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

“...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 they 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.

**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.

**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
- Attend... 77
- Employ... 29
- Resident... 110
- Respite 189
- Therapy 134

Gender
- Female 482
- Male 57

Age Range
- 10-19 20 30-39 40-49 50-59 60+ Unknown

Household Type
- Family - Other (27)
- Family - Couple with... 110
- Family - Lone P... 223
- Family - Couple without Chil...

Referral Source
- Self 475
- Police 64
- Family, fri... 48
- Medi... 37
- Co... 35
- Com... 34
- Centre A...

Funding Source
- DHHS 457
- DHHS - Better Pathw... 64

Outcome by Close Stage
- Goals reached fully 110
- Goals reached parti... 54
- Goals reached subst... 9 13 5
- No goals reached 22
- Not applicable - no ...
- Transferred to other agency

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

Year
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

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

Quickly create collaborative BI sites

Power BI
Featured reports
Top Countries/Regions
Average Daily Sales - Goal $2,800

Featured questions
Olympics Sample
Retailer Sales Sample

Documents
Shared with Everyone

Technology for social justice | www.infoxchange.org
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

Cloud

Power BI for Office 365
Workbook

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

Search for:
- Public Data
- Corporate Data
- Shared Queries

Maintain a data catalog of searchable data
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

[Image of chart showing medal count by sport for France and China as bar chart sorted by country]
Key Power BI components

Data Connect & arrange

Reports & dashboard

Dashboard

Report A Report B Report C

Dataset A Dataset B Dataset C

Pie Charts Line graphs Histograms Scatterplots Tree maps

Power BI: free (NFP pricing)
Power BI Pro: $4.10/user/month (NFP pricing)
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     |
|---|---------|-----------|-----|-------|-------|-----------|---------|-------|-------------------|-------|-----|-----|-----|-----|-------|-------|-------|-------|-------|-------|
| 1 | 1234 LNDR | Bill Anderson male | 12198 | 20/09/2014 | Angela Percy | 0. Initial Assessment | 4 | 4 | 4 | 10 | 4 | 4 | 7 | 4 | 10 |
| 2 | 1234 LNDR | Bill Anderson male | 12199 | 30/09/2014 | Angela Percy | 1st Review | 6 | 5 | 5 | 6 | 10 | 6 | 6 | 6 | 5 | 10 |
| 3 | 1234 LNDR | Bill Anderson male | 13820 | 30/12/2014 | Gerard Palk | 2nd Review | 2 | 3 | 5 | 4 | 4 | 5 | 6 | 7 | 6 | 6 |
| 4 | 1234 LNDR | Bill Anderson male | 13821 | 31/12/2014 | Anthony Laure | 3rd Review | 3 | 4 | 5 | 6 | 7 | 7 | 6 | 4 | 3 |
| 5 | 1234 LNDR | Bill Anderson male | 13829 | 12/01/2015 | Gerard Palk | 0. Initial At Client | 4 | 4 | 5 | 6 | 6 | 6 | 5 | 5 | 6 | 6 |
| 6 | 1334 ARREME | Gary Armless male | 12880 | 3/12/2014 | Training Elev | 1st Review | 7 | 5 | 7 | 5 | 7 | 6 | 7 | 8 | 1 |
| 7 | 1334 ARREME | Gary Armless male | 12837 | 3/12/2014 | Training Elev 0. Initial Assessment | 2 | 5 | 1 | 3 | 6 | 6 | 1 | 1 | 3 | 2 |
| 8 | 1183 ROAGI | Frodo Baggins male | 15134 | 1/10/2015 | Training Elev 0. Initial At Client and | 5 | 3 | 4 | 1 | 1 | 1 | 4 | 1 | 6 | 10 |
| 9 | 1183 ROAGI | Frodo Baggins male | 15142 | 13/10/2015 | Training Elev 1st Review | 7 | 5 | 3 | 4 | 7 | 5 | 5 | 3 | 6 |
| 10 | 1183 ROAGI | Frodo Baggins male | 15143 | 13/10/2015 | Training Elev 2nd Review | 7 | 7 | 5 | 5 | 3 | 3 | 7 | 7 | 5 | 3 |
| 11 | 1183 ROAGI | Frodo Baggins male | 15145 | 13/10/2015 | Training Elev 3rd Review | 10 | 9 | 9 | 9 | 8 | 7 | 6 | 5 | 5 | 5 |
| 12 | 1183 ROAGI | Frodo Baggins male | 15144 | 13/10/2015 | Training Elev 4. Ongoing Review | 10 | 9 | 9 | 9 | 8 | 7 | 6 | 5 | 5 | 5 |
| 13 | 1420 REASE | Fred Bassett female | 13294 | 9/12/2014 | Training Ten 1st Review | 4 | 8 | 5 | 8 | 3 | 7 | 4 | 5 | 4 | 5 |
| 14 | 1430 REASE | Fred Bassett female | 13300 | 9/12/2014 | Training Ten 2nd Review | 9 | 6 | 6 | 5 | 5 | 5 | 7 | 6 | 5 | 6 |
| 15 | 1430 REASE | Fred Bassett female | 13286 | 9/12/2014 | Training Ten 3rd Review | 5 | 7 | 3 | 7 | 5 | 7 | 5 | 4 | 5 | 6 |
| 16 | 2017 ASE2 | Jasmine Bean female | 14523 | 14/08/2015 | Angela Percy | 0. Initial At Client | 8 | 6 | 6 | 7 | 6 | 6 | 5 | 6 | 4 | 2 |
| 17 | 2017 ASE2 | Jasmine Bean female | 14553 | 14/08/2015 | Angela Percy | 1st Review | 7 | 8 | 7 | 6 | 7 | 6 | 5 | 5 | 6 | 5 |
| 18 | 1363 AREA2 | Barbra Bear female | 13012 | 5/12/2014 | Training Two 1st Review | 1 | 1 | 6 | 6 | 10 | 6 | 4 | 8 | 1 |
| 19 | 1363 AREA2 | Barbra Bear female | 13023 | 3/12/2014 | Training One 0. Initial Assessment | 5 | 2 | 6 | 8 | 7 | 7 | 3 | 2 | 9 |

- **A**: Person ID
- **B**: Alpha Code
- **C**: Given Name
- **D**: Family Name
- **E**: Sex
- **F**: Note ID
- **G**: Date
- **H**: Worker
- **I**: Stage
- **J**: Completed
- **K**: Motivation
- **L**: Self care
- **M**: Managing
- **N**: Social nets
- **O**: Drug and alcohol
- **P**: Physical health
- **Q**: Emotional
- **R**: Meaningful
- **S**: Managing
- **T**: Offending

#### Notes
- **Completed**: 0 indicates not completed, 1 indicates completed.
- **Motivation**, **Self care**, **Managing**, **Social nets**, **Drug and alcohol**, **Physical health**, **Emotional**, **Meaningful**, **Managing**, **Offending**: 0 indicates no concern, 1 indicates concern.
Tips when starting out

1. Start learning Power BI 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

Help us understand the non-profit technology landscape:
https://Infoxchange.org/digital-technology-not-profit-sector

Try Power BI at www.powerbi.com