

**THE QUEEN**  
**on the application of**  
**SUSAN WILSON & OTHERS**  
  
**-and-**  
**THE PRIME MINISTER**

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**REPORT OF DR PHILIP N. HOWARD**  
**PROFESSOR, OXFORD UNIVERSITY**  
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**TO**  
**THE HIGH COURT OF JUSTICE, QUEEN'S BENCH DIVISION,**  
**ADMINISTRATIVE COURT**

**DATED 30 NOVEMBER 2018**

**Specialist field: impact of digital media on political life around the world**

**On the instructions of: Croft Solicitors Limited**

**Subject matter: impact of unlawful overspending on digital advertising by Vote Leave and BeLeave campaigns in the 2016 EU Referendum**

**Enquiry date: November 2018**

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**A. Instructions and scope of my work**

1. I have been asked to produce an expert report on the impact or otherwise of the unlawful overspending on digital advertising by the Vote Leave and BeLeave campaigns during the 2016 EU referendum. My instructions are set out in a letter dated 22 November 2018 from the Claimants’ solicitors, Croft Solicitors Limited [Appendix 1].
2. My work in preparation of this report has included a telephone conference with the Claimants’ solicitors and one of the instructed barristers, Pavlos Eleftheriadis, as well as a review of the publicly available information relevant to my instructions<sup>1</sup>.

**B. My credentials**

3. I am the Director of the Oxford Internet Institute, a Professor of Internet Studies and a Fellow at Balliol College at the University of Oxford. I am an expert on the impact of new information technologies on public life. My full academic CV is at Appendix 2.
4. I have held senior academic appointments at Stanford, Princeton, and Columbia Universities, and from 2013-15 I helped design and launch a new School of Public Policy at Central European University in Budapest. Recently I received a large Consolidator Award from the European Research Council for my study of algorithms and public life. My projects on digital

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<sup>1</sup> The sources of publicly available information include: blogs published by Dominic Cummings on his personal website: <https://dominiccummings.com>; the reports and evidence published by the Digital, Culture, Media and Sport Committee of the House of Commons; information provided by Facebook to the DCMS Committee published on the Committee’s website in July 2018; and Tim Shipman’s book, *All Out War: The Full Story of how Brexit Sank Britain’s Political Class* (William Collins, 2016).

activism, information access, and modern governance in both democracies and authoritarian regimes have been supported by the National Science Foundation, US Institutes of Peace, and Intel's People and Practices Group.

5. My research and commentary writing has been featured in the New York Times, Washington Post, and many international media outlets. I was awarded the National Democratic Institute's 2018 'Democracy Prize' and Foreign Policy magazine named me a 'Global Thinker' for pioneering the social science of fake news production. I have written numerous empirical research articles, and published in a number of disciplines, on the use of the internet, digital media, and social media for civic engagement, political campaigning, public opinion influence, and social control in countries around the world. I am the author, most recently, of *Pax Technica: How the Internet of Things May Set Us Free or Lock Us Up* (Yale University Press, 2015).

**C. Use of social media in political campaigning**

6. Lobbyists, political campaign managers, and politicians use social media to communicate directly with their constituents or the public at large. Tools like Twitter and Facebook allow campaigners to communicate without worrying about how journalists and editors may change, interpret, or fact-check the campaign messages.
7. Removing professional editors and journalists from the flow of political news and information means that there are fewer checks on the quality of opinion and facts that circulate in public conversation. Editors and journalists provide a critical independent source of public knowledge and have an important role in evaluating the performance of elected leaders and public policy options. They check the claims of candidates who are running for election, and when political parties advertise their platforms journalists do the fact checking to investigate which political claims are most accurate.
8. Political campaigns generally attract supporters by using as much personal data on people as possible to tailor and customize political messaging, whether those campaigns are after the support of constituents, voters, members, consumers or any other group of people.
9. Sometimes this data is used for what experts call 'political redlining'. This is the process of deciding which people your campaign does not need to engage with. For example, if people from ethnic minority populations under a certain income level rarely vote, or if they always vote for your opponent, it may not be worth spending time in their neighbourhood trying to convince them to vote for you. If one city has consistently voted for one party for decades, and there is no evidence that public sentiment is changing, campaign resources will not be put into advertising there.

**D. Voter behaviour**

10. It is well known that most voters in elections and referenda make up their mind in the last few days of a campaign. The same appears to have been the case in the 2016 EU Referendum.

11. The London School of Economics ('LSE') and Opinium conducted a study and produced a report<sup>2</sup> on electoral psychology which aimed to understand the psychology of the EU Referendum vote amongst the British public. It used a mixture of questions and models that had been tried and tested in the LSE's electoral psychology research project since 2010 and others which were created specifically with a view to understand voters' behaviour in the EU Referendum.
12. The LSE's research found that in every election between 20% and 30% of voters make up or change their minds within a week of the vote. Half of those individuals do so on election day itself.<sup>3</sup> This proportion can be higher in a referendum given that people tend to think their vote is more significant. One of the key findings of the report showed that 54% of respondents perceived the EU referendum as the most important vote in a generation, with 81% considering it to be among the top three.<sup>4</sup>

#### **E. Vote Leave's digital strategy**

13. I now turn to Vote Leave's digital strategy in the course of the 2016 EU referendum. I do not have direct, personal knowledge of Vote Leave's campaign. I have formed my own views about it on the basis of publically available sources, which together present a clear picture of the campaign's strategy and practices.
14. I have taken into account Tim Shipman's book, *All Out War: The Full Story of how Brexit Sank Britain's Political Class* (William Collins, 2016). This book was published a few months after the referendum and relies on sources with first-hand knowledge of the events. I rely in particular on Chapter 24: *The Waterloo Strategy*, which sets out the digital strategy of Vote Leave [Appendix 3].
15. I have also read entries in a blog published by Dominic Cummings on his personal website: <https://dominiccummings.com>. Mr Cummings was Vote Leave's Campaign Director during the referendum. He has published detailed descriptions of Vote Leave's digital campaign, its strategy and its methods in his personal website [Appendix 4].
16. I have also relied on the reports and the evidence published by the Digital, Culture, Media and Sport (DCMS) Committee of the House of Commons in the course of its investigation into Disinformation and Fake News and especially the 5th Report – 'Disinformation and 'Fake News': Interim Report', published on 29 July 2018. This included information provided by Facebook to the DCMS Committee concerning Vote Leave and BeLeave advertising during the referendum campaign, published by the DCMS Committee on its website in July 2018.
17. In broad terms, Vote Leave's digital strategy was as follows. The campaign was largely conducted by the Canadian firm, Aggregate IQ ('AIQ'). AIQ began by building a 'core audience' for Vote Leave's adverts, by first identifying the social media profiles of those who had already 'liked' Eurosceptic pages on Facebook. Vote Leave advertised to this core audience to try and bring them onto its website, where they would be invited to add their details to its database. AIQ also used an advertising tool within Facebook called the

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<sup>2</sup> 'The Impact of Brexit on Consumer behaviour' report by LSE and Opinium – 8 June 2016 (<https://www.opinium.co.uk/?s=the+impact+of+brexit+on+consumer+behaviour>)

<sup>3</sup> Page 20 of the 'The Impact of Brexit on Consumer behaviour' report

<sup>4</sup> Page 10 of the 'The Impact of Brexit on Consumer behaviour' report, and see comparison table with other elections/referendums since 2011 on page 13 of the report

‘Lookalike Audience Builder’, which applied the demographic features identified by Facebook in the ‘core audience’ group to the UK population at large.

18. This second group, which they designated the ‘persuadables’, was essentially made up of people on Facebook whom Facebook had identified as having the same demographic features as the core audience. However, these ‘persuadables’ had not previously expressed interest in Eurosceptic content on Facebook by ‘liking’ Eurosceptic pages. This group of ‘persuadables’ reportedly contained ‘a number of better-educated and better-off people’. Dominic Cummings states, in one of his blog posts that the persuadables, and that they were ‘*a group of about 9 million people defined as: between 35-55, outside London and Scotland, excluding UKIP supporters and associated characteristics, and some other criteria*’.<sup>5</sup>
19. Vote Leave then began a process called ‘onboarding’ in the industry, whereby sympathisers were turned into committed supporters of, donors to, and volunteers for the campaign. To do this, Vote Leave and AIQ deployed advertising targeting the ‘persuadables’ and employed a three step ‘onboarding’ process. The first step was to invite the reader to click on an online advert, which would be displayed on Facebook or another digital channel, to be taken to Vote Leave’s website. Once there, the second step was to invite the reader to provide their personal details, which would also populate Vote Leave’s database. The final step was to invite the reader to either make a donation, share Vote Leave’s messaging (on the individual’s own social media accounts, thereby generating organic growth of the message without cost to Vote Leave) about, or volunteer their time towards the campaign.
20. At each step in this process, the advertisements and messages were tested on an iterative basis, so that adverts or messages which failed to convince enough readers to act towards moving to the next step were re-worked or changed entirely until a success threshold was reached. (This threshold is known as the ‘conversion rate’, on which I will comment further in section G below.) Tim Shipman cites in his book an anonymous source from within the campaign as saying that Dominic Cummings ‘*approached each ad as if it were its own unique poll or focus group, and would compare those results to what they had observed from the data they had already been gathering. He was seeing what was being said in the polling and focus groups, and wanted to test those assumptions online to see that everything was in agreement with everything else. And when there were things which weren’t, [Vote Leave would] exploit them or retool*’.
21. Different advertisements were developed for the ‘core’ and ‘persuadable’ audiences. The former were served more ‘demonstrative’ adverts, whereas the latter reacted better to adverts which appealed to their curiosity in weighing the arguments – ‘Is this a good idea?’ and ‘Do you want to know more?’ are cited by Tim Shipman as typical messages.
22. In 27 May 2016, approximately four weeks before referendum polling day, Vote Leave launched a competition in order to gather voters for its database. The competition promised a £50 million prize to anyone who could correctly predict the winner of all 51 games at Euro 2016, the football tournament. The purpose was to attract the attention of people who do not normally have any interest in politics. The images used for this campaign were released by Facebook. Participants in the contest were asked to provide their name, mobile telephone number, address and email details during the entry process. This data was fed in to Vote

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<sup>5</sup> <https://dominiccumings.files.wordpress.com/2017/01/20170130-referendum-22-numbers.pdf>

Leave's database. Over 120,000 entered the competition, all of whom were sent a reminder on 23 June 2016 to vote in the 2016 Referendum.

23. Vote Leave also launched an app for smartphones. This app was 'gamified': those who used it were awarded virtual points for performing actions such as completing quizzes which relied upon Vote Leave's talking points, sending text messages to friends, watching Vote Leave's video material and similar actions. People using the app reportedly used it to send 70,000 messages on 23 June 2016 reminding their friends to vote.
24. Vote Leave identified from focus groups that crucial swing voters were very confused, and liable to change their decision on which way to vote based on whether they had last seen a message from either side of the referendum campaign. Mr Cummings decided to implement a 'Waterloo Strategy', which aimed to ensure that a Vote Leave advertisement was delivered to swing voters as late as possible in the campaign. According to Tim Shipman, an unidentified source from Vote Leave described the Waterloo Strategy as: *'Basically spend a shitload of money right at the end. We tested over 450 different types of Facebook ad to see which were most effective. We spent £1.5 million in the last week on Facebook ads, digital ads and videos. We knew exactly which ones were the most effective.'* Mr Cummings is quoted as saying: *'We ran loads and loads of experiments for months, but on relatively trivial amounts of money. And then we basically splurged all the money in the last four weeks and particularly the last ten days.'*
25. In his blog, Dominic Cummings has said that *'one of the few reliable things we know about advertising amid the all-pervasive charlatanry is that, unsurprisingly, adverts are more effective the closer to the decision moment they hit the brain'*.<sup>6</sup>
26. The Vote Leave campaign decided to focus on consistent and simple messages: first, that the UK was spending £350 million a week on the EU, which it could spend on the NHS if it left the EU ('the £350m claim'); second, that Turkey, Macedonia, Montenegro, Serbia and Albania were about to join the EU ('the Turkey claim'); and third, that immigration could not be reduced unless the UK left the EU (the 'immigration claim'). The £350m claim was false; in April 2016, Sir Andrew Dilnot, the Chair of the UK Statistics Authority publicly stated that it was untrue. Similarly, the 'Turkey claim' was untrue: there were no imminent plans for Turkey, Macedonia, Montenegro, Serbia or Albania to join the EU. So the first two were simply falsehoods—what we have since come to call fake news. The third claim was a vague, controversial assertion, difficult to demonstrate.
27. Nevertheless, Vote Leave pressed on with all these messages throughout the campaign and especially in the last few days of the campaign. There were dozens of ads with such messages. For example, simply for purposes of illustration, the '£350m claim' is mentioned in videos 3067.mpv, 3070.mpv, and in images 3082.jpg, 3086.jpg, 3087.jpg, 3088.jpg, 3094.jpg, 3095.jpg and 3096.jpg, which were sent in the period between 18 and 23 June [Appendix 5].

## **F. Conversion rates**

28. One aspect of the effectiveness of digital campaigns concerns 'conversion rates'. The proportion of the audience that clicks on an online advertisement is known as the 'conversion

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<sup>6</sup> <https://dominiccummings.com/2017/01/09/on-the-referendum-21-branching-histories-of-the-2016-referendum-and-the-frogs-before-the-storm-2/>

rate'. Typically, in online political advertising, we find that conversion rates are of the order of 10%. That is to say, 10% of those who see an online political advertisement will click on it. Once on the landing page – the website to which that advertisement directs – 10% of that audience will then believe the messages on the website are true. A further 10% of that number can then be expected to *do something* based on the messages that they have just read, and now believe to be true<sup>7</sup>.

29. So, for example, if an online political ad has a reach of 10,000 people, we would expect 1,000 people to click on the advertisement, 100 of those people to believe the message they see on the website that advertisement takes them to, and 10 people to do something such as donate to the political cause or party, volunteer, or take some other action. These conversion rates allow a campaign manager to create an 'astroturf' movement. An 'astroturf' campaign strategy is defined as the process of seeking electoral or political victory by creating and mobilizing artificial grievances and political demand, and it is designed to create the image of public consensus where there is none<sup>8</sup>.
30. Tim Shipman states in his book *All Out War* that Vote Leave was aiming for a 30% conversion rate from its advertisements, and a 50% conversion rate with the messaging that the audience would receive on its website's landing pages.
31. It is suggested in Tim Shipman's account that Vote Leave was able to achieve these target conversion rates by regularly iterating on their advertisements and political messaging. If that is the case, then Vote Leave was able to achieve an even higher conversion rate. This would mean that if, say, an ad had a reach of 10,000 people, Vote Leave could then expect 3,000 of them to click through the ad to arrive at its website, where it could expect 1,500 of those people to provide it with their personal data for its database. The conversion rate for Vote Leave's third step, i.e. getting someone to do something, is not provided in Mr Shipman's book.

#### **G. Effect of overspending**

32. I now turn to the question of whether Vote Leave or BeLeave's unlawful overspending might have affected the outcome of the referendum.
33. It is impossible to make such a counterfactual judgment with certainty. Nevertheless, I consider that it is possible to reach a conclusion about the probability that the outcome of the referendum could have been affected, based on what we know about Vote Leave's campaign's methods and effectiveness.
34. The Electoral Commission found in its report of 17 July 2018 the following breaches of spending limits by Vote Leave and BeLeave:
  - **Vote Leave's spending limit:** The Electoral Commission concluded: 'Mr Halsall and Vote Leave both committed offences under section 118(2)(c) PPERA. Mr Halsall incurred spending of £449,079.34 which he knew or ought reasonably to have known was in excess of the statutory spending limit for Vote Leave. The

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<sup>7</sup> Howard, Philip N. (2005). *New Media Campaigns and the Managed Citizen*. New York, NY: Cambridge University Press. pp. 93, 144. ISBN 9780521612272.

<sup>8</sup> Howard, Philip N. (2003). 'Digitizing the Social Contract: Producing American Political Culture in the Age of New Media'. *The Communication Review*. 6 (3): 213–45. doi:10.1080/10714420390226270.



Commission has fined Vote Leave £20,000 for this’ (par. 1.29). This was because the Commission was satisfied beyond reasonable doubt that all of Mr Grimes’ and BeLeave’s spending on referendum campaigning was incurred under a common plan with Vote Leave.

- **BeLeave’s spending limit.** The Electoral commission concluded: ‘The Commission has determined that Mr Darren Grimes committed an offence under section 117(3) PPERA, and BeLeave committed an offence under section 117(4). Mr Grimes incurred spending on behalf of BeLeave which he knew or ought reasonably to have known exceeded by £666,015.87 the statutory limit for a non-registered campaigner. The Commission has fined Mr Grimes £20,000 for this.’ (par. 1.31.)

35. These spending offences are, strictly speaking, independent of each other, but it is very common for campaigns with a shared agenda to develop the same spending and communications strategies. BeLeave’s offence would be true even if it had not been acting under a ‘common plan’ with Vote Leave.<sup>9</sup> Effectively, the money used by BeLeave and Vote Leave advanced the same campaign.
36. So, to determine if these offences had an impact on the referendum outcome, we need to compare Vote Leave’s campaigns as it actually took place (i.e. with the excess spending of £449,079.34) with the campaign they would have pursued had they not have spent this additional amount of money.
37. The first issue to consider is how Vote Leave’s campaign would have been affected, if it had spent £449,079.34 less than it did. As I have said above, Vote Leave’s campaign put great emphasis on the last five days of the campaign, as part of the ‘Waterloo Strategy’. This strategy is described in some detail in a blog post a blog titled *On the referendum #22: Some basic numbers for the Vote Leave campaign* (dated 30 January 2017)<sup>10</sup> where Dominic Cummings provides a number of helpful charts. I consider these charts reliable information on Vote Leave’s campaign.
38. One chart shows ‘digital spend per channel [during the] 10 week official campaign’, which I have reproduced below as Figure 1. The chart contains four different digital advertising methods: video, search, display and Facebook. Facebook advertising appears to be the largest part of the net spending. It shows that Vote Leave heavily weighted its digital spending towards the final five days of the campaign in particular, which includes the final day, Thursday 23 June 2016. It is unclear whether Dominic Cummings’ provides the sums of money in US or Canadian dollars. In his blog, he states ‘[a]mounts are in dollars because they went through the system of the excellent Canadian firm AIQ’, which is ambiguous. However, nowhere in that blog are the common abbreviations for the Canadian Dollar, such as ‘C\$’, ‘CAD’, or ‘Can\$’, used. I therefore assume that the sums are given in US Dollars throughout, as this is more commonly the case in circumstances where it is not specified that the Canadian Dollar is the unit used.

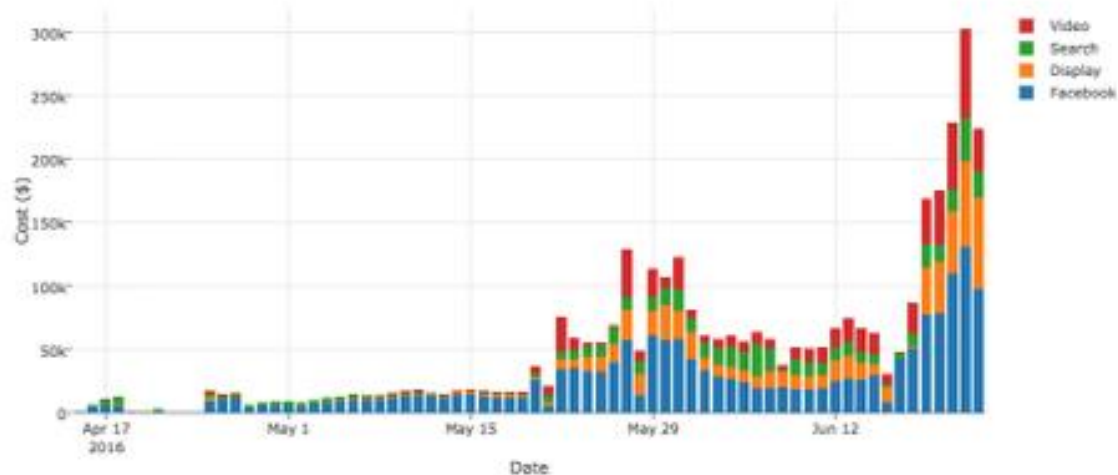
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<sup>9</sup> This is because, even if Vote Leave’s donation to BeLeave had been lower by £500,000 (which would have brought Vote Leave within its own spending limit of £7m), BeLeave would have still been in breach of its own spending limit of £10,000.

<sup>10</sup> <https://dominicummings.files.wordpress.com/2017/01/20170130-referendum-22-numbers.pdf>



## Spend by channel



Total spend = \$3,570,163

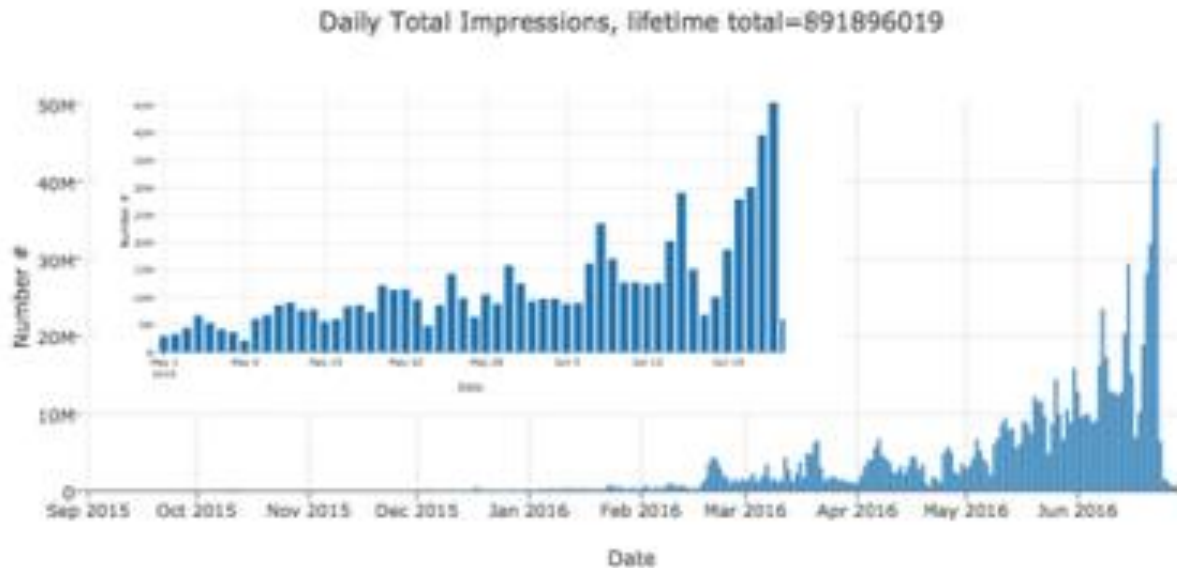
Figure 1 Vote Leave's Spending on Digital Advertising during 10 week campaign (source: Dominic Cummings personal blog)

39. This chart shows a decline in the amount spent on Facebook on 23 June 2018, the last day of the campaign. This may be because the official Remain campaign, Britain Stronger In Europe, exhausted its controlled spending and was therefore unable to maintain its advertisements on Facebook for that day. This would be consistent with 'best practises' in political campaigning. You keep track of your legally allowed campaign budgets and time the purchase of ads so the climax in ad spending coincides with the climax of the campaign period—right to the final hours—in which you legally allowed to campaign. The Remain and Leave campaigns would have been targeting their respective advertisements at similar audiences of potential voters. This would have had the consequence that the price of targeting adverts at that audience would have fallen due to the lack of competition between them. Facebook's advertising prices are determined based on the competition between advertisers seeking the same or overlapping audiences through an automated auctioning system.
40. Dominic Cummings noted in his blog post of 30 January 2017 that: '*something odd happened on the last day, spending reduced but impressions rose by many millions so our cost per impression fell to a third of the cost on 22/6 which is not what one would expect and we never bothered going back to Facebook to ask what happened.*'<sup>11</sup>
41. A second chart showing '~0.9 billion total Facebook 'impressions' from VL's launch in October 2015', reproduced below as Figure 2, appears to show that Facebook 'impressions'

<sup>11</sup> <https://dominicummings.files.wordpress.com/2017/01/20170130-referendum-22-numbers.pdf>

peaked on 23 June 2016, with approximately 45 million impressions being served on that day alone. Over 40 million impressions appear on 22 June and over 30 million on 21 June.

## Facebook ads + posts



**Figure 2:** Number of Facebook impressions of Vote Leave posts per day. The smaller graph superimposed onto the larger one appears to show impressions over a shorter timescale but this is unclear. (source: Dominic Cummings personal blog post, 30 January 2017)

42. A third chart showing ‘daily Facebook ‘reach’ in the 10 weeks of the official campaign, reproduced as Figure 3, shows that Vote Leave adverts reached slightly more than 12 million people on 22 June 2016 and slightly less than 12 million people on 23 June 2016.
43. The term ‘impressions’ refers to the number of times an advertisement is displayed. The term ‘reach’ refers to the total number of people who view the respective advertisement. The same person may view an impression more than once per day. This chart indicates that approximately 24 million people were being shown an average of roughly 3.5 adverts per person in the final two days of the campaign.
44. On the basis of these charts, it is possible to assess how many fewer impressions and how much less reach Vote Leave would have achieved had it spent £449,079.34 less than it did.
45. Since the charts report sums paid to the various (US based) internet platforms in US dollars, it is necessary to convert pounds to dollars. On 22 June 2016, £1 was worth \$1.4795. In US dollars then, Vote Leave’s total excess spending was  $£449,079.34 \times 1.4795 = \$664,412$ .

## Post Reach

The number of people your posts were served to.



**Figure 3** *Vote Leave's Facebook Advertising, reach* (source: Dominic Cummings personal blog, 30 January 2017)

46. This amount would have paid for the whole of Vote Leave's digital strategy for the last two days of the campaign, which appears to have been approximately \$525,000. I believe that, had it respected the spending rules, Vote Leave would have had to stop all its digital advertising sometime in the afternoon on Tuesday, 21 June 2016 (when it spent about \$230,000 in total). This was two and a half days before it actually ended its campaign.
47. I do not have information about the reach of the Vote Leave 'video', 'search' and 'display' campaigns. Figures are, however, available for the Vote Leave Facebook campaign, as set out by Dominic Cummings. If we only focus on Facebook advertising, for which we have detailed information, I calculate that, had Vote Leave respected the referendum spending limits, it would have had to forego 10 days of Facebook advertising. It took ten days for Vote Leave's spending to reach the figure of \$650,000, if one starts from the final day of 23 June and going back in time. Hence, assuming that all other spending remained constant, foregoing \$664,412 of Facebook spending would have meant that Vote Leave's Facebook ads would have had to stop on Monday, 13 June 2016, ten days before the Referendum vote.
48. Dominic Cummings has stated in his blog that: *'From 7-19 June it was ~15 million [impressions] daily. Over the last days it was ~25m, ~30m, ~40m, ~45m daily'*. He backs these figures up with the chart which appears above as Figure 2. So, according to Dominic Cummings' calculations the difference of Vote Leave spending \$650K less would be as follows:

	Tue 14/6	Wed 15/6	Thu 16/6	Fri 17/6	Sat 18/6	Sun 19/6	Mon 20/6	Tue 21/6	We 22/6	Thu 23/6	Estimate of Total:
<b>Excess Facebook Spending:</b>	\$25K	\$30K	\$10K	\$50K	\$50K	\$75K	\$75K	\$110K	\$125K	\$100k	<b>\$650K</b> [up to: \$664,412]
<b>Excess Impressions:</b>	15m	15m	15m	15m	15m	15m	28m	32m	42m	47m	<b>Approx Total: 239m, or average 23.9m daily</b>
<b>Excess Reach:</b>	4.5m	6m	12m	6m	4m	5m	8m	10.8m	12.4m	11.8m	<b>Approx: 80.5 m in total, or 8.05m daily</b>

49. Assuming on the above basis that Vote Leave respected the £7 million controlled spending limit as a designated campaign and stopped all Facebook advertising on Monday, 13 June, I calculate that Vote Leave’s net return on its unlawful overspending of £449,079.34 amounted to:

**239 million overall impressions** of Facebook ads in total (over ten days)  
**23.9 million impressions** of Facebook ads **per day** for ten days (including 23 June)  
**80.5 million persons reached in total** by Facebook ads  
**8.05 million people** on average reached per day by Facebook ads **per day for ten days.**

50. The overspending by Vote Leave was actually spent by BeLeave. I have considered the effectiveness of BeLeave’s campaign and whether it might have been less effective than Vote Leave’s campaign. However, looking at the figures, it becomes clear that BeLeave’s campaign was equally effective. This is unsurprising given that it was also run by AIQ.
51. The Electoral Commission found, in its report dated 17 July 2018, that Vote Leave and BeLeave acted under a common plan, for which they both relied on the services of AIQ. The Electoral Commission said:

*4.19. BeLeave’s ability to procure services from Aggregate IQ only resulted from the actions of Vote Leave, in providing those donations and arranging a separate donor for BeLeave. While BeLeave may have contributed its own design style and input, the services provided by Aggregate IQ to BeLeave used Vote Leave messaging, at the behest of BeLeave’s campaign director. It also appears to have had the benefit of Vote Leave data and/or data it obtained via online resources set up and provided to it by Vote Leave to target and distribute its campaign material. This is shown by evidence from Facebook that Aggregate IQ used identical target lists for Vote Leave and BeLeave ads, although the BeLeave ads were not run.*

52. The common messaging is evident in the choice of campaign messages. BeLeave used some of the same (arguably misleading) messages promoted by Vote Leave. For example:
- BeLeave wrote that ‘60% of our laws are made by from unelected foreign officials’ (ad number 1430).

- BeLeave wrote (ad group ID 155): ‘We send £350m to the EU every week. Let’s spend it on our priorities instead’.
53. Vote Leave made the following payments (ostensibly to BeLeave but, in reality, directly on BeLeave’s behalf) to AIQ under a common plan with BeLeave<sup>12</sup>.

<b>Date</b>	<b>Amount (£)</b>
14 June 2016	400,000.00
17 June 2016	50,000.00
20 June 2016	40,000.00
21 June 2016	185,315.18
<b>Total</b>	<b>675,315.18</b>

54. The data released by Facebook to the DCMS Committee show that BeLeave embarked on a Facebook advertising campaign on 15 June 2016, a day after the first transfer. On 19 July 2018, in response to a question by the Committee, Ms Rebecca Stimson, UK Head of Public Policy at Facebook, provided the DCMS Committee with copies of the advertisements run by AIQ on behalf of Vote Leave, BeLeave (and the Democratic Unionist Party). In addition to providing the images and videos used in the advertisements themselves, Facebook also provided a series of tables, which show the following information with respect to each advertisement by BeLeave:

1. Name of the page that ran the ad;
2. The web URL at which that ad was hosted;
3. The ‘Ad Group ID’;
4. The ‘Ad ID’, a unique identifier for each ad;
5. The text which accompanied the ad image;
6. The ‘Photo/Video ID’, which identified which image or video content was run in that particular ad;
7. The number of impressions, within a range, which that ad achieved;
8. The age and gender reach of ads in the same group as that ad;
9. The region reach for ads in the same group as that ad; and
10. The start and end dates for that ad.

55. By examining these tables, one is therefore able to form a view as to their impressions. I have analysed the table of ads run by the ‘BrexitCentral’ page on Facebook, which appeared to run ads featuring BeLeave’s ads.

- (1) According to the tables provided, BeLeave ran 120 advertisements in total between 15 June 2016 and 23 June 2016.
- (2) The earliest date on which such BeLeave ads are run was 15 June 2016, i.e. the day after the £400,000 payment to AIQ which the Electoral Commission found was made, on behalf of BeLeave, under a common plan with Vote Leave.

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<sup>12</sup> [https://www.electoralcommission.org.uk/\\_data/assets/pdf\\_file/0019/244900/Report-of-an-investigation-in-respect-of-Vote-Leave-Limited-Mr-Darren-Grimes-BeLeave-and-Veterans-for-Britain.pdf](https://www.electoralcommission.org.uk/_data/assets/pdf_file/0019/244900/Report-of-an-investigation-in-respect-of-Vote-Leave-Limited-Mr-Darren-Grimes-BeLeave-and-Veterans-for-Britain.pdf)

- (3) By and large, once an ad started to run, it was not discontinued: of the 120 ads, only two have an end date – 23 June 2016 in each case.
  - (4) The number of impressions each ad achieved – that is, the number of times it was displayed to Facebook users, regardless of whether they had already seen it or other adverts from BeLeave – is given as a range. This range appears to scale as the total number grows, e.g. some of the less shown ads had between 0-999 impressions, whereas the range given for the most successful ones is between 5,000,000-9,999,999 impressions.
  - (5) By adding together the lower and upper limits of the impression ranges for each ad, it is possible to arrive at an overall lower and upper limit for all of the ads run using the money ‘donated’ to BeLeave. In total, the ads commissioned by AIQ on behalf of BeLeave were viewed between **46,650,000** and **104,836,880** times.
  - (6) In terms of reach, the Facebook tables do not provide a total reach for each ad. The tables break down the reach for each ad group according to gender and age range (e.g. 18-24, 25-34, etc), as a percentage. For example, of one ad group’s total reach, 10% would be females between the ages of 25 and 34. Reach data is also provided according to region. Reach data will include targeted views, and organic views (i.e. those generated by users sharing the ad with their network).
  - (7) The reach data suggests that, initially, BeLeave may have been targeting its ads at people between the ages of 18 and 44, without any discernible gender bias. However, later groups of ads do not appear to show any particular age bias. In terms of region, voters in England were overwhelmingly the audience for these ads, with a minority of views in Scotland, Wales and Northern Ireland. This is likely because polling data revealed that large numbers of people in these regions were not ‘persuadables’.
56. It appears from the Facebook spreadsheets that BeLeave’s net return on its spending of £666,015.87 was not as successful as Vote Leave’s, but still reached millions of people. It amounted to approximately the following:
- Between **46,650,000** and **104,836,880** overall impressions of Facebook ads over eight days.
  - An average of between **5.8 million** and **13.1 million impressions of Facebook ads per day** (over eight days)

## **H. Conclusion**

57. The result of the 2016 EU Referendum was:
- Remain: 16,141,241 votes (48.1%)
  - Leave: 17,410,742 votes (51.9%)
58. Leave therefore won by 1,269,501 votes. A swing of 634,751 people would have been enough to secure victory for Remain. Over 80 million Facebook users saw the Vote Leave campaign’s ads on social media during the period of excess spending. Taking a conservative industry estimate that 10% of users would have clicked through, over 8 million people would have been directed to Leave campaign content that sensitive moment. Standard industry modelling

would estimate that over 800,000 of those would have been converted and persuaded by the campaign.

59. It is important to remember that I have made some conservative assumptions about measuring the effects. First, these communication campaigns were targeting likely voters, and in the final two days, were running at a time when Remain was not conducting similar, matching, excessive spending campaign. It appears that the rival campaign, ‘Stronger In’, stopped its digital advertising on the last day of the campaign because it had reached its statutory cap in its spending. Second, this conclusion is based on Vote Leave data alone—better reach data from BeLeave’s portion of the campaign would allow for an additional estimate of how many more voters were reached. Vote Leave, as well as BeLeave, would together have reached tens of millions of people over the last few days of the campaign as a result of their digital advertising that was purchased with money above the allowed cap. Third, Vote Leave’s dynamic, iterative ad testing system would have achieved rising success rates over time. In this analysis I have assumed a conservative, flat rate of opinion conversion. Fourth, these findings are only based on Facebook advertising data. The supplementary video, search and display strategies would have reached additional voters. Finally, the cost of Facebook advertising decreased on the day of the referendum itself, meaning that Vote Leave’s would excess spending would have afforded them even more impressions than estimated in our conservative model.
60. On the basis of this evidence I consider it very likely that the referendum result was the outcome of excess spending by Vote Leave and/or Beleave.

**I. Expert’s declaration**

61. I, Philip N. Howard, declare that:
- a. I have understood and discharged my duty to the Court;
  - b. I understand my duty to the Court and have complied with and will continue to comply with it;
  - c. I am aware of the requirements of Part 35 and Practice Direction 35, the Protocol for the Instruction of Experts to give Evidence in Civil Claims and the practice direction on pre-action conduct.

I confirm that I have made clear which facts and matters referred to in this report are within my own knowledge and which are not. Those that are within my own knowledge I confirm to be true. The opinions I have expressed represent my true and complete professional opinions on the matters to which they refer.



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PHILIP N. HOWARD  
Dated: 30 November 2018