The world of data is changing

10x increase every five years

85% from new data types

Big Data

Consumerization of IT

4.3 connected devices per adult

27% using social media input

“By 2015, organizations that build a modern information management system will outperform their peers financially by 20 percent.”

– Gartner, Mark Beyer, “Information Management in the 21st Century”
The NFP sector is increasingly under pressure to do more with less

There is a pressing need for the NFP sector to do things differently. Government is changing the way they work with the sector. Corporates and philanthropic trusts are also changing the way the work with NFPs. Supporters increasingly want to understand how their contributions make a difference. Digital technologies help NFPs respond to these changes. They can drive productivity, improve efficiency and service delivery effectiveness, allowing organisations to adapt and respond to these changes.

**Government**
- Government is looking for ways to reduce spending

Governments want new models which devolve greater responsibility to the NFP sector and reduce traditional levels of funding. They also increasingly require demonstrable outcomes from funding commitments.

This creates pressure on NFPs to become more efficient, competitive and sophisticated in measuring impact and outcomes.

**Funding**
- Traditional sources of funding are shifting

Corporates now more commonly seek alignment between their operations and social outcomes. Further, crowd sourcing through social media has made it easier to establish a social enterprise.

**Supporter engagement**
- Supporters increasingly want to see the impact of their investment

The public now expects far more information about the project the funding is being sought for and will actively engage through social media to do this. Social media is growing as a key factor in supporter engagement strategies, particularly as today’s youth become the principal source of public investment for NFPs.

NFPs are under pressure to maintain engagement with supporters to drive ongoing investment, and must harness the power of social media.

**The need for overall efficiency drives the urgency for effective use of data and digital technologies**

Historically NFPs have under-invested in digital technologies, with spending usually directed towards frontline service delivery. Without the right technology to drive supporter engagement, enable staff to deliver services efficiently, measure client and community outcomes and communicate success in a professional manner, organisations will be unable to compete.
Most NFPs don’t have good information at their fingertips

Analysis of our non-profit tech survey (Feb 2018, 385 respondents) showed:

» 50% of organisations reported their system aren’t capable of capturing information about client outcomes

» 49% of organisations reported they can’t easily get the information and reports from their systems they require to inform planning, improvement and reporting

» 45% of organisations reported that they don’t understand the outcomes they achieve over time and how they vary by client circumstances and situation
Data analytics and insights

Outer West Social Services
Cases Demographics

Total Cases 539

Case Type
- Attendees: 77
- Employers: 29
- Residents: 110
- Respite: 189
- Therapy: 134

Gender
- Female: 482
- Male: 57

Age Range
- 18-19: 15
- 20-29: 30
- 30-39: 82
- 40-49: 90
- 50-59: 67
- 60+: 31
- Unknown: 13

Household Type
- Family - Other: 27
- Family - Couple with: 190
- Family - Lone Parent: 223
- Family - Couple without Child: 99

Services
- Total # 12979
- Avg # 24
- Total Hrs 9451
- Avg Hrs 17.54
- Travel Hrs 440.80
- Avg Travel 0.82

Referral Source
- Self: 475
- Police: 64
- Family, fri.:
- Medical:
- Co:
- Com:
- Centre A:
- Corr:

Funding Source
- DHHS:
- DHHS - Better Pathw:

Outcome by Close Stage
- Goals reached fully:
- Goals reached partly:
- Goals reached subst:
- No goals reached:
- Not applicable - no :

Close Stage
- Agency withdrew
- Application for support is ineligible
- Client/family ceased contact with...
- Client/family completed service pl...
- Client/family illness
- Client/family moved from area
- Client/family referred to another ...
- Client/family withdraw
- Transferred to other agency
A powerful new way to work with data

Self-service business intelligence and analytics with Excel and the power of the cloud

Analyze in Excel

Collaborate in Power BI for Office 365
1 in 4 enterprise customers on Office 365

Discover | Analyze | Visualize

Share | Question | Mobility

Scalable | Manageable | Trusted
A powerful new way to work with data

Self-service business intelligence with familiar Excel and the power of the cloud

Analyze in Excel
1 Billion Office Users

Collaborate in Power BI for Office 365
Majority of NFPs with staff on Office 365

Discover | Analyze | Visualize

Share | Question | Mobility

Scalable | Manageable | Trusted
Share & collaborate with Power BI for Office 365

Quickly create collaborative BI sites

Power BI

Featured reports

- Top Countries/Regions
- Average Daily Sales - Goal $2,800
- Olympics (Sample) Michael Topolski | Updated 08/24/2014
- RetailBarSales (Sample) Michael Topolski | Updated 08/24/2014

Featured questions

- Medal count by year for swimming vs athletics
- 1954 gold medalists from Italy and their medals
- Athletes that won swimming medals at Athens '94
- show GDP for India, China, and US by year

Documents
- Shared with Everyone

BI Sites
Shared Queries
Data Refresh
Data Search
Mobile Access
Natural Language Questions
Share & collaborate with Power BI for Office 365

- BI Sites
- Shared Queries
- Data Refresh
- Data Search
- Mobile Access
- Natural Language Questions

Manage data queries for the team
Share & collaborate with Power BI for Office 365

- BI Sites
- Shared Queries
- Data Refresh
- Data Search
- Mobile Access
- Natural Language Questions

Keep reports up to date with scheduled data refresh

Power BI for Office 365
Workbook

Cloud

On Premise
Data Management Gateway
Installed on-premises

On premise Database
Share & collaborate with Power BI for Office 365

- BI Sites
- Shared Queries
- Data Refresh
- Data Search
- Mobile Access
- Natural Language Questions

Maintain a data catalog of searchable data

Search for:
- Public Data
- Corporate Data
- Shared Queries
Share & collaborate with Power BI for Office 365

- BI Sites
- Shared Queries
- Data Refresh
- Data Search
- Mobile Access
- Natural Language Questions

Stay connected with mobile access to your reports
Share & collaborate with Power BI for Office 365

BI Sites
Shared Queries
Data Refresh
Data Search
Mobile Access
Natural Language Questions

Ask questions of your data in natural language
Key Power BI components

Data

Connect & arrange

Reports & dashboard

Power BI: free (NFP pricing)
Power BI Pro: $4.10/user/month (NFP pricing)

Pie Charts
Line graphs
Histograms
Scatterplots
Tree maps

Waterfall
Funnel charts
Gauge charts
Cards
Geospatial
DEMONSTRATION
POWER BI TO EXPLORE YOUR OUTCOMES
Note: This demonstration uses ‘dummy’ data
# Specialist Housing Outcome Data

| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T |
| Person ID | Alpha Code | Given Name | Family Name | Sex | Note ID | Date | Worker | Stage | Completed | Motivation | Self Care | Managing | Social Net | Drug and | Physical | In Emotional | Meaningfulness | Managing | Offending |
| 1234 | LIND | Bill | Anderson | Male | 12198 | 20/09/2014 | Angela Percy | 0. Initial Assessment | 4 | 4 | 4 | 3 | 10 | 4 | 4 | 7 | 4 | 10 |
| 1234 | LIND | Bill | Anderson | Male | 12199 | 30/09/2014 | Angela Percy | 1st Review | 6 | 5 | 5 | 6 | 10 | 6 | 6 | 6 | 5 | 10 |
| 1234 | LIND | Bill | Anderson | Male | 13820 | 30/12/2014 | Gerard Park | 2nd Review | 2 | 3 | 5 | 4 | 4 | 5 | 6 | 7 | 6 | 6 |
| 1234 | LIND | Bill | Anderson | Male | 13821 | 31/12/2014 | Anthony Laurel | 3rd Review | 3 | 4 | 5 | 6 | 7 | 7 | 6 | 5 | 4 | 3 |
| 1234 | LIND | Bill | Anderson | Male | 13829 | 12/01/2015 | Gerard Park | 0. Initial Assessment | 4 | 4 | 5 | 6 | 6 | 6 | 5 | 5 | 6 | 6 |
| 1234 | ARRME | Gary | Armless | Male | 12880 | 3/12/2014 | Training Eleven | 1st Review | 7 | 5 | 7 | 5 | 7 | 7 | 6 | 7 | 8 | 6 |
| 1234 | ARRME | Gary | Armless | Male | 12837 | 3/12/2014 | Training Eleven | 0. Initial Assessment | 2 | 5 | 1 | 3 | 6 | 1 | 1 | 1 | 3 | 2 |
| 1183 | ROAG | Frodo | Baggins | Male | 15134 | 1/10/2015 | Training Eight | 0. Initial Assessment | 5 | 3 | 4 | 1 | 1 | 1 | 4 | 1 | 6 | 10 |
| 1183 | ROAG | Frodo | Baggins | Male | 15142 | 13/10/2015 | Training Eight | 1st Review | 7 | 5 | 3 | 4 | 7 | 5 | 5 | 3 | 3 | 3 |
| 1183 | ROAG | Frodo | Baggins | Male | 15143 | 13/10/2015 | Training Eight | 2nd Review Client | 7 | 7 | 5 | 5 | 3 | 3 | 7 | 7 | 5 | 3 |
| 1183 | ROAG | Frodo | Baggins | Male | 15145 | 13/10/2015 | Training Eight | 4. Ongoing Review | 10 | 9 | 9 | 9 | 8 | 7 | 6 | 5 | 5 | 5 |
| 1183 | ROAG | Frodo | Baggins | Male | 15144 | 13/10/2015 | Training Eight | 3rd Review | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 |
| 1430 | REAS | Fred | Bassett | Female | 13294 | 9/12/2014 | Training Ten | 1st Review | 4 | 8 | 5 | 8 | 3 | 7 | 4 | 5 | 4 | 5 |
| 1430 | REAS | Fred | Bassett | Female | 13300 | 9/12/2014 | Training Ten | 2nd Review | 9 | 6 | 6 | 5 | 5 | 5 | 7 | 6 | 5 | 6 |
| 1430 | REAS | Fred | Bassett | Female | 13286 | 9/12/2014 | Training Ten | 0. Initial Assessment | 5 | 7 | 3 | 7 | 5 | 7 | 5 | 4 | 5 | 6 |
| 2017 | ASE2 | Jasmine | Bean | Female | 14552 | 14/08/2015 | Angela Percy | 0. Initial Assessment | 8 | 6 | 6 | 7 | 6 | 5 | 6 | 3 | 4 | 2 |
| 2017 | ASE2 | Jasmine | Bean | Female | 14553 | 14/08/2015 | Angela Percy | 1st Review Client | 7 | 8 | 7 | 6 | 7 | 6 | 5 | 6 | 5 | 5 |
| 1363 | ARE2 | Barbara | Bear | Female | 13012 | 5/12/2014 | Training Two | 1st Review | 1 | 1 | 6 | 6 | 10 | 6 | 4 | 8 | 1 | 6 |
| 1363 | ARE2 | Barbara | Bear | Female | 12392 | 9/12/2014 | Training One | 2. Initial Assessment | 1 | 3 | 4 | 5 | 0 | 1 | 7 | 7 | 5 | 3 |
Tips when starting out

1. Start learning PowerBI using a dataset that
   1. You are familiar with
   2. Is easy to access

2. Success with Power BI requires buy-in from the executive and management. This is most effective when you are solving a real problem for them that causes difficulty – e.g.
   • Tracking contract targets
   • Understanding outcomes
   • Managing workload/caseload

3. Initially your data is likely to be dirty. Develop a strategy & monitoring to fix the solution at the ‘source’ – e.g. when the data is initially entered

4. If you need resources ($$, expertise, access to staff or commitment to clean up data), ask for it once you have built support for the program

5. If your systems or data is a mess, think very carefully about how to navigate the likely pitfalls

6. If you don’t have access your data, don’t assume this will be simple

7. It is easy to get lost in the analysis. Best to start with a hypothesis, or a question

8. Don’t be afraid to ask for help
If needed, Infoxchange can help with

» Developing a Power BI dashboard for your organisation
» Developing an information systems strategy
» Reporting on your activities, contract targets and outcomes
» Taking your business Intelligence & analytics environment to the next level
QUESTIONS AND DISCUSSION

Try Power BI at www.powerbi.com
Search YouTube for “PowerBI”
THANK YOU

PLEASE GET IN TOUCH

Marcus Harvey
Manager IT Services & Consulting
T 03 9418 7420
E mharvey@infoxchange.org

An Nguyen
Consultant
03 9452 6435
anguyen@infoxchange.org