TECHNICAL BRIEFING

TO: DOMINIC CUMMINGS

SUBJECT: PILOTTING AN EXPERIMENT INFORMED PROGRAMME (EIP) FOR THE VOTE LEAVE CAMPAIGN

COVER NOTE

We’re at a unique moment in British politics. Advancements in data collection, microtargeting and voter profiling from the USA could be – for the first time – introduced to the process. The campaign that controls this intelligence will acquire a critical first-mover advantage.

The Remain campaign has already sought to engage several Obama alumni for microtargeting. For Vote Leave to match Remain’s imported know-how, it will also need highly experienced technical and strategic staff who are familiar with these methods. However, we propose that Vote Leave leapfrog its competition by applying more innovative “next generation” psychographic methods of targeting currently being trialled on several presidential campaigns in the USA.

In order for Vote Leave to guarantee success in the upcoming referendum it must also extend its reach beyond its traditional conservative supporters and win over liberals, progressives and youth – the very types of voters we are most experienced with targeting. It is our eventual aim to build the most comprehensive political data tool yet seen in the UK, and we are eager to work with Vote Leave to engineer highly refined audiences to receive its messaging.

This briefing note explains the background research, methods and logistics required to pilot some of these new strategies in what American campaigns call an “Experiment Informed Programme” or an “EIP”. Information is power, and the level of insight this operation could uncover would be unprecedented in British politics.

We look forward to working with you.
TECHNICAL BRIEFING:

PILOTING AN EXPERIMENT INFORMED PROGRAMME (EIP) FOR THE VOTE LEAVE CAMPAIGN

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Introduction

They say all politics is local. It’s not. All politics is personal. The European Referendum will be a vote – not on pure politics – but on people’s hopes and fears for the future, their conflicting identities, their perception of the ‘other’ and their tolerance of risk. It will cut across traditional party, demographic and cultural lines, rendering a traditional political analysis inadequate. As such, the campaign that adapts to that fact and bases its strategy, message and targeting on this novel dynamic is the one that will prove victorious.

Two developments in the past decade will make this possible. The first is the emergence of psychographic profiling. With a deep understanding of underlying cognitive and dispositional processes, we can get to the heart of why people are driven towards almost any behaviour – from the music a person enjoys to how they vote (cf. Rentfrow et al, 2011). The second is the use of microtargeting in political campaigns, which applies advanced computational and data science methods to vast amounts of data to create empirically validated predictive models about each individual voter. In creating distinct and directly targetable groups for a campaign, we can engage each voter with the right message, in the right channel and at the right time. Through this, we reduce a vast amount of resources a standard campaign wastes through failing to target properly.

In this project, we propose engaging Ken Strasma and our multinational team that combines years of experience in microtargeting and psychographic profiling in British, American, Canadian and international politics. We will endeavour to give you unprecedented insight into the voting public and ability to predict what the campaign should be doing and saying next.

Ken Strasma, Chief Executive of HaystaqDNA and one of the “Top 50 Influencers” of US politics (Campaigns & Elections, 2014), pioneered the practice of microtargeting over decades spent winning elections for Democratic candidates across the United States. Ken served as National Targeting Director for Barack Obama’s presidential campaign, including in their upset primary victory over Hillary Clinton, and has run microtargeting campaigns for the Liberal Party of Canada, Mayor Michael Bloomberg and the Israeli Labour Party. His work changing the way American elections are won has been covered extensively in the book The Victory Lab: The Secret Science of Winning Campaigns. About eighty per cent of Ken’s work is now in the corporate space, where his client list includes Volkswagen, the NFL, Walmart and several other Fortune 500s. He has undertaken a diverse array of projects ranging from changing the attitudes towards the NYPD in the most deprived boroughs of New York to targeting more ethnic minority viewers for HBO’s hit series “Game Of Thrones”.

Crucially, all the work in this proposed EIP will be continuously reviewed for its effectiveness, return on investment (ROI) and likely impact on the overall result. Too many UK campaigns run without any kind of meaningful on-going evaluation, leading to an inexcusable waste of resources by supposed political professionals, basing their assumptions on ‘received wisdom’ and guesswork. We will continually test and re-evaluate our models and findings to ensure maximum effectiveness.

Here we set out a series of activities that form a pilot project that, should the decision be taken to proceed at the end of the pilot, would form the basis of the most powerful microtargeting tool yet to be seen in British politics.
Traditional polling is no longer reliable

Opinion polling, the traditional means of guiding political strategy, has taken a major hit in confidence in the past decade. Traditional pollsters are becoming less and less accurate in their readings of voter opinion (cf. BPC/MRS UK Polling Inquiry, 2015). Most recently we saw the catastrophic inaccuracy of mainstream pollsters in predicting the outcome of the 2015 UK General Election with the “surprise” Conservative majority win.

In our view, these gross inaccuracies are the result of three core failures. Firstly, relying on telephones as the primary means of data collection no longer yields representative samples as it once did. Too few people use a landline – and those who do are becoming less responsive to callers. This means that those voters who do pick up and choose to spend several minutes answering near robotic questioning are not representative of the population as a whole. Secondly, self-report scales are a poor metric in measuring voters’ honest opinion – people think they know their opinions better than they do and can often be lying to themselves. Thirdly, the polling sector has spent little time reviewing the validity of the questions they ask and the assumptions that underpin these questions. We should seek to avoid these issues through implementing far more rigorous psychometric and data science methods.

It is almost impossible for voters to fully understand which factors lead to them to reach a particular voting decision, and to what degree. In many cases, voters simply lack the self-insight to give an accurate answer. Further, complex biasing factors, such as social desirability bias (e.g. mis-remembering how often I vote because voting is a civic duty) or skewed self-constructs (e.g. underweighting my latent sexism as a factor when voting for a male over a female) mean that even the most self-aware of voters cannot be relied upon to give straight answer. By employing peer-reviewed psychometric methods in the questions posed to our samples, we can dig deeper.

It is also important to remember that, despite many political staffers using polls in this way, polling data has never been designed to be prospective. In other words, polling is not a predictive forecasting method – it can only tell you how general groups of people responded to a given survey in a given medium at a given time. It is only when we take this response data, perform a rigorous algorithmic analysis on it and compare it against validation samples and underlying observed data (e.g. consumer, voterfile or social data) that true signals can actually be discerned.

Lastly, polling only provides an aggregated snapshot of voter opinion that is not actually directly actionable. Although it is clearly important how different groups of voters opine on different issues, if we cannot identify who in the voterfile makes up those groups, it limits our use of the insights. By shifting focus to an analytics operation, we can make sure that all data collected has a dual purpose and can be directly applied in the field.

Advances in microtargeting

It is helpful to review briefly what microtargeting involves. Microtargeting is an applied statistical technique whereby a very large polling sample (called a “super sample”) is overlaid onto a database of personally identifiable information (“PII”) about voters and consumers. Statistical relationships between the responses in the super sample and the underlying voter data allow us to then make accurate inferences about other individual voters with similar data profiles who we have not directly spoken to. The output of newer microtargeting models are numerical “scores” about each inferred attribute. Scores are typically presented in the voterfile as a number that falls within a range of 0 to 100 and these scores can be used to measure almost any construct, such as partisanship, the likelihood to support or oppose a message, lifestyle habits or even personality traits. Past experience has shown that microtargeting can improve ROI of direct communications by over 60%, which has made it an essential tool in North American politics.

Over the past five years there have been significant advances in microtargeting related to data sources, algorithm sophistication and scaled database technologies. One of the most promising developments has been the integration of online and social data into traditional
There is substantial evidence for this. In the FFM, core traits are considered foundational to many facets of a person’s behaviour. There is substantial evidence for this, and the Big Five have been shown to affect music voter and consumer datasets. Given that the majority of people now curate their identities online across multiple platforms, much of the required data assemblage work is now done for us by the voters themselves. In fact, computer algorithms developed using social data have been repeatedly shown to be more accurate in predicting behaviour and personality traits of individual people than their spouse or close relative (cf. Kosinski et al., 2013 & Marcus et al., 2006).

The integration of online data has also meant that the full and seamless co-ordination of digital adverts, direct mail, telephony and live canvasses is now possible. In other words, we can ensure that a voter who indicated possible support of Vote Leave at the doorstep also then begins to see targeted online adverts that same day. One of the greatest challenges previously to setting up a fully-fledged microtargeting operation in the UK has been the spotty coverage of consumer datasets in the British data market. However, the Vote Leave campaign now has the option to “leapfrog” into the next generation of microtargeting that employs newer techniques of online data collection.

Specific developments in machine learning algorithms have allowed us to create more dynamic algorithms that continuously adapt and learn with each new data input. Practically speaking, this means that a new canvass ID in Newcastle can now improve the accuracy of voter scores in Bedford, Islington or Truro. Newer database technologies, such as Hadoop and MapReduce, also allow us to handle higher volumes of data that previously would have required a much more expensive computing infrastructure. We also use a technique called “ensemble modelling” to overcome some of the previous gaps in model accuracy. Different modelling methods have their own peculiarities, strengths and weaknesses, such as varying degrees of noise sensitivity and over-training. Ensemble models involve methods of improving classification accuracy by aggregating predictions over several base classifiers. Ensembles are often much more accurate than the base classifiers that compose them because the different weaknesses of individual techniques begin to cancel each other out when paired together.

**Personality: A model of the “Human Universal”**

One of the most unique strategies we can offer to the Vote Leave campaign is a practical application of psychological methods to political targeting. Many are now recognising that these methods are the “next generation” of microtargeting, where we are able to predict personality and psychological traits of individual voters. In fact, several US presidential campaigns are now implementing psychographic microtargeting at a national scale for this primary cycle. To better understand the value of psychographics, one first needs to understand the central importance of personality traits to human behaviour. In psychology, personality is referred to as the “human universal” (cf. McCrae & Costa, 1997). This is because personality is a construct affecting our behaviour that transcends gender, cultures and demographics, endures over the lifespan and is dispositional rather than learned. People of every creed and background have a personality, and the constellations of traits that make up each possible personality profile exist within every culture and region. In this light, to understand personality is to understand the core of what makes us human.

Our understanding of personality has reached the point of a generalised agreement whereby we can broadly conceptualise personality into a taxonomy of five primary traits (cf. McCrae & Costa, 1987, 1988, 1997). These traits are: Openness (or “Culture”), Conscientiousness (or “Diligence”), Extroversion (or “Surgency”), Agreeableness (or “Pro-sociality”) and Neuroticism (sometimes inversely referred to as “Emotional Stability”). Collectively, these are often referred to as the “Big Five” or by its acronym “OCEAN”. The strength of the Five Factor Model (FFM) and its psychosocial approach is that it establishes a uniform framework to study personality and the dynamics of individual traits. Although it can be difficult to fully represent the broad constellations of habits, attitudes and behaviours that exist within a population of individuals, the FFM still provides us with a well-researched and substantiated base model to build upon (Caprara et al., 1999).

In the FFM, core traits are considered foundational to many facets of a person’s behaviour. There is substantial evidence for this, and the Big Five have been shown to affect music
preference (Rentfrow et al., 2011), job satisfaction (Hogan & Holland, 2003), teacher burnout rates (Cano-Garcia et al., 2005), drug consumption (Paunonen & Ashton, 2001) and behaviour in economic games (Ben-Ner et al., 2008). There is also a growing body of research to show that these traits may have genetic influences, grounding them firmly as dispositional entities (cf. Fowler & Davies 2008; McCrae et al., 2010; Hatemi & McDermott 2012).

Until quite recently, there has been little attention placed on the relationship of personality and partisanship since McCloskey’s (1958) early research on the personality of the conservative voter (cf. Alford et al., 2005). However, given the antecedent nature of these traits with so many other behaviours, scholars have begun exploring their relationship to partisan worldviews (cf. Tetlock, 1983; Carney et al., 2008; Mondak & Halperin, 2008; Gerber et al. 2010; Mondak et al., 2010). The recent findings of this area of scholarship are exceptionally promising, revealing very consistent links between the Big Five and partisanship, political activism and voter turnout (Cottam et al., 2010). Studies have been done in the United States, Germany, Italy, Uruguay, Venezuela and Britain (respectively: Gerber et al., 2010; Schoen & Schumann, 2006; Caprara et al., 2006; Mondak et al., 2010 [Uruguay & Venezuela]; Denny & Doyle, 2008).

**Personality and political behaviour**

The most prominent results of these political psychology studies have surrounded the relationships between political identity and the personality trait of openness. In short, left-leaning identities are positively related to openness. This relationship is coherent with theory, as individuals high in openness are usually more untraditional, abstract, creative and interested by new approaches or experiences. It is intuitive that this sort of person would be less likely to identify as a political conservative. Conscientiousness has also been related to behaviours in the political sphere, where a number of studies have shown the trait to be related to right-leaning identities. Since conscientious people prefer reliability, organisation, diligence and structure to uncertainty, ambiguity or reliance on others, it is reasonable to assume that some of these people would extend this to their political identity and favour conservative ideology.

In this light, personality is becoming understood as a central underlying driver of political behaviour. Although moderated by demographic (e.g. SES), environmental (e.g. local economics) and biographic factors (e.g. personal experiences), it is important to recognise that all these factors are nonetheless interpreted centrally by a person’s brain. Given that personality is highly influential in developing personal biases to information processing and decision-making, it is logical to place it as a central factor to political behaviour. Below this model is diagrammed (from Mondak et al., 2010).
Caprara, et al.’s (2006) work in Italy engaged in a longitudinal explanation of voting behaviour, using modelling procedures to examine the effects of personality traits. In this work Italian voters with high levels of openness were more likely to vote for centre-left parties and those with higher levels of conscientiousness were more likely to vote for centre-right parties. Caprara’s analysis was also able to draw links between facets of each personality trait and political leaning, demonstrating that specific aspects of personality are directly linked to voting behaviours.

Mondak, et al. (2010) built on this work in the American political context, expanding the scope of the Caprara’s project to examine multiple types of political behaviour. The research included political donations to a party or candidate, attending political rallies, engaging in political persuasion, contacting political figures and working for a party or candidate, as well as voter turnout itself. Each of these behaviours were shown to be significantly correlated to one or more Big Five personality traits. Some of these correlations are outlined below.

1. Voter turnout is positively related to openness and negatively related to emotional stability.
2. Contacting a political figure is positively related to openness, negatively related to conscientiousness, positively related to extraversion, and negatively related to emotional stability.
3. Attending a meeting with a public figure is positively related to openness, negatively related to conscientiousness, and positively related to extraversion.
4. Working for a party or candidate is positively related to openness, negatively related to conscientiousness, and marginally positively related to extraversion.
5. Attending rallies is positively related to openness and extraversion.
6. Attempting to persuade those around you to vote in a particular manner is positively related to openness, marginally positively related to extraversion, and negatively related to emotional stability.
7. Putting up a yard sign and displaying a bumper sticker or campaign button is positively related to openness.
8. Donating to a political campaign or party is positively related to openness, marginally negatively related to conscientiousness, and negatively related to emotional stability.
9. Donating to a group or organisation that supports a party or campaign is positively related to openness and negatively related to emotional stability.

Taken together, these facets of political engagement paint a picture of the types of people most active in the political sphere and most likely to vote in an election. The largest trait forces behind political engagement appear to be openness and emotional stability. Individuals who are high in openness are active and more likely than others to vote in an election. Individuals who are low in emotional stability (in other words, high in neuroticism) are less likely to vote and also less likely to be engaged in the political sphere.

It is important to note that in the same paper by Mondak the fact that political behaviours relate to personality in different ways in different cultural settings is set out. For example, in South America it would seem that extraversion plays a larger role in political engagement than in the USA or Europe.

In Uruguay, extraversion is positively related to attending a political meeting and conscientiousness is negatively related to participating in a political protest. In Venezuela, extraversion was also positively related to attending a political meeting, as it was in Uruguay, but it is also positively related to participating in a political protest. Furthermore, agreeableness was also found to be negatively related to participating in a political protest.

These examples of cross-cultural study demonstrate that the social psychology of the local region should be taken into account before applying insights gained from studies in other countries. Indeed, it may be necessary to engage in pilot studies if the geographic area in
question is significantly culturally or politically different to the country in which the insight to be applied was originally discovered.

On the whole, traits are enduring measures of individual differences that are distinctly related to a variety of phenomena in the realm of political psychology and offer methods of intervention suited to individual level targeting. These observations offer several methods of accessing traits for political behaviour ‘nudging’.

**Personality as a possible pathway to “European” identity formation**

Given the recent findings that personality is an integral part of the pathway leading to political identity, it is coherent with theory that some of the same psychological traits may also lead a person to being more susceptible to foraging a looser “European” identity. Although this admittedly has been not thoroughly explored in current scholarship, one study of Spanish voters is worth noting. Gallego & Oberski (2012) found in the 2009 EU Parliament election that “[openness significantly affects interest, efficacy and identification with Europe]” within their sampled cohort of Spanish voters. The authors further theorised that:

“People who are more open to experience should be more likely to identify not just with their narrow political community, but also with the wider community of Europeans. Conversely, those who are low in openness may be more inclined to identify with their village or their country. We hypothesize that openness to experience increases turnout in European elections through the mediating mechanism of identification with Europe.”

Openness is related to experiential living, novelty seeking, aesthetic interests, tolerance of ambiguity and curiosity. Undoubtedly, a “European” identity is a less concrete construct than one’s local, ethnic or national identity. However, people high in openness are better equipped for not only tolerating a more ambiguous identity, they are also predisposed to actively explore and engage with the diverse nuances these looser identities can offer them. Put another way, there is simply more to “play with” as a less rigidly defined “European” than as a more rigidly defined Spaniard or Englishman. Being part of Europe also maintains the promise of more possibilities for personal exploration, new experiences and many of the cultural activities that open people find personally fulfilling. In this light, “Europe” for these types of people is an experience to be had, filled with many diverse personal opportunities for cultural and social exploration that outweigh any distant political or economic problems.

Of course, it is important to caveat these findings, as it is only one study and it focused on Spanish voters. However it is nonetheless promising that some research as found some personality relationships in the context of European politics and identity. Were we to embark on a pilot EIP with Vote Leave, we could significantly expand on these findings.
PILOT PROCESS AND METHODS

The following section will discuss possible psychometric and sampling methods to inform Vote Leave’s strategic decision-making. Although it is not necessary at this early stage for an in-depth review of the potential methods that we could deploy for the programme, we took the liberty of including a summary of some of the methods we have found useful in the past to provide some context of what an EIP could involve.

Diversifying data sources

Scaled online panels. Several online panels would be set up to target a cross section of voters. Panels are very effective at reaching the types of voters traditionally left out of telephone polling, such as urban, young and highly mobile voters – the same voters who will be crucial to a Vote Leave victory. Panels also allow us to conduct audio-visual experiments that are impossible to deliver over the phone.

The sample size would be circa 10,000, which in our experience is typically sufficient to identify nuances in the data. Panels also allow us as researchers to use visual and scenario-based tasks that are more “realistic” to how voters actually engage with politics. Visual and scenario-based techniques can therefore improve the environmental validity and reliability of results (cf. Dahan and Srinivasan, 2000).

Respondent-driven sampling and social data collection. We would try to further increase the sample by accessing the social networks of the panel respondents. We would also harvest online and social data. New psychology research from the University of Cambridge has shown that:

“Computer predictions based on a generic digital footprint are more accurate than those made by the participants’ friends using a personality questionnaire; (ii) computer models show higher interjudge agreement; and (iii) computer personality judgments have higher external validity when predicting life outcomes such as substance use, political attitudes, and physical health; for some outcomes, they even outperform the self-rated personality scores”.

– Youyou, W. et al., 2014

Respondent-driven and social graph sampling would also be used. Although not random, it is important to note that other “random” methods, such as telephone sampling, has been shown to be affected by discrete biases that were previously discussed in an earlier section. It has been shown that respondent-driven samples can create asymptotically unbiased estimates (cf. Heckathorn, D., 2002; Salganik et al., 2004). Respondent-driven sampling also allows researchers to make estimates about the social networks within the population. In fact, research in public health and epidemiology has found that respondent-driven techniques are a more reliable method for reaching difficult to reach or marginalised populations (cf. Valle, M. 2008, Latz, K. 2005, Todd et al. 2007, Brown, K. 2005). Applied to political polling, this technique will allow us to engage with non-traditional respondents at a higher frequency, such as youth, members of economically deprived communities and socio-cultural minorities.

Consumer and census data appends. With the understanding that consumer data is less available in the UK market in comparison to other countries we have worked in, we would take the super sample from the online panels and overlay consumer datasets, such as financial data or purchasing habits, where they can be found. We would use this to verify a record’s voter status and estimate the match rates we can achieve by blending online and offline data. Census data would be used as environmental metadata about the context of where the voters live.

Applying advanced psychometrics

It is almost impossible for voters to fully understand which factors lead to them to reach a particular voting decision, and to what degree. In many cases, voters simply lack the self-
insight to give an accurate answer. Further, complex biasing factors, such as social desirability bias (e.g. mis-remembering how often I vote because voting is a civic duty) or self-constrasts (e.g. underweighting my sexism as a factor when voting for a male over a female) mean that even the most self-aware of voters cannot be relied upon to give straight answer. By employing peer-reviewed psychometric methods in the questions we give to our sample, we can dig deeper.

Psychometric tests would be related to a political inventory. We would seek to identify relationships between party support or identification and other factors, such as attitudes to the future, tolerance of risk and personality traits.

Panel respondents would be assigned to a cohort and be given specific psychometric tasks, which could include:

a. **Personality psychometrics.** The measure of personality traits would be based on a condensed version of the NEO-PI-R or IPIP-NEO inventories. The NEO-PI-R inventory would serve as the template for trait-related questioning over other metrics because it has shown extensive cross-cultural reliability and stability in self-assessment versus peer ratings (cf. McCrae et al., 1998, 2005; Watson et al., 2000). The NEO-PI-R has also shown consistency in results when compared to other measures of personality, such as the 16PF, MMPI and MBTI (cf. Costa & McCrae 1988; Furnham, 1996).

Although there is a trade-off with reliability, abbreviated metrics such as the TIPI (cf. Gosling et al., 2001) would reduce sampling costs, and we are conscious that this Vote Leave EIP pilot will have a limited budget. Ideally, questioning for traits would be more detailed than the TIPI, but the TIPI test would serve as the minimum level of granularity – particularity for scaled peer-to-peer and snowball sampling where brevity is crucial for respondent acceptance.

Past political studies have also used ten-question Likert Scales for their personality metric (e.g. Mondak et al., 2010), so the TIPI should yield data that is at least as informative as the findings of previous academic studies. An option would be to include a more comprehensive battery of questions, such as the IPPI-NEO, for one of the panel cohorts – although issues involving sampling bias and attrition would need to be considered. However, we do not think these challenges are insurmountable.

b. **Item diversification.** Questioning for worldviews and media consumption would use Likert Scales, but also include Phrase Completion Scales. Likert scales are primarily useful for contrasting traits in groups of individuals (Baron & Helen, 1996). However, Phrase Completion has been shown to overcome some of the weaknesses of Likert Scales, as they reduce cognitive complexity by displaying information in a single dimension and ensure that ‘neutral’ and ‘not applicable’ responses are not conflated at the scale’s midpoint (Hodge & Gillespie, 2003). Peer interaction questions may employ Bogardus Social Distance Scales to inquire about the willingness of subjects to discuss politics and to openly disagree with their peers, and to what extent the subject would engage in these interactions (Karayuk, 2009).

c. **Implicit Association Test (IAT).** Developed at Harvard, the IAT assesses strengths of associations between concepts by observing response latencies (i.e. subtle microsecond time lags) in computer-administered categorisation tasks. Originally used to study implicit racial biases in the American public, the IAT uses rapid fire stimuli (images/sounds/words) to identify a trend in unconscious bias (aka ‘implicit association’) – in the context of this EU Referendum, these could range from images of Nigel Farage, images of European symbols and provoking phrases such as “I can be both European and British”.

d. **Thematic Apperception Test (TAT).** The TAT is a projective technique that consists of a series of pictures that depict various situations (cf. Campbell, Psychiatric Dictionary, 1996). A subset is selected by the examiner and presented to the subject who is asked to tell a story about each picture. The respondent’s narratives are then run through a Natural Language Processing algorithm to code language and identify biases (e.g. 10% fewer adjectives/descriptors related to risk are used to describe the Vote Leave campaign message when a female is shown in adverts compared to when a male is shown, etc.).
e. **Conjoint design.** Multi-attribute preference techniques are better at revealing a respondent’s discrete motivational drivers that other surveying techniques often miss (cf. Green & Srinivasan, 1990; Netzer & Srinivasan, 2011). Conjoint operate on the premise that complex stimuli should not be broken into their constituent parts, as this does not accurately reflect the actual decision a voter or consumer ultimately makes. For example, when buying a car, one does not (usually) independently consider the number of cupholders as a critical factor for purchase. However, if we as market researchers make cupholders more salient to the consumer in a survey where they “rank” the importance of each separate attribute of the car, respondents tend to overweight the importance of minor attributes in the purchase when they otherwise may have been inconsequential or completely ignored. This leads to misleading data about what actually is important to the consumer or voter (cf. Leaton & Laskey, 1999). This effect can often be seen in traditional polling where respondents are asked to “rank” what issues are most important to them.

Rather, a holistic situation should be presented to the voter and back-coding of factors would allow the researcher to later identify which factors affect the decision in the analysis. This also reduces cognitive load on the respondent, as simpler questions can be asked about overall impression (e.g. simply asking “Would you buy this car?” rather than “On a scale of 1-10 how much do cupholders matter to your car purchasing decision?”).

f. **Pairwise design.** Elections are competitive arenas in which each message carries some form of trade-off and it is the job of the opposing campaign to make salient that trade-off. However, traditional message testing in polling or focus groups does not usually present the opponent’s attack at the same time as testing the client’s message, which leads to unrealistic questioning frames and misleading findings. Pairwise techniques would be used to better position issues in relation to a countervailing message. Pairwise designs recognise that asking voters about issues in isolation does not accurately reflect the fact those voters are, in the reality of a competitive campaign, simultaneously hearing conflicting messages from all sides.

![Diagram](image)

**Machine learning and data science**

**Bespoke segmentation.** The EIP will result in a high-level prototype segmentation. That segmentation will result from an iterative process, which is built upon the bespoke data returned from the sampling phase. The reason we do not use ‘pre-fab’ segmentations, such as Experian’s MOSAIC, is because generic classifiers run the risk of not providing distinct and homogenous groups based around targeting specific political causes. This is because an issue as nuanced as Euroscepticism is likely to cut across traditional demographic segments – rendering demographic targeting ineffective. For example, we may find that Euroscepticism is distributed evenly across several demographic groups, which would mean that we would need to find a different way of isolating those supporters beyond a simple demographic view. Further, considering that the Vote Leave campaign must build diverse coalitions of support in order to win, it is strongly advised that it approach the population in non-traditional ways.

**Modelling techniques.** Once all the data has been collected, several statistical techniques would be used to identify correlations within the different variables. However, different
modelling methods have their own peculiarities, strengths and weaknesses, such as varying degrees of noise sensitivity and over-training. We will therefore use what are called “ensemble models”. Ensemble models involve methods of improving classification accuracy by aggregating predictions over several base classifiers. Ensembles are often much more accurate than the base classifiers that compose them because the different weaknesses of individual techniques begin to cancel each other out when paired together. These techniques could include, amongst others, linear regression, k-NN, singular value decomposition, gradient boosting and heuristic neural networks.

Applications of psychographic data to messaging

**S-T-P Framework.** We typically follow the S-T-P Framework, which is a standard practice in marketing that structures our work with data into three core phases: Segmentation, Targeting and Positioning. Psychographic data becomes most useful at the final positioning stage, where the data informs not only “who” should receive a message, but also “how” should that message be framed.

**Personality-congruent messaging.** Marketing research into the precursors of brand preference and customer loyalty led to the emergence of the Self Congruity Theory (cf. Sirgy, 1982; Onkvisit & Shaw, 1987, Folkes & Kiesler, 1991). This theory contends that consumers (or in Vote Leave’s case, voters) have a pre-defined “concept of self”, and that brands also project a collection of values and qualities that can be related to that self-concept. Following this, in the buyer’s (voter’s) search for brands (campaigns), the goods (messages) projecting an image that the buyer (voter) also associates with his or herself are more likely to be chosen (cf. Sirgy, 1982; Onkvisit & Shaw, 1987, Folkes & Kiesler, 1991). Brand–self congruency is therefore established and the customer’s (voter’s) self-image is re-confirmed through their purchase (or vote). Branding in this light serves a psychological need to enhance and validate our identity.

In the case of personality, as traits are in large part the antecedents of political attitudes, then
framing the presentation of an issue to complement (or in the case of inoculation, challenge) a target personality trait can lead to a more receptive response. Put another way, message development seeks to deliver messages to voters using the vocabularies, visuals, concepts and framing that are most congruent to the target voter’s internal worldview and self-concept. For example, recent research has found that personality-based framing impacts the acceptance of pro-environmentalism messaging even amongst environmentally sceptical voters (cf. Brick, C. & Lewis, G. 2014; Milfont, T. & Sibley, C. 2012). Framing climate change policy in terms of “protecting outdoor spaces” appeals more to extraverts (who are more likely to be active outdoors), “connecting with natural beauty” appeals more to open people (who often exhibit a stronger sense of aesthetics), “an insurance policy for our children” for conservative-minded conscientious people (who have a deference to messages of deliberative caution), and “a means of being a caring person” for agreeable people (who show a deference to others), are all ways that personality-based framing can improve responsiveness. **This is because we can trigger the underlying dispositional motivators that drive each psychographic audience.** In other words, we can tap into how the voter sees the world and use our understanding of their personality to “speak their language” when crafting our arguments.
Pilot questions and hypothesis generation

We would seek to probe questions in a myriad of areas:

**Perception and identity**

- **What is “Europe”?** How do different types of voters conceptualize “Europe”?
- **What exactly does this referendum mean to people?** How do different types of voters conceptualize this referendum?
- **How do the semiotics or projected symbolism of “Europeanness”, “Britishness” and “Englishness” impact the perceptions of Vote Leave and Remain?**
- **Is this Referendum actually a “proxy vote” on our culture or multiculturalism?** How much does the core issue of “Europe” actually matter compared to the debate about who we are as a culture?
- **Is this Referendum actually a “proxy vote” on our culture or multiculturalism?** How much does the core issue of “Europe” actually matter compared to the debate about who we are as a culture?
- **If so, how can Vote Leave offer alternative identity-building narratives that appeal to the sense of self of different voters?**
- **What is the effect, if any, if the Vote Leave campaign frame the referendum question as “leaving Europe”, “becoming independent”, “having our say”, “joining the global community”, “returning to how it used to be”, “caring for our own”, “taking control”, etc?**
- **In other words, what should be the “locus” of the Vote Leave message framing:**
  - Is this about tradition or progress? – Is a Leave vote a “return to the status quo ante” or is it “forgaging a new direction”?
  - Is this about us or them? – Is the Referendum more about “who we are” (as Britons) or “who they are” (as Europeans)?
  - Is this about leaving or joining? – Are we arguing to “leave” the EU or perhaps “join” a new community (whether that is a new global community or “joining” a new arrangement/deal in Europe)?
- **How and why do some liberal and Liberal Democrat voters rationalise their desire for greater localism with a countervailing effort to support a more centralised European Union, which is antithetical to localism?**
- **Can we provoke enough dissonance amongst these liberal voters such that they feel dissuaded from turning out?**

**Psychographic**

- **Can we confirm or expand upon previous academic findings of the openness trait as a pathway to “European” pan-national identity formation?**
- **What are the possible underlying inputs that lead to Eurosceptic or Europhillic attitudes?**
- **What, if any, is the relationship between Eurosceptic/Europhillic attitudes and psychological disposition?**
- **Are there any interactions between demography, psychography and biography that have moderating effects on Eurosceptic/Europhillic attitudes of voters?**
- **Specifically, what, if any, are the effects of the Behavioural Activation System on perceptions of risk and reward in relation to this referendum?**

**Demographic and biographical**

- **Do non-EU immigrants and their families (e.g. Indian, Afro-Caribbean, Australian, Canadian, Commonwealth) resent the automatic rights held by EU immigrants?**
- **Does the prospect of family reunification for non-EU immigrants as a consequence of leaving the EU drive up support of Vote Leave in non-EU and Commonwealth voters?**
- **Can non-EU immigrants be portrayed as “victims” of the EU’s preferential immigration policies?**
- **What is the effect of knowing an EU immigrant on a voter’s attitudes?**
- **How does having a family member abroad or in Higher Education affect voters’ attitudes?**
- **How does having significant local manufacturing industry influence voter attitudes?**
- **Are there common themes or experiences in day-to-day life for certain segments that would lead a voter to support Vote Leave or Remain?**
Possible strategic insights for Vote Leave

• Openness, as a personality trait, is related to novelty-seeking, taking risks and trying out new things – and is correlated to liberal political views. Conscientiousness is related to cautiousness, deliberativeness and an appreciation of structure, organisation and predictability – and is correlated to conservative political views.

• Therefore, open people should be more “open” to change and conscientious people should be more cautious around anything seen to be “radical” or “moving too fast”.

• If we find that conscientious people are more supportive of Vote Leave, this means that they see UK getting out of the EU as returning to the status quo ante – in other words, the more stable option. The strategic consequence of this would mean that, for example, Remain’s current narratives focusing on “doomsday” scenarios will not be received well because these voters would be supporting Vote Leave because of their very desire for stability, not in spite of it.

• If we find significant numbers of open people are supporting Vote Leave, this would show that some people are seeing the referendum as a question of change and new ideas (rather than a return to tradition) – in other words, as a progressive rather than conservative option. This would mean that progressive parties’ bases, who are typically composed of more open people, could become a viable conversion target for Vote Leave.

• As an interesting note, it is also possible that many UKIP voters score higher in openness – it may be that there are environmental factors (education, culture, etc.) that push them to a right-wing party (UKIP voters are arguably “experimenting” with radical, new and different ideas) despite otherwise being pre-disposed to a progressive party. This finding would explain why Liberal Democrats lose so many voters in the West Country to UKIP despite totally different ideologies.

• Either way, the results would give us the most granular understanding of how people are engaging and interpreting the dialogue surrounding the EU referendum.

• If we find that we can frame Vote Leave as a globalist, pro-immigration, pro-multicultural option when targeting (a) Commonwealth voters and (b) naturalised non-EU immigrant voters (and their families), we could deploy similar types of multicultural engagement strategies the lead to huge successes for the Conservative Party of Canada in the mid-2000s.

• We may also find that these classes of immigrants in fact resent the privileges bestowed upon EU immigrants when they had to “work harder” and “prove themselves” in order to get a visa instead of the “easy ride” EU citizens get under current arrangements. This effect was found in Canada where immigrants themselves often formed the “toughest” views on immigration policy.

• This multicultural engagement would also help rebut the possible public misperception of Vote Leave as a group representing older, white “Little Englanders”.


## Pilot deliverables

1. **Hands-on staff support**
   
   We are open to providing our in-house support at the Vote Leave office during the pilot phase so that the campaign can become more familiar with our approach and ensure that communication is optimal.

2. **Online psychometric panel setup**
   
   We will trial building UK-specific online voter panels and a digital polling capacity, allowing Vote Leave to conduct live-time polling, online focus groups, message testing and data collection from reliable and representative samples.

3. **Trial of social data and voterfile augmentation**
   
   We will trial social data harvesting for Vote Leave and use some of our own technology to target and acquire online data about UK voters. We will also relate this data to traditional telephone samples for validation.

4. **Strategy memo**
   
   We will outline the current state of the race, giving a far more detailed insight than yet exists into the levels of support for each side and the scale of the swing vote.

5. **Prototype segmentation**
   
   This will give a psychographic profile of different groups of target voters in the campaign, their size, attitudes and motivations.

6. **Data-driven messaging**
   
   Samples of data-driven messaging narratives and messages that show the highest response rates and levels of support.

7. **New polling, scripting and psychometric methods**
   
   We will work along side Vote Leave’s internal research team to test and improve newer psychometric methods in survey questions to reduce bias and yield better data. This will help get more reliable insight and create useable data for modelling. We will also help trial different styles of sampling and respondent recruitment to improve the quality of sample cohorts.

8. **Technical report and feasibility study**
   
   Technical brief on the logistics of implementing a full psychographic microtargeting programme (i.e. feasibility, castings, timescales, data sources, predictive power, etc.). From this, we would know exactly how much the full project would cost and how long it would take.
Pilot costs and timeline

We are happy to offer Vote Leave preferential rates to conduct this pilot given the many exciting opportunities that could result moving forward. We expect the timeline to fall within an eight-week period, although we are conscious that every day counts and would strive to complete as soon as would be possible without sacrificing the quality of results.

We estimate the cost of running these experiments as a trial of a full-scale microtargeting campaign, including data purchase, data collection, incentive payments to respondents or focus group participants, modelling, segmentation and staff support, is £57,500.

It is important to note that these costs do not fully translate or extend to a full-scale national programme. For example, some per record data costs reduce substantially at scale. We are also completely foregoing our normal management fee rates to make this pilot as cost effective as possible.

| Panel costs | This covers panel recruitment fees and incentives, third party technology licences and online data acquisition. | £27,500 |
| Data appends | This covers charges to acquire and test data samples from consumer datasets. | £12,500 |
| Telephone sampling | This would cover a telephone validation sample to test match rates, response rates, data accuracy and the utility of this channel for voter contact. | £7,500 |
| Interviews and focus group | We would run several in-depth interviews and a focus group to elucidate common narratives and come up with hypotheses for quantitative testing. | £5,000 |
| Modelling and analysis | This covers server fees, external specialists and additional staff time we would incur to prototype and run the data through various models. | £5,000 |
Beyond the pilot

The pilot EIP will offer the insights needed to effectively and efficiently plan for a full-scale microtargeting operation, which would empower Vote Leave to identify, individually profile and contact all target voters with the right message, in the right format, at the right time. There are several possible larger projects that could emerge from this proposed pilot EIP.

<table>
<thead>
<tr>
<th>Psychographic microtargeting</th>
<th>A national microtargeting programme where every voter record is appended with a series of personality, political and messaging scores. These scores can be deployed nationally and locally for highly refined, evidence-based direct mail, e-mail, social adverts, canvass scripts and other messaging.</th>
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<tbody>
<tr>
<td>Attitudinal inoculation</td>
<td>With the psychographic scores, we would be able to identify and target those voters who are most vulnerable to Remain messaging and queue them into an inoculation treatment cohort before they are converted. Psychological re-framing techniques, such as those found in Inoculation Theory (McGuire, 1964) or the Valence-Framing Effect (Bizer &amp; Petty, 2005; Bizer et al., 2011), have been shown to increase the solidity and resilience of partisan views. Attitudinal inoculation works on psychological factors in a similar way to a viral immunisation works on the immune system. The base premise is to expose someone to weakened counterarguments, triggering a process of counterarguing, which eventually confers resistance to later, stronger persuasive messages of your opponents.</td>
</tr>
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</table>
Proposed team

Put simply, microtargeting and political psychographics are both extremely new and niche fields with limited know-how existing within the UK. However, we could provide the Vote Leave campaign a support team who years of experience in managing Experiment Informed Programmes, microtargeting and targeted communications for major political campaigns around the world. We not only have the benefit of years of international political experience, but also have a deep understanding of British politics. Taking lessons from the many diverse campaigns we have worked on gives us a unique perspective on what can be possible for Vote Leave.

1. Experience

- Multiple US presidential, senatorial, congressional campaigns and PACs
- Extensive experience at senior levels in national Canadian, British and American elections
- Advised senior UK Cabinet ministers
- Frequently appear in national media, including the BBC and the Guardian, for political analysis
- Advised national parties in emerging democracies in Africa and the Caribbean
- Helped set up national voterfiles for major political parties in the UK, USA, Canada and the Caribbean (*including the same VAN voterfile technology the Remain campaign will be using*)
- Graduates of the University of Cambridge and London School of Economics (“LSE”), awarded top of class in several subjects

2. Skillsets

- Microtargeting, psychographic segmentation, audience engineering and Experiment Informed Programmes (EIPs)
- Data-informed messaging development for national TV, digital and direct mail
- Administering national direct mail and digital advertising programmes
- Intimate working knowledge of voterfiles technologies, including national-level administration, trainings and deployment
- Guiding organisational culture change on large-scale technology projects
- All three are full-stack programmers familiar with some of the newest coding frameworks including Node, D3, Angular, Rails, Django, Selenium, SQL and NoSQL
Recommended actions / Next steps

<table>
<thead>
<tr>
<th></th>
<th>Action Description</th>
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<tbody>
<tr>
<td>1</td>
<td>January meeting at Vote Leave HQ</td>
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<td></td>
<td>We hold a follow-up meeting in January with Vote Leave to discuss moving forward.</td>
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<tr>
<td>2</td>
<td>Retain our team for a pilot</td>
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<tr>
<td></td>
<td>If agreement is reached, our team is engaged by the Vote Leave campaign to work on the above-mentioned projects for approximately two (02) months.</td>
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<tr>
<td>3</td>
<td>Conduct a pilot project</td>
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<td></td>
<td>We begin an EIP programme in one target rural region of England and one urban region.</td>
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<tr>
<td>4</td>
<td>Identify feasibility of national targeting programme after pilot concludes</td>
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<td></td>
<td>Once the pilot project is completed, we analyse the results to identify what options could exist for larger scale programmes and what the expected Return on Investment would be for the Vote Leave campaign.</td>
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Proposed research pipeline for Leave pilot EIP

**Outcomes**
- Hypothesis generation
- Qualitative inputs into quantitative programme
- Methods creation
- Identify response rates
- Costing estimates for national programme
- Data collection
- Identify match rates
- Identify correlations
- Model validation
- Effects of media channel
- Technical brief
- Prototype segmentation
- Draft messaging
- Proposal for national programme
- Insight into the state of race
- Estimation of ROI potential for national programme

**Preparatory phase**
- Focus groups and IDIs
- Mock up test messages
- Draft psychometrics

**Sampling phase**
- Online panels

**Data augmentation phase**
- Consumer data overlay
- Snowball sampling

**Testing phase**
- Telephones
- Social ad testing

**Estimates**
- Preparatory phase: Est. 2 weeks
- Sampling phase: Est. 2 weeks
- Data augmentation phase: Est. 2 weeks
- Testing phase: Est. 2 weeks
- Total est. 8 weeks