

Implications of the ICO's Draft Guidelines on consent



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Foreword

In May next year, the much-debated GDPR comes into force. The legislation is a welcome update to the data protection rules that provides the opportunity for organisations to build a new relationship with customers, based on trust and transparency when it comes to handling their data, making data protection a core brand value.

In recent years, we've seen from our own consumer research that people expect companies to be a trusted custodian of their personal data and are increasingly looking at the way a company treats their personal data as a brand differentiator. In fact, 59% of customers say that a brand using their personal data responsibly is important in their decision whether to use them – according to our [Customer Engagement 2017 research](#).

As we prepare for this new data protection regime, it is therefore important that there is maximum clarity about the rules under which organisations will operate, including those on processing personal data.

This study concentrates on the standard of consent, which is one out of six legal bases for processing data, and which continues to be a central pillar for many data businesses. Consequently, getting the right interpretation of the rules on consent under GDPR matters a great deal. We therefore welcome this important contribution by London Economics into the possible effects of an overly strict interpretation of consent on consumers and business.

Rachel Aldighieri
Managing Director at the Direct Marketing Association

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Executive summary

- This study examines the potential economic impact of the General Data Protection Regulation¹ (GDPR) in relation to **the ambiguities created by the Information Commissioner's Office (ICO) guidance on consent**.
- We have highlighted two elements of the guidance that will have particular impact: **the prohibition of any form of opt-out consent and the requirement to name all third-parties that will rely on consent**. In both cases, the ICO's current guidance seems to imply **a more stringent interpretation of GDPR** than is required by an impartial reading of the text of the Regulation.
- The evidence reviewed in this report clearly indicates that a more stringent interpretation of GDPR, as per current ICO guidance, would lead to a **reduction in the amount of data available to companies**.
- **This is exemplified by the effect on the availability of name and address data from the edited electoral register, considered a cornerstone of the UK's consumer data ecosystem**. As the primary source of name and address data in the UK, it serves as the link between data that firms hold on their customers and external data sources; a lot of added value depends on this link. Reducing the availability of nationally representative data on individual's names and addresses would lessen firms' capacity to target existing and potential customers, and would severely reduce the effectiveness of marketing if no compensating actions are taken.
- This reduction in the available data would have **potentially large impacts on data derived profitability. Profits attributable to data analytics could decrease by up to £41 million** in the UK, while profits attributable to **prospecting for customers could decrease by up to £114 million**.
- Another adverse effect of the above might be that firms move data collection and analysis in-house rather than outsourcing it to specialist analytics and data providers, thereby **undoing the benefits of specialisation** and entrenching the market power of larger firms. A **closed system of centralised data silos could pose problems for data security**, and render data duplication unavoidable. In addition, consumers in a closed system might be asked to provide consent for the same personal data multiple times, whereas in a distributed data ecosystem they might only be asked once.
- A survey of marketing and data professionals in the UK that was conducted as part of this study reveals a **strikingly low level of certainty regarding the impact of GDPR on core business activities** and company performance. This points to a lack of effective communication regarding the interpretation of GDPR with the business community and a failure to provide a comprehensive impact assessment of GDPR.

¹ Regulation (EU) 2016/679

1 Background & context

Data is everywhere. It enables vast range of applications across virtually all industry sectors. **Most industries now rely on data flows** to develop products and services, streamline processes, improve customer service, access markets and maintain relevance in today's quick-evolving business landscape².

Creating trust in digital trade is a fundamental precondition for ensuring that the opportunities emerging in the information economy can be realised. Personal data is “the fuel that drives much commercial activity online”³. At the same time, the use of personal data by businesses raises concerns about privacy and the security of information, and insufficient data protection can harm consumer confidence.

However, **too stringent protection regimes will unduly restrict activities, increase administrative burdens and stifle innovation.** Frictions in the way personal data is used will inhibit the proliferation of new technologies and business models, thereby reducing potentially large societal benefits.

Specific concerns exist in relation to the requirements for consent contained in the GDPR, in particular as interpreted by the ICO in its draft “GDPR consent guidance”. The reliance on the fair use of personal data of large part of the marketing industry, as well as a large part of the internet economy as it currently exists, means that **the economic consequences of an overly restrictive approach to consent is bound to have substantial economic consequences.**

A better understanding of the economic impact of the changes introduced by the GDPR on the companies that affected is a crucial missing piece of information that **would be very valuable to policymakers** in what is an increasingly important pillar of the UK economy.

Particular consideration should be given to the impact on the industries that are more immediately impacted, namely the direct marketing industry, which is important both in and of itself and for the value it feeds into a diverse range of other sectors including some of the UK's largest companies.

² North American Leaders Summit (2010). *Report on the Trilateral Committee on Transborder Data Flows*

³ UNCTAD, 2016, p. iv.

2 GDPR and consent

Box 1 Summary: GDPR and consent

The General Data Protection Regulation (GDPR) will replace the UK Data Protection Act 1998 from May 2018. The GDPR will introduce new obligations and modifies existing requirements, including requirements on consent. The GDPR moves towards consent based on affirmative action.

The ICO's interpretation of consent requirements in the GDPR as published in its draft guidelines appear to be stricter than the explicit requirements in the GDPR. The ICO's interpretation explicitly rules out opt-out consent and requires the naming of all parties who will rely on consent. The GDPR does not seem to rule out opt-out consent explicitly and merely requires the naming of all categories of parties relying on consent.

The move to an explicit prohibition of opt-out consent is likely to reduce consent rates, since people tend to follow the default option presented to them. Furthermore, people tend to be more likely to provide opt-in consent to large and established firms. This implies that relying on opt-in consent risks entrenchment of market power.

2.1 Overview

The General Data Protection Regulation (GDPR) will replace the UK Data Protection Act 1998 (DPA)⁴ from 25 May 2018. **The GDPR introduces a number of new obligations** on matters such as data subject consent, access and erasure of personal data, data portability, breach notification, international data transfers, and appointment of data protection officers, among others.

GDPR modifies the requirements for obtaining data subject consent. While consent continues to provide the basis for lawful collection and use of personal data, **the definition of consent in GDPR is more restrictive.** While the DPA allowed opt-out consent, GDPR will require "a statement or a clear affirmative action" to qualify as valid consent. Recital 32 specifies that affirmative actions can consist of ticking a box on a website, "choosing technical settings for information society services", or "another statement or conduct" that clearly shows the data subject is consenting to their data being processed. "Silence, pre-ticked boxes or inactivity", on the other hand, do not constitute valid consent. The burden of proof that consent was obtained lawfully according to these principles rests with the data controller (Article 7(1)).

Further rules relating to consent are:

⁴ The DPA implements the current European Data Protection Directive 95/46/EC.

- Recital 43: If there is “a **clear imbalance between the data subject and the controller**, in particular where the controller is a public authority”, the presumption is **that consent is not freely given**. Importantly, a controller may not make a service conditional upon consent, unless the processing is necessary for the delivery of the service.
- Article 7(3): **The right to withdraw consent at any time**, with the added specification that “it shall be as easy to withdraw consent as to give it”, of which data subjects must be informed prior to consent being given.
- **Consent must be specific to each data processing operation**. To meet the specificity requirement under Article 7, a request for consent must be “clearly distinguishable” from any other matters in a written document, and must be provided “in an intelligible and easily accessible form, using clear and plain language.” However, the law exempts controllers from obtaining consent for subsequent processing operations if the operations are “compatible.” Recital 50 states that compatibility is determined by looking at factors including the link between the processing purposes, the reasonable expectations of the data subject, the nature and consequences of further processing, and the existence of appropriate safeguards.
- Article 17, the data subject has the **right to have the controller erase her data** if she withdraws consent and the processing had been based on consent.
- Article 18, where the data subject exercises **her right to restrict data processing**, the controller may only continue to process the data if it obtains the data subject’s consent or if processing is necessary for a legal claim.
- Article 20 grants the data subject **the right to receive all the personal data about her in the controller’s possession** where the processing is based on her consent. In these circumstances, the required level of consent is “unambiguous” consent.
- Article 22, controllers need **explicit consent to make decisions that produce legal effects or similarly significantly affect the data subject**⁵ “based solely on automated processing, including profiling”.
- Article 49, controllers need explicit consent to authorise transfers of personal data to countries that do not provide an adequate level of protection, if no other transfer mechanism is in place.

The GDPR, therefore, **creates additional hurdles for consent over what was required by the Directive**. As interpreted by the Article 29 Working Party’s Opinion 15/2011 on the definition of consent, the Directive required the controller to provide “accurate and full information on all relevant issues,” including the nature of the data that will be processed, the purposes of processing, the identity of the controller, and the identity of any other recipients of the data. Consent had to be specific to the processing operations and the controller could not request open-ended or blanket consent to cover future processing. Significantly, while consent could be satisfied by an express statement, it also could be inferred from an action or inaction in circumstances where the action or inaction clearly signified consent. Thus, **the Directive left open the possibility of “opt-out” consent**.

⁵ Denial of credit and evaluation of employment applications by automated processing without human intervention are given as examples.

2.2 The ICO's draft guidelines

2.2.1 Consent

The ICO's draft guidance asserts that under GDPR all consent must be opt-in consent and that there is no such thing as "opt-out consent". However, **in the text of the GDPR there is nothing that specifically prohibits opt-out consent**. If the European legislators had intended to exclude all forms of opt-out consent from the concept of consent it would have been a simple matter for them to say so.

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Effect of framing on consent

There is conclusive evidence that **requiring consent by opt-in dramatically reduces consent rates**. For instance, Johnson and Goldstein (2004) show that consumers tend to go with the default option chosen for them in the case of organ donations, despite heavy publicity encouraging donations. Thaler (2009) points out the difference in consent rates between two similar countries, Austria and Germany: "In Germany, which uses an opt-in system, only 12 percent give their consent; in Austria, which uses opt-out, nearly everyone (99 percent) does."

The same effect, albeit potentially with smaller magnitudes, **is present when consumers are asked to consent to receiving targeted ads**. If the default approach is for consumers to be subscribed (opt-out), then more consumers are likely to remain subscribed than under an opt-in system where consumers are by default unsubscribed⁶. The DMA has stated that "the impact of re-consenting supporters will clearly have a negative effect on the third sector's ability to continue to raise funds from its pool of existing donors – at best reducing the pool to a fifth of the size"⁷.

References

- Acquisti, A., Taylor, C. and Wagman, L. (2016). The economics of privacy. *Journal of Economic Literature*, 54(2), 442–492, <http://dx.doi.org/10.1257/jel.54.2.442>
- Campbell, J., Goldfarb, A. and Tucker, C. (2015). Privacy Regulation and Market Structure. *Journal of Economics and Management Strategy*, 24(1), 47–73.
- Johnson, E. J. and Goldstein, D. G. (2004). Defaults and Donation Decisions. *Transplantation* 78(12), 1713–16.
- Joseph W. Sakshaug, J. W., Schmucker, A., Kreuter, F., Couper, M. P. and Singer, E. (2016). Evaluating Active (Opt-In) and Passive (Opt-Out) Consent Bias in the Transfer of Federal Contact Data to a Third-Party Survey Agency. *Journal of Survey Statistics and Methodology*, 4(3), 382–416. doi:<https://doi.org/10.1093/jssam/smw020>

⁶ Acquisti et al (2016)

⁷ DMA response to the ICO's draft guidelines <http://www.thirdsector.co.uk/direct-marketing-association-says-ico-wrong-opt-out-consent/fundraising/article/1429586>. Consultation p. 10, https://dma.org.uk/uploads/misc/58e37de3d084e-ico-gdpr-consent-guidance--uk-dma-response-march-2017-final_58e37de3d07b4.pdf

Knight, J. (19 Jan, 2017). Opt-in or Opt-out – what will it be for B2B email marketing? Marketscan Insight (Blog). Retrieved from <https://www.marketscan.co.uk/insight/opt-in/opt-out-what-will-it-be-for-b2b-email-marketing>

Maldoff, G. (12 January 2016). Top 10 operational impacts of the GDPR: Part 3 – consent. Retrieved from <https://iapp.org/news/a/top-10-operational-impacts-of-the-gdpr-part-3-consent/>

Thaler, R. (26 September 2009). Opting in vs. Opting Out. New York Times Economic View. Retrieved from <http://www.nytimes.com/2009/09/27/business/economy/27view.html>

2.2.2 Naming 3rd parties

The ICO's draft guidance states that the data controller must **"name any third parties who will be relying on consent"**. The apparent specific requirement to name third parties seems to **go beyond what is required in the GDPR**, which requires the data controller to provide the data subject with information as to "the recipients or categories of recipients of the personal data, if any". The difference between naming each and every third party on the one hand and providing information on the categories of recipients of the personal data on the other in practice could be considerable.

The differentiated market for data and related services that has grown up over the recent period means that a sophisticated business that makes optimal use of its data may share that data with dozens of third parties (who are typically not household names). **The difference in terms of the burden on business and the effect on consumer behaviour that is caused by this diverging interpretation could be very large.**

3 Economic impacts of GDPR

Box 2 Summary: Economic impacts of GDPR

The economic sector dealing with the collection and analysis of data is large, generating £4.8 billion in gross value added in 2016. The availability of data lies at the heart of this sector. Data analytics is beneficial to firms; firms using data analytics more are consistently shown to be more productive.

Stricter consent rules are likely to damage these productivity benefits. A strict interpretation of the GDPR could cause a loss of UK GDP of up to £14 billion due to additional hurdles to direct marketing only. For the EU as a whole, GDP losses could be as large as £58 billion, with 1.3 million jobs lost. Loss to UK GDP due to additional hurdles to online behavioural advertising could be up to £633 million (£3 billion and 66,000 jobs lost EU-wide).

Consultations with business confirm that data on names and addresses are indispensable for linking different sources of data. The ability to augment data that companies hold is the basis for many value-added activities, and a reduction of availability of third-party data is considered detrimental by the interviewees.

Interviewees believe that reduction in the available third-party data would worsen segmentation and with that targeting of existing and potential customers. This would make marketing less effective and less profitable. The impact is considered especially detrimental for firms with limited access to primary data (typically new businesses without existing consented customer databases). Interviewees also anticipate that data collection and analytics are likely to be moved in-house, possibly undoing the benefits of specialisation and entrenching the market power of larger firms with existing databases.

Further, interviewees also anticipate that the requirement to name third-parties will affect businesses. The requirement is likely to decrease consent rates because it highlights risks of data processing while ignoring the benefits.

3.1 The UK data economy

The economic sector dealing with the collection and analysis of data is large. To get a sense of its size, the sector has been defined as comprising firms that engage in “the collection and

interpretation of customer, citizen or business information for the purpose of informing commercial and public policy decisions, improving management of customers or civic relationships, or improving commercial or public management efficiency” (“business of evidence”, PwC, 2012).

This industry **generated £4.8 billion** in gross value added and **up to 73,000 full time equivalent jobs** in 2016 (PwC, 2016). The so-called ‘core suppliers’, the traditional global market research firms, account for approximately half of these figures. The data analytics sector is still relatively small, generating between £355 million and £497 million in gross value added and employing between 4,800 and 6,700 full time equivalents in 2016. However, it is a fast growing sector. It grew 350% between 2012 and 2016.

At the heart of successful use of data analytics lies the data. At a functional level, quality data is required to get analytical algorithms to function properly. Major advances in artificial intelligence in the last few years (from machine translation to image classification) have been triggered by the availability of new datasets, rather than by the development of new algorithms (Wissner-Gross, 2016). This implies that **data is a key factor to quality analysis**.

Not only at a functional level is data a key driver. **Competitive advantages also derive from data**, more than from algorithms (Lohr, 2017; Ebert, 2016; Wertz, 2016). The fact that data creates competitive advantage can be seen in the drive of large technology corporations such as Microsoft and IBM to purchase smaller companies to gain access to new data.

3.2 Evidence on the impact of GDPR

With all of this in mind, the question remains what benefits data analytics brings to firms, and how the GDPR will impact this.

13% more value

10-15% more productivity

3% faster growth in productivity

The first question can be answered by looking at **productivity differences of firms with different attitudes to data analytics**. Bakhshi et al. (2014) find a large effect of the use of data on firm productivity. They find that firms scoring in the top quartile of online data use produce **13% more value added** than firms scoring in the bottom quartile.

The use of data analytics, rather than data collection or deployment⁸, has a particularly large impact on productivity. The **top 16% of firms** most heavily using data analytics are between **10% and 15% more productive** than the average firm.

Brynjolfsson et al. (2011) estimate the effect on productivity of firms adopting **data-driven decision-making** in their business. They find, statistically significant, **positive increases in productivity** when firms adopt such decision making⁹.

Tambe (2014) estimates the impact of investments in ‘big data’ of firms, measured with employment numbers of specialists skilled in the Hadoop platform. Hadoop is an open-source

⁸ Data deployment captures the importance of data use in business decisions-making.

⁹ The authors find a 5% increase in sales for a 1 standard deviation increase in their measure of adoption of data-driven decision making. If this measure was normally distributed, this would allow us to compare the average firm with a firm scoring within the top 16% of firms scoring highest on adoption. In reality, the data is slightly skewed.

platform for ‘big data’ analytics. The author finds that **investments in ‘big data’ are associated with a 3% faster growth in productivity.**

References

- Bakhshi, H., Bravo-Biosca, A., & Mateos-Garcia, J. (2014). *Inside the Datavores: Estimating the effect of data and online analytics on firm performance*. Nesta. Retrieved from https://www.nesta.org.uk/sites/default/files/inside_the_datavores_technical_report.pdf
- Brynjolfsson, E., Hitt, L. M., & Kim, H. H. (2011). Strength in Numbers: How Does Data-Driven Decisionmaking Affect Firm Performance? *SSRN Working Paper*. Retrieved September 20, 2017, from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1819486
- Ebert, M. (2016, January 14). *AI's Big Trade Secret: Why Algorithms are Worthless*. Retrieved September 20, 2017, from Medium: <https://medium.com/@maebert/ai-s-big-trade-secret-a0d59110d6e3>
- Lohr, S. (2017, January 8). *Data Could Be the Next Tech Hot Button for Regulators*. Retrieved September 20, 2017, from The New York Times: <https://www.nytimes.com/2017/01/08/technology/data-regulators-google-facebook-monopoly.html?mcubz=0>
- PwC. (2012). *The Business of Evidence*. Retrieved from https://www.mrs.org.uk/pdf/The_Business_of_Evidence_Final_08102012.pdf
- PwC. (2016). *Business of Evidence 2016*. Retrieved from <https://www.pwc.co.uk/business-of-evidence-2016.html>
- Tambe, P. (2014). Big Data Investment, Skills, and Firm Value. *SSRN Working Paper*. Retrieved September 20, 2017, from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2294077
- Wertz, B. (2016, January 6). *Data, not algorithms, is key to machine learning success*. Retrieved September 20, 2017, from Medium: <https://medium.com/machine-intelligence-report/data-not-algorithms-is-key-to-machine-learning-success-69c6c4b79f33>
- Wissner-Gross, A. (2016). *Datasets Over Algorithms*. Retrieved September 20, 2017, from Edge.org: <https://www.edge.org/response-detail/26587>

3.3 Specific impacts on direct marketing and related uses of third-party data

The GDPR will have an impact on users of Direct Marketing and related uses of third-party data. **Stricter consent rules, or the interpretation of the GDPR as such, will likely impact the use of data analytics.** Examples include the requirement to obtain active opt-in consent rather than passive opt-out consent and the requirement to name all parties that will be relying on consent (Information Commissioner's Office, 2017). Stricter consent rules will likely lead to smaller datasets from which firms can draw. For example, opt-in consent makes people less likely to consent to be contacted for future marketing purposes (Johnson et al., 2002).

A study by Deloitte (2013) attempts to estimate the **economic impact of the GDPR**¹⁰ on a number of **sectors heavily reliant on personal data**. Some of these sectors rely on data analytics to generate value. Highlighted here are the impacts on **direct marketing** and **online behavioural advertisement** as examples of such sectors.

For users of **direct marketing**, the study estimates a **sales loss** of €62.5 billion (£57.5 billion¹¹) for the EU-27 and **€15.1 billion (£13.9 billion) for the UK** due to the GDPR. These sales losses translate to an estimated loss of GDP of €85 billion (£78.3 billion) and **loss of employment of 1.3 million EU-wide**. Given that the study uses conservative estimates, the losses are likely to be higher.

For users of **online behavioural advertisement**, the study estimates a sales loss of €3.2 billion (£2.9 billion) for the EU-27, and **€687 million (£632.6 million) for the UK**. These losses translate to an estimated loss of GDP €4.2 billion (£3.9 billion) and **loss of employment of 66,000 EU-wide**.

The estimated losses presented above show that the economic impact of the GDPR on sectors relying on personal data and data analytics can be large. Losses can go into the billions of pounds.

Not all businesses are affected equally by consent rules. Varian et al. (2004) look at the use of do-not-call (DNC) registries in the US, which function similarly to opt-out consent. They find that income, educational attainment and household composition can explain the differences in the likelihood of people signing up for such registries. **This implies that the losses** estimated in Deloitte (2013) **might not be spread equally between affected firms**.

References

Deloitte (2013). *Economic impact assessment of the proposed European General Data Protection Regulation: Final report*.

Information Commissioner's Office (ICO). (2017, March 2). Consultation: GDPR consent guidance. Retrieved September 4, 2017, from <https://ico.org.uk/media/about-the-ico/consultations/2013551/draft-gdpr-consent-guidance-for-consultation-201703.pdf>

Johnson, E. J., Bellman, S., & Lohse, G. L. (2002). Default, Framing and Privacy: Why Opting In-Opting Out. *Marketing Letters*, 13(1), 5-15.

Varian, H., Wallenberg, F., & Woroch, G. (2004). The Demographics of the Do-Not Call List.

3.4 Impacts on businesses that use 3rd party data: consultation with businesses

To further illuminate the potential impact of GDPR, the team conducted **5 telephone interviews with senior customer data/analytics managers in UK businesses** between August and October 2017. The companies represented included a high street bank, a big six energy supplier, a national

¹⁰ When this report was written, the Regulation was not yet finalised. Discussion is based on the form of the Regulation as debated at the time.

¹¹ Exchange rate applied to all euro amounts is €1 = £0.92075. This is the average exchange rate over 1 September 2017 as per Eurostat.

print media group, a major insurer and a leading live events organiser. Another consultation was held with the Direct Marketing Association (DMA).

The first insight, confirmed by interviewees across the different markets, is that **name and address information is currently indispensable as the link that allows businesses to combine different data sources** (internal and external) to gain a fuller understanding of their customers. Without the ability to link records on the individual level, the information available to companies would either deteriorate, or businesses would be forced to collect more data themselves, so as to avoid linking in-house and third-party data.

Augmenting the data that a company holds on its customers (and which is covered by consent or legitimate interest) is the basis for many value-added activities, from improved targeting of marketing communications, prospecting for new customers on the basis of propensity to buy, optimisation of products or services and strategic planning based on detailed customer segmentation and insights into population level structures and trends¹².

Third party data providers offer a wealth of individual level data that are used by companies in many different ways. The **edited electoral register** is a fundamental component of these datasets because:

- it is approximately **representative** of the UK population, thus allowing population-based, rather than sample based predictions and insights, and
- the combination of name and address provides the most reliable (and often the only) **link between internal and third-party data**. Third-party data includes data on lifestyle, preferences, age, income etc. collected from different sources and held at the level of the individual.

Individual level data is not always involved in the final application. For example, segmentation for strategic purposes is often done at higher aggregates; however, to create the relevant datasets, linking based on names and addresses is still indispensable. And many applications, in particular in relation to marketing and prospecting, do require individual level data. Data on age, for example is important for time-critical products and services, e.g. in financial services (pensions/life insurance). If companies do not have access to this data, this might leave consumers worse off.

Reduction in the availability of third-party data

On the question what would happen if the amount of third-party data companies can use were reduced, for example due to fewer records being available in the edited electoral register (and thus lower match rates with in-house datasets), interviewees unanimously agreed that detailed **customer segmentation would no longer be possible at the current level of accuracy** and that therefore targeting would be worse¹³.

In addition, the “marketable universe” would be reduced: companies would not be able to reach all potential customers, thus achieving lower sales and lower growth. The impact would be particularly

¹² The issue here is that companies’ in-house data is necessarily limited to a sample of existing customers. Insights into how well this sample represents the overall population are very valuable. For example, a company might find that it serves only a small part of a specific customer segment and can design its products or improve its targeting so as to increase its market share.

¹³ Segmentation in practice is very sophisticated, with over 100 segments not uncommon, e.g. in financial services.

severe for new companies who need to build a customer base: one interviewee estimated that **the number of potential new customers that can be targeted would decrease 60%-70%**.

More untargeted advertising, including through social media would be used instead. As targeting becomes less precise, marketing becomes less effective (lower conversion rates reduce overall profitability¹⁴). This could result in a reduction of overall marketing spend or a redirection towards less targeted modes

*“If we didn’t have this information, we would send more irrelevant communications to our customers”
Live events business, September 2017.*

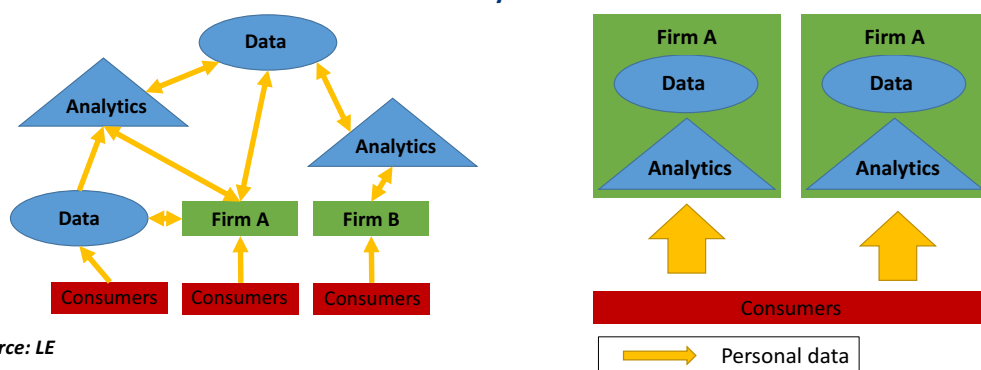
One interviewee remarked that companies faced a trade-off between data and modelling, e.g. when it comes to predicting propensity-to-buy: reduced access to data would mean they would rely more on modelling. If the model-based inference is correct, then it is arguable whether an increase in data protection has been achieved, if not it leads to less accurate targeting.

In terms of insights and analytics, reduced access to third party data **is worse for companies that have access to fewer sources of primary data** of their own, such as pure online businesses, as opposed to diversified media companies, for example.

Overall, interviewees were of the view that **the value of third party data would diminish ‘greatly’** if there were fewer records available to match with their in-house data. While the interviewees could not quantify the impact, some thought it was likely that they would no longer buy third-party data, but would instead **collect more data from their own customers**, e.g. through ‘progressive registration’.

Several interviewees also confirmed that they were exploring the possibility to **take analytics functions that are currently outsourced to third parties in-house** if the exchange of data with third parties became more difficult. This indicates that the amount and type of processing that is being done may not change. There also is a risk that this (re-)integration of analytics functions might **undo certain benefits of specialisation** that have led to the emergence of a specialised data analytics industry in the first place.

Figure 1 Distributed vs closed data ecosystem



Source: LE

¹⁴ One interviewee argued that it is “absolutely not” the case that the remaining data (individuals who opt in to having their records used) would be more valuable: the decision to opt out is not made in full view of benefits later on (e.g. in cases where a product becomes only relevant to a consumer once she has reached a certain life stage, which might occur a long time after the consent situation).

Disintermediation is also likely to **strengthen the market power of businesses that hold large consented databases**, at the expense of entrants. As a result, consumers might miss out on new products and services, instead being more intensely marketed to by their existing suppliers. This echoes Acquisti et al. (2016): “The sharing or protection of consumer data can also influence market competition. Campbell, Goldfarb, and Tucker (2015) demonstrate that, if privacy regulation only relied on enforcing opt-in consent, an unintended consequence may be the entrenching of monopolies. The authors show that consumers are more likely to grant their opt-in consent to large networks with a broad scope, rather than to less established firms. Hence, if regulation focuses only on enforcing an opt-in approach, users may be less likely to try out services from less established firms and entrants, potentially creating barriers to entry by leading to a “natural monopoly” in which scale economics include privacy protection.”

Naming third parties

In relation to naming third parties, one company had run an experiment, which showed that **consent rates for marketing communications fell from 70%-80% to 30%-40%** if a list of third parties with whom data might be shared was shown. The interviewee remarked that the lack of clarity from the ICO causes them to do a lot of extra work to assess such impacts.

In general, it was thought that drawing attention to third parties would worry customers/lead to complaints by **highlighting risks, while not giving equal consideration to** benefits to the consumer. As a result, it was thought (by the insurance company) that fewer customer would consent to data sharing, and some would cease buying from the company altogether.

4 Impact of changes to consent rules

Box 3 Summary: Impact of changes to consent rules

To estimate the impact of changes in consent rules, a survey was conducted among UK data professionals. The respondents to this survey believe that moving from opt-out consent to opt-in consent will reduce the consent rate. They report that 83% of consumers opt-in to having their data processed when this is the default option. But only 42% of consumers are expected to opt-in if consent has to be explicitly given. Databases obtained under opt-in consent, however, are believed to be more valuable.

Respondents further note that more restrictive rules on consent will make them more reluctant to use third-party data in analysis of consumer data.

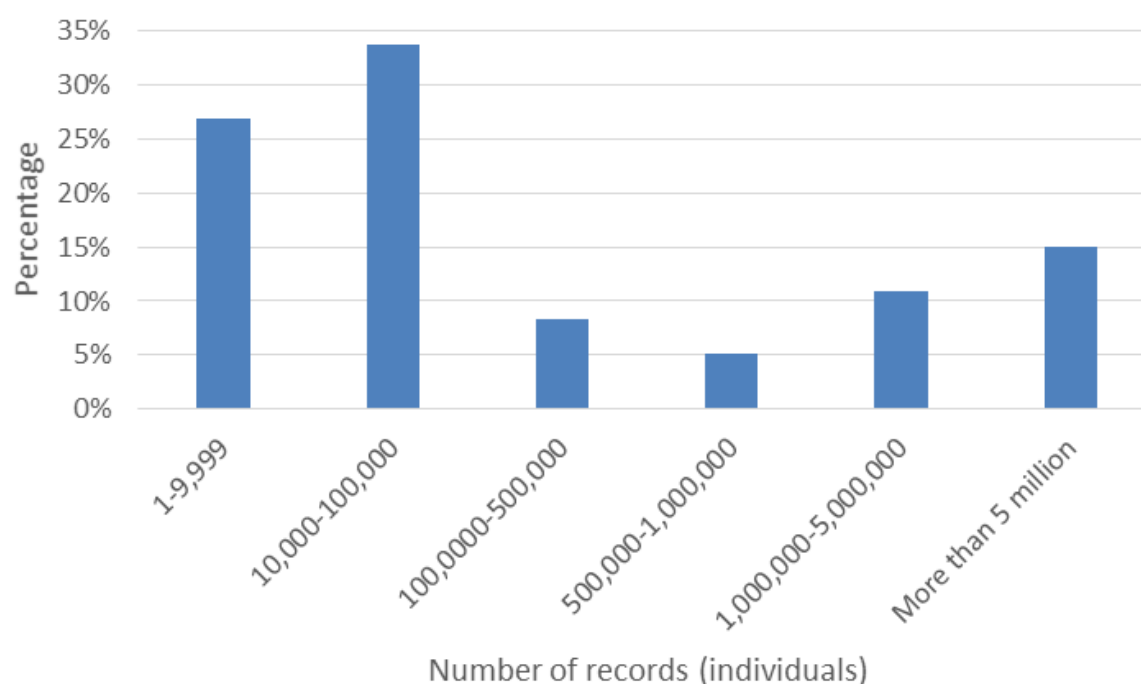
More stringent consent rules are also likely to cause loss of profits for firms relying on third-party data. Respondents expect profits directly attributable to data analytics to drop by 11.6%. Looking at specific uses of third-party data, economy-wide profits due to data analytics could be decreased by up to £41 million and economy-wide profits due to customer prospecting could be decreased by up to £114 million.

An online survey sample of 504 data marketing professionals was conducted between August and September 2017 to provide new primary data on the possible impact of stricter consent rules in the GDPR on the use of third-party data¹⁵. Also, the impact of stricter consent rules in the GDPR on profitability was assessed.

79% of survey respondents claim that their company holds records on individuals (i.e. personal data).¹⁶ As Figure 2 shows, the majority of firms that hold any records, report holdings on less than 100,000 individuals. Over a quarter holds records on less than 10,000 individuals. On average, the firms represented in the survey holding any records, hold records on 1.2 million individuals.

¹⁵ For details of the survey, see Annex 1 (survey questionnaire) and Annex 2 (overview of questionnaire responses and respondent profile).

¹⁶ The analysis excludes participants who were not able to answer a question, i.e. answering “Don’t know” or similar.

Figure 2 Number of records held

Source: LE survey

Data can be held for a number of different reasons. Records can be held for the purpose of facilitating a trade (e.g. holding credit card details to process a payment) but also for the purpose of improving the business (e.g. targeting the right consumers or designing new services). Arguably, stricter rules on consent are more relevant for the latter reason. **59% of the respondents** represented in the survey **hold records to carry out data analytics**. Of those, only **31% report using data from third-party sources** to complement data they collect themselves.

Data from third-party sources can also serve as the basis of **prospecting** for new customers. **30% of respondents use data from third-party sources** for this reason.

Data obtained from the edited electoral register can be used to link data held by companies with data held by third-party providers. Data from the electoral register can be vital in linking data. This was confirmed repeatedly by interviewees (see section 3.4 above). However, only 8% of survey respondents report that either they or their third-party data provider use data from the electoral register. We regard it as likely that this substantially understates the importance of the electoral register as cornerstone of the UK's data economy and reflects a lack of understanding of the linkages between different datasets, especially where third-party data is concerned.

4.1 GDPR impact on value of data and size of databases

A major change to consent rules implemented in the GDPR is the requirement to obtain active opt-in consent rather than passive opt-out consent. Received wisdom is that opt-in will decrease the number of customers that will provide consent for their data to be used. This sentiment was shared by the survey respondents.

According to the survey respondents, on average 17% of consumers **opt-out** for their data to be used in marketing. This implies that **83% of consumer can be targeted** using data that firms collect. The expectation is that only **42% of consumers to opt-in** for their data to be used for marketing.

This implies that the number of customers that can be targeted using collected data would decrease by over 40 percentage points relative to an opt-out system.

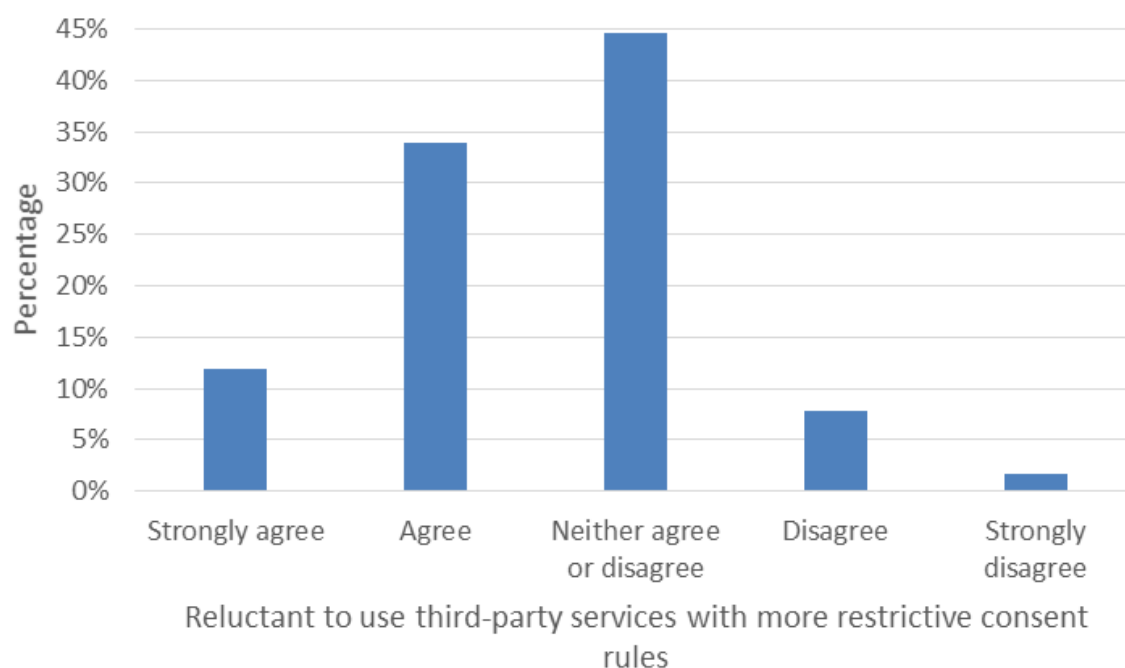
Similarly, respondents that rely, either directly or indirectly, on the electoral register estimate that the **size of their database would shrink by about 39% under an opt-in system** relative to an opt-out system. This is low compared with the opinions of individuals that were interviewed as part of the study.

On the other hand, respondents note that **databases obtained under opt-in consent could be more valuable**. 82% of respondents believe this to be the case. Databases obtained under opt-in are expected to be around 33% more valuable than databases obtained under opt-out. However, based on in-depth interviews, **not all data users will experience an increase in value**.

4.2 GDPR impact on attitudes towards using third-party services

Stricter consent rules may change the attitudes of firms towards using third-party data sources. Figure 3 reveals that a large share of firms would be **more reluctant** to use third-party services. Nearly **46% of respondents agree**, or strongly agree, with this sentiment. However, nearly 45% of respondents believe that stronger consent rules will not change their attitudes. Around 10% of respondents believe that stricter consent rules will make them more willing to use third-party data sources.

Figure 3 Reluctance to use third party services under stricter consent rules



Source :LE survey

4.3 Impact of the GDPR on profitability

The previous sections show that the GDPR is likely to decrease the number of records held by firms, even though the remaining data might be more valuable, at least in certain applications.

Furthermore, companies are likely to be more reluctant to use third-party data. This could impact the profitability of firms.

The survey suggests that profits will fall under stricter consent rules. **Across all respondents, profits are expected to fall by a combined £1.5 million** if they are unable to augment customer data with data from third-party sources; the strictest implementation of the GDPR possible. Furthermore, the respondents estimate that profits directly attributable to data analytics would drop by 11.6% of data could not be complemented with data from third-party sources¹⁷.

The **impact of stricter consent rules on profitability can be further examined** by looking at two uses of third-party data: **data analytics** and **prospecting for new customers**. These two avenues also allow for an economy-wide estimation of lost profits due to GDPR.

The first avenue explored is the impact of GDPR on profitability derived from **data analytics**. The respondents who use third-party data for data analytics spend a total of £700,684 on sourcing third-party data for data analytics. The estimated returns for this were on average 8.6%. This implies a generated profit of £60,142 from third-party data analytics.

According to the respondents, GDPR will have an impact on the amount spend on sourcing third-party data. **Spending is expected to decrease by an average of 10.5%**. Assuming that the return on data analytics is not affected by the GDPR, this implies lost profits equal to £6,332 for the respondents in the survey. The survey can be used to scale this number to an economy-wide upper bound estimate of lost profits on data analytics due to the GDPR.

The input-output tables published by the Office of National Statistics¹⁸ provide information on intermediate consumption of advertising and marketing research. Although not all of this consumption will represent spending on third-party data analytics, some of it will. An upper bound estimate for the for economy-wide profit loss can be calculated by assuming that all intermediate consumption on advertising and marketing research is used for third-party data analytics, and by applying the return on investment (8.6%) and expected decrease in spending on third-party data (10.5%). Given that not all sectors have the same propensity to use third-party data, the focus here is on those industries most likely to use this type of data¹⁹.

The sectors most likely to use third-party data consumed nearly £4.6 billion of advertising and marketing research in 2014. Applying the multipliers implies **an upper-bound estimate for loss of profit due to GDPR of over £41.2 million**.

The second avenue explored is the use of third-party data for **prospecting new customers**. Respondent spend a total of £621,025 on third-party data for prospecting new customers. The average estimated return was 13.1% implying profits for survey respondents equal to £81,380.

As for third-party data use for analytics, the GDPR will impact the amount spend on third-party data for prospecting for new customers. Respondents report an **expected decrease of spending of 19%**

¹⁷ This excludes one outlier reporting profits of £2 billion directly attributable to data analytics.

¹⁸ <https://www.ons.gov.uk/economy/nationalaccounts/supplyandusetables/datasets/inputoutputsandsupplyandusetables>. Most recent data is for 2014.

¹⁹ The industries most likely to use third-party data are the industries representing the top customers of CACI Ltd.

on average. As before assuming that the GDPR does not impact the rate of return, this implies lost profits of £15,462 for the survey respondents.

The return on investment (13.1%) and reduction in spending (19%) can again be used to construct an economy-wide upper bound estimate of lost profit with data on intermediate consumption of advertising and marketing research.

Assuming that all consumption is used on third-party data for prospecting, applying the multipliers on total consumption for industries most likely to use third-party data leads to the upper bound estimate. This **estimated loss of profits amounts to over £113.6 million**.

The two avenues explored show that the GDPR could cause **up to £41.2 million (data analytics) or up to £113.6 million (prospecting) in lost profits** depending on the use of third-party data. However, these numbers should be interpreted with caution. On the one hand, the number represent upper bounds. They assume that all advertising and marketing research spending is reserved for a single purpose and they do not take into account the possibility that resources are reallocated to other activities that are at least as profitable. On the other hand, firms are likely to lose profits due to both worse data analytics capacity and worse prospecting capabilities, which will affect different firms in different ways²⁰, but may increase the overall damage. Finally, the estimates do not take into account other uses of third-party data (or different interpretations of the scope of ‘analytics’ and ‘prospecting’).

²⁰ Note that the two figures cannot be combined to generate a single upper bound estimate of lost profits. Both estimates rely on advertising and marketing research consumption to be solely used for either analytics or prospecting. Both cannot be true at the same time.

Annex 1 Survey questionnaire

This annex presents the survey questionnaire. Different elements of the survey are indicated as follows:

- questions are presented in bold, preceded by the question number;
- answer options are presented in standard font, often as a numbered list;
- the introduction seen by the respondents is presented in italics; and,
- routing, where applicable, is indicated in bold and underlining.

A1.1 Introduction

This survey investigates the impacts of the consent requirements in the General Data Protection Regulation (GDPR). According to draft guidelines issues by the ICO, once the GDPR comes into force in 2018, all consent must be opt-in consent.

(R1) Does your organisation sell data (B2B) for the purpose of prospecting, carrying out analytics, target communications, design services, predict propensity to buy, predict value per customer etc.?

- 1) Yes
- 2) No

A1.2 Brands (no at R1)

All questions in this section are asked to only those respondents who report No at question R1.

A1.2.1 Third-party data use for analytics and related uses

(Q1a) Does your organisation source data from third parties and combine it with personal data on your customers to carry out analytics, target communications, design services, predict propensity to buy, predict value per customer etc., etc.?

- 1) Yes
- 2) No
- 3) Don't know

Q1b is asked if Q1a is answered with No or Don't know²¹.

(Q1b) Does your organisation use its own data on customers to carry out analytics, target communications, design services, predict propensity to buy, predict value per customer etc., etc.?

- 1) Yes
- 2) No
- 3) Don't know

²¹ Question Q1b was added to the survey after evaluation of initial results. Consequently, the first 99 respondents would never have been asked Q1b irrespective of their answers to Q1a.

Q2 to Q4 are asked if Q1a is answered with Yes.

(Q2) Thinking about sourcing data from third parties to carry out that type of analytics, can you estimate how much your organisation spends on that each year in £s? Don't worry about being precise, please just estimate.

£ _____

(Q3) Can you estimate your organisation's Return on Investment in third-party data and related analytical services?

- 1) Less than 1%
- 2) 1%-2%
- 3) 3%-5%
- 4) 5%-10%
- 5) 10%-20%
- 6) More than 20%
- 7) Don't know

(Q4) After GDPR comes into force in 2018, do you think your organisation's spending on third-party data and related analytical services is likely to:

- 1) Increase
- 2) Decrease
- 3) Not sure

Q4_up is asked if Q4 is answered with Increase.

(Q4_up) Please estimate a percentage (%)

____%

Q4_down is asked if Q4 is answered with Decrease.

(Q4_down) Please estimate a percentage (%)

____%

A1.2.2 Third-party data use for prospecting for new customers

(Q5) Does your organisation source data from third parties for use in prospecting for new customers?

- 1) Yes
- 2) No
- 3) Don't know

Q6 to Q8 are asked if Q2 is answered with Yes.

(Q6) Thinking about sourcing data for prospecting, can you estimate how much your organisation spends on that each year in £s? Don't worry about being precise, please just estimate.

£ _____

(Q7) Can you estimate your organisation's Return on Investment in prospecting data?

- 1) Less than 1%
- 2) 1%-2%
- 3) 3%-5%
- 4) 5%-10%
- 5) 10%-20%
- 6) More than 20%
- 7) Don't know

(Q8) After GDPR comes into force in 2018, your organisation's spending on third-party prospecting data is likely to:

- 1) Increase
- 2) Decrease
- 3) Not sure

Q8_up is asked if Q8 is answered with Increase

(Q8_up) Please estimate a percentage (%)

____%

Q8_down is asked if Q8 is answered with Decrease

(Q8_down) Please estimate a percentage (%)

____%

A1.2.3 Use of electoral register

(Q9) Does your organisation use name and address data sourced on the edited electoral register?

- 1) Yes
- 2) No
- 3) Don't know

(Q10) Do third party suppliers from whom your organisation sources data use name and address data sourced on the edited electoral register?

- 1) Yes
- 2) No
- 3) Don't know

Q11 is asked if either Q9 or Q10, or both, are answered with Yes

(Q11) If the edited electoral register became opt-in (rather than opt-out as it currently is), how do you think this would affect the number of records available? Would the number of records available:

- 1) Increase
- 2) Decrease
- 3) Not sure

Q11_up is asked if Q11 is answered with Increase

(Q11_up) Please estimate a percentage (%)

____%

Q11_down is asked if Q11 is answered with decrease

(Q11_down) Please estimate a percentage (%)

____%

A1.2.4 Size and value of databases

(Q12) Can you estimate how many records of personal data your organisation holds (number of individuals)? If you don't hold any records please tick that option.

- 1) Not applicable / none
- 2) 1-9,999
- 3) 10,000-100,000
- 4) 100,000-500,000
- 5) 500,000-1,000,000
- 6) 1,000,000-5,000,000
- 7) More than 5 million
- 8) Don't know

(Q13) Do you think that a database containing personal data on your customers who have explicitly opted in to having their personal data processed for marketing purposes (rather than 'not opted out') will be more or less valuable (by valuable please think about greater conversion rates for your marketing, less attrition, higher value per customer due to better targeting, improved services, etc).

- 1) More valuable
- 2) Less valuable
- 3) Not sure

Q13_up is asked if Q13 is answered with More valuable.

(Q13_up) Please estimate a percentage (%)

____%

Q13_down is asked if Q13 is answered with Less valuable.

(Q13_down) Please estimate a percentage (%)

____%

A1.2.5 Profit attributable to analysis of personal data

(Q14) Can you estimate how much of your organisation's annual profit (in £s) is directly attributable to analysis of personal data of your customers? Don't worry about being precise, please just estimate.

£ _____

(Q15) And can you estimate how much of that annual profit that is directly attributable to analysis of personal data of your customers would be lost if you could no longer use third-party data to augment the customer data that your organisation collects directly. Don't worry about being precise, please just estimate.

£ _____

(Q16) Can you estimate what would be the net loss or gain to your organisation if you could no longer use third-party data to augment the customer data that your organisation collects directly? Don't worry about being precise, please just estimate.

- 1) Gain
- 2) Loss
- 3) Not sure

Q16_up is asked if Q16 is answered with Gain

(Q16_up) Please estimate in £s

£ _____

Q16_down is asked if Q16 is answered with Loss

(Q16_down) Please estimate in £s

£ _____

A1.2.6 Attitudes towards use of third-party data for analytics

(Q17) To what extent do you agree or disagree that more restrictive consent rules (such as an obligation to name all third parties that will carry out processing) will make your organisation more reluctant to use 3rd party services to carry out analytics involving personal data on its customers?

- 1) Strongly agree
- 2) Agree

- 3) Neither agree or disagree
- 4) Disagree
- 5) Strongly disagree
- 6) Don't know

A1.2.7 Direct marketing

(Q18) Can you estimate how much your organisation spends on direct marketing per year on average? Don't worry about being precise, please just estimate

£ _____

(Q19) Can you estimate what percentage (%) of your customers opt out of receiving direct marketing communications from you? Don't worry about being precise, please just estimate.

____%

(Q20) Can you estimate what percentage (%) of your customers you expect would opt in to receiving direct marketing communications from you?

____%

A1.3 Suppliers (yes at R1)

All questions in this section are asked to only those respondents who report Yes at question R1.

A1.3.1 Supply of third-party data for analysis and related uses

(Q101) Does your organisation supply third parties with data that they combine with personal data on their customers to carry out analytics, target communications, design services, predict propensity to buy, predict value per customer etc., etc.?

- 1) Yes
- 2) No
- 3) Don't know

Q102 is asked if Q101 is answered with Yes

(Q102) Still thinking about the supply of data to customers, can you estimate the value of your organisation's sales of this data and associated analytical services (per year) in £s? Don't worry about being precise, please just estimate.

£ _____

A1.3.2 Use of electoral register

(Q103) Does your organisation use name and address data sourced on the edited electoral register?

- 1) Yes

- 2) No
- 3) Don't know

(Q104) If the edited electoral register became opt-in (rather than opt-out as it currently is), how do you think this would affect the number of records available?

- 1) Increase
- 2) Decrease
- 3) Not sure

Q104_up is asked if Q104 is answered with Increase

(Q104_up) Please estimate a percentage (%)

____%

Q104_down is asked if Q104 is answered with Decrease

(Q104_down) Please estimate a percentage (%)

____%

A1.3.3 Size and value of databases

(Q105) If any, can you estimate how many records of personal data your organisation supplies to customers per year (number of individuals)?

- 1) Not applicable / none
- 2) 1-9,999
- 3) 10,000-100,000
- 4) 100,000-500,000
- 5) 500,000-1,000,000
- 6) 1,000,000-5,000,000
- 7) More than 5 million
- 8) Don't know

(Q106) Do you think that a database containing personal data on your customers who have explicitly opted in to having their personal data processed for marketing purposes (rather than 'not opted out') will be more or less valuable (by valuable please think about greater conversion rates for your marketing, less attrition, higher value per customer due to better targeting, improved services etc).

- 1) More valuable
- 2) Less valuable
- 3) Not sure

Q106_up is asked if Q106 is answered with More valuable

(Q106_up) Please estimate a percentage (%)

____%

Q106_down is asked if Q106 is answered with Less valuable

(Q106_down) Please estimate a percentage (%)

____%

A1.3.4 Attitudes towards use of third-party data for analytics

(Q107) To what extent do you agree or disagree that more restrictive consent rules (such as an obligation to name all third parties that will carry out processing) will make your organisation more reluctant to use 3rd party services to carry out analytics involving personal data on its customers?

- 1) Strongly agree
- 2) Agree
- 3) Neither agree or disagree
- 4) Disagree
- 5) Strongly disagree
- 6) Don't know

A1.4 Concluding questions

(QComments) Please provide any further comments on the impact of changes in consent rules brought about by GDPR in the box below (optional).

[_____]

Annex 2 Overview of questionnaire responses and respondent profile

A2.1 Sample selection

The sample for the survey was drawn from UK participants to the YouGov panel. To ensure that relevant panellists were approached for the survey, the panel from which the sample was drawn was narrowed by three steps of targeting.

Firstly, the panel was narrowed to include panellists in employment (either part-time or full-time) and preferably working in the private sector.

Secondly, the resulting panel was further narrowed by including only panellists working in companies offering relevant services. More precisely, panellists were included if their company offered the following services:

- digital;
- market research
- marketing communication;
- advertising;
- sales consultancy and lead generation; or,
- marketing consultancy.

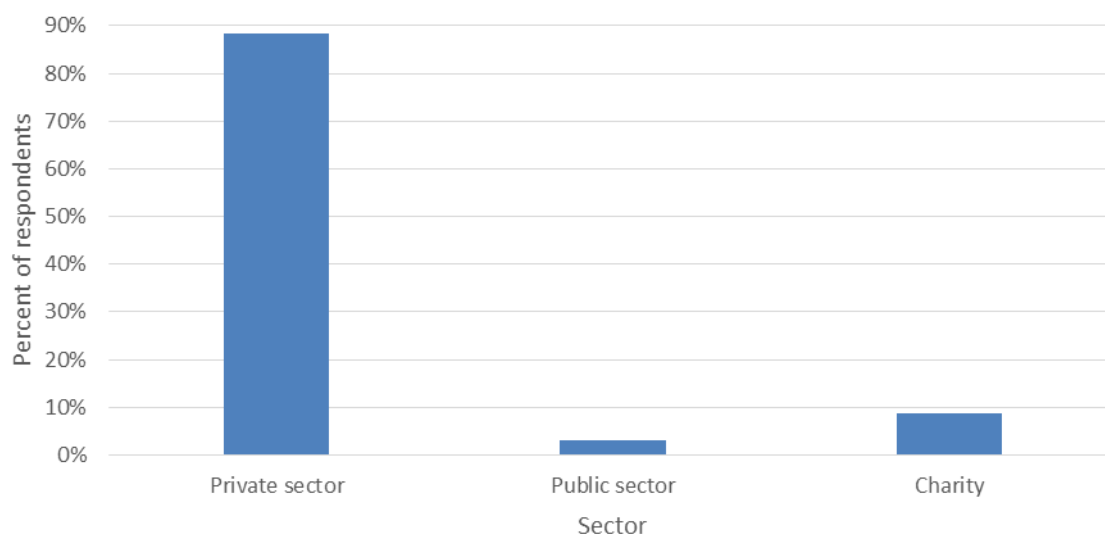
Thirdly and lastly, the panel was further narrowed based on the role of the panellist in the company. Panellists were included if their role included any of the following:

- developing new products/services;
- advertising and communications;
- sales and business development;
- customer services;
- technology and mobile phones;
- data, analytics and Customer Relationship Management (CRM);
- digital marketing and/or social media; or,
- market research and insight.

From this ultimate, narrowed panel, a sample of 504 respondents were drawn.

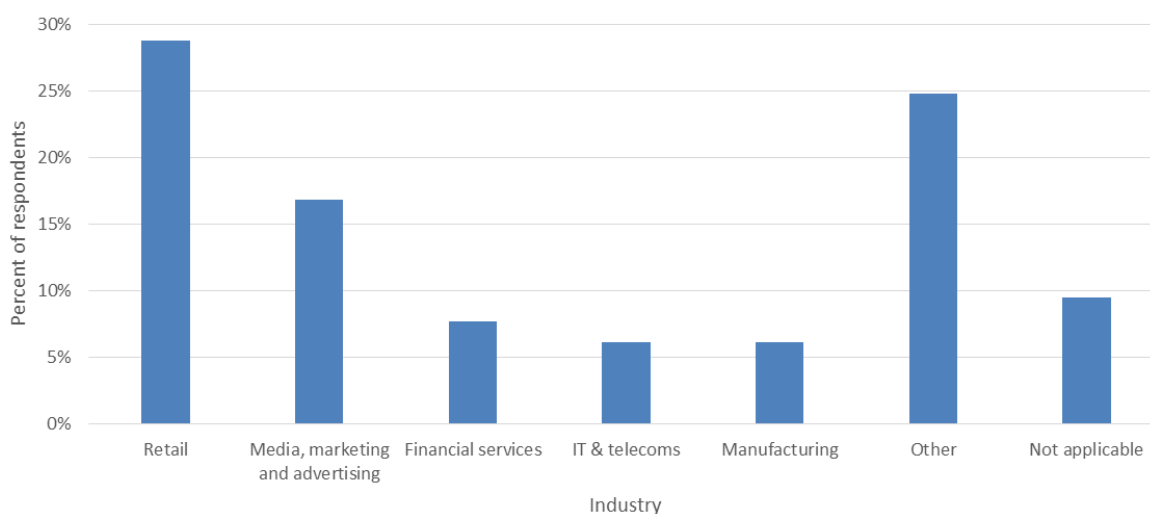
A2.2 Respondent profile

As expected from the sample selection, the respondents work predominantly in the private sector. As Figure 4 shows over 88% work for a private sector firm. Nearly 9% of the respondents work for a charity, whereas only 3% work in the public sector.

Figure 4 Sector of employment of respondents

Source: LE survey

Figure 5 shows the five most represented industries within the survey. Most participants, nearly 29%, work in retail. This is followed by respondents working in marketing, advertising and related industries (17%), financial services (8%), IT and telecoms (6%) and manufacturing (6%). Other industries represented in the survey include accountancy, medical services and education.

Figure 5 Industry of employment of respondents

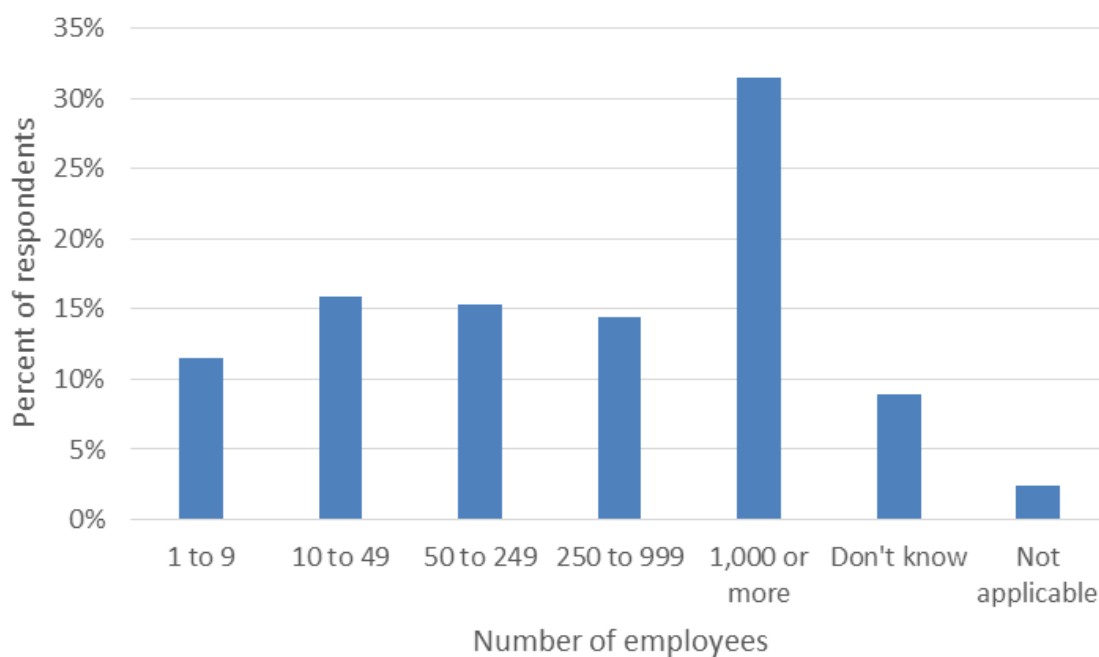
Source: LE survey

The survey represents a combination of small, medium and large-sized firms, as shown in Figure 6 and Figure 7²². Both in terms of employees and turnover, firms of all sizes are represented. The respondents are more likely to be employed by a large firm, especially firms with 1,000 employees

²² Both figures use the EU definition of small and medium-sized enterprises, for respectively employee headcount and turnover, as base for categorisation.

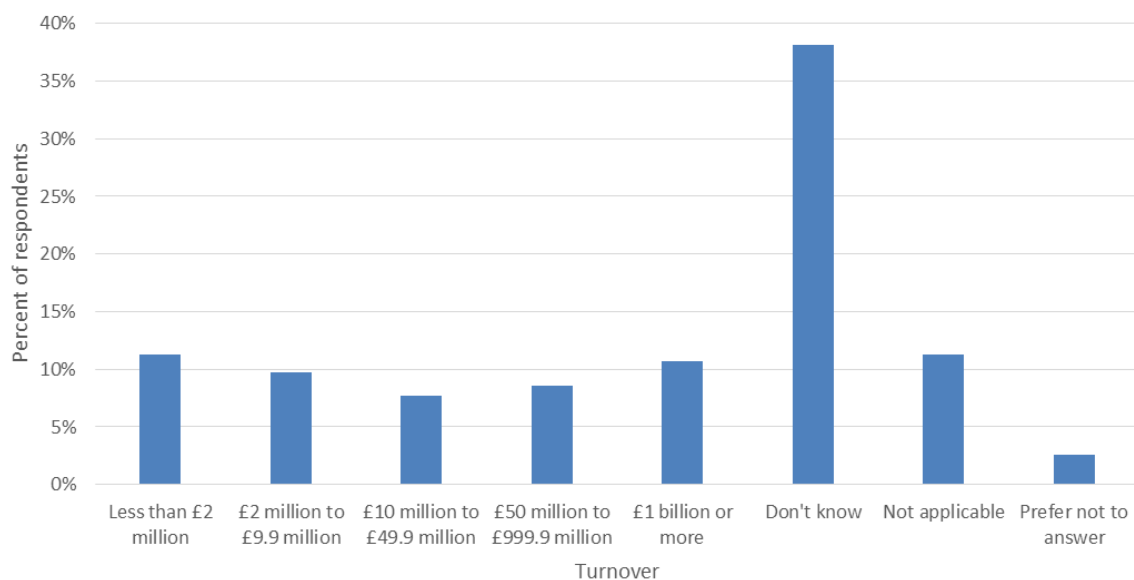
or more. Representation in terms of turnover seems more equally distributed among the categories, although the number of respondent not providing an estimate for turnover is high.

Figure 6 Number of employees



Source: LE survey

Figure 7 Turnover



Source: LE survey

A2.3 Overview of responses to the survey

This section presents an overview of the responses given by the respondents to the questionnaire. Answers are presented question by question (indicated by question number) following the structure of the questionnaire, as presented in Annex 1.

A2.3.1 Introduction

(R1) 9.3% of all 504 respondents to the survey reported that their company supplies third-party data, whereas 90.7% reported that they do not. Given the small number of suppliers, the analysis of section 4 focuses on those who respond with “no”.

A2.3.2 Brands (no at R1)

Note that questions Q1a to Q20 were only asked of the 457 respondents answering no at R1.

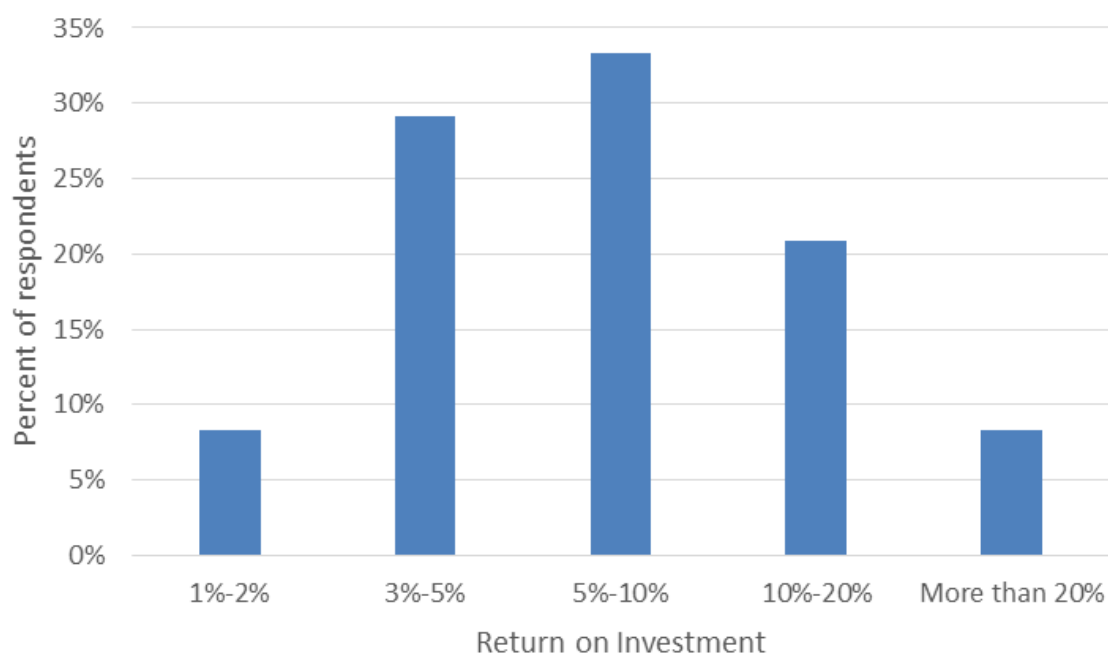
Third-party data use for analytics and related uses

(Q1a) All 457 respondents were asked question Q1a, of which 74.6% could provide a yes or no answer. Of these 74.6%, 20.8% reported that their company uses third-party data for analytics.

(Q1b) 308 were asked question Q1b, of which 78.2% could provide a yes or no answer. Of this group of respondents, 65.1% reported that their company uses its own data for data analytics.

(Q2) 71 respondents were asked question Q2, of which 25.4% could provide an estimate for spending on third-party data for analytics. These estimates total to £700,684 on spending on third-party data for analytics, or an average of £38,927 per firm.

(Q3) 71 respondents were asked Q3, of which 33.8% were able to estimate Return on Investment on data analytics. The results of these respondents are presented in Figure 8.

Figure 8 Estimates of Return on Investment of data analytics

Source: LE survey

(Q4) 71 respondents were asked Q4, of which 23.7% were able to provide an estimate of the effect of the GDPR on spending on third-party data for analytics. 41.2% of these respondents believed that spending will increase, whereas 58.8% believed it will decrease.

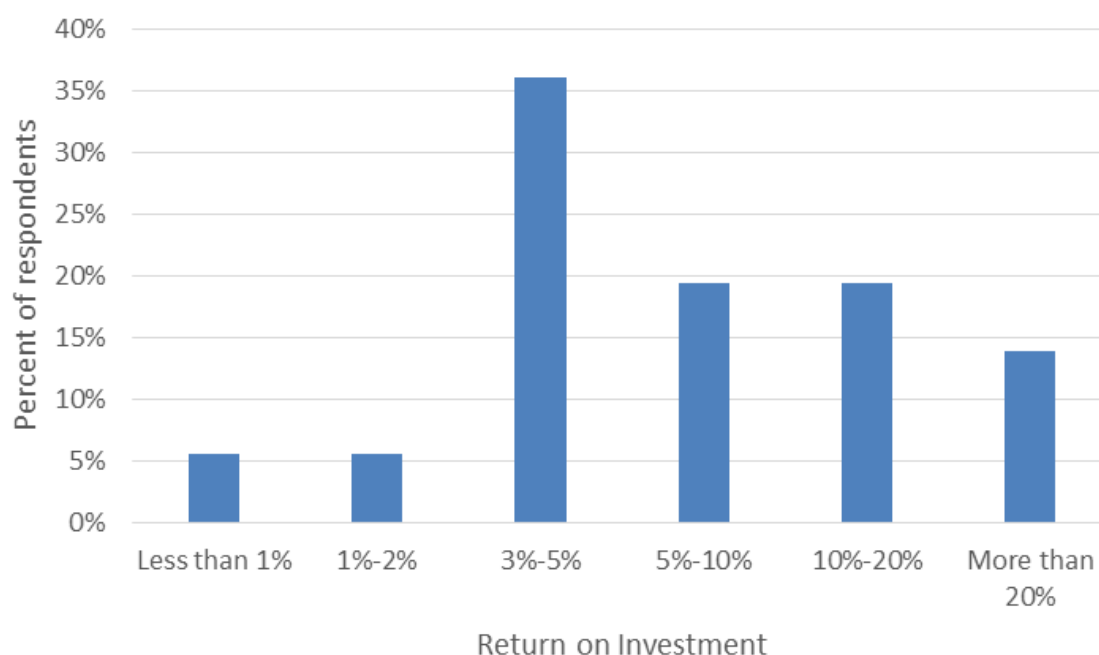
(Q4_up and Q4_down) Respondent expecting spending on third-party data to increase, believed that the increase will be, on average, 40.1%. Respondents expecting spending on third-party data to decrease, believed that the decrease will be, on average, 46%. Across both groups, the respondents believed that spending on third-party data for analytics will *decrease* by 10.5%.

Third-party data use for prospecting for new customers

(Q5) All 457 respondents were asked Q5, of which 71.1% could provide a yes or no answer. Of these 71.1%, 29.5% reported that their company uses third-party data for prospecting for new customers.

(Q6) 96 respondents were asked Q6, of which 30.2% could provide an estimate of spending on third-party data for prospecting. These estimates total to £621,025 for an average of £21,415 per firm.

(Q7) 96 respondents were asked Q7, of which 37.5% could provide an estimate for the Return on Investment for prospecting data. The results of these respondents are presented in Figure 9.

Figure 9 Estimates of Return on Investment of prospecting data

Source: LE survey

(Q8) 96 respondents were asked Q8, of which 22.9% were able to estimate an effect of GDPR on spending on third-party data for prospecting. 72.7% of these respondents believed that spending will decrease, whereas 27.3% believed that spending will increase.

(Q8_up and Q8_down) Respondents expecting spending to decrease, believed that spending on prospecting data will, on average, decrease by 43.4%. Respondents expecting spending to increase, believed that spending will increase, on average, by 46.2%. Across both groups, respondents believed that spending would *decrease* by, on average, 19%.

Use of electoral register

(Q9 and Q10) All 457 respondents were asked Q9 and Q10. 72.2% of respondents could provide a yes or no answer to Q9, with 6.1% of these reporting using the electoral register. 58.6% of all respondents were able to provide a yes or no answer to Q10, with 5.2% of these reporting that their data suppliers use the electoral register. 5.9% of all 457 respondents reported that either they or their suppliers use the electoral register.

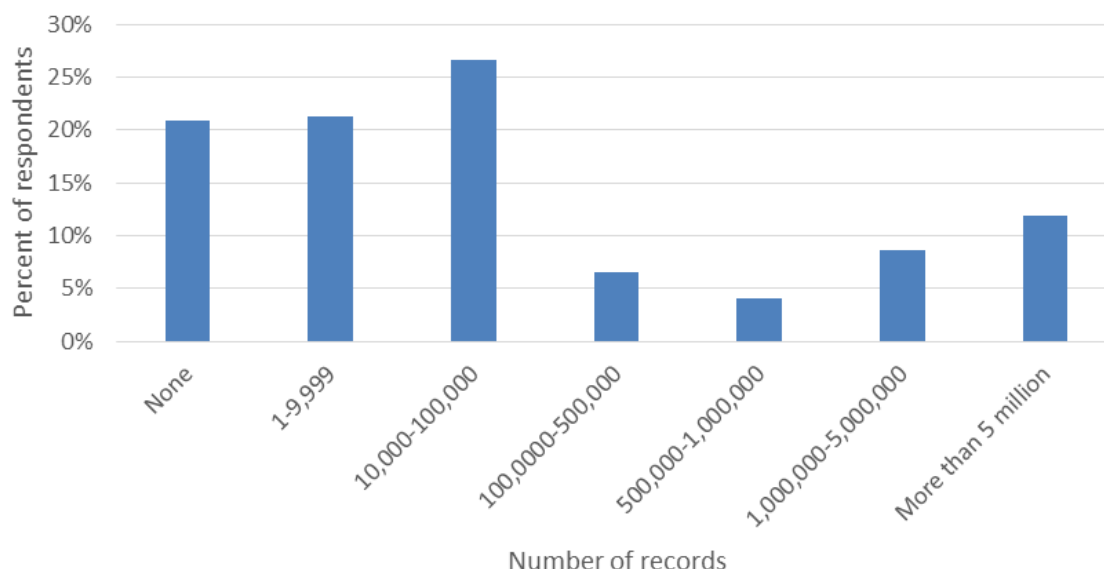
(Q11) 27 respondents were asked Q11, of which 51.9% provided a definite answer. Of these, only a single respondent believed that availability of records will increase, and all other believed that availability will decrease.

(Q11_up and Q11_down) The respondent expecting availability of records to increase, believed that this increase would be by 20%. The respondents expecting availability of records to decrease, believe this decrease to be by, on average, 43.5%. Across both groups, respondents believed availability of records to *decrease* by 39%.

Size and value of databases

(Q12) All 457 were asked Q12, of which 53.4% provided an estimate of the size of their database. The estimates of these respondents are presented in Figure 10.

Figure 10 Estimates of the number of records held



Source: LE survey

(Q13) All 457 respondents were asked Q13, of which 31.5% were able to provide a definite answer to the value of opt-in databases, relative to opt-out databases. Of these respondents, 81.9% believed opt-in databases to be more valuable, whereas 18.1% believed them to be less valuable.

(Q13_up and Q13_down) Respondents believing opt-in databases to be more valuable, believed that the value was, on average, 48.5% higher than for opt-out databases. Respondents believing opt-in databases to be less valuable, believed that the value was, on average, 38.8% lower. Across both groups, respondents believed opt-in databases to be 33.6% more valuable.

Profit attributable to analysis of personal data

(Q14) All 457 respondents were asked Q14, of which 15.1% were able to provide an estimate. These estimates total to £2,007,887,000 (£7,887,000 excluding estimates above £1 billion) for an average of £29,099,812 (£115,985 excluding estimates above £1 billion).

(Q15) All 457 respondents were asked Q15, of which 14.9% could provide an estimate. These estimates total to £916,686, for an average of £13,480 per firm.

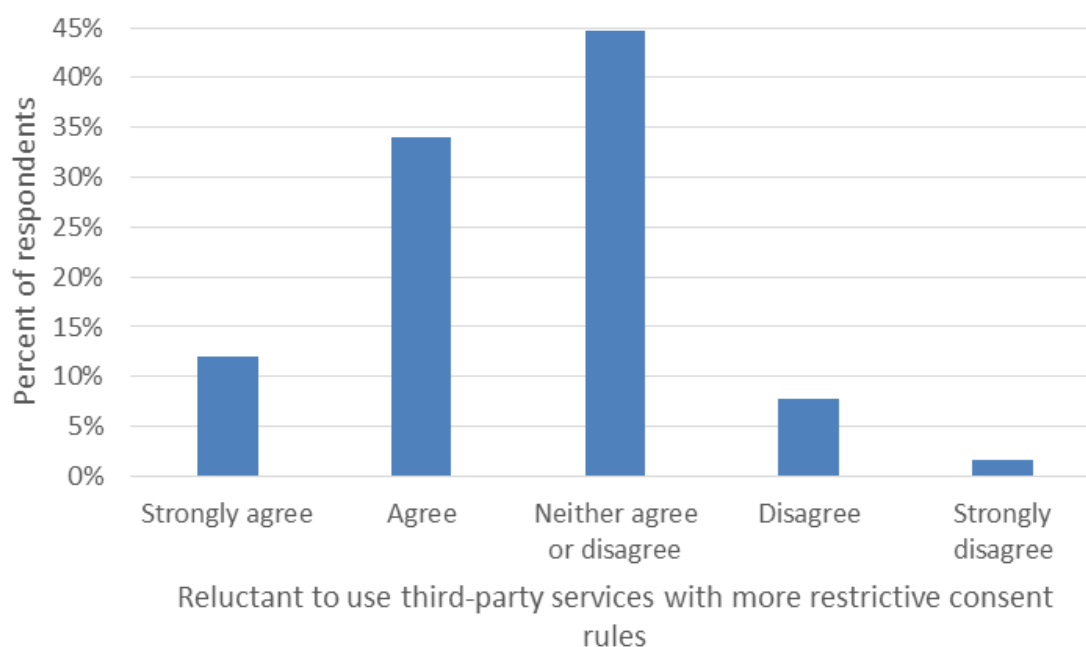
(Q16) All 457 respondents were asked Q16, of which 10.1% could provide a definite answer. Of these, 84.8% believed that losing the ability to augment data with third-party data will be a loss to the firm, whereas 15.2% believed that it will result in a gain.

(Q16_up and Q16_down) There are indications that Q16_up and Q16_down were misunderstood by the participants. The questions ask to estimate gains or losses in pounds. However, some respondents seem to have reported a percentage change. Therefore, results for these questions are not reported here.

Attitudes towards use of third-party data for analytics

(Q17) All 457 respondents were asked Q17, of which 67.6% were able to provide a definite answer. The results for these respondents are presented in Figure 11.

Figure 11 Reluctance to use third party services under stricter consent rules (brands)



Source: LE survey

Direct marketing

(Q18) All 457 respondents were asked Q18, of which 22.1% were able to provide an estimate. These estimates total to £2,801,710, for an average of £84,900 per firm.

(Q19) All 457 respondents were asked Q19, of which 27.3% were able to provide an estimate. These respondents believed that, on average, 17% of consumers opt-out for marketing communications. This estimate excludes two estimates with an opt-out rate above 100%. These have been interpreted as mistakes, as such opt-out rates are mathematically impossible.

(Q20) All 457 respondents were asked Q20, of which 26.9% were able to provide an estimate. These respondents believed that, on average, 41.8% of consumer would opt-in for marketing communications.

A2.3.3 Suppliers (yes at R1)

Note that questions Q101 to Q107 were only asked of the 47 respondents answering yes at R1.

Supply of third-party data for analysis and related uses

(Q101) All 47 respondents were asked Q101, of which 74.4% could provide a yes or no answer. Of those, 57.1% reported that their firm supplies third-party data for analytics.

(Q102) 20 respondents were asked Q102, of which 40% were able to provide an estimate. These estimates total to £211,600,000, for an average of £26,450,000 per firm.

Use of electoral register

(Q103) All 47 respondents were asked Q103, of which 63.8% could provide a yes or no answer. Of these, 33.3% reported that their firm uses the electoral register.

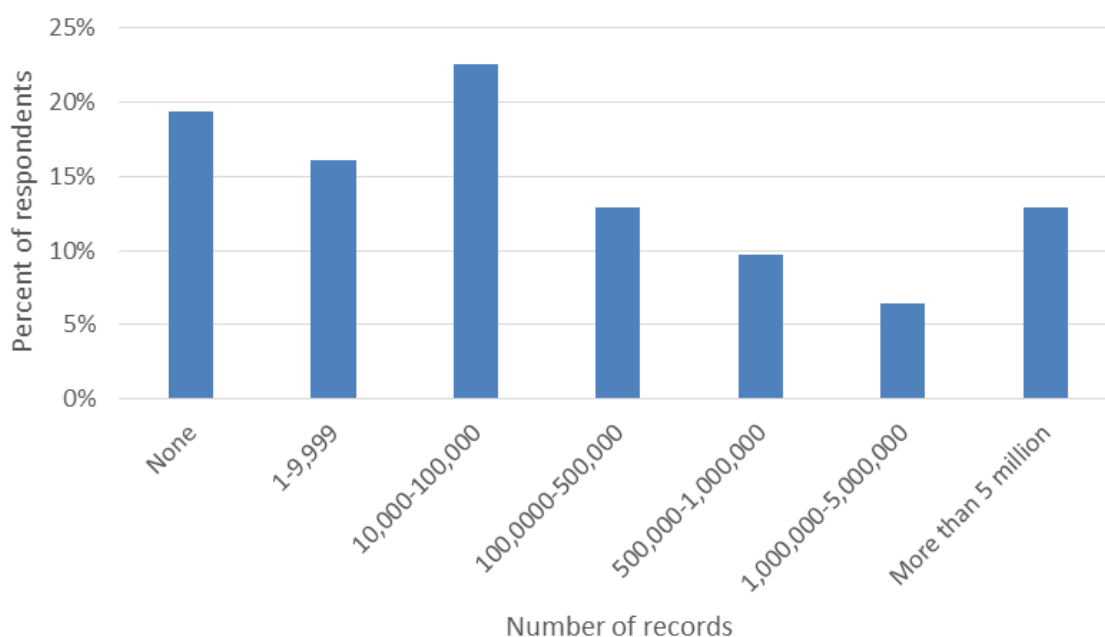
(Q104) All 47 respondents were asked Q104, of which 44.7% were able to provide a definite answer. Of these, 23.8% believed that a requirement to opt-in would increase the number of records available, whereas 76.2% believed it would decrease it.

(Q104_up and Q104_down) Respondents expecting opt-in to increase the number of records available, believed this increase to be, on average, 23.4%. Respondents expecting a decrease of records available, believed the decrease to be, on average, 41.4%. Across both groups, respondents believed that the number of available records would *decrease* by 26%.

Size and value of databases

(Q105) All 47 respondents were asked Q105, of which 66% could provide an estimate of records supplied. The results for these respondents are reported in Figure 12.

Figure 12 Estimates of records supplies



Source: LE survey

(Q106) All 47 respondents were asked Q106, of which 42.6% were able to provide a definite answer. Of these, 65% believed that an opt-in database would be more valuable, and 35% believed that it would be less valuable.

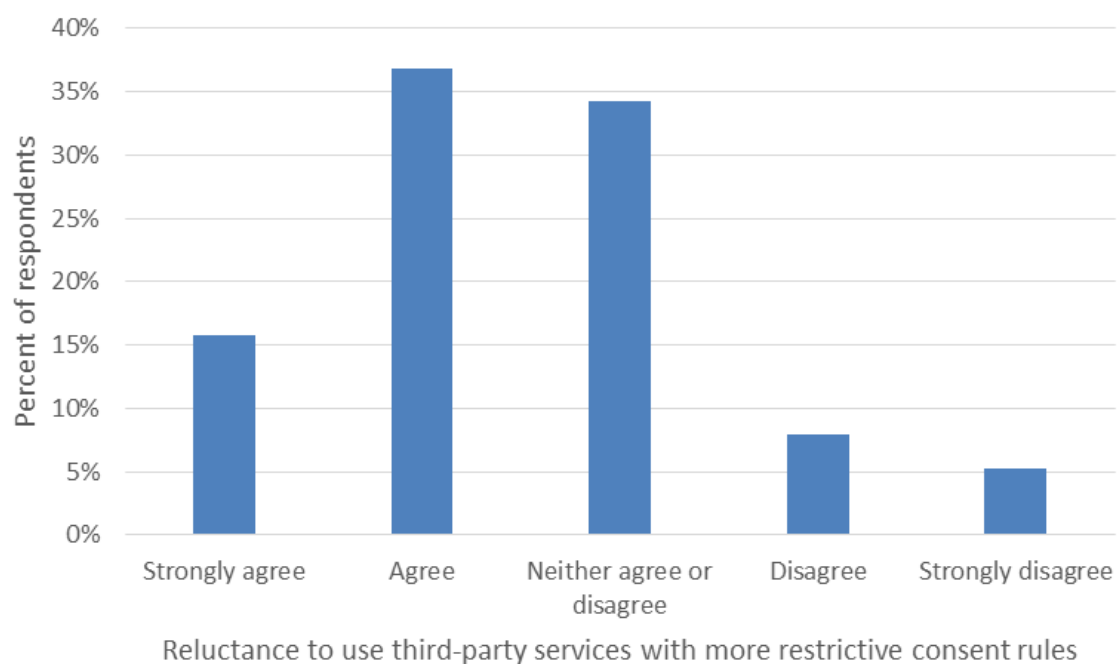
(Q106_up and Q106_down) Respondents believing an opt-in databases to be more valuable, believed that the value would be, on average, 25.8% higher. Respondents believing opt-in databases

to be less valuable, believed that the value would be, on average, 29.1% less. Across both groups, respondents believed opt-in databases to be 5.5% *more* valuable than opt-out databases.

Attitudes towards use of third-party data for analytics

(Q107) All 47 respondents were asked Q107, of which 80.9% could provide a definite answer. The results of these respondents are presented in Figure 13.

Figure 13 Reluctance to use third party services under stricter consent rules (suppliers)



Source: LE survey

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