	●	●	●	●
Organi-zational structure and processes	Tracking the business impact of data and analytics activities	23	●	●	●	●	●
	Designing an appropriate organizational structure to support data and analytics activities	45	●	●	●	●	●
	Creating flexibility in existing processes to take advantage of data-driven insights	13	●	●	●	●	●
	Providing business functions with access to support	14	●	●	●	●	●
IT infra-structure	Investing at scale	17	●	●	●	●	●
	Designing effective data architecture and technology infrastructure	36	●	●	●	●	●

SOURCE: McKinsey Global Institute analysis

“Good data in. Great insights out”

Source: PWC, 2018, ‘Build your data foundation”

DATA FOUNDATION

STEP 1) UNDERSTAND YOUR DATA

STEP 2) ORGANISE YOUR DATA

STEP 3) EXPLORE YOUR DATA

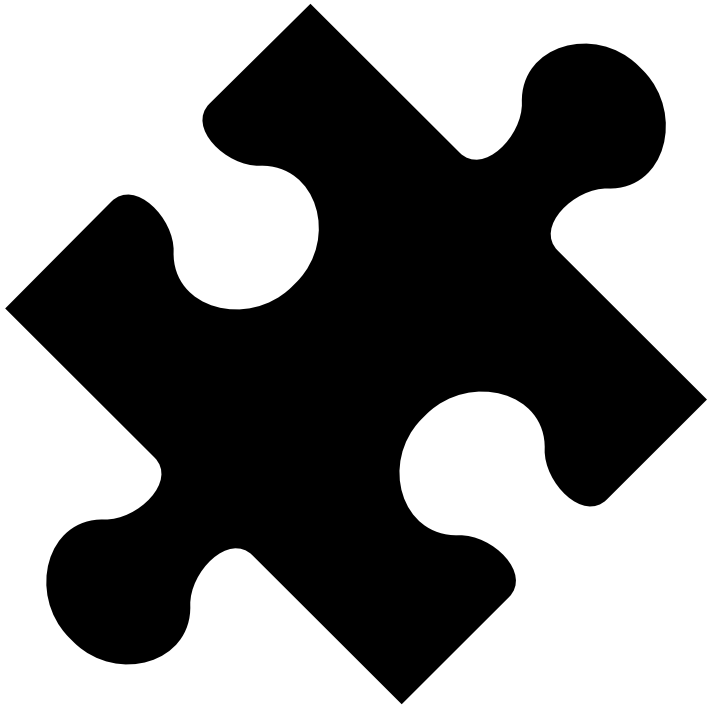
DATA FOUNDATIONS

UNDERSTAND YOUR DATA

Information architecture

“ (is) a holistic view on the flow of information in an enterprise, including the effects of the processes that act upon the data.”

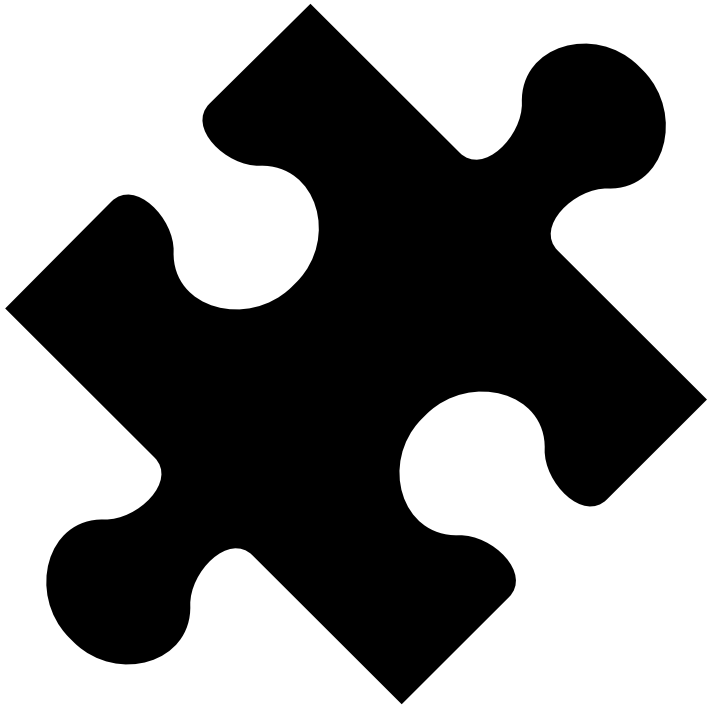
Source: DataVersity, 2018



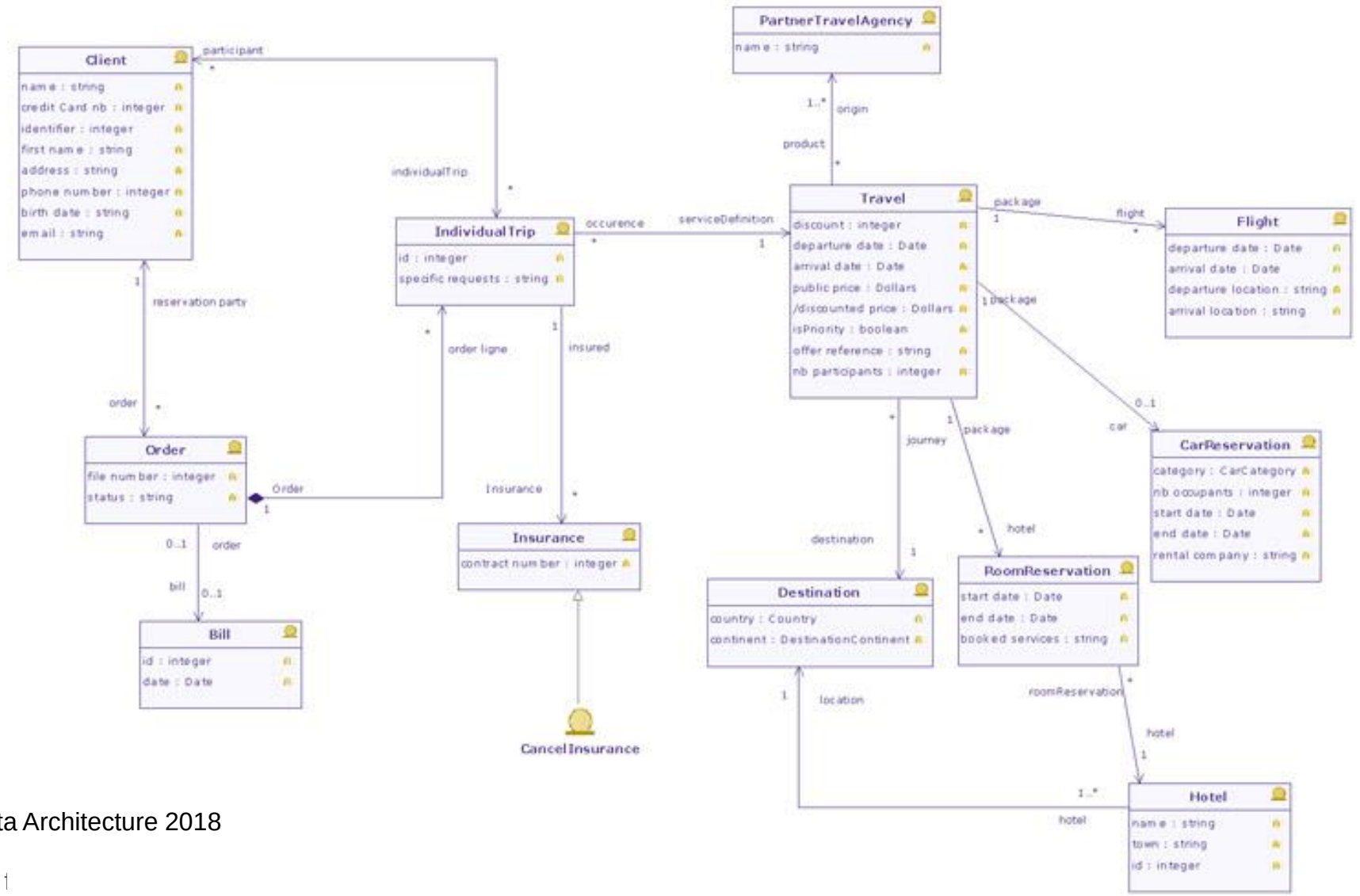
Data architecture

Data (in) context. Without context, data is meaningless; we create meaningful information by interpreting the context around data… The resulting information then guides our decisions.”

Source: DAMA, 2016



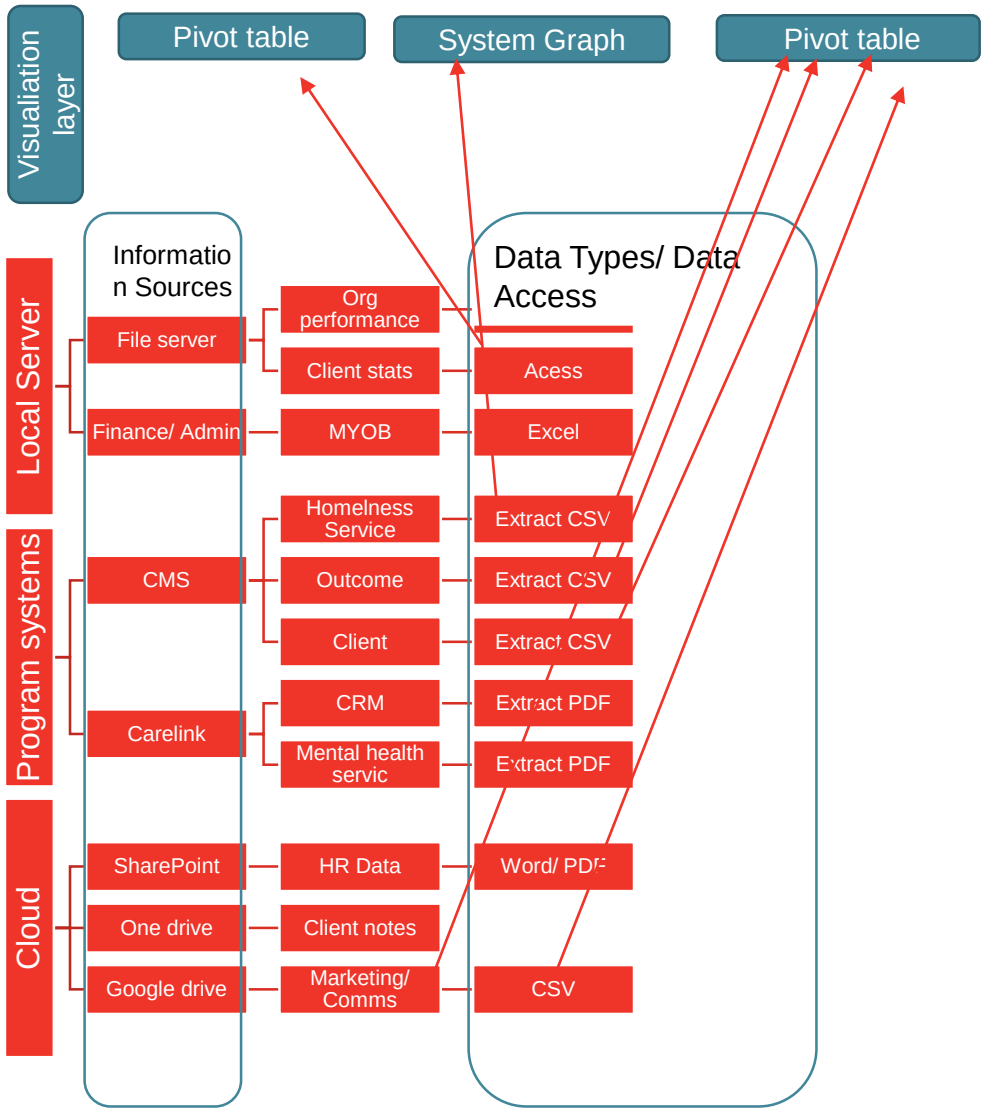
Mapping relationships



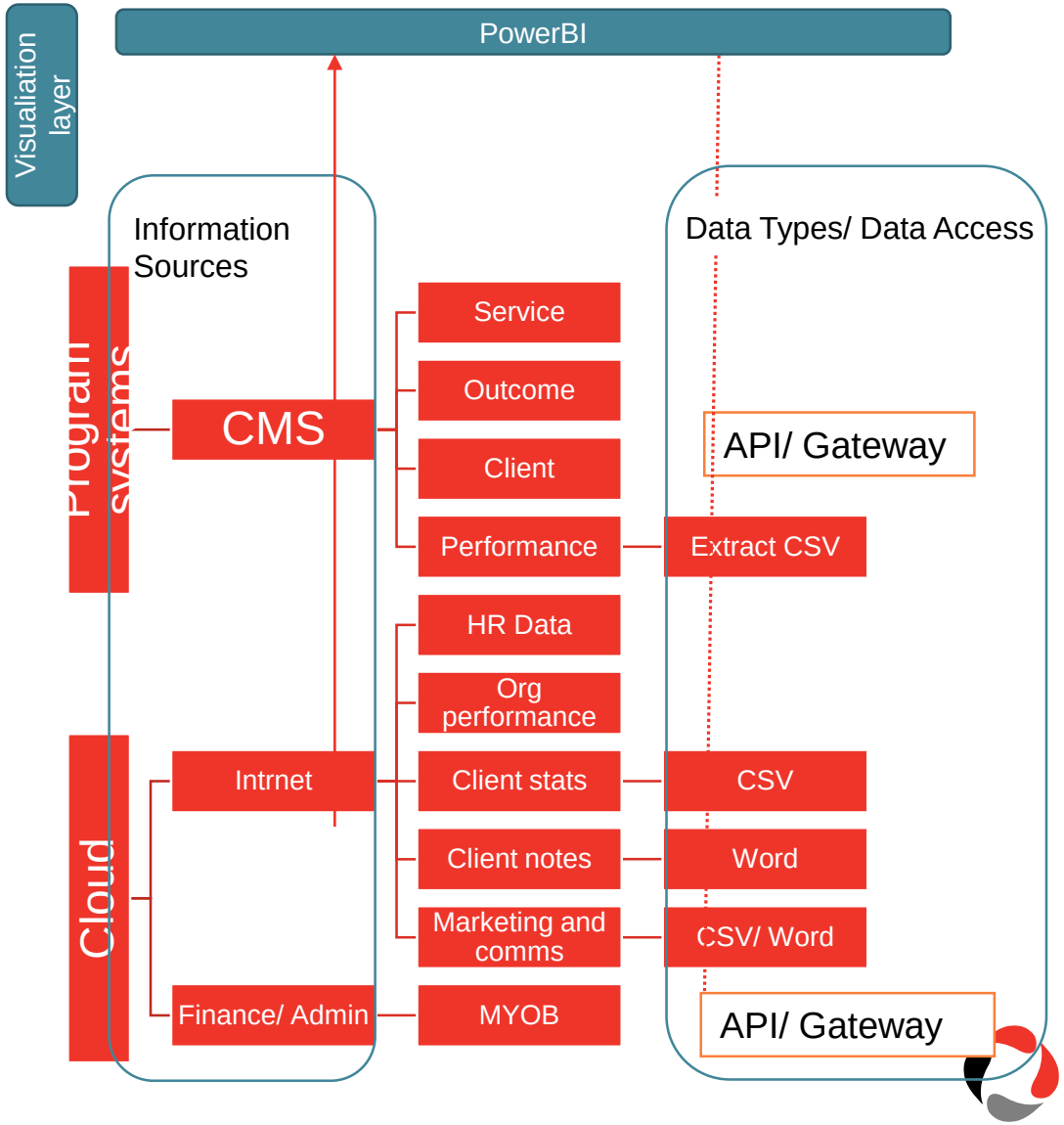
Source: TOGAF, Data Architecture 2018

Data Mapping

Current state



Future state



DATA FOUNDATIONS

ORGANISE YOUR DATA

System Selection

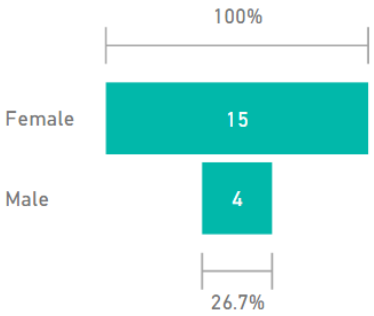
Choosing the right system to you

DATA FOUNDATIONS

EXPLOTE YOUR DATA

Client Demographics

Open Plan by Sex



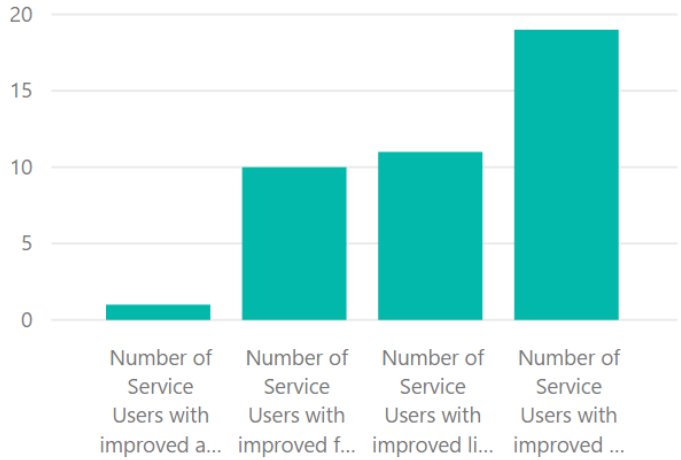
8
Person ID

Neither Aboriginal or T...
11
Person ID

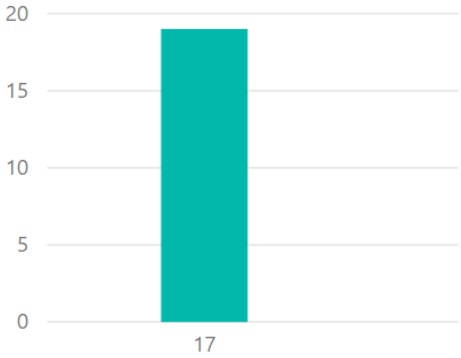
Person ID by Age

Person ID by Sex

Response by Measure Name



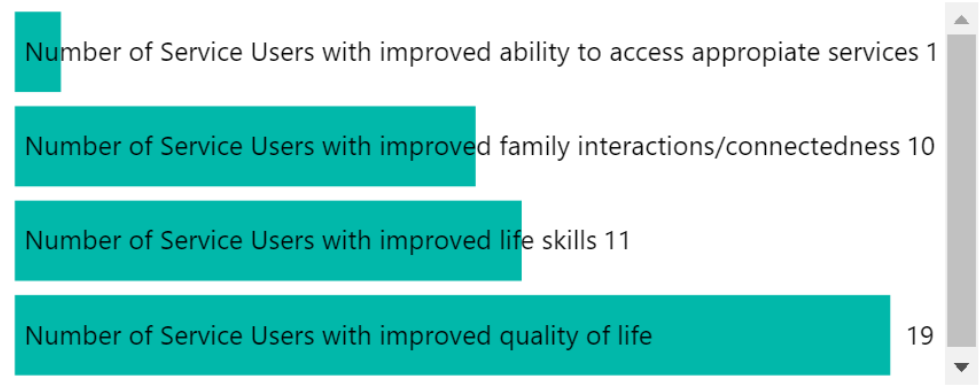
Count of Contact Time by Age



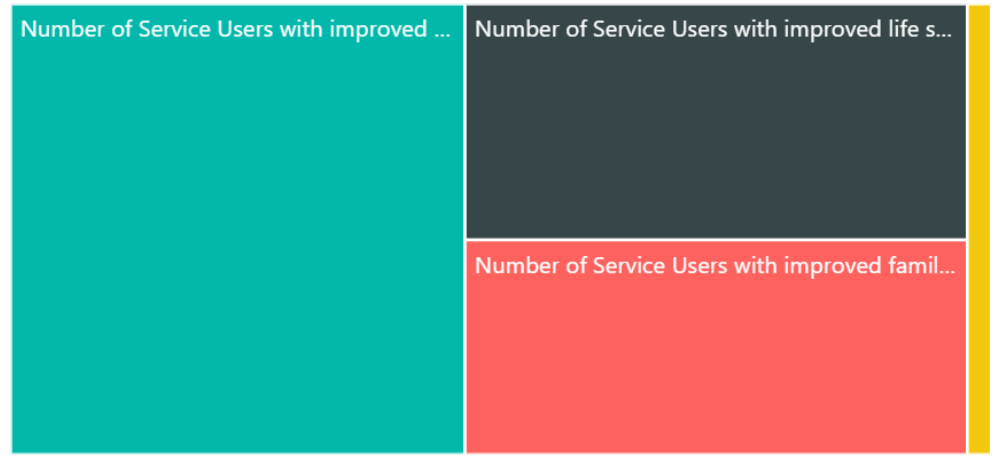
Person ID by Country of Birth

Infoxchange Client Outcomes

Response by Measure Name



Response by Measure Name



Number of hours provided during the reporting period
912.27
Response

Number of Service Users who received a service during ...
58.00
Response

Filter

Age
- (Blank)
- 14
- 15
- 16
- 17
- 18
- 19
- 20

Sex
- Female
- Male

Code
- VYEN2
- ORORI
- OPENL
- OLRAY
- OENEL
- OBINH
- NRONC
- MMCOT
- ISIKR
- HATEE
- HAAUI
- ESARS
- AYORI
- AYEAC
- AVDWR
- ATHIL
- ADIMT
- ACAYO

BASIC TIPS AND TRICKS

Basic tips and tricks to improve your data management

Focus on data quality:

- Develop data entry standards
- Determine what is your key data
- Avoid duplication

Utilise data analysis

- Use a visualisation tool
- Challenge your assumptions
- Determine your story, and evidence it

Embrace a data culture

- Embed strong data practices across your team
- Reinforce the value of data
- Provide opportunity for key staff to develop insights

DATA CAPABILITY ASSESSMENT

Data Capability Matrix

	Starting Out	Beginner	Intermediate	Advanced
Data foundations	We don't know where our data is stored We'll be fine, we're not vulnerable to data breaches	Our data lives in a variety of sources We use data to comply with funding requirements, but that's it. Data security is discussed informally No formal plan to manage security needs exist.	Our data is consolidated in two or three key areas A data security plan has been developed, and partially implemented but is not regularly reviewed	Our data is consolidated and linked across programs A data security strategy is emplaced and regularly updated.
Data Governance and planning	The use of data within the organisation is not considered Data is not important to our organisation	Organisational data is considered by senior level, but no plan to leverage data exists We think data could help us, but are slightly confused about where to start	An organisational wide data plan is developed, but needs implementation and review We use data to inform our practice once or twice a year We provide more insights with our data than our funders needs	A comprehensive data governance framework exists, is understood by all staff and implemented We use our internal data for content marketing Data constantly informs our practice with access to real time insights. We use BI tools to provide insights in real time
Data management	Staff do not know where data is stored Policies and processes on data do not exist	Staff see value in data There is one or two people in the organisation who know where our data is kept	Key organisation data is accessible and regularly updated Data management practices exist, but are not reviewed regularly	We can generate insights with data easily Our data is stored in a central location We have data management practices which are reviewed regularly
Data Visualisation	Data is not used for decision making.	Some teams/ staff use charts on their own services but these are not shared across the organisation	Teams have access to graphs and charts on organisational performance, but data is often outdated or incorrect We use a BI tool when needed for strategy, but it is not always available	Staff and executive have dashboards on organisational performance in real time available to them

WHY?

Improved insights
Improved outcomes
Improved efficiencies
Improved management
Improved service delivery
Improved access to funding

“Data can provide the community services sector with the tools it needs to improve services in order to deliver long-term outcomes for vulnerable and at-risk groups within our community. Without the necessary enabling environment created by government, the sector risks being left behind by private for-profit organisations that are able to use that data in ways that do not necessarily provide the greatest benefit to the community as a whole. Through better data linkage between Federal and State governments and with the not-forprofit sector, it is possible to deliver wrap-around services that will reduce long-term costs and drive better community outcomes.
“

Source: ACOSS, 2016

THANK YOU

PLEASE GET IN TOUCH

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