Dataset Search Queries

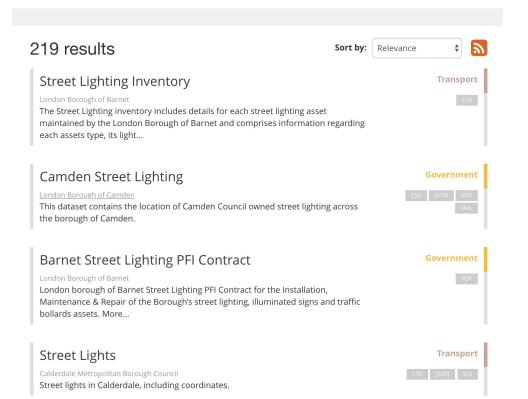
Southampton





Emilia Kacprzak @kacprzakemilia

Open Data Portals



- DCAT metadata
- Human generated metadata
- Search over description

Dataset Search

- Searching for dataset presents challenges
- Not the same user experience as we are used to in web search
- Unique search vertical (as e.g. publication or email search)
- More difficult to explore in comparison to textual sources

Experiment Design

4 Open Data portals:

- Data.gov.uk
- ONS
- Data.gov.ca
- data.gov.au

2 milion Portal Queries500 data request

500 crowd generated queries (based on selected 50 requests)

Data and Analysis

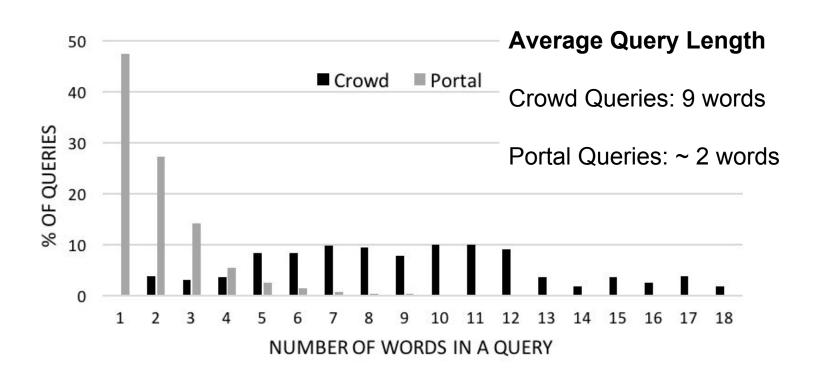
Portal Query:

Yorkshire 1986

Crowd Query:

Annual livestock numbers Yorkshire by parish 1986 onwards

Results - Query Length



Results - Query Types

	Portal Queries	Crowd Queries	
Geospatial	5%	36%	7x more
Temporal	7%	50%	7x more
File and dataset type	6%	50%	8x more
Number	5%	6%	
Only number	<1%	<1%	7.49% general
Question queries	<1%	9%	web search ¹

¹ Michael Bendersky and W. Bruce Croft. 2009. Analysis of Long Queries in a Large Scale Search Log. In Proceedings of the 2009 Workshop on Web Search Click Data. ACM, 8–14. https://doi.org/10.1145/1507509.1507511

Summary

- Portals currently do not respond well to longer queries
- Providing faceted search based on geospatial and temporal information
- Longer queries mean more complex information needs
- We need to rethink approaches to index and search through datasets

Thank you!

emilia.kacprzak@theodi.org

@kacprzakemilia

Data and Analysis

Data Request:

Request annual return data on total numbers of Sheep and Lambs and Cattle and Calves in the following two North Yorkshire parishes from 1986 to the latest available date: for Malham Moor Parish and for Buckden Parish