



HM Revenue
& Customs

Recognition of Citizen's Voice with Social Media

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A Listening Organisation

- Macnamara (2016) has issued a list of criteria for organisations wishing to adhere to the maxim of being a listening organisation.
- It is acknowledged within Her Majesty's Revenue and Customs (HMRC) that it is some way short of meeting those criteria – despite pockets of good practice.
- Part of the strategy within HMRC is that by moving to digital and utilising advances in technology and software in particular that they will be a listening organisation.



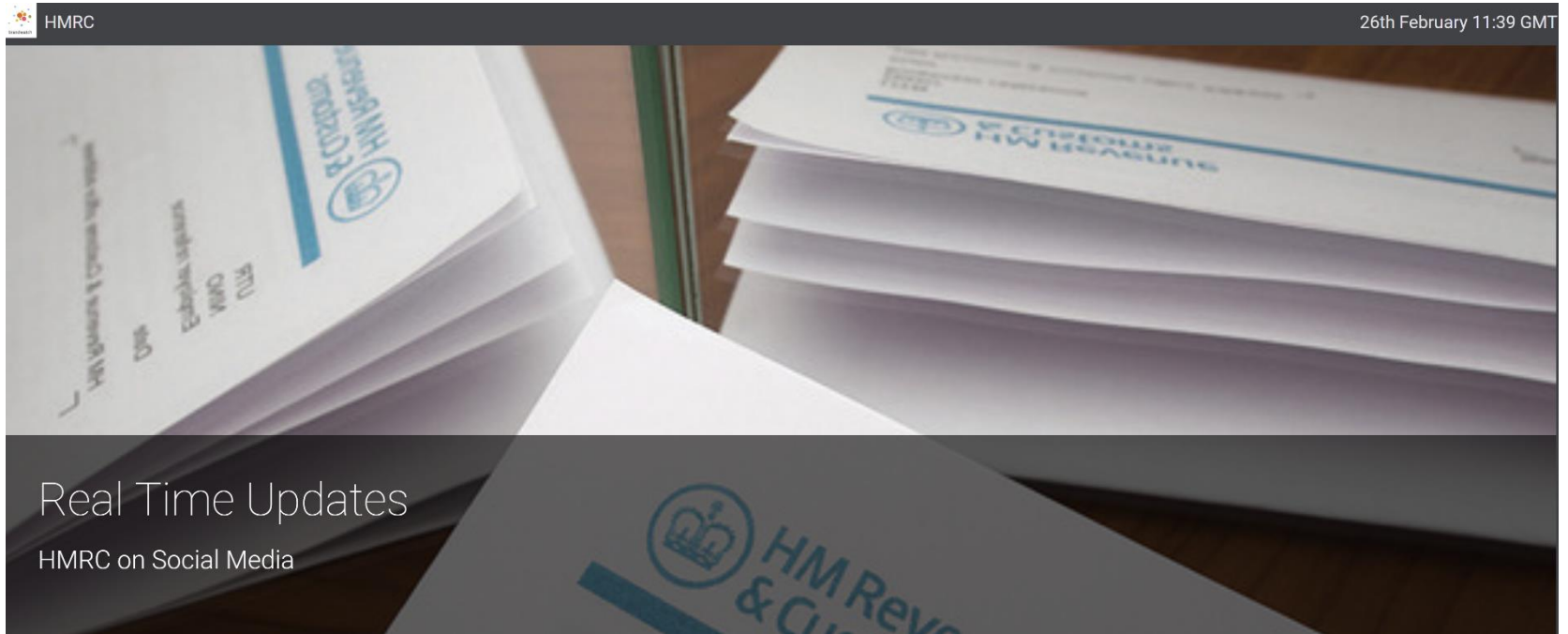
- HMRC are trying to address the identified 'crisis of listening' within the organisation in the hope of regaining trust and re-engaging people whose voices are unheard or ignored.
- HMRC in doing so understands that urgent attention to organisational listening is essential for maintaining governance, democracy, organisational legitimacy, business sustainability, and social equity.
- The department is attempting to use data, to procure software tools, implement processes and change the culture in order to act on the insights generated by the data.



- So there is an acknowledgement that the solution to the ‘crisis of listening’ is more than a technological one.
- A core aspect of overcoming this crisis is the implementation of ‘real-time’ listening capability.
- A key component of ‘real-time’ listening is the monitoring and response to social media interactions between HMRC representatives and citizens/customers of HMRC services.



Listening to Social Media



<https://vizia.brandwatch.com/?displayId=500011819&sceneIndex=1>



HM Revenue
& Customs

- Keeping up to date with the latest social media customer trends to ensure communications remain **current and engaging**
- What **data** is relevant and can help direct future **strategy** when it comes to **analysing social media** results and proving the ROI?



- Do something different! Taking advantage of innovative new platform features and creative content ideas to deliver high performing communications on the right platform for your **audience and objectives**
- Getting a **goals-oriented strategy** in place to ensure you're not just using social media platforms for the sake of it but that there are real, demonstrable benefits of investing time and resources
- **What's next for social media analytics?** A look to the future: what are the changes to affect communications?



Context is King

- We are witnessing the 2nd 'Big' Data Revolution
- People are waking up to surveillance and the end of privacy
- 'Fake' News or misinformation and social media
- Cambridge Analytica and the militarisation of data analytics
- There are calls from within academic research groups for data ethics and a Hippocratic Oath for data scientists.
- General Data Protection Regulation (GDPR).



“The ugly truth here is that much of “big [social] data” is plucked from our lives without our knowledge or informed consent. It is the fruit of a rich array of surveillance practices designed to be invisible and undetectable as we make our way across the virtual and real worlds.”
(Zuboff, 2016)



Calculated Data People

- Current social media analytics generates crude quantitative knowledge, or “calculated publics”.
- Interpreting the dashboard generated by social media analytics platforms require human perception.
- Requires wider knowledge of context and debates surrounding the topic, brand, theme or campaign at hand.
- Analytic platforms are creating public problems and controversies.



Defined, managed, and governed

- Social data is not a population in its totality, but the *various ways in which that population is defined, managed, and governed*.
- It is denaturalising and unfamiliar – but not objective, unbiased or neutral.



Sample of Analytics Dashboards



HMRC Review of 2017

HMRC and Social Media



Key Insights

HMRC Master | Jan 01, 2017 - Dec 31, 2017

Total Mentions

3M

▲ 148%

Previous Period: 1M

Unique Authors

438K

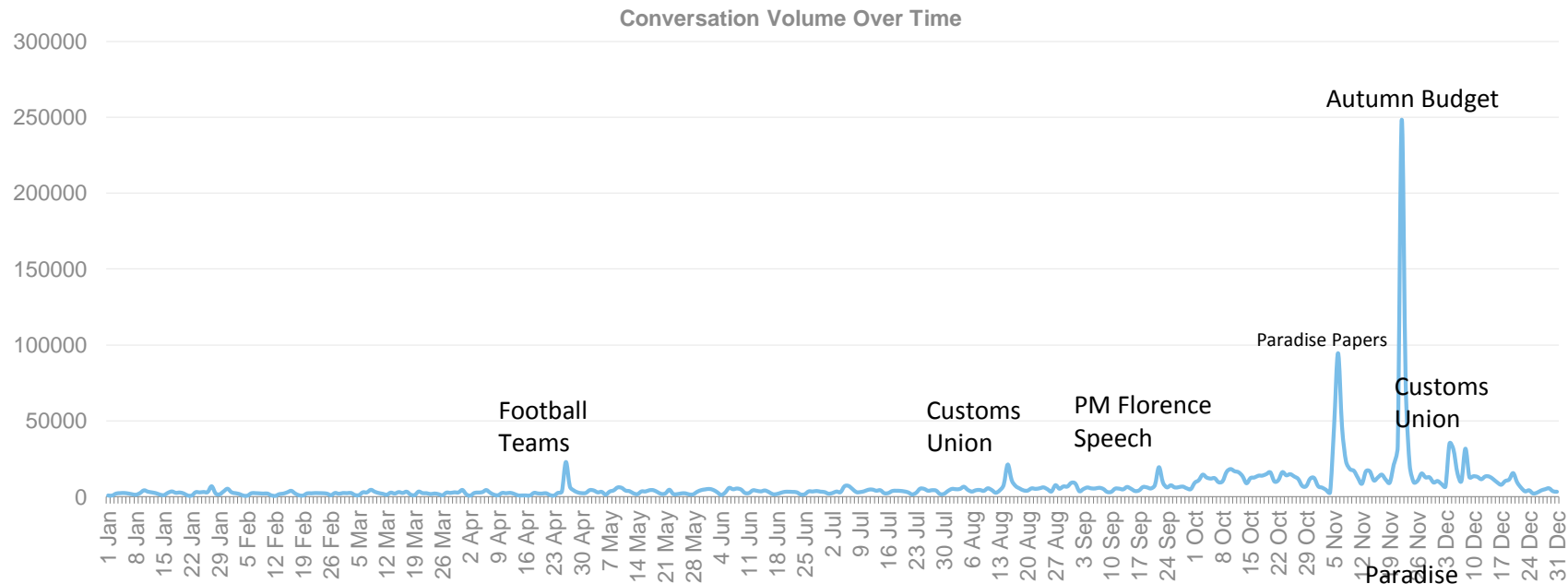
▲ 60%

Previous Period: 275K

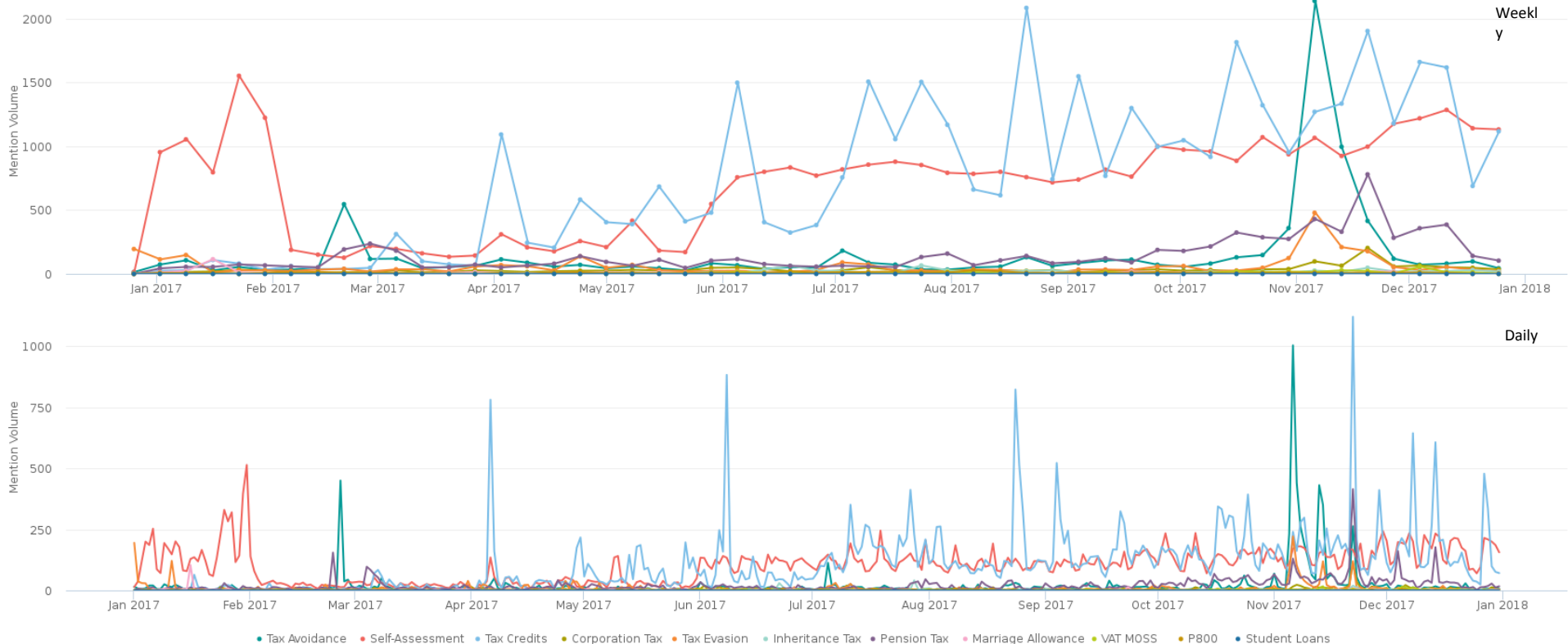


Conversation Volume Over Time

HMRC Master | Jan 01, 2017 - Dec 31, 2017



Services Comparison



Mentions & Search

HMRC Master | Jan 01, 2017 - Dec 31, 2017



Public Sector Jobs @PublicSector_Wk | 31st Dec 2017

#PublicSectorJobs #PublicSector #Jobs Developer / Senior Developer - Public Sector (inside IR35): Exeter - Developer / Senior Developer - Business Transformation - Public Sector (inside IR35) On behalf... of a... dlvr.it/Q8MvK1 For More...
(((GrandmaH))) @grandmah_hilda | 31st Dec 2017



RT @freespirited_p: Did you know that since 2010, the #Conservatives have slashed tax bills for 31 Million people? A typical tax payer now pays £1000 less tax, than they did under the last @UKLabour government.
#BecauseOfTories #TeamTory...
sprouts @disgust_me | 31st Dec 2017



CC users get shit on.. Credit card fees ban backfires as consumers face new 'service charges' and higher prices' | via @telegraph
telegraph.co.uk/news/2017/12/3...



Iris Benson MBE @irisebenson100 | 31st Dec 2017

RT @saralivadeas: Thank you lovely social care workers everywhere making sure older people have a great new year 🍷🌟
pic.twitter.com/LJ0fU1q6dq



taxationweb.co.uk www.taxationweb.co.uk | 31st Dec 2017

Carrying back gift aid and late tax return - Tax Forum :: Free Tax Advice If I am late submitting my tax return, is the deadline for carrying back charitable gifts 31 Jan or the date the return was submitted? (I'm trying to decide whether...
Doug Varley @djvarley | 31st Dec 2017



RT @KWOLP: Donate to the Waterloo Provincial Liberal Association (PLA) by midnight tonight to receive up to 75% back in 2017 tax credits. For example, a \$25 donation costs you only \$6.25 after tax credits. Please donate here:...



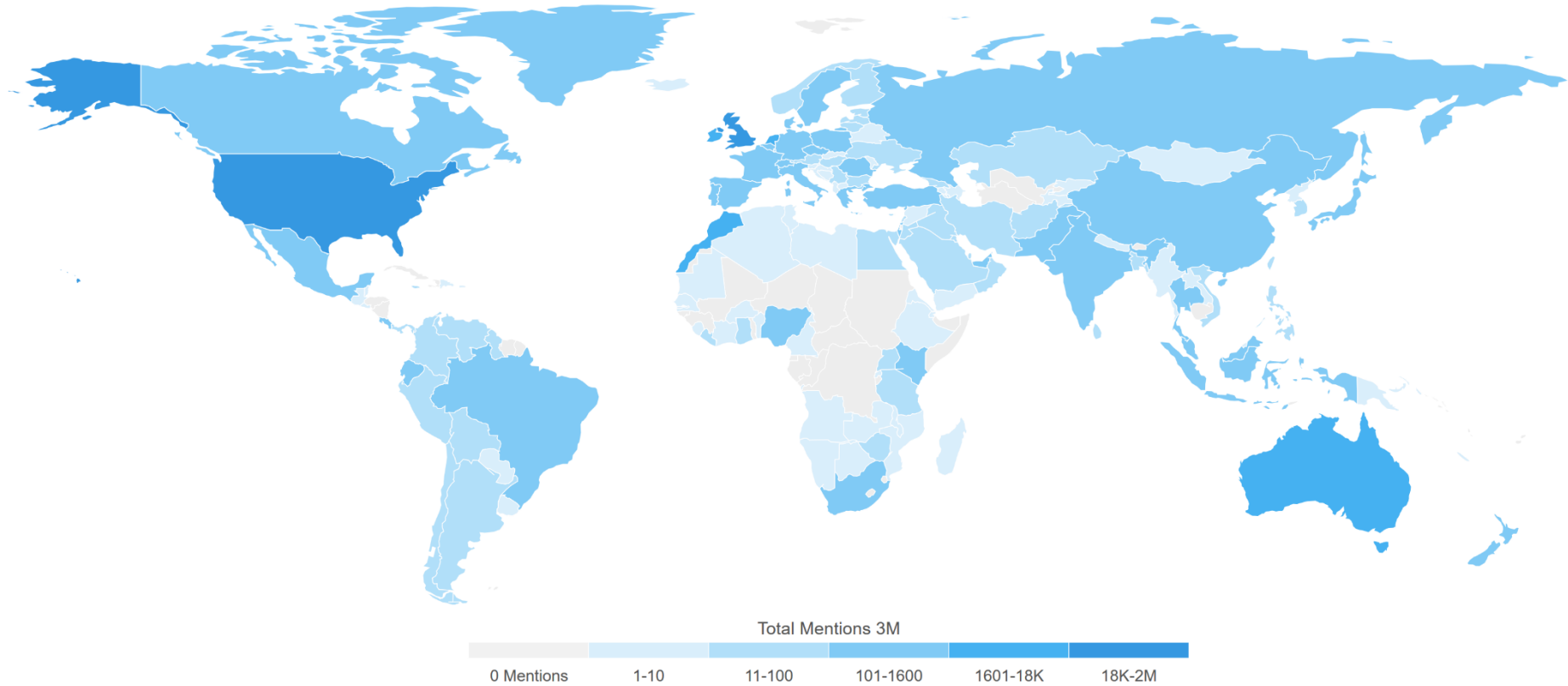
Toni @ToniCooper29 | 31st Dec 2017



RT @Panopticon6: #bbcnews crack down on benefit fraud by gangs announced. But massive problem of corporations & elites not paying their taxes passes by without comment.What about the bailout Adonis says was given to stagecoach/virgin...
Stuart Canning @StuartC93 | 31st Dec 2017

@EimhearLibNI Free Trade Abolished Stamp Duty Building On The Green Belt





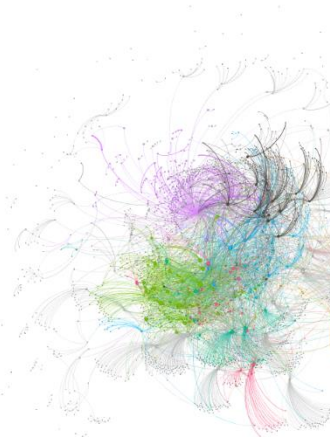
🔍

Columns ▼

	MENTIONS 🔍				IMPACT 🔍	SITE RANKING 🔍		SITE VISITORS 🔍			LOCATION
SITE NAME	MENTIONS ▼	POS	NEG	NEU	TOTAL	🏠 MOZRANK	BACKLINKS	VISITORS/MONTH	AVG. TIME (MIN)	TOP AUTHORS ▼	
twitter.com	2285903	107353	167895	2010655	100	9.6	49850734	6000000000	20	@HMRCcustomers ▼	United Kingdom
forums.moneysavingexpert.com	18046	702	784	16560	98	5.99	1417	6000000	9	00ec25 ▼	United Kingdom
www.reddit.com	8225	403	588	7234	98	0	0	0	0	AutoNewspaperAdmin ▼	United Kingdom
www.tripadvisor.co.uk	6447	659	110	5678	97	7.49	841706	0	0	Catjlyn ▼	United Kingdom
www.instagram.com	5336	1124	169	4043	98	8.92	905362	0	0	fagyshop ▼	United States
www.dailymail.co.uk	4291	226	334	3731	98	7.59	76679	110000000	11	Reuters ▼	United Kingdom
www.careerboard.com	3516	151	18	3347	94	0	0	0	0	n/a	n/a
www.express.co.uk	3168	131	216	2821	85	6.86	24424	1900000	5	n/a	United Kingdom
www.reed.co.uk	3012	384	7	2621	81	5.87	4727	6400000	9	n/a	United Kingdom
www.youtube.com	2728	113	71	2544	75	9.31	18555890	100000000000	23	buysilver247365 ▼	United Kingdom
Total for top sites	2340672	111246	170192	2059234			70260939	106124300000	77		



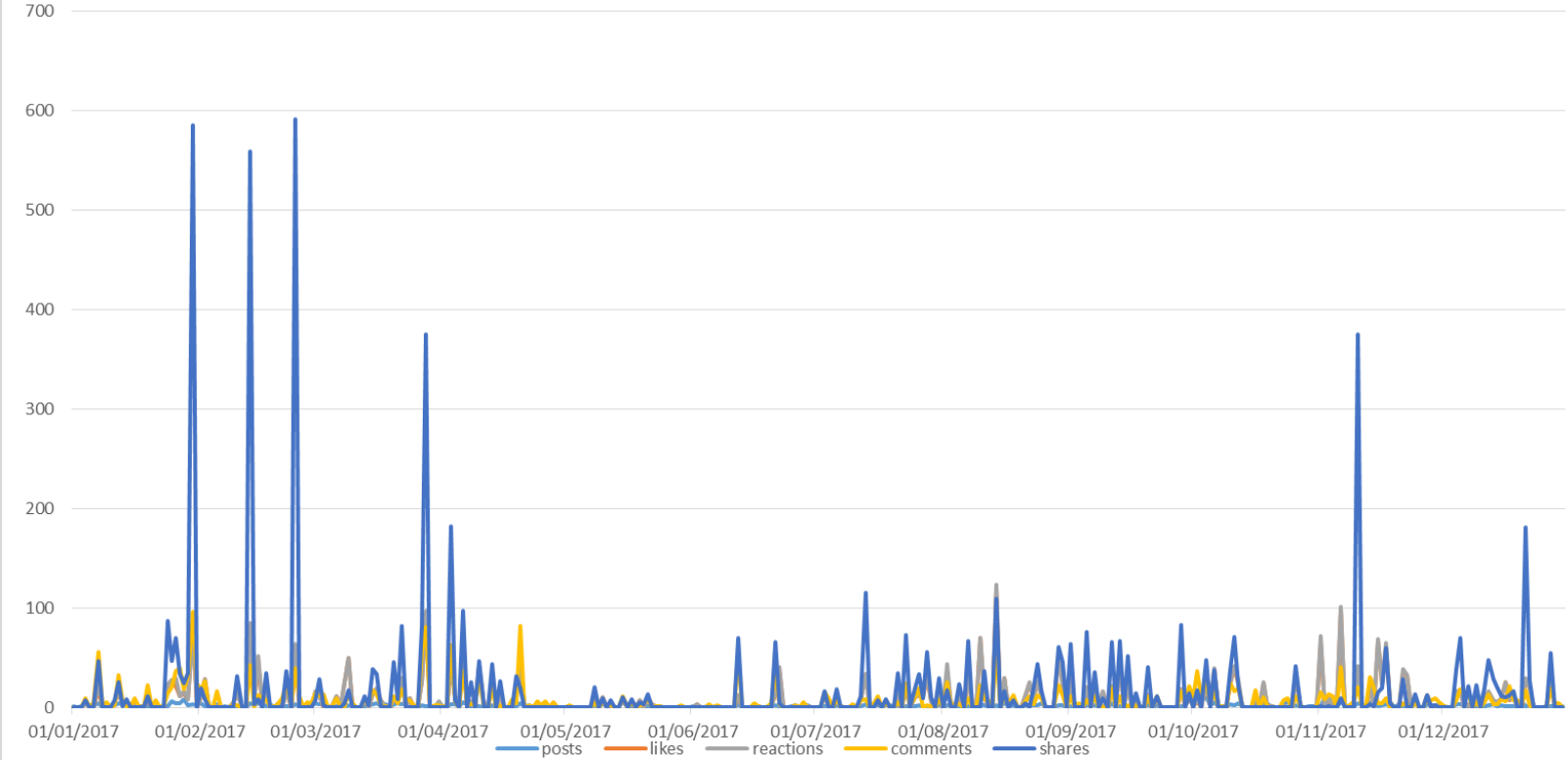
HMRC Facebook Page by Engagement



Label	timeset	type	type_post	like_count	comment_count	reactions_count	engagement	post_published
Be careful you don't get caught out by fraudsters who have been trying to con their victims into purchasing		post	photo	52	37	64	692	2017-02-24T18:20:38+0000
Beware of any scams pretending to be from HMRC. There is a new scam going round so please take care of you		post	photo	81	42	84	685	2017-02-13T18:31:01+0000
Beware of any scams pretending to be from HMRC that try to bully you into giving your details away. There is a		post	photo	59	29	60	631	2017-01-30T17:35:01+0000
Calling all working parents! Childcare Choices brings together all the government childcare offers for the first ti		post	photo	93	81	97	553	2017-03-28T15:00:12+0000
3867ba5f3b62559512eb35122f3fb80ba154b68e		user	user	1	472	1	473	
We continue to receive reports of this iTunes vouchers scam which particularly targets the elderly and vulnera		post	photo	35	13	36	424	2017-11-10T17:52:00+0000
Ever wanted to see how we're cracking down on tax dodging? Tune into tonight's Catching the Tax Dod		post	link	117	56	122	287	2017-08-14T12:48:00+0000
Stay safe this Christmas against the scam involving iTunes gift cards. There's been over 1 500 reports of frai		post	photo	29	18	30	229	2017-12-21T14:06:00+0000
Have you ever wondered why our tax year begins on 6 April?		post	photo	51	20	58	175	2017-04-06T10:34:00+0000
HMRC will never ask for any outstanding debts to be paid with iTunes vouchers. If you receive a suspicious cold		post	link	29	6	30	164	2017-04-03T16:54:00+0000
If you're married or in a civil partnership you could be eligible for Marriage Allowance. If one of you earns l		post	photo	27	55	27	164	2017-03-27T15:59:00+0000
2c327ede270ab3e4d466fa7a3d4bc508d7200917		user	user	144	0	144	144	
Tax Facts is a great way to teach young people all about tax. If you're a teacher of youngsters aged betwee		post	link	49	23	51	135	2017-08-29T15:39:00+0000
We're continuing to send out tax credits renewals packs all throughout June. You can renew your tax credits on		post	photo	12	50	12	132	2017-06-12T11:09:00+0000
Are you a parent? Want to know what government support there is to help with childcare costs? Then why not		post	video	30	19	30	131	2017-03-22T10:12:00+0000
Ahead of BBC Children in Need tonight there was a special visitor to one of HMRC's offices this week! Don't f		post	video	59	7	63	130	2017-11-17T14:56:00+0000
The Self Assessment deadline is tomorrow at midnight. Make sure you file on time - we're happy to help you.		post	photo	20	67	20	130	2017-01-30T11:02:00+0000
Have you heard of Junior Tax Facts? Junior Tax Facts is a fun and interesting way to teach youngsters about		post	link	49	12	50	129	2017-09-13T14:22:12+0000
Have you recently been charged after using a tax rebate agent? BBC One's Rip off Britain investigates why s		post	link	37	17	38	126	2017-10-11T16:55:00+0000
It's the final countdown! The deadline to file your Self Assessment is a week today. Do yours now www.gov		post	photo	23	15	24	126	2017-01-24T10:55:00+0000



Facebook Engagement Overtime



Linkedin – National and Global Audience



HMRC Topics in Real Time

HMRC Reputation - Topics

HMRC Master

Last 6 hours



+ Add tag

View

Export

Filters



- They are fictions.
- The modelling algorithms know nothing about letters, words, sentences, nothing about narrative form, nothing about meaning, nothing about politics.



- The algorithms lack knowledge of semantic meaning, and lack knowledge of the social media as a form or genre, algorithms point us to a very warped or skewed model of our customers.
- Social analytic tools and platforms are engaged in the datafication of the social in 'social media'.
- **Datafication** is an attempt to describe a certain state of affairs, as it occurs in one moment as static or representative, it flattens the human lived experience.



- Data, particularly that which is derived from huge conglomerate sources, is becoming increasingly a material or source for driving questions for and informing design practice.
- Decisions and policies introduced as a result of metrics derived through social media data represent a partial and non-representative sample.
- They do not accurately or adequately represent how people engage with and experience the social media world or our services.



- What is worrying is that planners, strategists, designers, developers, and policy makers take social media data as an object or representation of a truth that can be extracted from and that reflects their audience or costumers.
- However - these various ways are not neutral or objective.



- Social media visualisation dashboards have there place.
- As social media analysts we need to do something different.



What is to be done?



Get critical of social media research platforms and dashboards

- Realise that certain demographics within the population are not as vocal on social media platforms as a result of financial and other constraints.
- Place social, ethical, and political concerns at the core of your strategies.



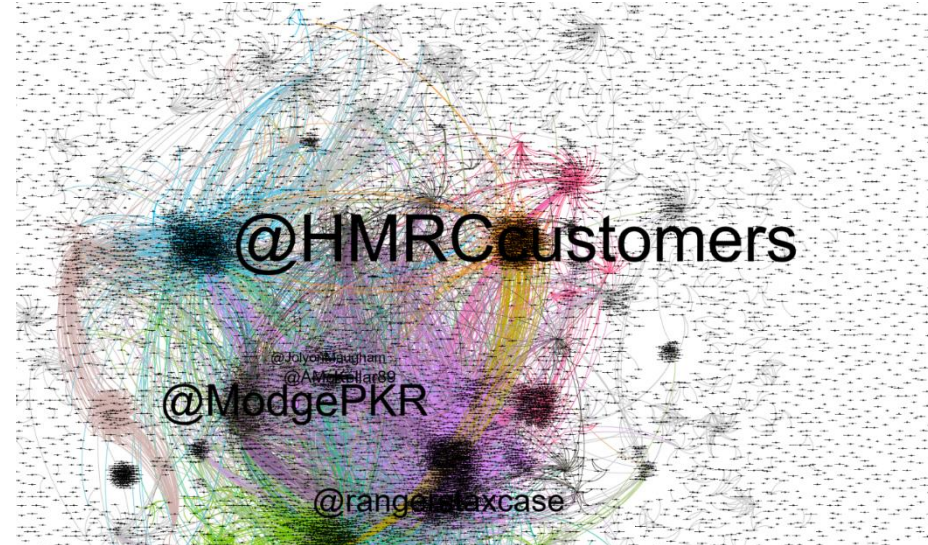
What **data** is relevant and can help direct future **strategy** when it comes to **analysing social media** results and proving the ROI?

- Get data that isn't solely dependent on visualisations created by social media analytic black boxes.
- Set clear aims and build analytics into the iterative process of customer fronting teams.
- Constantly checking what is and is not working and altering strategy according to results of ongoing research.
- Viewing the relationship between your product, brand or service and the consumer, influencer and public as in constant flux.



Do something different! Taking advantage of innovative new platform features and creative content ideas to deliver high performing communications on the right platform for your **audience and objectives**

- Know your audience directly.
- Not as a percentage point generated by an algorithm
- Know them quantitatively and qualitatively.
- Know them as a mass – as a group and as individuals.
- See your audience as groups and therefore subject to group dynamics.



Getting a **goals-oriented strategy** in place to ensure you're not just using social media platforms for the sake of it but that there are real, demonstrable benefits of investing time and resources

- Research and analyse strategies that claim to have worked.
- Cambridge Analytica and the US elections.
- But with ethical, social and political concerns at the core of the goal-orientated strategy.



What's next for social media analytics? A look to the future: what are the changes to affect brand communications?

- Getting at qualitative insights...
- “Netnography” is ethnography adapted to the study of online communities or groups.
- Netnography is faster, simpler, and less expensive than traditional ethnography, and more naturalistic and unobtrusive than focus groups or interviews.
- The human perspective is key.



The Digital Data Future...

- Getting the data directly.
- Opening up of data silos within organisations and pooling analytic resources.
- Smartphones are the number one tool for accessing online social media platforms.
- Smartphone data in the hands of computer scientists, programmers and coders will only exacerbate the problem of datafication.
- Removing the social media analysis platforms from the data collection process.



Qualitative Analysis and Social Media (QASM)

Listening to what people say to us
and what they say about us



QASM

- To present qualitative analysis to drive data-rich decision making and evidence based strategy to improve HMRC Digital Services



QASM

- Socially Intelligent Research
- Listening to what people say to us and what they say about us
- An inquiry into the motivations behind customer behaviour
- Using Computer Aided Qualitative Data Analysis Software to help organise, manage and turn data into wisdom
- Focused on understanding, insights, meanings, and values
- Trying to get at the 'why' of human behaviour

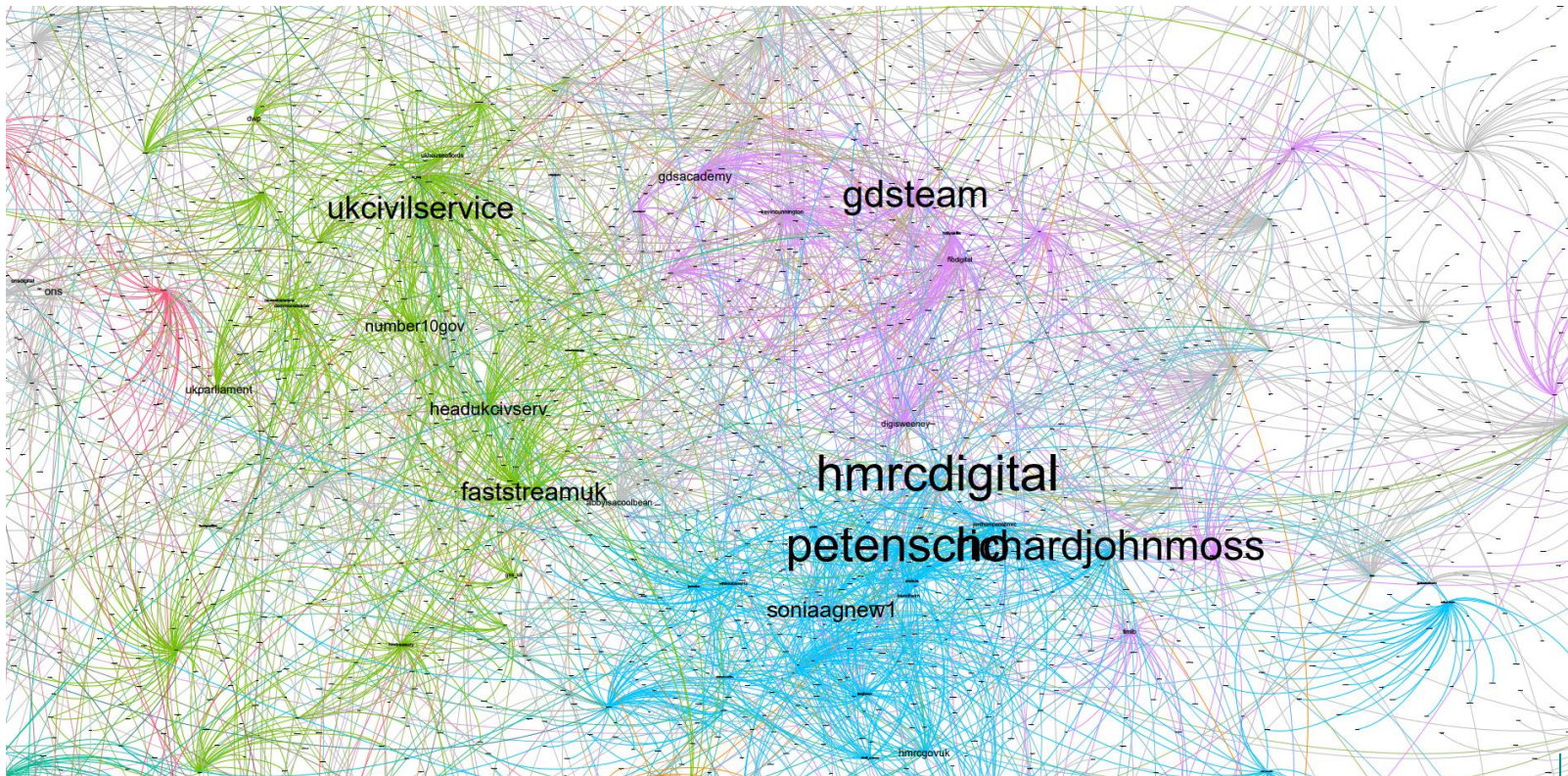


Computer Aided Qualitative Data Analysis Software

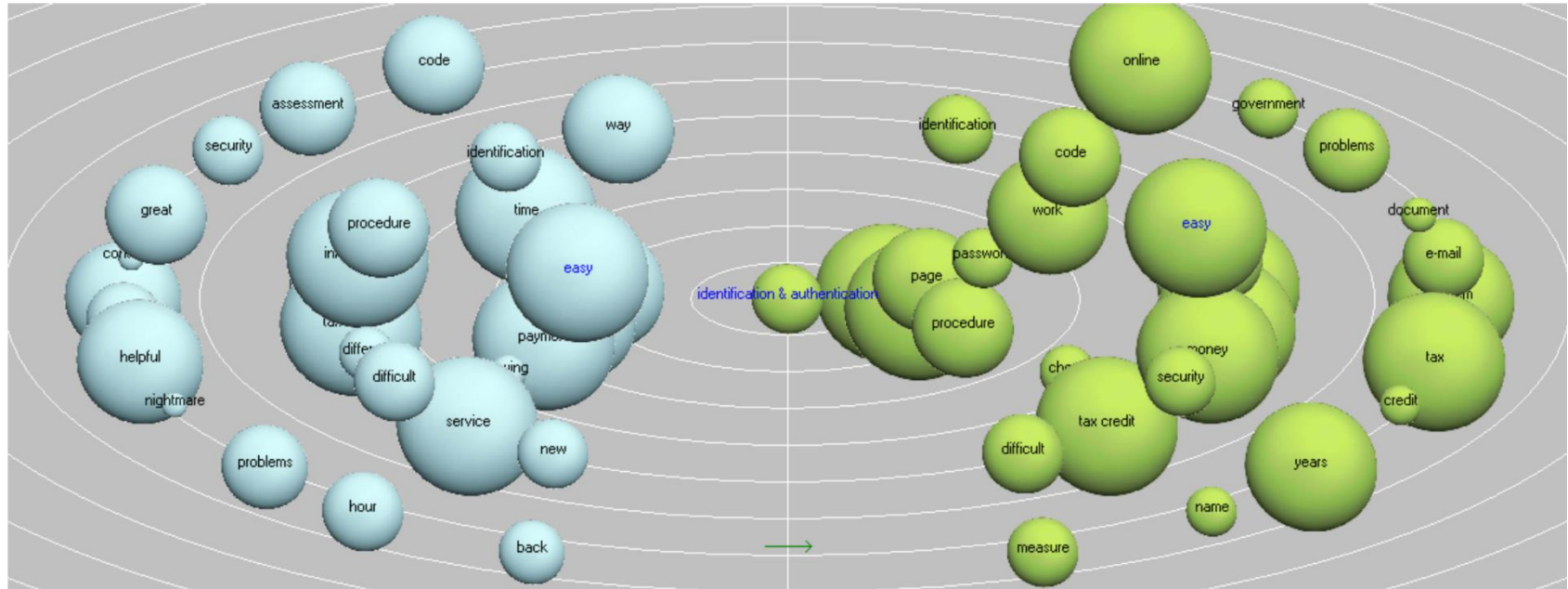
- Brandwatch – Social Media Visualisation
- Vizia – Social Media Displaying
- Hootsuite – Social Media Monitoring
- Coosto – Social Media Displaying
- Leximancer – Semantic Network Analysis and Cognitive Analysis using Machine Learning
- Tropes – Natural Language Processing
- Gephi – Social Network Analysis and Graph Visualisation
- UCINET – Network and Graph Analysis
- Pajek – Massive Network Analysis
- Neo4j – Multi-Dimensional Social Network Analysis
- QDAminer – Thematic Analysis, Naïve Bayesian Analysis
- DMI-TCAT – Twitter Collection
- Survey Monkey – Survey data collection



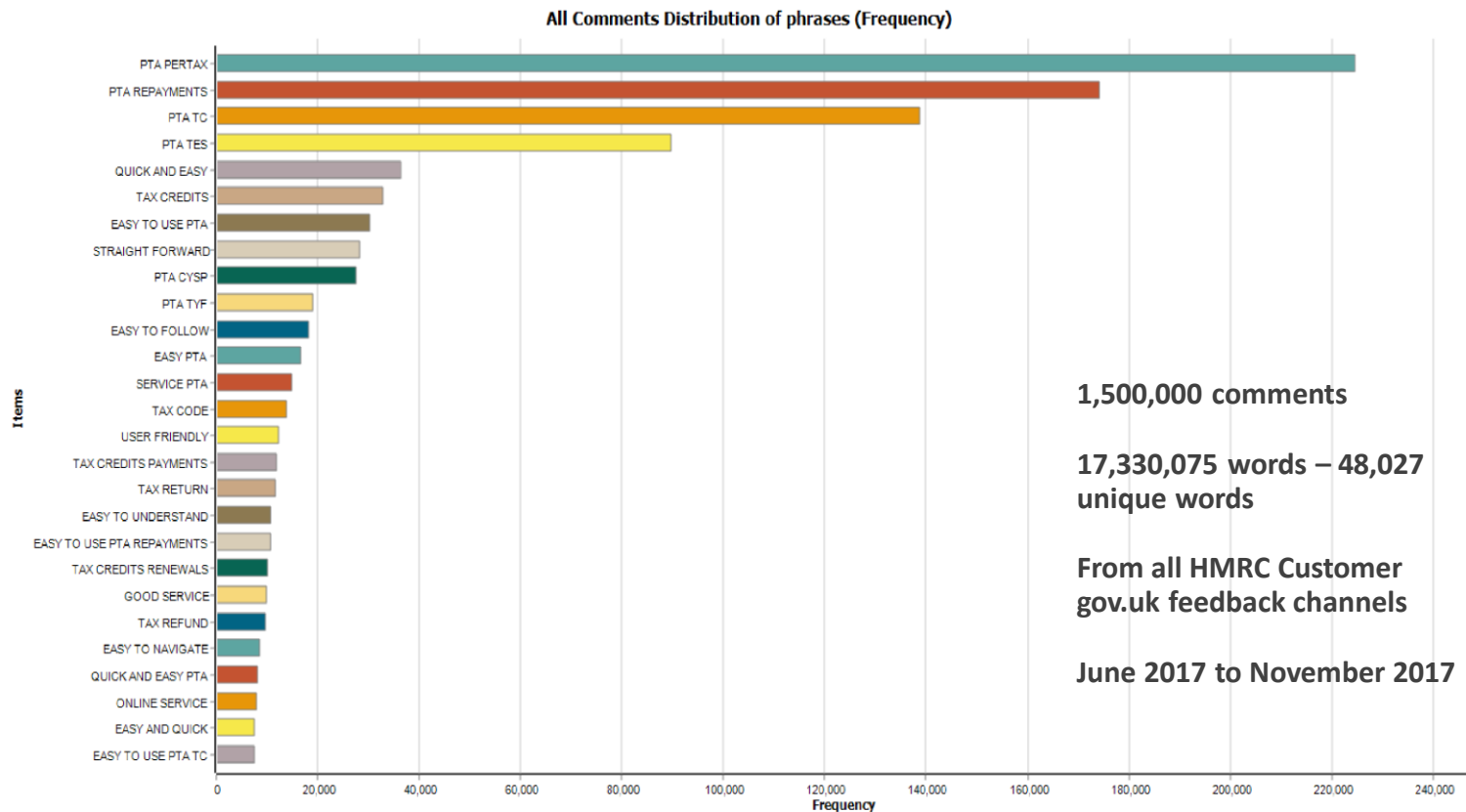
Finding Small Patterns in Big Data



Analysis of Unstructured Customer Services Feedback



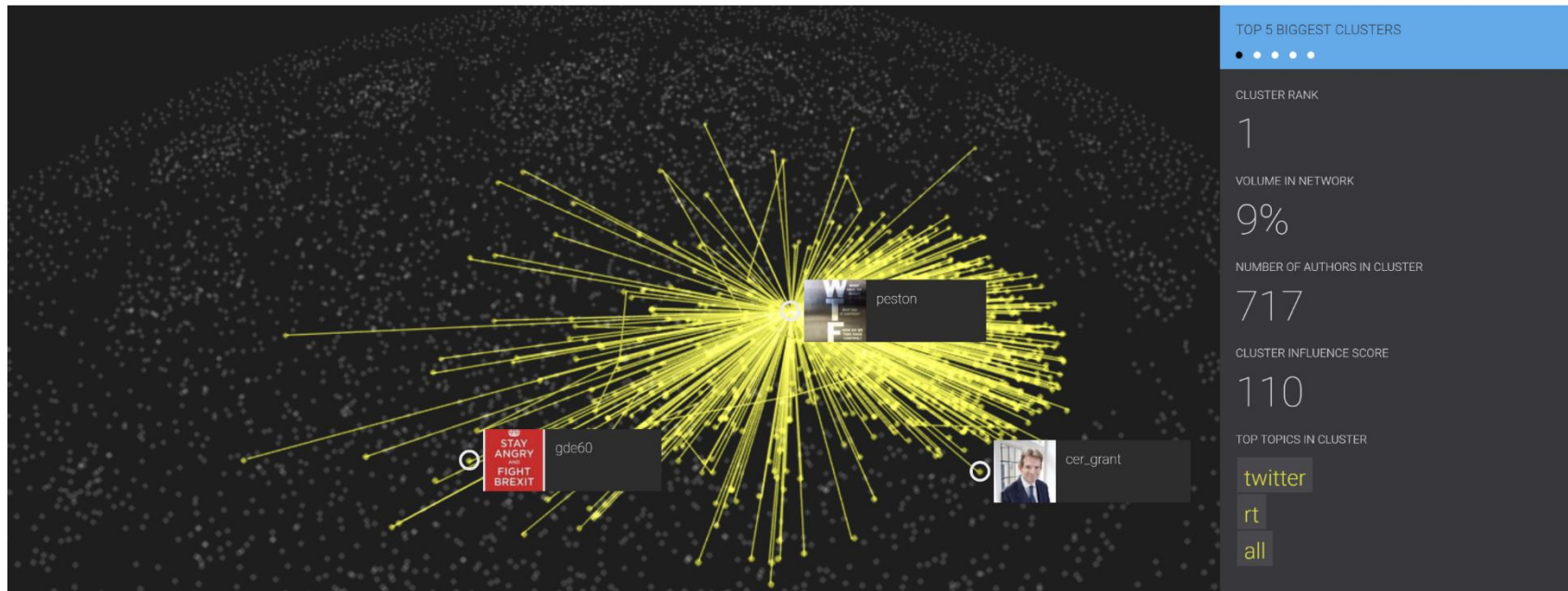
QASM - Case Study



Real Time Dissemination of Social Media Analysis

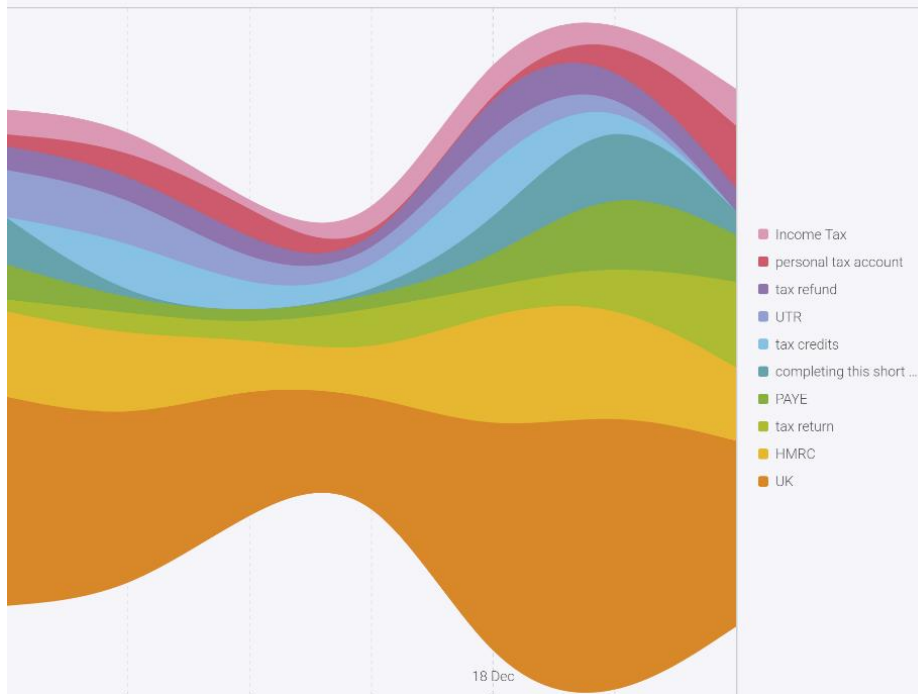
 HMRC Social Network

20th December 15:11 GMT



HMRC Customers Topics

Last 7 days



HMRC Customers Mentions Stream

HMRCcustomers
@HMRCcustomers



@zalvera Hi Sara, the P45 is sent to you by the employer and not by HMRC. Please see the following link for information on this: gov.uk/payee-forms-p45.... ^NH

4 minutes ago

HMRCcustomers
@HMRCcustomers

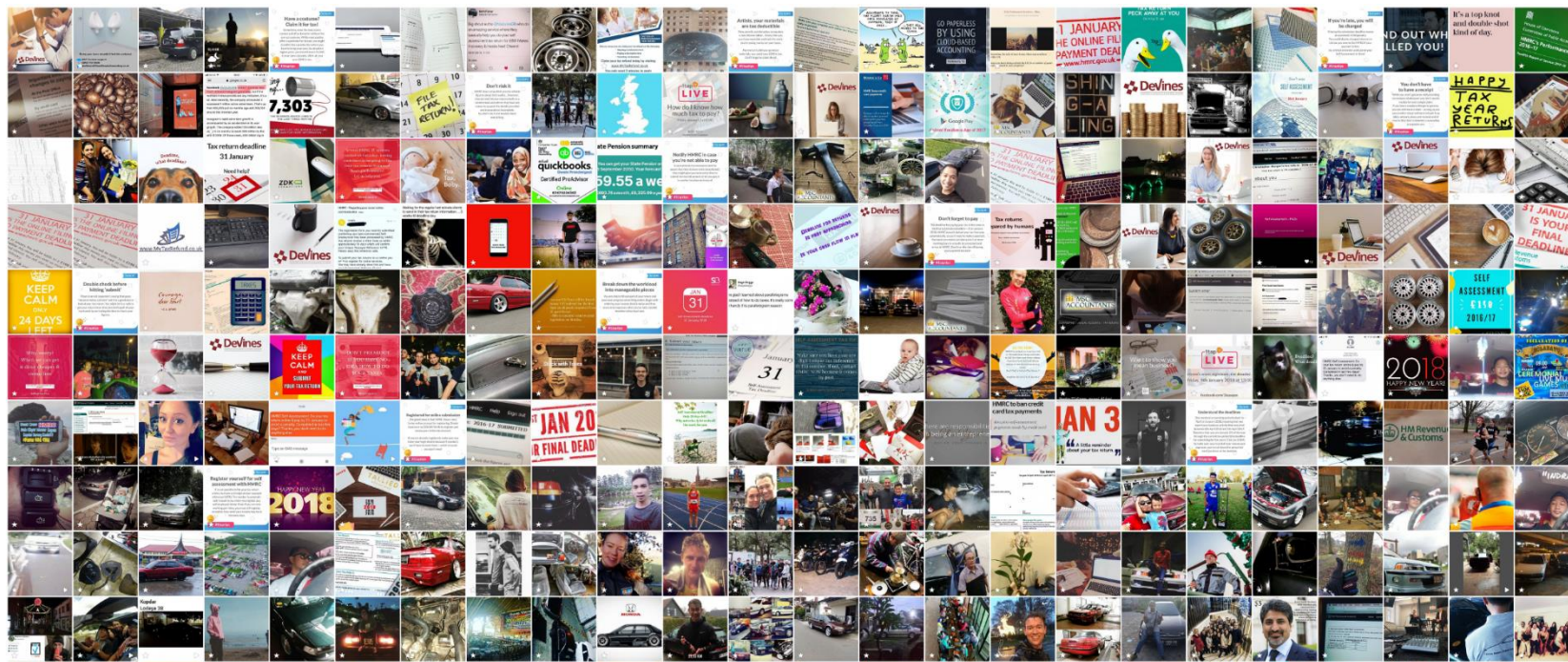


@Kazie0000 Yes Karen, if you wish to write a letter you can send it to the postal address shown on the previous link. Alternatively, you can also use webchat. ^RM

5 minutes ago



Instagram Images



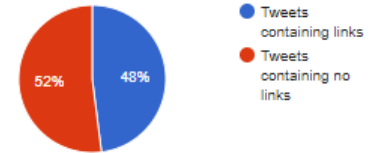
Qualitative Analysis Sept 2017

Twitter



Introduction – Limited Test Case

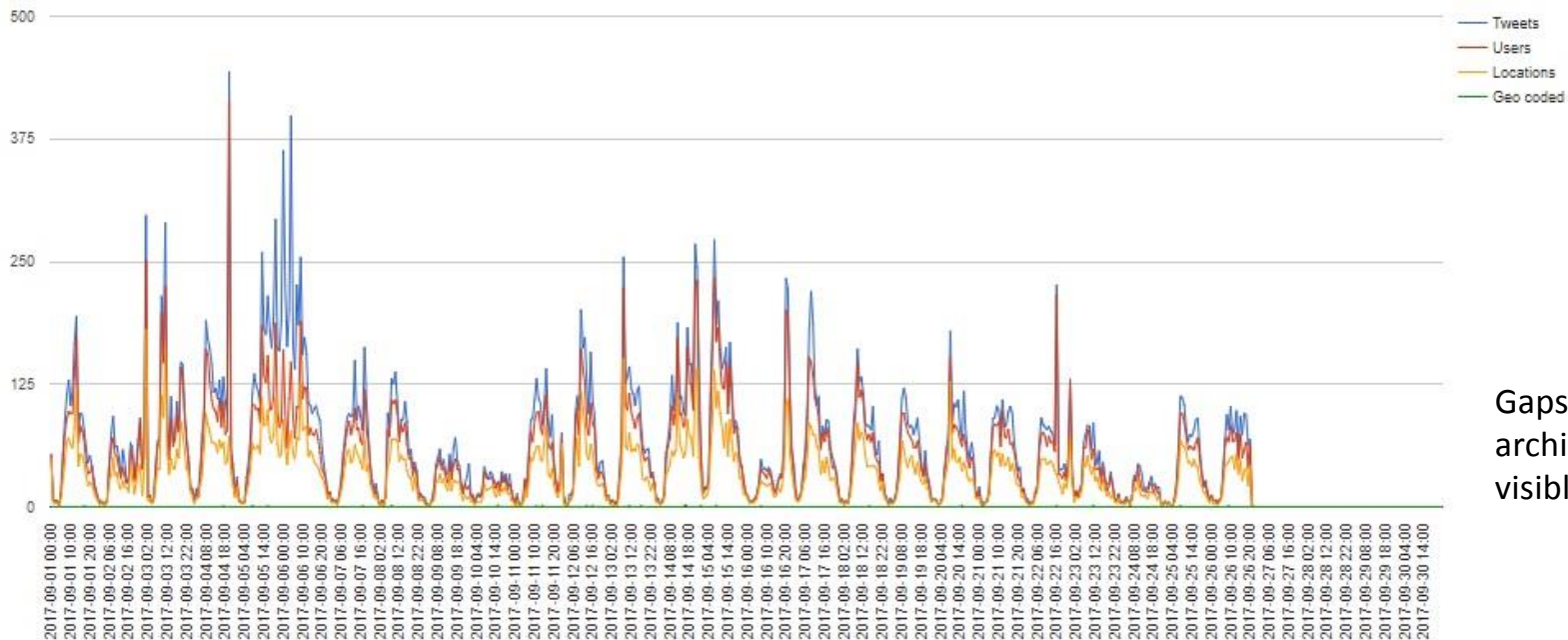
- Dataset: HMRC (#hmrc, @hmrc, @HMRCbusiness, hmrc, HMRCbusiness, HMRCcustomers, HMRCgovuk, HMRCpressoffice)
- Startdate: 2017-09-01
- Enddate: 2017-09-30
- Number of tweets: 41.836
- Number of distinct users: 20.322



Ideally would like Tweets containing links to be over 90%



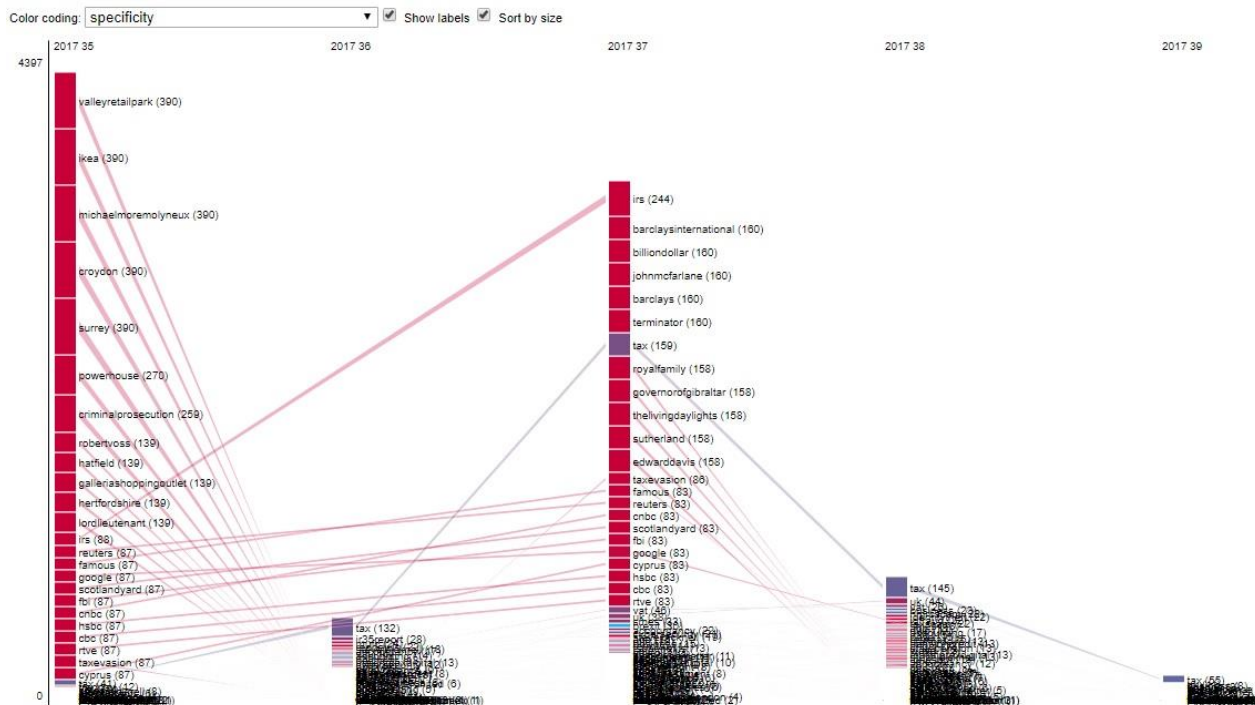
Time Series



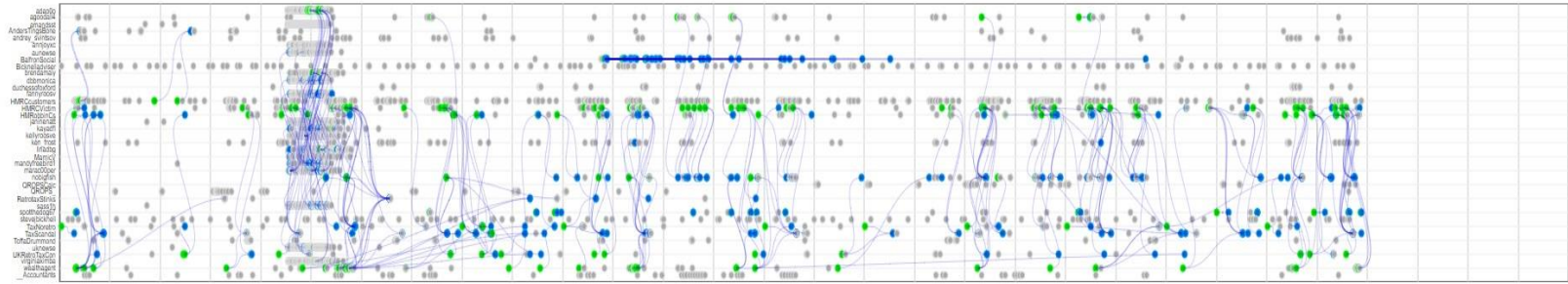
Gaps in the archive are visible



Keywords co-occurring at least 10 times (overall)
and at least 0 times (per week)



Bot Detection – Posting at least 50 Times on HMRC in Sept 2017



adao0o

agoodall4

amandsst

AndersTingsBone

andrey_svinsov

annjoyxc

aunewse

BalfronSocial

Bicknelladviser

brendamaiy

dbbmonica

Duchessofoxford

fannyroosv

HMRCcustomers

HMRCVictim

HMRobbinCs

janinenatt

kayadfi

kellyroosve

ken_frost

linadbg

MamicV

mandyfreebird1

marac00per

nobigfish

QROPSCalc

QROPS_

RetrotaxStinks

sass1h

spotthedog67

stevejbicknell

TaxNoretro

TaxScandal

ToffaDrummond

uknewse

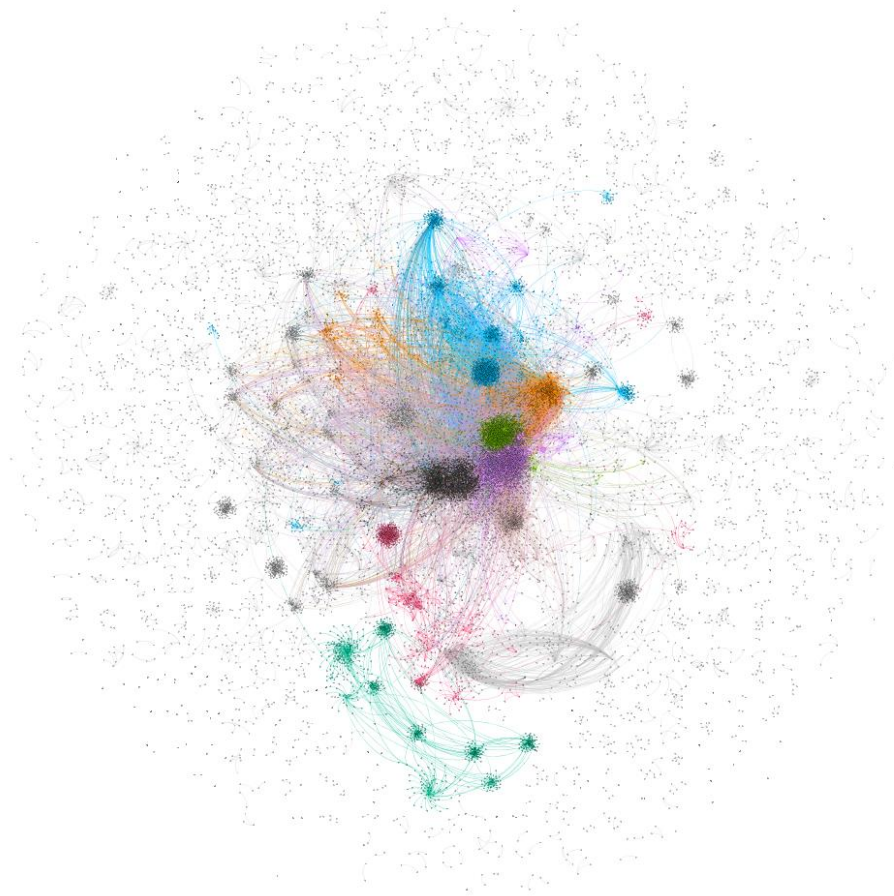
UKRetroTaxCon

virginiakimba

wealthagent

__Accountants





HMRC Twitter Network Sept. 2017

**Nodes (Accounts) 20,197
Edges (links) 32,291**

At least 9 sub-groups

**Colour - clustered by
modularity class**

**Size of node - betweenness
centrality score**





HMRC Digital

News, updates and job alerts from HMRC's digital team - learn about the biggest digital transformation in government, what we're doing, and how we're doing it.

United Kingdom
hmrcdigital.blog.gov.uk
Joined February 2014



Carroll Trust

Carroll Foundation Maryland Trust
\$5,000,000,000 Five Billion Dollars
Offshore Tax Fraud Identity Theft Files
LOCKDOWN FBI Scotland Yard Most Famous Case

Washington DC London
about.me/carrolltrust
Joined January 2009



Jon Thompson

CEO of HMRC. Social mobility champion. Passionated by leadership, Accountant, Christian, Proud dad, husband and grandad. Tax queries to @HMRCcustomers
London, England
gov.uk/press
Joined November 2015



HMRC Customer Help

We can help with general queries about HMRC products & services. Monday to Friday 8am - 10pm. Saturday 8am - 10pm. Sunday 8am - 10pm. No personal info please.
UK
gov.uk/government/org...
Joined October 2014



HM Revenue & Customs

Official news and information from HM Revenue & Customs. If you have a tax query, please tweet @HMRCcustomers
UK
gov.uk/HMRC
Joined January 2010



John McDonnell MP

Labour MP for Hayes and Harlington and Shadow Chancellor, join the Labour Party here → you.labour.org.uk
Hayes and Harlington
john-mcdonnell.net
Joined September 2009

Top 30 Twitter Accounts

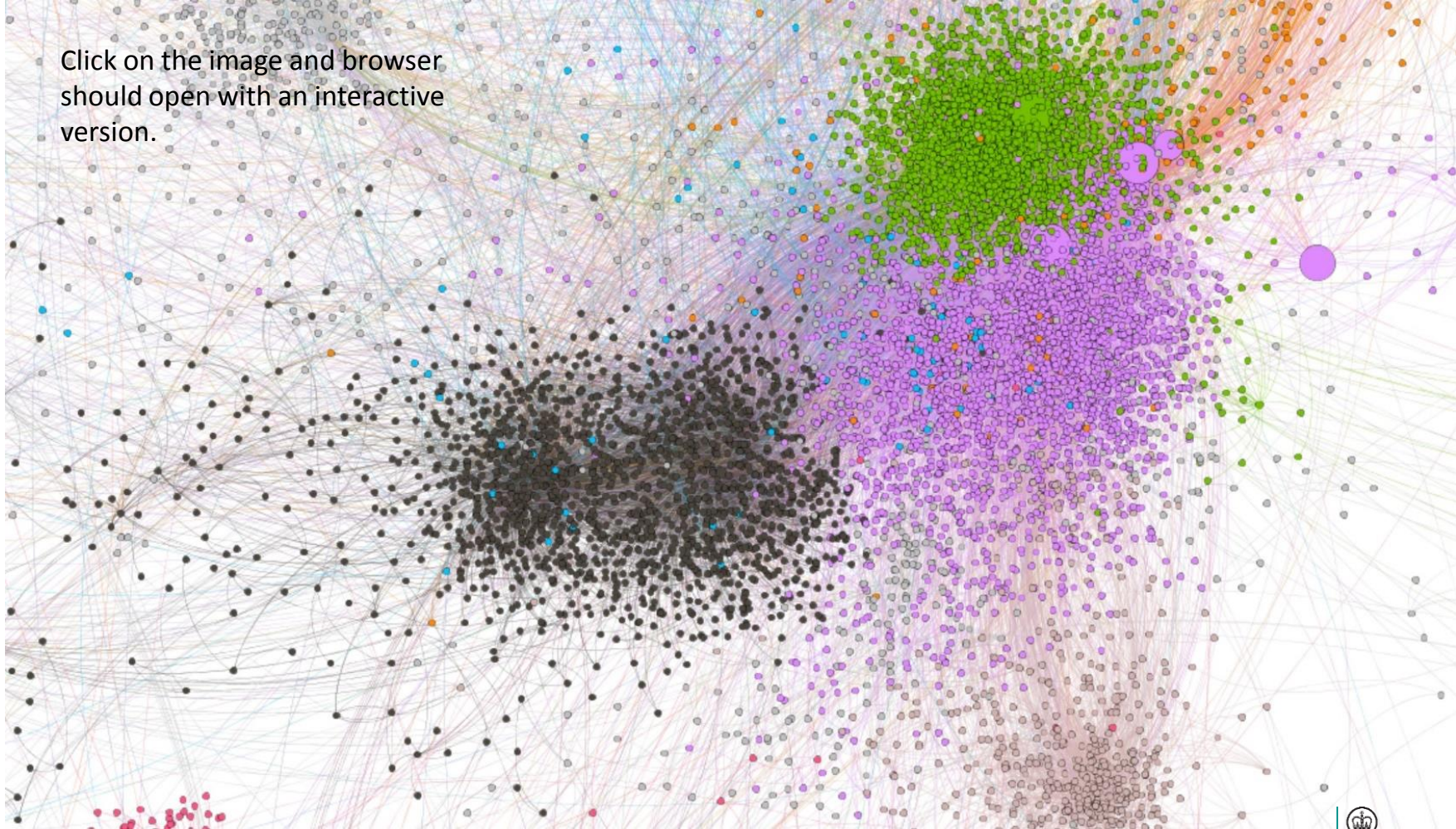
hmrccustomers
techuk
hmrcdigital
helenolsen
Jonthompsonhmrc

hselftax
hmrcgovuk
iaincampbell07
hmrcvictim
jonathan_rile
jduffin24
auldheid
johnmcdonnellmp
bhoymagic
rangerstaxcase
agoodall4
nobigfish
soongjohnston
hmrcbusiness
pcs_union
preludeaccounts
jolyonmaugham
uklabour
laurapidcockmp
jmalitr
govuk
barcabhoy1
tweetlittlehank
pcs_scotland



HM Revenue & Customs

Click on the image and browser should open with an interactive version.



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HM Revenue
& Customs