Data and Democracy in the UK
A report by Tactical Tech’s Data and Politics Team

by Amber Macintyre, Gary Wright and Stephanie Hankey

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Introduction

“What we are doing is no different from what the advertising industry at large is doing across the commercial space.”
– Alexander Nix, former CEO of Cambridge Analytica

In 2017 and 2018, the Department for Digital, Culture, Media and Sport (DCMS) in the UK held an inquiry into the impact of fake news on the political process. The parliamentary committee questioned staff from social media platforms, digital communication companies, academics and political advisors in the context of their work on recent political campaigns in the UK and internationally. Despite inconsistencies across the testimonies, the hearings significantly sought a level of transparency and accountability for a set of practices that has been little understood to date. In doing so, they also demonstrated how widespread and normalised data-driven practices across political campaigning in the UK have become – not just in the case of a few companies, and not only in the EU referendum.

Whilst the UK and international media reported extensively on the DCMS hearings and the Cambridge Analytica and Facebook scandal that emerged in their midst, there have been fewer attempts to create a more comprehensive view of the use of data in elections in the UK and how much can be determined from existing reports and transparency measures. To date, the most significant research on these questions are Nick Anstead’s cross-party study into the use of data in the 2015 elections; a recent investigation into digital campaigning by the Electoral Commission; and the Constitution Society’s critical review of digital campaigning and regulatory safeguards. This report combines original research by the Data and Politics team at Tactical Tech with findings from the aforementioned overviews, as well as testimony from the DCMS hearings, journalistic

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2 An overview of the hearings can be found here: https://www.parliament.uk/business/committees/committees-a-z/commons-select/digital-culture-media-and-sport-committee/news/fake-news-evidence-17-19/
reports and our own in-depth analysis of the expenses submitted to the Electoral Commission for the UK 2015 and 2017 general elections and the EU referendum.

The report then goes on to examine in more detail the challenges of using the current system of transparency to understand political parties' use of data-driven campaigning.

Our report examines the use of personal data in campaigning by six parties in the 2015 and 2017 general elections: Labour, Conservatives, Liberal Democrats, the Green Party, the Scottish National Party (SNP) and the United Kingdom Independence Party (UKIP).

In the case of the EU referendum, we focused on the two official Leave and Remain groups: "Vote Leave" and "Britain Stronger In."

Our findings suggest that there is a need to revisit the current regulations to help enforce sound practices and generate more transparency around the use of personal data in campaigns.

This report outlines the three key findings of Tactical Tech’s research:

- Data-driven practices may expand the gaps between political parties’ access to resources
- Parties in the UK have significantly increased their investment in data-driven campaigning since 2015
- Information about data-driven practices remains opaque, despite efforts by the Electoral Commission and journalists to make them more transparent.

**Sources and Methodology**

The unique contribution of this research is to synthesise and compare previous research, creating a broader overview and revealing gaps or inconsistencies among existing accounts. Our sources include:

- Self-published materials from parties and campaign staff, such as the blog of the Campaign Director of Vote Leave, Dominic Cummings. Such materials are limited in that we can assume they reflect the views of the individual/s publishing them.

- Reports by journalists and academics, including Anstead’s research and the Constitutional Society report, mentioned above. These are again limited to the information the authors have access to or have been provided by the parties or companies, which may not always be factually accurate or complete.

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6Dominic Cummings has blogged extensively on his experiences and opinions surrounding the EU referendum at [https://dominic-cummings.com](https://dominic-cummings.com).
Testimony and individual interviews from the DCMS hearings on fake news, bearing in mind that testimony was inconsistent and there is no legal obligation for individuals to be honest in these hearings.

Official spending reports from the Electoral Commission,\(^7\) which oversees elections and regulates political finance. Parties must submit all invoices to show their spending during the reporting period of electoral or referendum campaigns.

In using the official spending reports to understand how much was invested in data-driven campaigning and how that money was distributed across suppliers, it was necessary to conduct our own research, as there is no simple or singular way of filtering the Electoral Commission’s online database of reported spends according to ‘digital’ or ‘data-driven’ campaign spends. In attempting to extract data-driven campaigning spends from the Electoral Commission’s database, we made the following decisions about what to include and exclude from our analysis:

- We have excluded companies that specialise in door-to-door leafleting, although they may use data available from online sources.
- We have excluded companies that specialise in qualitative opinion polling or traditional surveys, although this data might feed into digital strategies.
- We have included strategists and consultants who deliver both digital and non-digital services, even if it is unclear from the invoices what services they delivered.
- Taking into account the time and scope of this research, we only included suppliers who were paid over £50,000 according to our calculations.

**Data-driven campaigning in the UK: how did we get here?**

The increased use of data-driven practices by political campaigns in the UK mirrors, as Nix himself indicated in his testimony, the rapid rise of personal data use in digital advertising and marketing campaigns in the commercial sector.\(^8\) Whilst many of the techniques in use are new and particular to digital campaigning, the principles of data collection, understanding public opinion and creating targeted, marketing-style communications is of course not new.

\(^7\)Reported spends can be found on the Electoral Commission’s online database at [http://search.electoralcommission.org.uk/](http://search.electoralcommission.org.uk/)

The use of personal data in political campaigns in the UK has developed alongside three main pre-existing practices that have been part of campaigns for decades: firstly, opinion polling; secondly, targeted campaigning and direct marketing; and finally, voter registration and party sign-up efforts. Opinion polling can be traced back to Gallup polls undertaken since the 1940s in order to gauge public opinion on particular issues, with a range of other polling companies emerging in their wake, such as ICMUnlimited, Ipsos MORI, NOP and Harris.9 Initially, polling allowed parties to merge broad demographic data with insights into how to craft positions and messages that resonated with large swaths of the population. Targeted campaigning and direct mail developed in the UK in the late 1970s and early ‘80s. The use of persuasive messaging can be traced back to 1983, when the Conservative Party hired Chris Lawson as a full-time director of marketing.10 The move reflected a shift toward a more corporate style of marketing in politics. During this time, Lawson worked with the advertising company Saatchi and Saatchi “to design a campaign which relied to a greater extent than ever before on US-style value research and ‘psychographics’.”11 More recently, efforts to increase the number of party members and voter turn-out led to the introduction of digitised systems and methods within the major parties in the UK. Parties utilised these systems to create databases of citizens that could be rallied for support or called upon for help with campaigns.

Over the past decade – as in the commercial sector – these methods have changed significantly, not only diversifying to a wider range of service providers, such as social media platforms, data brokers, data analytics companies and digital advertising companies, but also to more precise forms of profiling and direct targeting. With the rise of data-driven methods, voter profiles are no longer limited to a region or a demographic group but can also be connected to individuals’ names, email addresses or household addresses. This data can also now include behavioural traits such as recent interactions with different political causes, purchasing habits or internet browsing histories.12 In the past, targeted messages would be delivered to broad audiences and placed in certain localities via TV, radio, newspapers or billboards, with the most substantial opportunity for individual contact being through door-to-door canvassing. In more recent campaigns, data-driven technologies have expanded the channels for communication between politicians and the public to include data-driven and profile-based advertisements through social media and apps. These channels provide opportunities to deliver more personalised and targeted communications on an individual level or to very specific segments of the population, with greater speed and reach than ever before. For example, many individuals provide their email address to a party when donating,

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11 Ibid.
12 A selection of these traits can be found on the website for NationBuilder, a customer relationship management system commonly used by political candidates in the UK at https://nationbuilder.com/import_codes
signing up to volunteer or requesting to hear more about the party’s policies. The party can then upload the list of email addresses to Facebook to create segmented "custom audiences." A custom audience of those who have donated can then be targeted with a different advert than the custom audience of volunteers.

**Legal Context**

The Constitution Society recently released a publication presenting a unique, aggregated and robust overview of the existing framework for data-driven campaigning. The report brings together various aspects of UK law that impact the use of data by parties and campaigning groups. It focuses on four areas that are currently regulated – spending limits, broadcasts, quantity of communications in broadcasting, quality of communications in broadcasting, and data processing – which are outlined in detail below:

- **Spending:** all parties and campaign groups are limited in what they can spend overall. This changes per election, referendum and who is spending the funds, whether a party, a local candidate or a non-party campaigner. Each group must keep records of all funds both received and spent, which they then have to submit to the Electoral Commission for review, including invoices. These reports are the basis of much of our research and findings.

- **Quantity of communications:** paid political advertising on television and radio is prohibited in the UK. Instead, each party is allocated a set amount of time-slots that are labelled as political party broadcasts, which vary according to the election and the channel. The slots are about five minutes in length and free of charge; however, this does not apply to digital advertising.

- **Content of communications:** other than TV and radio, there are no specific regulations on the content of other forms of media, including offline posters and leaflets. There are also no regulations governing online communications. Political advertising is exempt from any of the general advertising rules that have applied to private companies since 1999. While this was decided for various reasons, legislators still recognised that a set of guidelines would be useful. However, this has not yet happened. The only exemption for political advertising is that it is illegal to present any false statement about a candidate’s personal character or conduct, but this does not include their political views.

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13 S. Hankey, J.K. Morrison, & R. Naik, *Data and Democracy in the Digital Age*. For more information about the legal context in particular, see pp. 27–35.
• **Data processing**: during the time of this research in May 2018, the General Data Protection Regulation (GDPR) was implemented. However, for the duration of the elections and referendum studied in this report, the data regulation in place was the 2002 Privacy Directive, which requires an individual recipient’s consent to carry out or send automated calls, faxes and electronic mail.\(^7\) However, the directive only covered forms of communications that involve direct contact, which does not include social media or channels not specifically directed at one individual.

It is worth pointing out that these laws pre-date digital campaigning and therefore may require revision. The Constitution Society recommends improvements to the legal framework, which include a review of the code of conduct for the quality and quantity of communication content and an active approach to implementing GDPR,\(^8\) including an awareness of the limits of its coverage of the collection and use of aggregate data such as website traffic and behavioural or analysis of sentiment and language on Twitter.\(^9\)

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**Key Findings of Our Research**

**Finding 1: Data-driven practices may expand the gaps between political parties’ access to resources**

The two parties with the largest supporter base, influence and income are the Labour Party and the Conservative Party. According to our analysis of the spending reported to the Electoral Commission, not only do these two parties spend more overall, but they also spend a larger percentage of their budgets, compared to other parties, on suppliers that support their data-driven campaigning. Smaller parties, on the other hand, spend more on print and canvassing. *Tables 1 and 2* (below) illustrate the notable difference in spending among the parties in the 2017 and 2015 general elections respectively, with Labour having spent two or three times more money on digital services than the next largest party, and Conservatives spending six to ten times more. It is also evident that all the parties invested in digital and data-driven campaign services, across a range of companies.

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\(^8\)S. Hankey, J.K. Morrison, & R. Naik, *Data and Democracy in the Digital Age*, pp. 34–36

\(^9\)Ibid.
The following two tables show spending per party on data-driven practices in the general elections of 2017 (Table 1) and 2015 (Table 2). The figures are based on our analysis of the Electoral Commission database of reported spends.20

**Table 1:** shows the contrast among the respective parties’ spending on data-driven platforms; advertising and data companies; and consultants and strategists in the 2017 general election

<table>
<thead>
<tr>
<th>Platforms</th>
<th>Conservatives</th>
<th>Labour</th>
<th>Liberal Democrats</th>
<th>UKIP</th>
<th>Green Party</th>
<th>SNP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook</td>
<td>£2,118,045.95</td>
<td>£577,269.80</td>
<td>£411,967.01</td>
<td>£18,753.15</td>
<td>£43,345.44</td>
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<tr>
<td>Google</td>
<td>£562,153.59</td>
<td>£254,515.51</td>
<td>£203,531.09</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advertising and data companies</td>
<td>£481,253.56</td>
<td>£300,000.00</td>
<td>£0.00</td>
<td>£0.00</td>
<td>£0.00</td>
<td></td>
</tr>
<tr>
<td>Return Marketing Limited</td>
<td>£294,300.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experian Ltd</td>
<td>£86,953.55</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Message Space</td>
<td>£100,000.00</td>
<td></td>
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<td></td>
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<tr>
<td>Total</td>
<td>£822,692.99</td>
<td>£337,133.52</td>
<td>£0.00</td>
<td>£0.00</td>
<td>£0.00</td>
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</tbody>
</table>

**Table 2:** shows the contrast among the respective parties’ spending on data-driven platforms; advertising and data companies; and consultants and strategists in the 2015 general election

<table>
<thead>
<tr>
<th>Platforms</th>
<th>Conservatives</th>
<th>Labour</th>
<th>Liberal Democrats</th>
<th>UKIP</th>
<th>Green Party</th>
<th>SNP</th>
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</thead>
<tbody>
<tr>
<td>Facebook</td>
<td>£1,209,593.76</td>
<td>£16,454.67</td>
<td>£22,245.14</td>
<td>£51,922.04</td>
<td>£21,256.80</td>
<td>£5,466.64</td>
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<td>Google</td>
<td>£312,033.79</td>
<td>£178.64</td>
<td>£11.96</td>
<td></td>
<td>£692.33</td>
<td></td>
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<tr>
<td>Advertising and data companies</td>
<td>£102,293.14</td>
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<tr>
<td>Message Space</td>
<td>£86,458.67</td>
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<tr>
<td>Luntz Malansky Strategic Research</td>
<td>£71,788.78</td>
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<tr>
<td>VE Interactive</td>
<td>£53,100.00</td>
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<td>Experian Ltd</td>
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<tr>
<td>DS Political</td>
<td>£54,000.00</td>
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<td>Alchemy Social</td>
<td>£74,400.00</td>
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<tr>
<td>Family Advertising Ltd</td>
<td>£175,620.13</td>
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</tr>
<tr>
<td>Total</td>
<td>£384,417.41</td>
<td>£150,654.00</td>
<td>£0.00</td>
<td>£0.00</td>
<td>£0.00</td>
<td></td>
</tr>
</tbody>
</table>

**20** All reported spends and donations are recorded and accessible on The Electoral Commission’s online database, available at [http://search.electoralcommission.org.uk/](http://search.electoralcommission.org.uk/).
It should be noted that the Electoral Commission records analysed in the tables above only show spends on external suppliers, but do not reflect investments in in-house staff or the contribution of volunteers or donations, which may also constitute significant resources. This makes it difficult to determine the exact overall spending and activities of each party. Most parties and campaigns are known to have in-house staff dedicated to the processing and analysis of personal data during the campaign; in the 2017 elections, Labour devised their own social media tool called Promote, which was linked to their voter database and could be used to target digital content, but the official records don’t account for these types of tools.21

Some parties build and develop their own databases of supporters and voters to enhance their digital campaigns. Some of these are free and others are relatively costly, which may exacerbate the inequality of resources and therefore the overall influence that each party can attain. Freely available databases of voter information, such as the 2011 Census, are relatively easy for all parties to acquire. By comparison, proprietary datasets, such as Experian’s Mosaic (a postcode-based database), can be prohibitively costly and thus only available to larger parties.22 In the case of the EU referendum, Vote Leave created a multi-functional database called the Voter Intention Collection System, which aggregated personal data about potential voters from social media, advertising, website activity, apps, canvassing, direct mail, polls, fundraising and activist feedback.23 It may also have made use of other purchased data, such as the credit ratings of citizens, as alleged by former Cambridge Analytica employee, Brittany Kaiser.24 This means Vote Leave could generate profiles on individuals, as well as segments or groups, that were most persuadable in order to assess the best strategy for reaching them.

Differences of investment in in-house database management systems can also impact the efficacy of data processing and analysis, which is costly, and potentially could put the security of the data at risk if sufficient resources are not available. For example, candidates with fewer resources used Excel spreadsheets to track their potential supporters, whereas those with more money used off-the-shelf software purpose-made to manage and analyse supporter data, such as NationBuilder, to manage communications with their supporters.25

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The differences in spending among parties and campaigns indicate that the better resourced political groups may have access to more tools – as well as knowledge – than their competitors, which only serves to exacerbate the gaps in the size and influence of the largest parties. Costly political consultancies can provide beneficial advice on how to use digital tools and data in campaigning strategies. For example, the Conservatives hired Jim Messina from the Messina Group in both the 2015 and 2017 elections. Messina, who originally worked on Barack Obama’s presidential campaigns in 2008 and 2012, specialises in using granular data to understand and target specific voters in precise constituencies to most effectively win seats in elections. Labour, meanwhile, hired the digital strategy firm Blue State Digital, who also worked on the Obama campaigns, which helped them transform their internal digital structure and their external digital communications to best reach voters and recruit volunteers.

As these data-driven consultancies do not always secure a win for the party that hires them, our interviews have found that there is substantial speculation within political circles as to the effectiveness of their techniques. However, in theory, access to such expertise could also increase the advantage of a particular party compared to parties who do not have the budget to hire experts and do not have equivalent in-house or volunteer technical expertise. Though it has yet to happen at scale in the UK, it is worth noting that in the US presidential campaigns, significant support was donated, or brought in-house, from Democratic supporters who were also technologists and data scientists. With regards to off-the-shelf services provided by the larger digital advertising platforms such as Google and Facebook in the general elections in 2015 and 2017, the differences in spending are significant between the parties. Through looking at spending on Facebook alone, in Chart 1 (below), it is possible to see the significant differences in investment in just one platform, with the Conservatives pouring over £2 million into Facebook services in 2017. Presumably, the more money that a party can spend, the more likely they are to reap the benefits that such platforms can provide.

As Facebook and Google have developed tools to enable political parties to access their services, they have also hired political sales teams to advise campaigns on how to use the platforms to their advantage. For example, during the 2017 election, Facebook’s political sales teams hired former

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27 Ibid.
30 See some of these tools at https://politics.fb.com and https://protectyourelection.withgoogle.com/intl/en/
Conservative and Labour campaign officials, giving them insider insights about campaigning, which would in turn be useful to their clients.\footnote{Facebook’s policy and politics teams have included Rishi Saha, a former head of digital communications at Downing Street; Karim Palant, a former chief policy adviser to Ed Balls, Labour’s shadow chancellor; and Theo Lomas, a former political consultant for Crosby Textor, the PR firm of the man running the Tories’ 2017 general election campaign. See https://www.theguardian.com/technology/2017/may/08/facebook-political-aides-campaigns-target-voters} A source within Facebook stated, “[Facebook has] created these links into the campaigns so they can whisper in parties’ ears, say ‘we know what you need, come spend money with us.’”\footnote{R. Booth, ‘Facebook employs ex-political aides to help campaigns target voters’, The Guardian, 8 May 2017, http://www.theguardian.com/technology/2017/may/08/facebook-political-aides-campaigns-target-voters} It is difficult to determine the impact of these relationships beyond creating informed sales teams; however, it does mean that there are skilled, insider resources within the major platforms who have prior party alliances – another affiliation that mainly serves the largest parties.

\textit{Chart 1: Amount of money Facebook directly received from political parties in 2015 and 2017 general elections according to the invoices submitted to the Electoral Commission}
Our research allowed us to identify several possible implications of the gaps in spending between parties on data-driven practices. It may be that parties first have to have a large budget to even begin engaging in digital campaigning. It may also be that once a party invests in digital, their digital expertise increases, and they consequently spend more money on secure and effective tools, creating further differences between the parties. In addition, parties with more money can access commercial off-the-shelf solutions and invest in external expertise.

**Finding 2: Parties in the UK have significantly increased their investment in data-driven campaigning since 2015**

In the UK, political parties and campaign groups use a full range of digital marketing tools and individual data collection practices. The amount of money invested in these practices has increased substantially from 2015 to 2017 across all parties. *Tables 1 and 2* (see page 7) show that the Conservatives spent £1 million more on data-driven campaigning in 2017 than in 2015, while the Labour Party and the Liberal Democrats spent three times more from one election to the next, and the Scottish National Party spent more than five times more over the two years. UKIP is the major exception, but this is reflective of their shift in activity more generally by the 2017 election. The Electoral Commission’s research into digital campaigning shows that this rise in spending on digital campaigning companies across all campaigning groups has gone from 0.3% of total spend in 2011 to 42.8% of total spend in 2017.\(^{34}\) From the increases in spending on these services, we can infer that there are associated consequences for the processing and instrumentalisation of the personal data of citizens, including an increased investment in the acquisition and analysis of personal data and associated methods and strategies that make use of that data.

**Increased investment in direct processing of personal data**

The parties’ increased spending on digital campaigning implies an increased investment in the collection and use of personal data from citizens. This can be inferred by looking at the types of companies that absorb the spending, which include a number of organisations that provide tools to assist with the direct collection, hosting and analysis of personal data. For example, both Labour and Conservatives spent substantially more on Experian in 2017 than in 2015. Experian is a company that sells data and profiles on individuals and groups. It also helps match existing individual profiles so that citizens can be targeted with the same message across multiple channels, including their phones, social media and email accounts. Parties don’t just purchase personal data

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\(^{34}\) Electoral Commission, ‘Digital campaigning: Increasing transparency for voters’. 
from data companies; Labour also purchased data on parents and the size of their families from *Emma’s Diary*, a pregnancy and childcare advice website.\(^35\)

A detailed analysis of the invoices also reveals an increased investment in customer relationship management systems (CRMs). CRMs are systems that manage databases of information about individuals and help collate a history of their interactions with a political party: did they show support during a door-to-door interaction? Have they donated? Have they been opening the emails sent to them? CRMs often help manage communications, too, such as dividing databases up into groups to send targeted emails or push certain social media messages. CRMs also provide extra features such as appending data, matching profiles and providing additional data from data sales companies such as Aristotle or Advocacy Data.\(^36\)

Some tools, such as the Customer Relationship Management System provided by NationBuilder, provide additional support, such as direct analysis of which political party an individual is likely to vote for.\(^37\)

*Image 1: An example of a personal profile from the NationBuilder website and an accompanying sales pitch show how NationBuilder claims to use data from a volunteer, including their Twitter and volunteer activity, to help their clients profile, match and target individuals*\(^38\)

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\(^36\) NationBuilder, 'Data integrations', available at [https://nationbuilder.com/data_integrations](https://nationbuilder.com/data_integrations) (retrieved 10 July 2018)

\(^37\) Different codes for labelling individuals in databases can be found on the NationBuilder website [https://nationbuilder.com/political_party_codes#gb](https://nationbuilder.com/political_party_codes#gb)

\(^38\) NationBuilder, 'Software for leaders', available at [https://nationbuilder.com/software](https://nationbuilder.com/software) (retrieved 10 July 2018)
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Paid data-driven profiling to target and influence potential voters can be used in tandem with other tools, such as non-paid ads, volunteer canvassing and the profiling and testing of social media posts to encourage people sharing them with their friends. This last form of non-paid targeting is referred to as "organic reach." According to reports, Labour’s Momentum movement benefitted significantly from organic reach. Matching online and offline profiles can also help with personalised canvassing and leafleting materials, by indicating where, who and when to canvas.

**Increased investment in personal data-driven tactics**

Alongside political parties’ investment in the direct acquisition and analysis of personal data, our research shows that there is an overall increase in the indirect use of personal data through platforms, whereby parties leverage personal data through platforms such as Facebook, Instagram, YouTube and Google Search, who themselves collect and analyse personal data to enable targeting.

Digital and platform-based adverts are becoming increasingly targeted to ‘segments’ as well as to individuals. Segments can be groups of individuals that fit certain demographics, such as "women based in North London between 20-30." Decisions about how to segment voters are often based on assumptions about who is seen to be open to influence when targeted with the appropriate messaging. This could be a positive message to vote for a particular party, or a negative one to try to dissuade them. For example, in the 2017 snap election, as Labour MP Andrew Gwynn wrote in *The Guardian*:

“We put unprecedented levels of funding into online advertising, supported by a highly professional data targeting operation that gave us an edge in getting the right messages in front of the right voters. This allowed us to make quick decisions about who and where to target. When we saw improved local canvass returns in Sheffield Hallam, we were able to target anti-Lib Dem Facebook messages at all the voters in the seats that we thought were being contested between Labour and the Lib Dems. In the last week alone 24 million people viewed our shared content on Facebook.”

In the EU referendum, the Vote Leave campaign tested many versions of the same ad and adapted the ad according to people’s responses. Dominic Cummings revealed the strategy on his blog:

"Instead of spending a fortune on an expensive agency (with 15% going to them out of ‘controlled expenditure’) and putting up posters to be ‘part of the national conversation’ weeks or months..."
before the vote, we decided to 1) hire extremely smart physicists to consider everything from first principles, 2) put almost all our money into digital (~98%), 3) hold the vast majority of our budget back and drop it all right at the end with money spent on those adverts that experiments had shown were most effective (internal code name 'Waterloo')."  

The Vote Leave campaign used this strategy to target fishermen in certain parts of the UK, for example, who were known to be likely supporters of the Leave vote, with personalised messages on social media that only they could see. The campaign can then test the effectiveness of their adverts at the individual or small group level, and the results of these tests form new datasets to drive strategy and implementation of targeting groups and personalising messaging.

There are various ways to segment and profile an audience to understand their likelihood of supporting a particular party or vote and/or how persuadable they are. Some of this is en masse (as described above in terms of segments), some of this is by profile and some of this is micro-targeted down to the level of the individual. Individual targeting can be done through different techniques including psychometric profiling, a method described in detail in Tactical Tech’s article "Persuasion by Personality," but also through behavioural profiling. This uses information on the activities of certain groups or individuals to create a profile about their habits, such as whether they have voted a certain way in the past, or interacted with a party in any way. Behavioural profiling can also include data about what a person reads and watches, or where they shop. These tools are common across all personal data-driven advertising platforms. This is the type of profiling that Cambridge Analytica carried out by analysing individuals’ personality traits via the "OCEAN model," which measures individuals against five main personality traits: openness, contentiousness, extraversion, agreeableness and neuroticism. With this personal data, they could create profiles that allowed them to determine which messages or advertisements will resonate with which voters. Although Alexander Nix claimed that Cambridge Analytica did not work with clients in the UK, he also stated that the marketing techniques they used are not unusual across many marketing companies.

The most common reports of micro-targeting are those that highlight how custom and "lookalike" audiences on Facebook can allow political parties to target a narrow set of individuals with an advertisement. These different forms of segmentation and micro-targeting services are offered not only by Facebook, as significantly covered in the press, but also by other platforms such as Google,

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42 D. Cummings, 'Dominic Cummings: how the Brexit referendum was won', The Spectator, 9 January 2017, [https://blogs.spectator.co.uk/2017/01/dominic-cummings-brexit-referendum-won/](https://blogs.spectator.co.uk/2017/01/dominic-cummings-brexit-referendum-won/) (retrieved 10 July 2018)

43 D. Cummings, 'On the referendum #20: the campaign, physics and data science – Vote Leave’s ‘Voter Intention Collection System’ (VICS) now available for all'.

44 A thorough explanation of psychometric profiling can be found on Tactical Tech’s Our Data Our Selves project website at [https://ourdataourselves.tacticaltech.org/posts/psychometric-profiling/](https://ourdataourselves.tacticaltech.org/posts/psychometric-profiling/)

whose Audience manager for adverts of Google analytics supports parties in tracking who has visited their website and for how long.46 The expenditures to Google represented in Tables 1 and 2 could also encompass spending on other media, like YouTube – a Google owned platform – and/or Google AdWords. Google AdWords (now Google Ads) is a service that allows clients to target people based on what they search for on Google and YouTube, as well as on websites or in Gmail.47 Political parties can then personalise their adverts to be aligned with the words searched for by individuals. The service operates on a pay-per-click model, whereby the party only pays when someone clicks the link. The evidence of how often something is clicked and what they were searching for also provides valuable data about potential voters that the party can use to evaluate and make adjustments to their targeted messages.48

*Image 2: An advertisement on Google, paid for by the Labour Party, shows how people searching for Conservative Party Leader David Cameron are given specific search results.*49

Finding 3: Information about data-driven practices remains opaque

“It is actually hard even for very competent and determined people to track digital communication accurately, and it is important that the political media is not set up to do this. There was not a single report anywhere (and very little curiosity) on how the official Leave campaign spent 98% of its marketing budget. There was a lot of coverage of a few tactical posters.”50

46 Information on Google’s Audience Manager can be found at [https://support.google.com/google-ads/answer/7538811?hl=en](https://support.google.com/google-ads/answer/7538811?hl=en) and Google Analytics at [https://marketingplatform.google.com/about/](https://marketingplatform.google.com/about/).
48 Ibid.
50 D. Cummings, ‘Dominic Cummings: how the Brexit referendum was won’. 
In Tactical Tech’s Data and Politics research, we have identified several major factors that make it particularly difficult for any external evaluator, concerned citizen, researcher or even regulators such as the Electoral Commission to monitor or assess the tools and techniques of data-driven campaigning in the UK:

- **Lack of transparency, openness and consistency amongst those who use personal data in political campaigns**

Industry experts and political strategists are reluctant to speak openly about some of the practices they use. Cummings initially refused to appear at the DCMS inquiries and only attended after being issued an order to do so. Furthermore, as part of our research on the data industry in 2017 and 2018, Tactical Tech requested interviews with several digital political strategists. Though some agreed to be interviewed, the majority only agreed if their interviews were off-the-record.

Even when strategists and insiders do talk, as with all first-hand testimony, it can be hard to determine the veracity or accuracy of the information they convey. For example, while Cummings alleged that "there was not a single report anywhere" about how the Vote Leave campaign spent 98% of their budget, he later implied that the reason was because 98% was spent on digital campaigning.\(^{51}\) The inconsistency in Cummings’ own accounts calls his assertions into question. The reported spends by the Vote Leave campaign to the Electoral Commission in fact suggest a lot more was spent on print media and canvassing than Cummings implied. If we accept the Electoral Commission reports as accurate, one expense immediately confuses the claim that 98% was spent on digital: they report that £179,055.64 was spent on Royal Mail for the purpose of delivery of physical materials to individuals' houses. This discrepancy may be because Cummings is referring to the budget he worked with, not the overall campaign budget. Despite this, the statistic that 98% was spent on digital was then reported in other media sources\(^ {52}\) even though there is no clear evidence it is accurate.

Arron Banks, a major investor in Vote Leave, also suggests campaigns were not forthright with the media. In his testimony to the DCMS he stated his general approach to giving information to journalists: "We certainly weren't afraid of leading journalists up the country path, the same with

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\(^{51}\)Ibid.

politicians [...] Journalists are the cleverest, stupidest people on earth. They are clever, but they want to believe some of this stuff.”

• **Difficulties in monitoring and creating transparency in political data-driven advertising**

The very nature of micro-targeted adverts makes it difficult for third parties such as journalists and researchers to monitor or track the strategies and tactics behind them. In some cases, only the platforms that publish the ad and the campaigning group or digital consultant they’ve hired know its intended audience. At the time of writing, efforts to make these types of targeted ads transparent are ongoing and have met with varying degrees of success, but they did not exist during the 2015 and 2017 elections campaigns or during the EU referendum. Some social media platforms have now pledged to publish political ads with additional information, including in some cases who paid for the advert published on their platforms, and in some cases to whom they were targeted. However, this form of self-regulation on behalf of the platforms depends on their good will. A citizen-led initiative called Who Targets Me monitors the use of political advertising on social media, but the project can only gather information via citizens who volunteer to install software to track political ads on their social media accounts. This is not only ad hoc but also provides data based on a self-selecting group of concerned individuals. The UK government has recently said it will consider whether to enforce clear reporting on who has paid for digital ads, in line with similar regulations for physical leaflets and post, so this may change in the future but it is currently not enforced.

• **Challenges within the existing expense reporting regime of the Electoral Commission:**

The Electoral Commission’s reporting systems require invoices to be submitted for all campaigning groups during a reporting period from an election or referendum. There are multiple challenges for researchers, journalists and those monitoring spending when reviewing submitted expenses and invoices. These include: a) difficulties in ascertaining accurate spending amounts; b) opacity of the reported expenses; c) difficulties in following expenses through intermediaries; and d) loopholes in the reporting system.

a) **Difficulties for journalists and researchers in ascertaining accurate spending amounts**

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55See the project at their website [https://whotargets.me](https://whotargets.me)

There are significant inconsistencies between parties' and journalists' reporting and the official records from the Electoral Commission.

Table 3: shows Leave and Remain campaigning groups' spending on data-driven platforms, advertising and data companies and consultants and strategists in the EU Referendum.

![Table 3: UK EU Referendum Spending](image)

For example, in May 2017 The Guardian reported, "It was with AggregateIQ that Vote Leave (the official Leave campaign) decided to spend £3.9m, more than half its official £7m campaign budget," a figure that was then repeated in various other sources, including Business Insider and Bloomberg. This figure, however, is not consistent with the Electoral Commission spending records reflected in Table 3 (above), which show an overall spend of £3.5 million from Vote Leave (£400,000 less than the original Guardian article), including all other Leave campaigning groups.

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57 All reported spends and donations are recorded and accessible on The Electoral Commission’s website [http://search.electoralcommission.org.uk/](http://search.electoralcommission.org.uk/)


61 In a subsequent article, The Guardian amended the figure: "The company [AggregateIQ] played a critical role in Britain’s European Union referendum, with a total of £3.5m being spent on its services by four different campaigns: Vote Leave, BeLeave, Veterans for Britain and Northern Ireland’s Democratic Unionist party.” See [https://www.theguardian.com/us-news/2018/apr/06/facebook-suspends-aggregate-iq-cambridge-analytica-vote-leave-brexit](https://www.theguardian.com/us-news/2018/apr/06/facebook-suspends-aggregate-iq-cambridge-analytica-vote-leave-brexit)
Many similar inconsistencies in facts and figures arose in the DCMS hearings. The most glaring, perhaps, was when Alexander Nix claimed that Cambridge Analytica “do not work with Facebook data, and we do not have Facebook data,” whereas whistleblower Christopher Wylie stated, “it is categorically untrue that Cambridge Analytica has never used Facebook data.” The inconsistency can be attributed to alternative interpretations of ownership – Cambridge Analytica’s data was sourced from a survey application which worked through Facebook. This app collected data from the surveys and other personal data the individual would consent to, such as their contact lists. Nix’s reasoning could be defended by the argument that this data was never Facebook’s, instead immediately being owned by Cambridge Analytica. Wylie’s testimony on the other hand, could be supported by the argument that as Facebook is an intermediary to accessing this data, Facebook has ownership over the personal data before it is passed over to Cambridge Analytica.

b) Opacity of expenses

Image 3: An invoice showing a payment from the Conservative Party to Facebook for the General Election in 2017. The invoice shows the names of different ads under codes.

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66 All reported invoices available on The Electoral Commission online database: http://search.electoralcommission.org.uk/Api/Spend-ing/Invoices/55723
There is a significant disparity between parties' reported expenses and the way invoices are detailed. This makes understanding some of the records difficult. For example, the invoice in Image 3 (above) shows that some expenses are filed with a list of codes and internal references that are not transparent about what the services were. By contrast, others are submitted with extremely detailed invoiced items, in some cases, down to the name of the actual advert produced and the number of clicks an advert received. This cannot be attributed to a simple difference of invoicing styles across companies. There are no consistent standards set by the Electoral Commission for reporting. Our research showed that the same company invoices had different levels of detail to different parties on different campaigns.

c) Difficulty of following expenses through intermediaries

Image 4: An invoice showing services charged to the Labour Party by Alchemy Social for “activity” on Facebook. The payment description references the connection of Alchemy Social to their parent company, Experian. Available at http://search.electoralcommission.org.uk/

The exact details of how funds are spent can be obscured by a layer of intermediary companies. This practice not only calls for greater scrutiny but also requires an understanding of company subsidiaries. For example, Labour’s spend on Facebook communications can ostensibly be measured by looking at how much money the Labour Party paid to Facebook; but a closer look at
the invoices of other companies, such as Alchemy Social (see Image 4, above), shows that additional funds were spent on Facebook through Alchemy Social. In addition, Alchemy Social is a subsidiary of the personal data company Experian, meaning that some profits will ultimately end up back with Experian, too. Based on these kinds of transactions, we can conclude that additional companies profit from political spends than those that are initially visible from the spending reports. Knowledge of the relationship among these companies as well as a detailed reading of invoices is needed to gain a clear understanding of exactly what types of services are being paid for and with which companies.

The invoice in Image 4 (above) shows how an advertising specialist company can act as an intermediary between the political party and the final product, but it does not detail the type and level of strategic support given by a particular company. The Electoral Commission cannot access this information even on request, impeding not only citizen access to this knowledge but also access of those trying to enforce regulation, as the Electoral Commission itself states:

“Our statutory powers to compel the provision of evidence cover all organisations and individuals that are regulated under the law – including registered campaigners. However, our powers outside an investigation only cover material related to income and expenditure. Our powers do not extend to third parties such as suppliers of digital platforms.”

Another example of the use of intermediary companies obscuring spending is the Conservative Party’s employment of The Messina Group, who offer services in advising strategy as well as helping to implement it. There is no information on how much freedom The Messina Group had in implementing the party’s strategy, such as publishing Facebook advertisements, or whether they required sign off from the party staff, and at what level of detail. Further, the invoice shown in Image 5 (below) again gives no information to help understand this for any interested group. The more freedom The Messina Group had, presumably, the less the political party and campaigning group will know what data-driven practices took place. This not only means we most likely cannot rely on the political party and campaigning group pundits to describe what happened, but also more critically, it puts the choices that impact political communications at the heart of our democratic processes in the hands of intermediary technocrats rather than political experts.

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d) Loopholes and inconsistencies in the reporting system

Finally, there are loopholes and inconsistencies in the reporting system of the Electoral Commission that mask the full picture of spending on data-driven practices. The Commission only requires records during the reporting period, which means that in the run-up to an election or political campaign, the period between the publication of spending limits and the start of reporting period may be used “to spend large sums of money that don’t count towards their spending limits.” For this reason, it may be important in the future to think of regulation of ‘permanent campaigns’ rather than just during given periods around elections. Further, campaign groups also failed to file all relevant information: the Electoral Commission has fined Leave.EU £70,000 for failing to report accurately, including omitting at least £77,380 in its spending return. This to some extent shows that the system is working. However, the Electoral Commission themselves have stated that they don’t believe their fines are harsh enough. The maximum fine in a singular instance is £20,000, which they believe some campaigns may simply see as a necessary campaign cost. In some cases, fines may be a risk that parties are willing to take in order to avoid accurately

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reporting. The Electoral Commission highlights that this could be a particular risk for referendums, where campaigning groups may not need to maintain an ongoing sound reputation.\(^{71}\)

The main challenge in the reporting system is that spending transparency does not currently cover donations or third-party or external contributions, and this creates a potential future risk of interference in the democratic process, including by foreign actors. Focusing only on spending by the political parties creates a potential loophole whereby funds can then be routed through third parties or directly spent on data-related services by interested parties in support of a particular campaign, such as wealthy individuals or those with particular business interests. This has been a source of significant controversy in the case of the EU referendum. Much attention was given to alleged activities that appear to test the system, such as donations made by campaigns to third parties in order to possibly avoid spending limits. In the EU referendum process, £625,000 was reportedly given to a young student, Darren Grimes,\(^{72}\) who then paid a portion of this to a Canadian social media marketing company called Aggregate IQ, a transaction that later became the subject of an inquiry by the Electoral Commission.\(^{73}\)

Similarly, attention was paid to allegations that Arron Banks utilised his company, Eldon Insurance, to support the work of Vote Leave.\(^{74}\) This was first picked up on by *Guardian* journalist Carole Cadwalladr and later with allegations from Brittany Kaiser in her testimony to the DCMS that personal data from Banks' own insurance companies may have been used in early efforts to collect data for the Vote Leave campaign.\(^{75}\) Whether or not these claims are accurate, the point remains that such investments and such a use of business-related data is a necessary consideration for regulation and transparency of the use of personal data in elections and political campaigns.

**Conclusion**

Personal data has become integral to campaigning in the UK, and is bound to become even more so. Due to the fact that data-driven campaigning is both expensive and requires digital expertise, different political groups and parties implement it in unequal measures. This may have effects on the access to, and quality of, information the electorate have as well as the success of different

\(^{71}\)Ibid.


parties. In order to assess the impacts of these practices, it is necessary to have transparency of decision making, spending and implementation. Without meaningful transparency, it is difficult to fully understand how to legislate for or monitor data-driven campaigning. The current system in the UK poses various challenges for achieving such transparency, including inconsistencies in accounts from practitioners, possible loopholes in the Electoral Commission reporting system and initiatives to leverage personal data that do not involve direct spending by a political party. Until these issues can be addressed, it will remain difficult for researchers and journalists to utilise access to this information, for regulators to keep abreast of the limitations of regulations, and for political parties to understand the implications and appropriateness of their own practices on the integrity of the democratic process.

**Amber Macintyre** is a freelance researcher in campaigning and technology. She is currently working on the Our Data Our Selves project at Tactical Technology Collective. She is currently carrying out research for her PhD at Royal Holloway, University of London, on the use of personal data by charities and NGOs. She previously worked at Amnesty International, in digital communications, before undertaking her Masters in International Law.

**Gary Wright** is a researcher and project coordinator with Tactical Technology Collective with a history in technology & innovation in international development cooperation, as well as digital and privacy rights.

**Stephanie Hankey** is the co-founder and Executive Director of Tactical Tech and is currently a Visiting Industry Associate at the Oxford Internet Institute at the University of Oxford. Her work combines her background in technology, design and activism. She currently writes, consults and teaches on the politics of data and ethics in technology design.