

Data Analytics Team improve to PowerBI meeting

Problem we want to solve

Not enough accuracy

Data Sources not sync between SAcommunity & GA4

The data output from GA4 is wrong since GA4 Filter's were not working

Manual data correcting takes time

Final output missing session data

Variables

EXPLORATION NAME: Free form

Custom
Jul 5, 2023 - Jun 30, 2024

SEGMENTS +

- US
- Direct traffic
- Paid traffic
- Mobile traffic
- Tablet traffic

DIMENSIONS +

- Event name
- Gender
- Country
- Device category
- First user medium
- City
- Landing page + query

Settings

SHOW ROWS: 10

NESTED ROWS: No

COLUMNS: + Drop or select dimension

START COLUMN GROUP: 1

SHOW COLUMN GROUPS: 5

VALUES: Sessions

+ Drop or select metric

CELL TYPE: Bar chart

FILTERS: Landing page + query string contains 194720

+ Drop or select dimension or metric

Free form 1

	Landing page + query string	Council	Sessions
Totals			374
1	/org/194720-Police_Station_-_Marla		1
2	/org/194720-Police_Station_-_Marla	(data deleted)	22
3	/org/194720-Police_Station_-_Marla	(not set)	374
4	/org/194720-Police_Station_-_Marla	APY Lands	1
5	/org/194720-Police_Station_-_Marla	City of Playford	1
6	/org/194720-Police_Station_-_Marla	City of Whyalla	1
7	/org/194720-Police_Station_-_Marla	District Council of Tumby Bay	1
8	/org/194720-Police_Station_-_Marla	NT	1
9	/org/194720-Police_Station_-_Marla	Outback Communities Authority	369

This show the difference between the data output in **GA4 (369 sessions)** and the **actual value(374 sessions)**

Previous approach

Compare every datapoint for the proposed council with Google analytics data and verify with SAcommunity data.

Post correction, add omitted services form SAcommunity directory to create a excel for PowerBI.

Timeline for this entire process is usually more than a week to generate the final Power BI report.

Most time-consuming part in this process is filtering community service data which is not part of proposed council but included in the list.

Proposed Solution

Identify and combine all the data sources (SAcommunity/ GA4)

Automate Data cleaning to save time.

Have volunteers manually check SAcommunity and reflect any changes on the directory.

Develop a straightforward, documented pipeline for all future volunteers to follow.

The Difference : Was it worth it

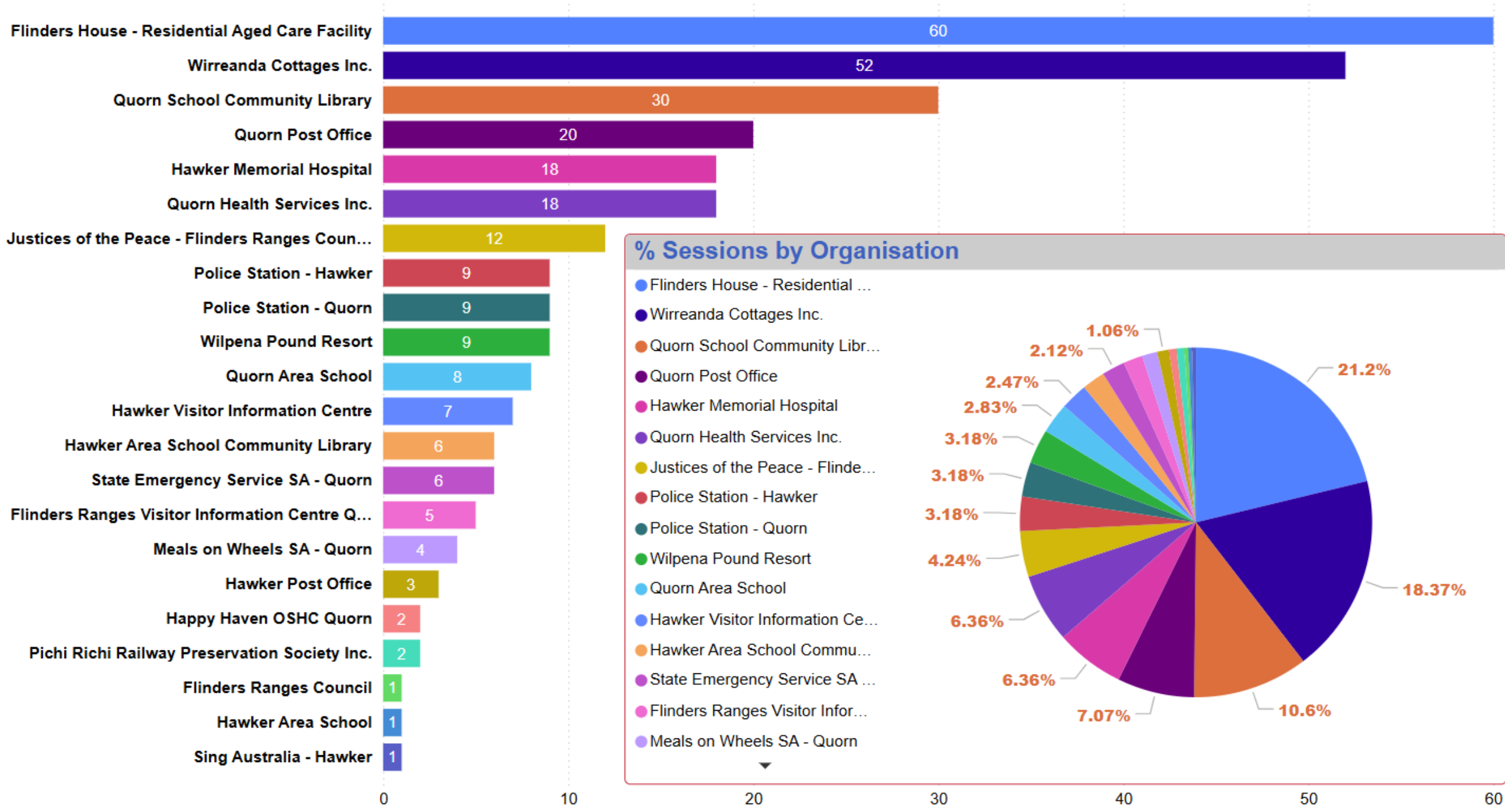
Old way : Relying on GA

Organisation Name	Sum of Sessions
Flinders House - Residential Aged Care Facility	60
Flinders Ranges Visitor Information Centre Quorn	5
Hawker Area School Community Library	6
Hawker Memorial Hospital	18
Hawker Visitor Information Centre	7
Justices of the Peace - Flinders Ranges Council	12
Police Station - Hawker	9
Police Station - Quorn	9
Quorn Area School	8
Quorn Health Services Inc.	18
Quorn Post Office	20
Quorn School Community Library	30
State Emergency Service SA - Quorn	6
Wilpena Pound Resort	9
Wirreanda Cottages Inc.	52
Total	269

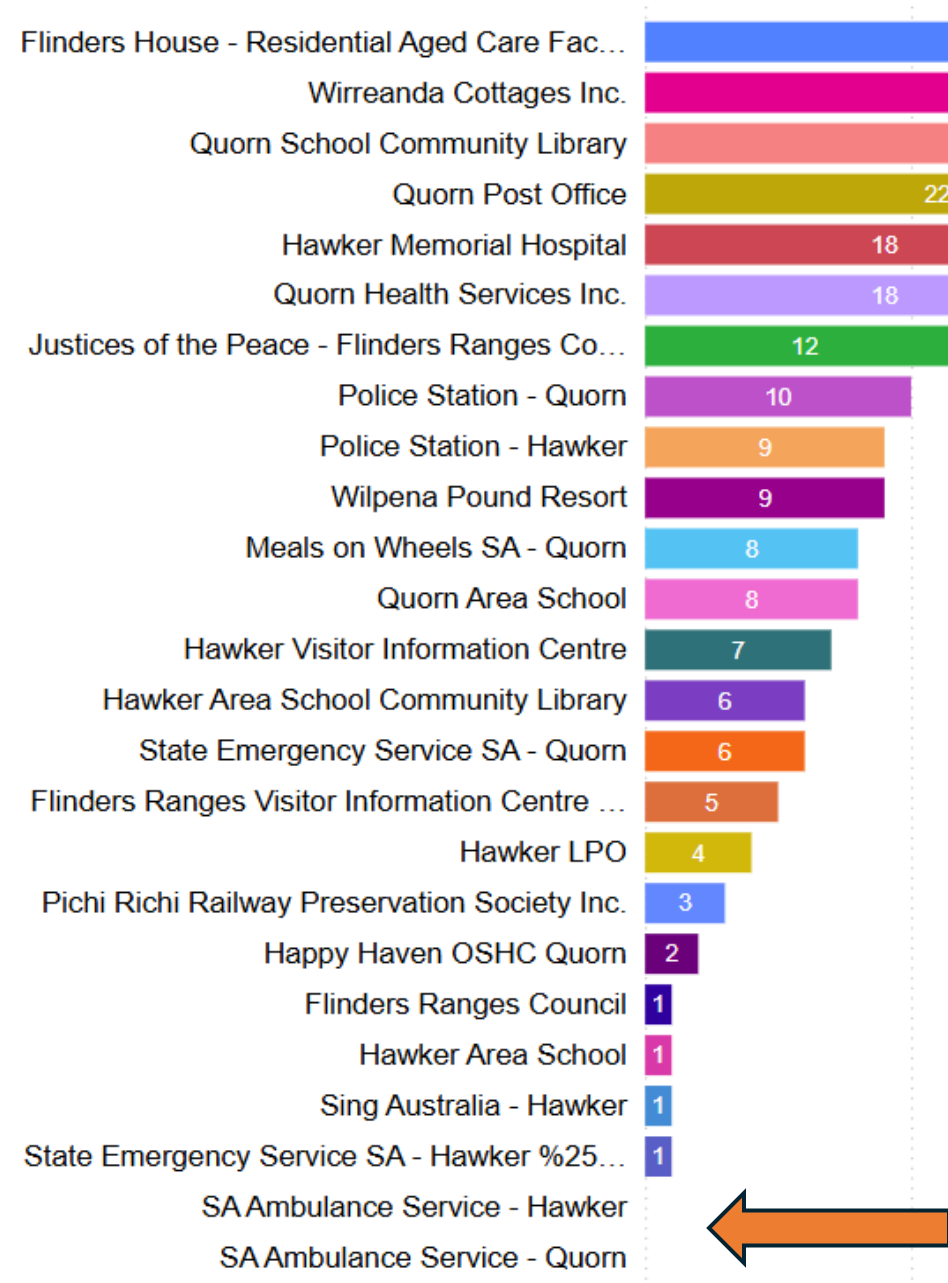
New way : Relying on Sa Community

Organisation Name	Sum of Sessions
Flinders House - Residential Aged Care Facility	62
Hawker Area School Community Library	6
Hawker Memorial Hospital	18
Hawker Visitor Information Centre	7
Justices of the Peace - Flinders Ranges Council	12
Meals on Wheels SA - Quorn	8
Police Station - Hawker	9
Police Station - Quorn	10
Quorn Area School	8
Quorn Health Services Inc.	18
Quorn Post Office	22
Quorn School Community Library	31
State Emergency Service SA - Quorn	6
Wilpena Pound Resort	9
Wirreanda Cottages Inc.	53
Total	279

Flinders Ranges Council - Sessions by Organisation (FY 2023-2024)

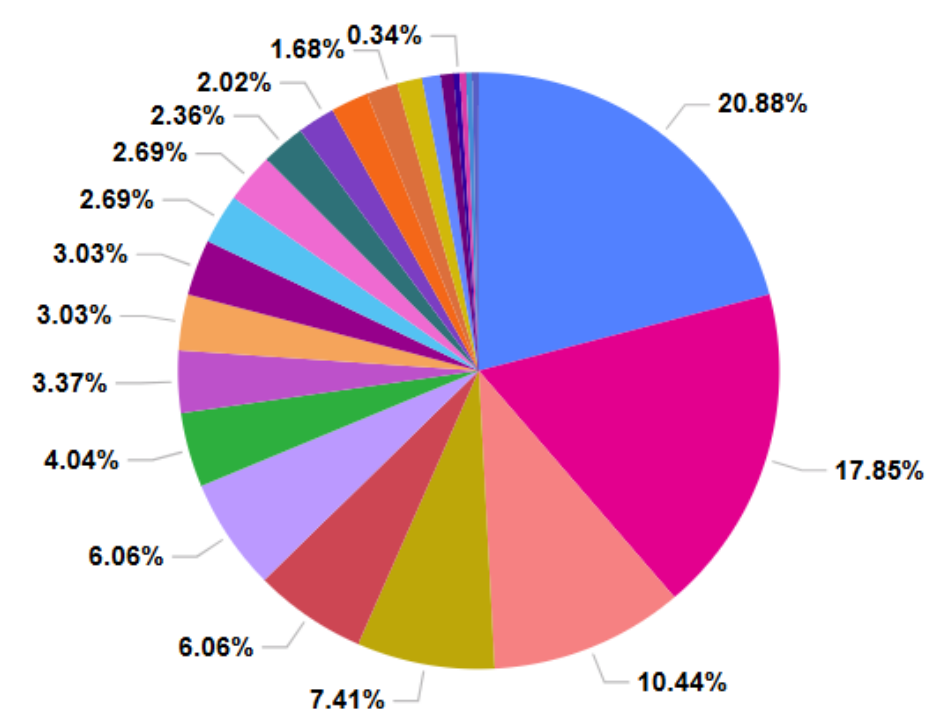


Sessions by Organization



% Sessions by Organization

- Flinders House - Residentia...
- Wirreanda Cottages Inc.
- Quorn School Community Li...
- Quorn Post Office
- Hawker Memorial Hospital
- Quorn Health Services Inc.
- Justices of the Peace - Flin...
- Police Station - Quorn
- Police Station - Hawker
- Wilpena Pound Resort
- Meals on Wheels SA - Quorn
- Quorn Area School
- Hawker Visitor Information ...
- Hawker Area School Comm...
- State Emergency Service S...



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After running the code, it shows 374 sessions instead of 369, which is correct.

Improvement



Efficiency & Speed



Consistency & Accuracy



Scalability



Repeatability



Complex Operations



Documentation & Traceability



Cost-Effectiveness

Program we have done

- Python code to combine the data from data.gov, CiviCRM and GA4 for council and federal electorate
- Python code to prepare the data for Canva

Next step

- Convert python program to executable file