

Mid module survey

Some quick answers:

- “What to do in the assignment”: stories, using data journalism techniques
- “What to use to get data”: revisit wk2 on sources/search techniques + ask
- “Don’t enjoy numbers”: look for motivations (e.g. topics, datasets)
- Relevant “only to assignment”: 😊



Google Trends

Compare



bbl

Search term



sculptra

Search term



liposuction

Search term

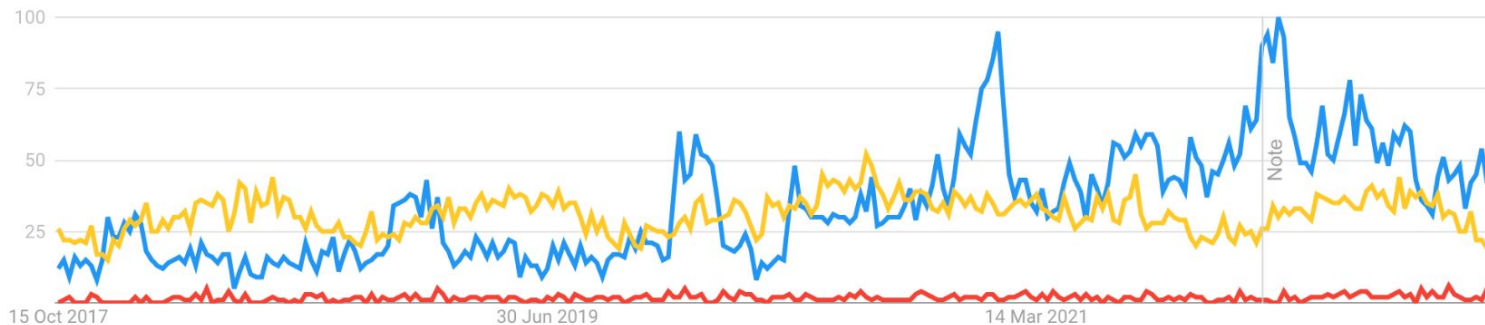
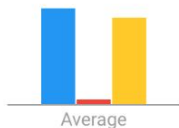
+ Add comparison

United Kingdom ▼

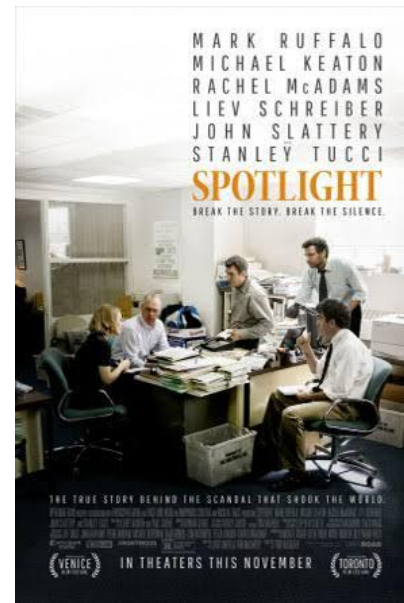
Past 5 years ▼

Useful data source:
Google Trends

Interest over time ?

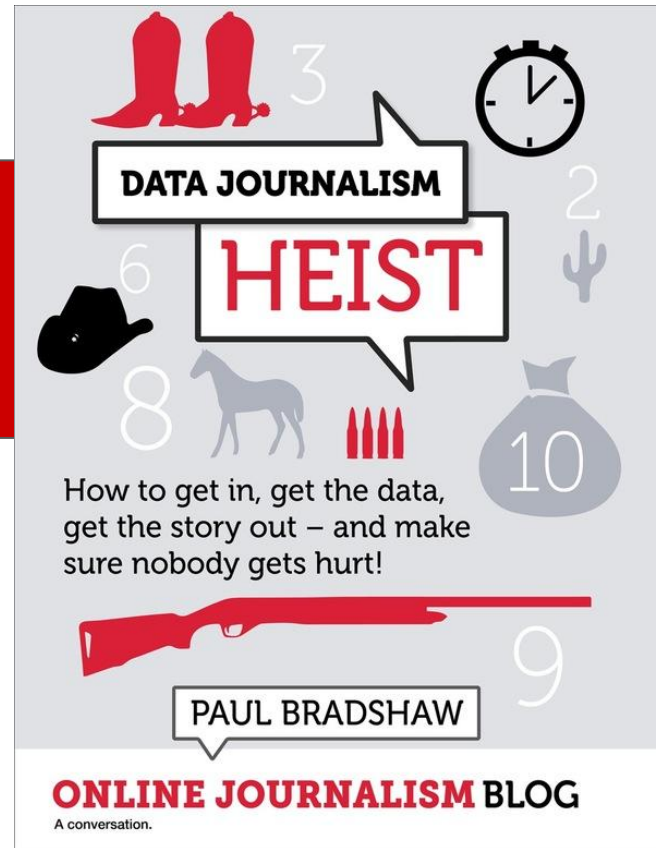


<https://trends.google.com/trends/explore?date=today%205-y&geo=GB&q=bbl,sculptra,liposuction>



Workshop: sorting

You will need it!



Free copy for BCU students!

leanpub.com/DataJournalismHeist/c/bcustudents

By the end you will:

- Have sorted to find story leads
- Have filtered to find story leads
- Have calculated a percentage to...
well, you get it by now.

Most learning takes place when you're
experimenting + **exploring**, so
don't stop when you're 'finished'

*Try: different angles, challenges,
calculations*

Challenge 1 (sorting):

- Download gender pay gap data
- Which company has the biggest gender pay gap?

[gender-pay-gap.service.gov.uk/
viewing/download](https://gender-pay-gap.service.gov.uk/viewing/download)

Use notes on Moodle:

Data journalism's 3 chords

Here's a quick activity to get to grips with data journalism's '3 chords': sorting, filtering, and calculating percentages (change and proportions).

With just those 3 tools you can find and tell the most basic data journalism stories: who's top and bottom; what's changed; and what's of interest. And the good news is that two of them require no maths at all.

Some data to play with

First, you'll need some data to try out these techniques. Here are 3 useful datasets I'll refer to:

- [Gender pay gap data](#)
- [Stop and search data](#) (tick *West Midlands* and *Include stop and search data*). There's a [GitHub repo for the data used in a story on Birmingham Eastside](#) which you can use too - this has totals for two months that can be compared.
- [Local authority spending above £500 \(Birmingham\)](#) (the most recent release is at the bottom)
- [European Investment Bank: projects financed database](#) (conduct a search and there will be a link to download the data)
- [Oscar winners](#) (click the download button in the upper right corner)

Each has its own qualities that are useful to talk through as you work with the data and consider stories.

	A	B	C	D	E	F
1	EmployerName	Address	CompanyNumber	SicCodes	DiffMeanHourlyPercent	DiffMedianHourlyPercent
2	23.5 DEGREES LIM	Unit 3	8014079	56103	10	0
3	ABACUS HOTELS	White Lion	3101431	55100	37.8	3.5
4	Abbeyfield Wale	Pagefield		87100,	21.9	7.6
5	ABERDEEN JOUR	Lang	SC015256	18110,	15.7	13.3
6	ACEGOLD LIMITE	Norcliffe	3484784	86900	-5.1	2
7	ADAPT BUSINESS	Canolfan	6805468	81229	3.3	0
8	ADDITIONS (U.K.	Coach	1945425	78200	0	0
9	ADECCO UK LIMI	Millennium	593232	78200	-7.8	-3.2
10	ALLIANCE CARE (Norcliffe	3691542	86900	-0.8	0.3
11	ALLIANCE CLEAN	Unit 5,	3596969	81299	2	0
12	ALLIANCE MEDIC	Iceni	2128897	86101,	21	23
13	AMVALE MEDICA	Unit 1, C/D	4502825	82990	7	0
14	APETITO LIMITE	Canal Road,	233851	10850	18	13.2

What next?

- This is a lead — not a story
- What can you do next to turn it into a story?

Challenge 2 (sorting + filters):

- Which Birmingham company has the biggest gender pay gap?
- Which football team has the smallest gender pay gap?

Challenge 3 (proportions):

- **How many Birmingham companies pay men more than women?**
- **What is that as a proportion of all Birmingham companies?**

What next?

- Stress-test the story idea: is it what you think it is?
- Play devil's advocate: does the data actually say what you think it does?
- Is there anything about the data you don't understand as well as you'd like

Challenge 4 (calculating change):

- **How many Birmingham companies paid men more than women in the previous year?
(You'll need last year's data)**
- **What is that as a percentage change?**

Challenge 5 (pivot tables):

- **How many people stopped and searched by police were not white?**

Download: data.police.uk/data

- **What is that as a percentage?**

Challenge 6 (pivot tables):

- Which sectors in Birmingham are getting more arts funding?
Download: [Arts Council 2023-26 Investment Programme: Data](#)
- What are the proportions?

How to

change

Count
to Sum



Row Labels	Count of Sales
Beverages	117
Condiments	117
Confections	144
Dairy Products	114
Grains/Cereals	64
Meat/Poultry	69
Produce	57
Seafood	115
Grand Total	897

PIVOT TABLE

How to

add a

Percentage
column



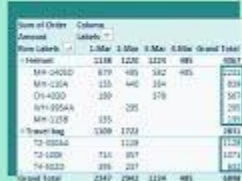
Row Labels	Sum of Order Amount	Percent of Order Total	Percent of Region Total
Beverages	\$68,576.00	7.6%	27.7%
Condiments	\$68,576.00	7.6%	27.7%
Confections	\$84,710.40	9.5%	33.9%
Dairy Products	\$68,576.00	7.6%	27.7%
Grains/Cereals	\$34,288.00	3.8%	13.9%
Meat/Poultry	\$34,288.00	3.8%	13.9%
Produce	\$25,716.00	2.9%	10.4%
Seafood	\$68,576.00	7.6%	27.7%
Grand Total	\$900,000.00	100.0%	100.0%

PIVOT TABLE

How to

sort by

VALUES



Row Labels	Sum of Order
1-Mar	1118
1-Apr	879
1-May	485
1-Jun	440
1-Jul	378
1-Aug	295
1-Sep	135
1-Oct	1309
1-Nov	1733
1-Dec	1109
1-Jan	715
1-Feb	807
Grand Total	2342

PIVOT TABLE

How to

show

Year

comparison



Row Labels	2000	2001	2002	Grand Total
Jan	418	425	418	1261
Feb	378	378	378	1134
Mar	238	238	238	714
Apr	418	418	418	1261
May	418	418	418	1261
Jun	418	418	418	1261
Jul	418	418	418	1261
Aug	418	418	418	1261
Sep	418	418	418	1261
Oct	418	418	418	1261
Nov	418	418	418	1261
Dec	418	418	418	1261
Grand Total	1261	1261	1261	3843

PIVOT TABLE

What next?

- Do you need other data to put this into context?
- What different stories can you tell with that?

Key points to remember

- Practise these skills on a range of datasets
- Discuss problems and challenges - the skill isn't 'spreadsheets', it's problem solving
- Think critically about what the data can and cannot tell you: don't make claims you can't prove

Reading & directed study:

- [Finding Stories in Spreadsheets](#) (use the link for the FREE copy for BCU students) chapters 1-4
- Spend 4 hours doing the tasks in that book and using the techniques from that and last week's reading

“The most important piece of technology on my desk is my landline **telephone**. I think some people have the idea that “data journalism” means staring at spreadsheets until a story magically appears, but in the real world that almost never happens. The best stories almost always emerge from talking to **people**, whether they are experts or just ordinary people affected by the issues we write about. **They’re the ones who pose the questions** that data can help answer, **or who help explain** the trends that the data reveals, or **who can provide the wrinkles and nuances** that the data glosses over.”

[Ben Casselman, New York Times](#)