WHO AM I

SAM HEADBERRY

SENIOR CONSULTANT, INFOXCHANGE

» 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
Agenda

» Barriers in the community sector

» Data Foundations
  • Understand your data
  • Organise your data
  • Explore your data

» Basic tips and tricks

» Data capability assessment
Barriers for the community sector
Figure 3: Perceived barriers to outcomes measurement

- Lack of funding or access to resources: 62% (Big barrier), 28% (Small barrier), 10% (Not a barrier)
- Client, service and funder diversity: 41% (Big barrier), 25% (Small barrier), 34% (Not a barrier)
- Support and enlistment of all staff: 44% (Big barrier), 20% (Small barrier), 36% (Not a barrier)
- Participation of clients/beneficiaries: 39% (Big barrier), 24% (Small barrier), 37% (Not a barrier)
- Lack of interest or support from board/senior management: 22% (Big barrier), 10% (Small barrier), 68% (Not a barrier)
- Lack of established methodology or tool: 37% (Big barrier), 34% (Small barrier), 29% (Not a barrier)

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?

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

SOURCE: McKinsey Global Institute analysis
DATA FOUNDATION

STEP 1) UNDERSTAND YOUR DATA
STEP 2) ORGANISE YOUR DATA
STEP 3) EXPLORE YOUR DATA

“Good data in. Great insights out”
Source: PWC, 2018, ‘Build your data foundation”
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

**Visualization layer**

**Information Sources**

- Org performance
- Client stats
- MYOB
- File server
- Client notes
- HR Data
- SharePoint
- MyDrive
- Google drive

**Data Types/ Data Access**

- Access
- Excel
- Extract CSV
- Extract PDF
- Word/ PDF

**Program systems**

- CMS
- Carelink
- Finance/ Admin
- Marketing/ Comms

**Cloud**

- Intrnet
- Finance/ Admin
- MYOB

**API/ Gateway**

**Data Types/ Data Access**

- Service
- Outcome
- Client
- Performance
- HR Data
- Org performance
- Client stats
- CSV
- Word
- CSV/ Word

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System Selection
Choosing the right system to you

- Identify your need
- Speak to your peers
- Identify solutions
- Ask for a demonstration
- Undertake an evaluation
- Involve internal stakeholders to be a part of the process
- Be ruthless in your choice

Be ruthless in your choice
Involve internal stakeholders to be a part of the process
Undertake an evaluation
Ask for a demonstration
Speak to your peers
Identify solutions
Identify your need
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

<table>
<thead>
<tr>
<th></th>
<th>Starting Out</th>
<th>Beginner</th>
<th>Intermediate</th>
<th>Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Data foundations</strong></td>
<td>We don’t know where our data is stored</td>
<td>Our data lives in a variety of sources</td>
<td>Our data is consolidated in two or three key areas</td>
<td>Our data is consolidated and linked across programs</td>
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<tr>
<td></td>
<td>We’ll be fine, we’re not vulnerable to data breaches</td>
<td>We use data to comply with funding requirements, but that’s it.</td>
<td>A data security plan has been developed, and partially implemented but is not regularly reviewed</td>
<td>A data security strategy is emplaced and regularly updated.</td>
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<td></td>
<td>The use of data within the organisation is not considered</td>
<td>Organisational data is considered by senior level, but no plan to leverage data exists</td>
<td>An organisational wide data plan is developed, but needs implementation and review</td>
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<tr>
<td></td>
<td>Data is not important to our organisation</td>
<td>We think data could help us, but are slightly confused about where to start</td>
<td>We use data to inform our practice once or twice a year</td>
<td></td>
</tr>
<tr>
<td>Data Governance and planning</td>
<td>Staff do not know where data is stored</td>
<td>Staff see value in data</td>
<td>Key organisation data is accessible and regularly updated</td>
<td>We can generate insights with data easily</td>
</tr>
<tr>
<td></td>
<td>Policies and processes on data do not exist</td>
<td>There is one or two people in the organisation who know where our data is kept</td>
<td>Data management practices exist, but are not reviewed regularly</td>
<td>Our data is stored in a central location</td>
</tr>
<tr>
<td>Data management</td>
<td>Data is not used for decision making.</td>
<td>Some teams/staff use charts on their own services but these are not shared across the organisation</td>
<td>Teams have access to graphs and charts on organisational performance, but data is often outdated or incorrect</td>
<td>We have data management practices which are reviewed regularly</td>
</tr>
<tr>
<td>Data Visualisation</td>
<td>Data is not used for decision making.</td>
<td>We use a BI tool when needed for strategy, but it is not always available</td>
<td>We use BI tools to provide insights in real time</td>
<td>Staff and executive have dashboards on organisational performance in real time available to them</td>
</tr>
</tbody>
</table>
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-for-profit sector, it is possible to deliver wrap-around services that will reduce long-term costs and drive better community outcomes.

Source: ACOSS, 2016