Online inter-organisational relationships in the disability service sector

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Challenge

In order to ensure joined up disability support services, organisations need to collaborate.

*How do organisations collaborate?*

Approach

- In an online world, organisations host websites and use these for sharing information and connections.
- Hyperlinks between organisational websites may indicate organisational collaborations.
- Complement offline relationships.
Methods

• Web crawling and hyperlink analysis
  - Crawl the full website of seed websites for all outgoing hyperlinks
• Visualisation of network

Seed websites (100 random NDIS registered service providers)

• Geography: National, State, Local
• Type: Government, Private, NGO, Social enterprise, Advocacy NGO, Peak Body
• Sector: Disability, Health, Social Services, Aged Care, Community, Education, Finance, Housing, Recreation, Technology etc.
• Focus: Hospital and Health Services (HHS), Advocacy, Support services, Audiology, Occupational Therapy, Psychology, Medical supplies, Equipment etc.
Seed websites (100)

Composition by Type

Composition by Sector

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Seed websites (100) Types & Focus

- Support services: 10
- Support services: 2
- Independent statutory organisation implementing NDIS: 1
- Advocacy: 2
- Housing: 2
- Indigenous/Respite: 1
- Social Support: 3
- Equipment: 12
- Construction: 3
- Drug and Alcohol: 1
- Fitness: 1
- Home Cleaning: 3
- Maintenance: 2
- Medical supplies: 1
- Occupational Therapy: 3
- Optometry: 1
- Physiotherapy: 7
- Plan Management: 1
- Psychology: 9
- Allied Health: 1
- Construction: 3
- Drug and Alcohol: 1
- Fitness: 1
- Home Cleaning: 3
- Maintenance: 2
- Medical supplies: 1
- Occupational Therapy: 3
- Optometry: 1
- Physiotherapy: 7
- Plan Management: 1
- Psychology: 9
- Allied Health: 1
Visualisation - Overview

<table>
<thead>
<tr>
<th>Total Seed Website</th>
<th>Size</th>
<th>Edges</th>
<th>Density</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>6,113</td>
<td>9,298</td>
<td>0.000249</td>
</tr>
</tbody>
</table>
Inter-connection between websites and their sizes

Operation types (by Degree)

Max: Clickability 1417
Connections with NDIA

30/100 points to NDIA

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGO</td>
<td>10</td>
</tr>
<tr>
<td>Private</td>
<td>10</td>
</tr>
<tr>
<td>Government</td>
<td>7</td>
</tr>
<tr>
<td>Advocacy NGO</td>
<td>1</td>
</tr>
<tr>
<td>Peak Body</td>
<td>1</td>
</tr>
<tr>
<td>Social enterprise</td>
<td>1</td>
</tr>
</tbody>
</table>
NDIA only points to government/NGO/Peak Body/Advocacy NGO
Connections between Non-Government websites

E.g.
- QDN → NDS / Endeavour
- PWDA → QDN
- NDS → PWDA
- Clickability → Others
Important websites with In-Degree $\geq 30$
(meaning cited by others $\geq 30$ times, the total source number is 100)

Social Media plays an important role among online organisational networks
Next Steps

• Crawling 100 more randomly sampled NDIS registered service providers

• Analyse the network using social network metrics to identify centrality, importance, role of websites (hubs, authority)

• Use results to identify organisations for offline investigation
Thank you

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