Department for Digital, Culture, Media & Sport

Data: a new direction

Analysis of expected impact

Contents

1. Introduction

Background and purpose

1. This annex sets out initial analysis of the main expected impacts of the changes proposed in the public consultation on data reform. It is intended as a starting point towards building a more detailed impact assessment as policy develops further. Through this consultation, we are seeking stakeholders' opinions on our current assumptions and evidence as well as where further evidence is required.

2. This annex sets out the rationale for intervention in order to develop a theory of change for the proposed package of measures as a whole, outlining the main expected impacts. We expect that the reforms will lead to impacts through a number of primary channels, identified as comprehensively as possible.

3. The table below summarises where we have developed quantitative estimates of expected impacts and where we have relied on qualitative assessments.

	Measure	Net Benefit (NPV Ten Year)
Reducing barriers to responsible innovation	Clarifying legitimate interests	£1,111.0m
	Simpler gateway for research	
	Permissions for AI systems	
	Clarifying the fairness principle	
	Clearer standards for data minimisation	
Reduce burdens on business and deliver better outcomes for people	Reforming breach reporting requirements	£578.3m
	Privacy and rights in relation to electronic communications	
	Amending bulk subject access requests	
Boosting trade and reducing barriers to data flows	Human rights and citizen safety	Assessed qualitatively
	Reforming adequacy assessments	
	Alternate mechanisms for international transfers	

Delivering better public services	Learning lessons from personal data use during the CV19 pandemic	Assessed qualitatively
	Building trust in government and increase transparency	
Reform of the ICO	Duty to have regard to growth, innovation and competition	Assessed qualitatively
	Governance Model and Leadership	
	DCMS Secretary of State to publish a statement of strategic priorities	
	Ensuring the ICO follows best-practice	
	A more proportionate regulatory approach to complaints	
Familiarisation costs		-£239m

4. The proposed package of reforms is designed to bring benefit to the UK, regardless of the EU's current and future decisions on its adequacy status. Initial analysis indicates a net direct monetised benefit of £1.04bn over 10 years This is driven by removing barriers to responsible data use and reducing business burdens. The Government welcomed the EU's adoption of adequacy decisions for the UK in June 2021, and we firmly believe there to be no incompatibility between our proposed package of reforms and our adequacy status with the EU. In the event EU adequacy is maintained alongside these reforms, this would rise to £1.45bn, through saving £410m in associated costs of switching to alternative transfer mechanisms. In addition, there is likely to be a benefit to UK trade, although our modelling of this is subject to more uncertainty.

5. Our current modelling indicates that benefits and costs from these reforms will not fall equally across the economy and society, and that small and micro businesses will benefit proportionately more from these reforms.

6. Our quantitative analysis focuses on the impacts on data controllers and data processors, chiefly private businesses and public and third-sector organisations. Where we consider quantification is possible, we set out the methodology, evidence and assumptions available to us (see Section 2). Owing to limited existing methodological approaches and evidence to draw on, we have used a number of assumptions and proxies where specific figures are needed for quantification. We set out illustrative figures to provide transparency and to enable us to gather further evidence and input from relevant stakeholders during this consultation (see Section 5 for consultation questions).

7. We present our initial quantitative analysis in Section 2 in relation to:

    a. Increased responsible data use and the resulting improvement in productivity and output;
    b. Lower compliance costs faced by organisations; and
    c. One-off familiarisation costs incurred by organisations when the new regime is introduced.

8. There are also potential impacts on individual data subjects that are likely to be complex and differ across groups. Broad types of impacts on data subjects may relate to data rights, agency (control of data, knowledge of its use, data sharing and risk of undesired use), security (such as

the likelihood of breaches), and indirect effects such as levels of trust and consumer surplus enabled by data-driven services. We consider there to be significant potential benefits for individuals through improved data-enabled services whereas the material impacts on the rights of data subjects are likely to be minimal.

9. Our logic modelling considers these potential effects on individual data subjects. We assess that the proposed measures will not materially affect an individual's data rights, or agency, finding only marginal potential impacts. This reflects how measures have been designed to uphold individuals' data rights and the responsibilities of data controllers. Furthermore, through increased responsible data use by organisations, it is likely that consumers will benefit from improved quality and breadth of data-enabled products (such as through increased data use through legitimate interests) as well as from improved solutions enabled by measures (such as those simplifying data processing for research purposes). Many of these data-enabled services may be offered free to consumers, generating a large consumer surplus[1] while being reliant upon users' data.[2] We are considering potential methodologies for analysing the value of privacy rights, the impact of measures on trust and data sharing, and the indirect benefits of improved data-enabled services, and welcome further evidence and feedback on these issues as we develop policy further.

10. While methodological approaches exist to quantify the impact on trade, we will seek further information at the consultation stage in order to ensure these are sufficiently robust (Section 3).

11. As set out in Section 4, we consider that impacts that are more appropriate to consider qualitatively at this stage include:

    a. Reducing ambiguity for businesses and increased innovation;
    b. Empowering public bodies and increased data use leading to better public services;
    c. Improved regulatory oversight;
    d. Potential impacts on privacy and trust; and
    e. Potential wider benefits of data use.

    We welcome stakeholders' views on how these might be quantified and whether there are other material impacts to consider.

Rationale for intervention

12. Data use is widespread, with 65% of UK businesses handling some form of personal data.[3] The use of data increases considerably as businesses become larger.[4] However, evidence indicates that the current level and nature of data use may be suboptimal and that there are potential efficiency gains to be made which would result in a more socially optimal outcome.[5] While businesses identify benefits of the General Data Protection Regulation (GDPR)[6] and Data

[1] Coyle and Nguyen (2020) The value of free digital goods
[2] Li et al (2019) Value of Data: There's No Such Thing as a Free Lunch in the Digital Economy
[3] DCMS: UK Business Data Survey (2020); When asked whether they use data in any form, by type, 65% stated using personal data relating to employees or other.
[4] This includes data collected from the businesses' employees (for example, for HR or payroll purposes) and data collected from elsewhere (such as customer data). Source: UK Business Data Survey (2020)
[5] See HMT "The economic value of data: discussion paper" (2018) for a discussion of why data is an suboptimally used asset
[6] Until the end of 2020 the EU GDPR applied in the UK. Since then, the applicable legislation in the UK has been the UK GDPR. For simplicity we typically refer to the UK GDPR throughout, but where evidence relates to the earlier GDPR we refer to this as the GDPR.

Protection Act 2018 (DPA 2018),[7] some organisations find this legislation difficult to understand and implement, particularly small businesses.[8] In particular, approximately 40% of UK businesses report lacking certainty on key definitions in the UK's data protection regime, what people's data rights are and how and when to report a breach.[9]

13. Fewer than 10% of UK businesses use customer relationship management software to collect, store, and share customer information within their businesses,[10] meaning that most businesses do not have an easy way of using data to gain customer insights. Some businesses even view data as a liability, particularly where personal data is concerned, and take steps to severely curtail access and usage, implying a level of strategic over-compliance arising from uncertainty. This may come at significant opportunity cost.

14. There is also evidence that the current regime may reduce firm-level innovation, business creation and employment,[11] decrease investment in emerging technology firms,[12] and negatively impact data-driven industries.[13] The current data protection regime is complex to interpret and apply. We found that 53% of those who thought the GDPR was unclear stated they had spent a disproportionate amount of time working out its requirements.[14] Further, when asked which elements of the GDPR could be clearer, 42% reported the lawful bases that allow data processing.[15] Such complexity is understood to be a barrier to compliance and lead to uncertainty, and potential over- or under-compliance (through strategy or error).[16]

Other policy measures considered

15. Several options were considered to meet the key objectives of the reforms to create a pro-growth and innovation-friendly data protection framework, whilst ensuring public trust in the responsible use of data. The set of reform proposals has been designed to be consistent, comprehensive and meet these objectives as a package; we therefore assess the preferred option as the package of measures together. However, alternative options were considered and are presented at this consultation stage where possible.

16. Prior to considering any specific reform options, the government gathered evidence from internal and external stakeholders to understand how the current data protection regime is functioning in practice. In light of this evidence, reform options were designed to respect the key elements of the current UK GDPR, such as its processing principles, data rights for citizens, and mechanisms for supervision and enforcement. These will continue to underpin a high level of protection for people's personal data and control for individuals over how their personal data is used.

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[7] For example, increased awareness of data protection at a senior level, improved awareness of data as a business asset, and increased customer trust, from the UK Business Data Survey (2020)
[8] The European Commission's (2020) evaluation of the GDPR identified challenges for organisations, in particular SMEs.
[9] DCMS: UK Business Data Survey (2020); When asked which elements of GDPR do you feel could be clearer, respondents answered; The definitions of 'special category' data (40%), What people's data rights are (38%), How and when to report a data breach (37%)
[10] ONS (2018) E-commerce and ICT activity Statistical bulletins, Table 25; this is even lower for micro-sized firms.
[11]Christensen et al.(2013) The Impact of the Data Protection Regulation in the E.U.
[12] Jia et al. (2018) found that GDPR negatively affected venture capital investment in digital technology firms.
[13] For example, direct marketing, behavioural advertising, credit information and website analytics, as studied in Deloitte (2013). Similar findings are indicated by Arnold and Hildebrand (2017)
[14] DCMS: UK Business Data Survey (2020)
[15] DCMS: UK Business Data Survey (2020)
[16] Christensen et al.(2013) The Impact of the Data Protection Regulation in the E.U. To note, this is a forecast of the proposed GDPR rather than an ex-post impact evaluation.

Furthermore, the Government recognises that organisations have invested in understanding, complying and implementing the current regime. The powers granted to the regulator, the Information Commissioner's Office (ICO), to uphold and monitor the regime are also fundamentally fit for purpose. The reform options are designed to address identified issues or improve upon the current framework.

17. This process of engagement identified various issues for organisations and for individuals,, formalised as problem statements. This was used to identify areas of the legislation to be considered and evaluated for reform. For example, feedback shared with the ICO (during the development of its Accountability Framework) revealed that the accountability requirements set out in GDPR, such as record keeping, were viewed as overly prescriptive and onerous to comply with, particularly for smaller organisations.

18. A long list of potential reform options was generated in each area, with each option designed to tackle an identified issue. These were then assessed for their likely impact on stakeholders (the public, organisations in the public and private sector and the wider data economy) alongside associated risks and benefits. The viability of each reform option was then assessed as part of continued engagement with the ICO and wider internal and external stakeholders, further policy research and policy analysis looking at their legal and practical feasibility as well as the extent to which the option would deliver the intended policy outcome. Each reform was also re-considered in the context of the wider package of potential reforms in order to assess its fit and interdependencies with other potential measures. This resulted in the list of potential reform options being considered at this consultation stage.

Methodological approach and evidence base

19. The proposed measures have common channels of impact and practical implications. Further, the proposed measures are closely interlinked and are not mutually exclusive. We therefore consider the expected impact of the package of proposed measures as a whole, as mentioned above. Where quantification is possible, we provide indicative analysis of quantified impacts of some measures as a basis for discussion and to seek stakeholders' input.

20. Our methodological approach consists of three stages.

    i. In stage 1, we assess available evidence to develop theories of change for each of the measures, mapping outputs, outcomes, direct and indirect effects, and possible unintended consequences of measures (see below).

    ii. In stage 2, we assess available evidence to judge which direct and indirect effects could be feasibly modelled (see Section 2).

    iii. In stage 3, we qualitatively assess the remaining impacts using the available evidence (see Section 3).

21. We have relied on three types of evidence:

    i. Data on how many organisations process personal data and currently undertake activities to comply with data protection regulation;

    ii. Data on the cost of compliance activities and/or the marginal impact of reforms and data use; and

iii. Wider evidence on the impact of current data legislation and potential reforms

These are described in further detail below.

22. For the first type of evidence, we mainly used the UK Business Data Survey (UKBDS)[17], which is a large survey on UK businesses' use of data and interaction with data protection. This has a representative sample of 4,500 UK businesses, surveyed by telephone in late 2020. The survey provides detailed information on many of the activities related to data protection and data use.

23. For the second type of evidence, the most important data sources for our modelling are the European Commission's and Ministry of Justice's 2012 impact assessments (IAs) of the then proposed European data protection regulation. Where possible, these were integrated with more recent evidence. As these IAs are now just under 10 years old, and were carried out before GDPR came into force and we have not found any more recent estimates, it is possible that actual compliance costs as currently experienced by UK organisations differ from the costs reported in the IAs. For example, the IAs generally assumed that the cost of compliance would be constant over time; however these costs may decrease over time as organisations are increasingly familiar with regulation. In contrast, compliance costs may increase over time as patterns of data use change (such as remote and online working) or new technologies develop (such as automated decision making) which existing rules might not readily accommodate.

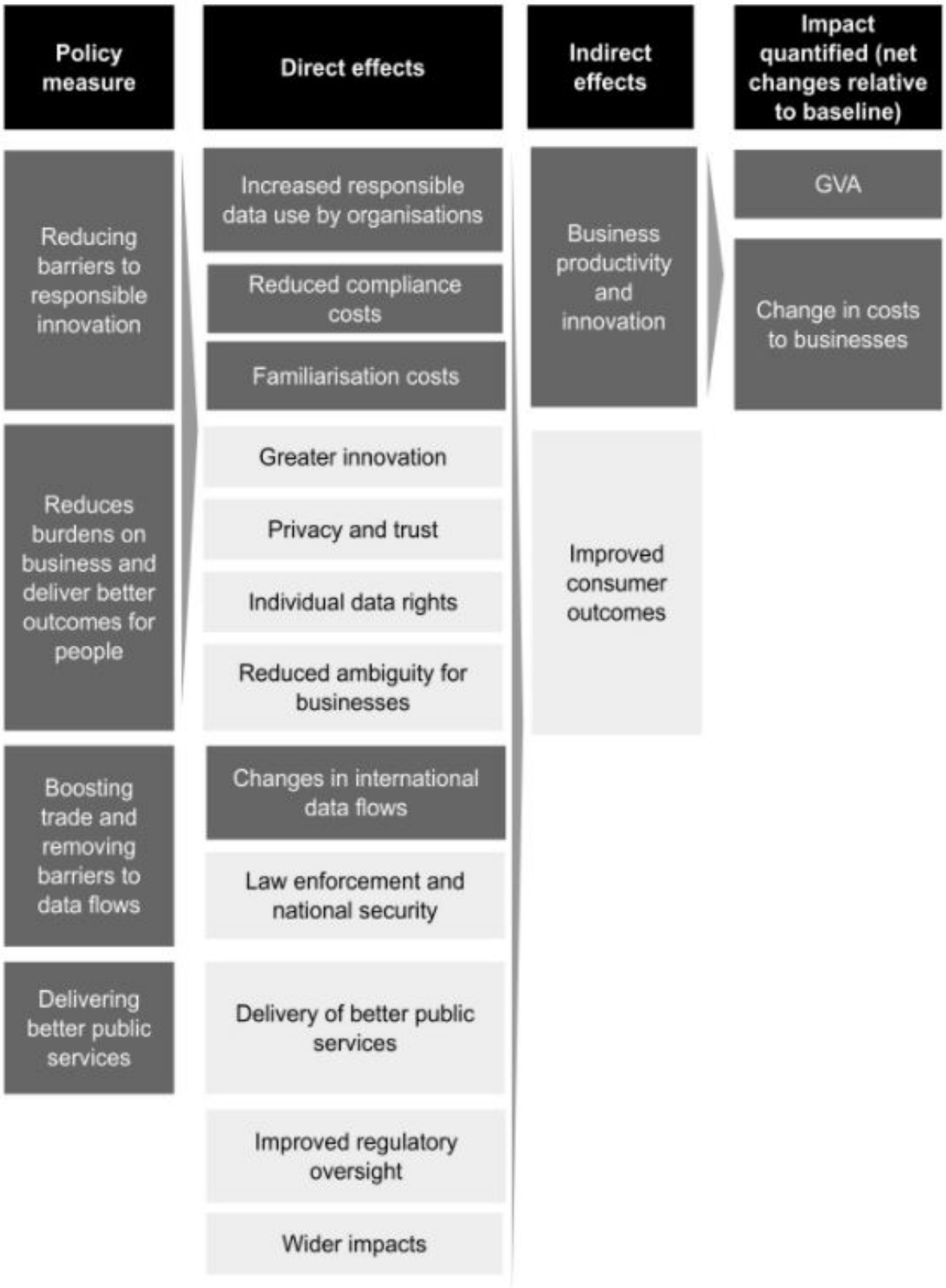
24. For the third type of evidence, we investigated the impact of similar policies and case studies. This includes literature on the impact on productivity of data use, cross-border flows of data and data policy restrictions. Finally, we conducted meta-analyses of available estimates in order to understand the associated effects of different changes, such as changes to organisations' use of data. As described above, the proposed reforms are novel and there is limited precedent of other comparable reforms. We are therefore seeking stakeholders' views on the degree to which our findings from this review are applicable in this current context.

Theory of change

25. A theory of change sets out how policies have direct and indirect effects that contribute to achieving final intended outcomes. We developed our theories of change using economic principles, evidence of the impact of comparable policies, and an expert panel consisting of academics and practitioners in data policy.

[17] UK Business Data Survey (2021), DCMS Ad-hoc Statistics (2021)

26. The figure below sets out the theory of change for the package of proposed reform options in this consultation. Where we have sufficient evidence and we have been able to make reasonable assumptions, we have quantified the net impact in terms of changes relative to the baseline. The boxes in light grey represent the effects that we have not quantified but have instead considered qualitatively. We assume the baseline is where the status quo remains in place with respect to the current data protection regime.



2. Quantitative assessment of expected impacts

27. An estimated increase in responsible data use and a reduction in compliance costs account for the majority of quantified economic benefits, which are expected to generate net benefits of £1.45 billion over ten years. These benefits arise mostly from the measures relating to reducing barriers to responsible innovation, and reducing burdens on business and delivering better outcomes for people. The rest of this section sets out our approach and evidence used to quantify these benefits.

Increased responsible data use

28. The proposed measures are expected to increase responsible data use at the firm level, primarily due to lower compliance costs and reduced uncertainty associated with data use, but also through changes in overall data sharing by individuals. We expect that greater clarity will allow organisations to increase responsible data use, both in organisations that already conduct these activities and by increasing the number of organisations that use data. Some proposed measures will increase data processing for specific activities, such as those in relation to R&D and AI systems.

29. A wide literature identifies data as a factor of production and driver of firm-level productivity, with more (or higher quality) data driving higher output through lower costs, better coordination and improved products. Using reliable estimates from the literature on the relationship between data use and GVA, we estimate the impact of measures on economic output.

30. The impact of data at the firm level is complex and varied. Its value to organisations is widely reported[18] in terms of driving greater firm-level efficiency, enabling new products (often personalised and free), and powering new technologies through big data, AI and data analysis.[19]

31. There are many mechanisms by which the acquisition of data can improve and increase outputs. In essence, data-intensive analytics can be used to discover new insights which enhance decision-making and optimise processes or coordination. This includes quality improvements in existing products and services, cost reduction in delivering products and services, (e.g. analytics can reduce the costs of delivery, better credit scoring can reduce the cost of delivering, lower wastage and dynamic efficiency from improved data on performance), and greater innovation in development of new products and services.[20]

32. The measures relating to reducing barriers to responsible innovation are likely to generate an increase in responsible data use. For example, creating a limited non-exhaustive list of legitimate interests for which businesses can use personal data will give organisations more confidence to process personal data without unnecessary recourse to consent. Similarly, helping organisations

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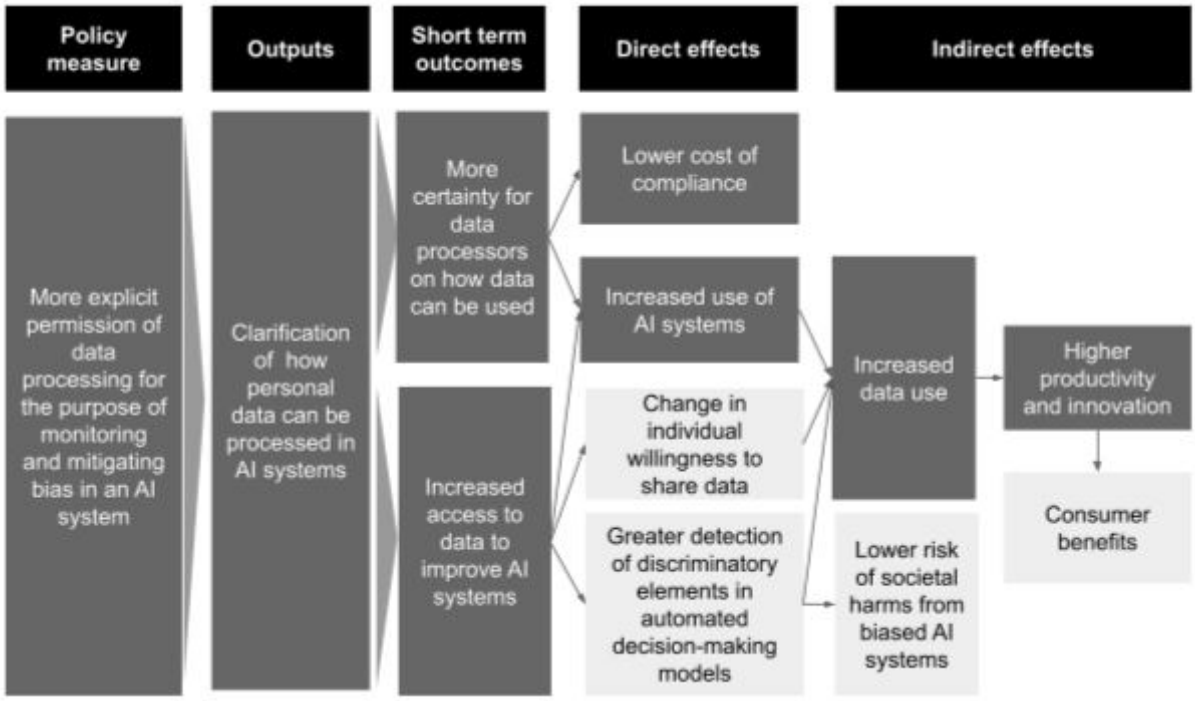
[18] Snaith (2018) Data's value: how and why should we measure it?, ODI, August 2018
Higson and Waltho (2009) Valuing Information as an Asset, David Waltho, C. Higson, Published 2010
McKinsey (2013) Open data: Unlocking innovation and performance with liquid information, October 2013
LaValle et al. (2010) Big Data, Analytics and the Path From Insights to Value, Sloan Management Review, Steve LaValle, Eric Lesser, Rebecca Shockley, Michael S. Hopkins and Nina Kruschwitz, December 2010,
Deloitte (2019) Generating value from data capture

[19] McKinsey (2018) How artificial intelligence and data add value to businesses

[20] Additional examples include the development of new financial products, smart contracts and supply chain tracking services, new products that rely on applications such as online maps or translation, and new consumer goods based on analysis of purchasing trends. From World Bank (2021) World Development Report 2021: Data for Better Lives

building or deploying AI tools to interpret existing data regulation and simplifying legislation where appropriate will facilitate new entrants to data-driven markets and help to ensure beneficial data processing is not impeded.

33. As an example of how we consider the impact of each of the individual measures, the figure below sets out the theory of change for the proposal to provide a more explicit permission for the processing of personal data for the purpose of monitoring and mitigating bias in AI systems. It can be seen that providing clarity in this area is expected to lead to short-term outcomes which then lead to direct and indirect effects. We have quantified the resulting impact on productivity and innovation in terms of GVA.



34. In order to determine the number of organisations affected by each measure, we use data from UKBDS and other sources.

Approach to quantifying impact of increased responsible data use

35. The impact of organisational data use is complex and inherently uncertain, but is understood to be valuable to firm organisation and production. There are various ways of understanding the role of data in the creation of value by organisations: as a factor of production, as a productivity enhancer, as a by-product, or as an output itself.

36. We do not attempt to directly quantify data as a primary output or a by-product itself. Instead, we consider data as an input to businesses, as a factor of production driving output and productivity.[21] Data may also be conceptualised as a driver of total factor productivity (TFP) by providing additional *information* or *insight*. Increases in TFP reflect a more efficient use of factors of production, often thought to be driven by technological change. Businesses use data along with various technologies to become more productive by improving their business processes, learning more about their clients and customers, developing new products, or making better data-

[21] Manyika, Chui and Brown (2011) Big Data: The Next Frontier for Innovation, Competition, and Productivity

driven decisions. In this context, the addition of data to the production process makes the main factors of production more efficient, leading to better performance.[22]

37. Quantifying, and particularly monetising, the value of this data poses a difficult challenge. For example, defining the volume of data in terms of bytes does not reflect the quality of that data in terms of its many characteristics (such as accuracy, timeliness, and the degree to which it is processed). The value of data will vary greatly according to context and there is limited information on prices. Nonetheless, rather than omitting a monetised impact from our analysis, we use GVA as one potential way to capture the value added to the economy on a top-down basis. Through the mechanisms described above, we expect that data use will improve TFP, improving allocation of resources and coordination to increase firm-level output with all other inputs unchanged. We estimate the effect of measures on data use by channel of impact and attempt to find reliable estimates that relate additional data use to firm-level productivity and consequently GVA. While the ultimate value of this increased data is impossible to assess directly due to the inherent uncertainty and variation in how data will be productively used across organisations, we consider the net impact on data controllers will be positive, and therefore deem it worth inclusion in the cost-benefit analysis.

38. We assess GVA as the most reliable way to capture this added value to the economy from a top-down method. Through the above mechanisms, we expect that data use will improve TFP, improving allocation and coordination to increase firm-level output with all other inputs unchanged. We undertook a literature review of the evidence relating data use and productivity, two key papers being Bahkshi et al (2014)[23] and Brynjolfsson, (2011)[24]. Bahkshi et al. find that a one-standard deviation increase in the use of online data is associated with a 8% higher level of productivity (TFP). Looking at decision making based on data and business analytics ('data driven decision making' or DDD), Brynjolfsson finds firms adopting DDD have output and productivity 5-6% higher than what would be expected, all else being equal. Primarily at this stage, we use Bahkshi's estimates of an increase in productivity, measured as GVA per worker, which represents a central and commonly found estimate across the literature. However, we are seeking further evidence and input as to the impact of increased data use at organisational level.

39. We consider a GVA approach to be a clear and empirically sound method to appraise the value of data. Studies that attempt to estimate the value of personal data are typically based on income, market or contingent valuation. However, these are typically context-specific[25] and may therefore be unreliable or inaccurate in a more general context of analysis.

Net reduction in compliance burdens

40. Compared to the current regime, several of the measures change compliance requirements on organisations, typically lowering the current compliance burden while continuing to require businesses to be accountable for delivering key outcomes for data protection.

[22] World Bank (2021) World Development Report 2021: Data for better lives
[23] The analytical firm: Estimating the effect of data and online analytics on firm performance
[24] Strength in Numbers: How Does Data-Driven Decisionmaking Affect Firm Performance?
[25] Sources: BEIS (2019) Companies House data: valuing the user benefits; Winegar and Sunstein (2019) 'How Much Is Data Privacy Worth? A Preliminary Investigation'; Coyle and ODI (2020) The Value of Data summary report; PWC (2018) Putting a value on data

41. We expect that, compared to the current data protection regime, the proposed measures will reduce administrative costs owing to fewer staff or less time spent on unnecessary compliance activities.

42. Specific measures relating to reducing barriers to responsible innovation that may reduce direct business costs include:

    a. Simplifying the use of personal data for research purposes;
    b. Creating a limited non-exhaustive list of legitimate interests that businesses can use personal data for, giving organisations more confidence to process personal data without unnecessary recourse to consent; and
    c. Providing greater clarity on specific activities including when further processing can take place, the circumstances in which data will be regarded as anonymous, and that the test for anonymisation is relative.

43. Specific measures relating to reducing burdens on business and delivering better outcomes for people that may reduce direct business costs include the following:

    a. Reforming the accountability framework to allow for more efficient focussing of efforts either through a privacy management programme (PMP) or through targeted changes to current prescriptive requirements; and
    b. Introducing a cost ceiling for SARs and amending the threshold for response where a request is likely to cause disproportionate or unjustified disruption.

44. To assess the impact of proposals relative to the current regime, we assess the compliance activities currently undertaken under the UK GDPR, their unit-costs and impacts on organisations.

45. The table below sets out some of the key compliance requirements and activities that we assume result from the current UK GDPR/DPA requirements, and the associated unit-costs or time-cost (costs incurred by organisations to undertake such activities or complete requirements). While these are derived from the best available evidence, there remains a large degree of uncertainty. For example, we assume that the baseline cost of some compliance activities varies depending on the size of the organisation (e.g. establishing a lawful ground for data processing) whereas others do not (e.g. cost of seeking legal advice). We are therefore seeking input from a range of organisations as to the practical impact of current data protection legislation at consultation.

Compliance activities and costs assumed under the baseline

Activity	Description	Annual cost per activity per business (£)
Seeking legal advice	Businesses often require external legal advice in order to maintain their compliance with regulation. This includes advice on how and whether data can be used.	£990/year cost of legal advice (equivalent to 4 hours of a legal professional and 2 hours of a clerical worker)
Establishing a lawful ground for data processing	Internal staff time is often required to consider whether a particular use of data is permissible, and to clarify this for others.	Annual wages for DPO (medium and large enterprises): £50,000 for medium and large enterprises; annual labour costs for DPO type functions: £900 for small and micro enterprises
Acquiring	Businesses must acquire consent to process personal	£67.50 cost per business per year

consent for data processing	data as consumers have the right to prevent processing of their data. They often fulfil this requirement by having 'opt-in' and 'opt-out' functionality on their website.	to run opt-in/opt-out
Responding to SARs	Consumers have the right to access their personal data which is met through a Subject Access Request (SAR). When these are raised, businesses have to collate information on what data they hold on the individual, how it is used, who it is being shared with and where they obtained the data from. Compiling a response to each SAR takes time for the business to complete.	Around 9 SARs on average per year at a cost of £75/SAR for SMEs and £375/SAR for large businesses
Notifying data breaches to ICO	If an organisation is involved in a data breach of a certain severity, they must report the details of this to the ICO no longer than 72 hours after becoming aware of it.	£1,500[26]
Keeping records of data processing activities	Businesses must keep record of their data processing activities, such as maintaining documentation of the categories of data being processed and the purpose of the data processing.	£53/year annual cost of demonstrating compliance
Providing privacy notices	Businesses that process personal data must provide a privacy notice. Privacy notices are public documents that explain how the business processes personal data and how it applies data protection principles	Assume cost per request similar to cost of SARs: £75/SAR for SMEs and £375/SAR for large businesses
Preparing Data Protection Impact Assessments (DPIAs)	DPIAs must be completed by businesses where data processing is likely to result in a high risk to individuals. They describe the nature and scope of processing, identify the risks to individuals of processing and ways to mitigate those risks. DCMS confirmed that under each of the measures a DPIA would still be required.	£990/year cost of legal advice (equivalent to 4 hours of a legal professional and 2 hours of a clerical worker)
Other internal compliance activities	Other internal compliance activities not listed above include, but are not limited to, notifying the authorities of processing of data which might represent specific risks to individuals, and responding to consumer questions about how the business is following data protection principles.	Annual wages for DPO (medium and large enterprises): £50,000 for medium and large enterprises; annual labour costs for DPO-type functions: £900 for small and micro enterprises

[26] This is a mid-point estimate of the cost of notifying the ICO of a data breach, which the MOJ's 2012 Impact Assessment estimated to be between £1,000 - £2,000. This includes initial incident analysis and fact finding, drafting the letter to the ICO, and analysis and response to replies and questions from the supervisory authority.

46. The tables below set out the assumptions used to calculate the change in compliance costs that are expected to result from the proposed measures.

47. The table below shows how the average annual decrease in compliance costs resulting from creating a limited non-exhaustive list of legitimate interests for which businesses can use personal data is approximately £13.6 million in total per year on average.

Compliance activity	Number of organisations potentially affected	Proportion of these organisations actually affected	Baseline cost	Percentage change in compliance cost resulting from measure	Estimated effect (£m per year on average)
Effect on legal advice costs	1, 236, 000 organisations that use data to generate new insights or knowledge	11.5% : 50% of the 23% of organisations that have sought legal advice because of GDPR/DPA2018	£138m annual cost of legal advice for these organisations	6.25%: assuming that 25% of legal advice costs are related to issues clarified by this measure, and that for those issues the cost of legal advice will fall by 25% as a result of the measure	8.6
Establishing a lawful ground for data processing	1, 236, 000 organisations that use data to generate new insights or knowledge	84%: proportion of organisations who have a member of staff leading on data protection	£1.9bn	0.25%: assuming that 25% of DPO time is spent on activities related to this measure, and that the measure leads to a decrease in this by 10%	4.8
Reduction in customer complaints about data use relating to non-permissible uses of data	Number of customer complaints: 2,976, according to ICO - data on number of complaints to ICO on how data is being used/collected[27]		Cost of responding to legal complaints: £725[28]	Assuming that 25% of all data uses are affected and the atthere is a 25% reduction in complaints as a result of the measure.	0.1
TOTAL REDUCTION IN COMPLIANCE COSTS					**13.6**

[27] ICO Complaints and concerns data sets

[28] Average cost of each ICO investigation (2016/17)

48. The table below shows how the average annual decrease in compliance costs resulting from measures relating to AI, machine learning and data protection is almost £2 million on average per year.

Compliance activity	Number of organisations potentially affected	Proportion of these organisations actually affected	Baseline cost	Percentage change in compliance cost resulting from measure	Estimated effect (£m per year on average)
Effect on legal advice costs	385,000 businesses that use personal data and use AI	15%: organisations that don't find GDPR and related ICO guidance clear and easy to understand	£56m annual costs of legal advice	2.5%: assuming that 10% of legal advice costs for affected organisations are related to processing personal data to improve accuracy of AI systems, and that 25% of legal costs in these cases could be saved as a result of the measure	1.4
Establishing a lawful ground for data processing	385,000 businesses that use personal data and use AI	All businesses (assuming all businesses that use personal data for AI have a DPO or have defined someone in the organisation to undertake DPO activities)	£514m annual costs	1%: assuming that 10% of DPO time is spent on activities related to this measure, and that the measure leads to a decrease in this by 10%	0.5
TOTAL REDUCTION IN COMPLIANCE COSTS					**1.9**

49. The table below shows how the average annual decrease in compliance costs resulting from simplifying the use of personal data for research purposes is estimated to be just over £3 million on average per year.

Compliance activity	Number of organisations potentially affected	Proportion of these organisations actually affected	Baseline cost	Percentage change in compliance cost resulting from measure	Estimated effect (£m per year on average)
Effect on legal advice costs	722,000 organisations that use data to generate new insights or knowledge and that employ someone who leads on R&D: 58% of 1, 236, 179	11.5% : 50% of the 23% of organisations that have sought legal advice because of GDPR/DPA2018	£276m annual cost of legal advice	2.5%: assuming that 25% of legal advice costs are related to issues clarified by this measure, and that for those issues the cost of legal advice will fall by 25% as a result of the measure	2.0
Establishing a lawful ground for data processing	722,000 organisations that use data to generate new insights or knowledge and that employ someone who leads on R&D: 58% of 1, 236, 000	All businesses - to be checked with UKBD survey data	£1.26bn annual labour costs for DPO type functions	0.1%: assuming that 10% of DPO time is spent on activities related to use of data for R&D, and that the measure leads to a decrease in this by 10%	1.3
TOTAL REDUCTION IN COMPLIANCE COSTS					**3.3**

50. The table below shows how raising the threshold for notification of data breaches to the ICO would lead to around £1.1 million cost savings to businesses on average per year.

Compliance activity	Number of organisations potentially affected	Proportion of these organisations actually affected	Baseline cost	Percentage change in compliance cost resulting from measure	Estimated effect (£m per year on average)
Decrease in breaches notified to ICO	Unknown - but known number of breaches in a year: 12,152	Assuming measure removes need to notify half of all non-cyber security breaches (36% of all breaches)	£13.7m	1/3 of costs of notification can be saved as a result of the measure	1.1
TOTAL REDUCTION IN COMPLIANCE COSTS					**1.1**

51. The table below shows how allowing organisations to use cookies for low-risk processing without consent could achieve around £15.8 million cost savings on average each year.

Compliance activity	Number of organisations potentially affected	Proportion of these organisations actually affected	Baseline cost	Percentage change in compliance cost resulting from measure	Estimated effect (£m per year on average)
Obtaining opt-in consent	781,833 organisations that collect personal data through website analytics	All businesses	£52.8m	30% of businesses will no longer offer opt-in consent	15.8
TOTAL REDUCTION IN COMPLIANCE COSTS					**15.8**

52. The table below shows how limiting the time and threshold for responding to subject access requests could lead to cost savings for businesses of around £55 million each year.

Compliance activity	Number of organisations potentially affected	Proportion of these organisations actually affected	Baseline cost	Percentage change in compliance cost resulting from measure	Estimated effect (£m per year on average)
Decrease in SARs	529,000 organisations that receive SARs in a year (assumed to be ~75% of organisations that have received a SAR according to UKBD)	All businesses	£796m annual cost	6.25%: assuming that 25% of all SARs are sent are speculative in nature, and that 25% of these will take less time and resource to respond to as a result of the measure	54.7
TOTAL REDUCTION IN COMPLIANCE COSTS					**54.7**

53. As set out in the tables above, the percentage reduction in these costs is assumed in our modelling not to vary by size of organisation. Some of the baseline compliance costs are assumed to vary by size of organisation. Therefore, the estimated proportional impact on small organisations is estimated to be bigger than for larger organisations. We welcome stakeholders' views on these underlying assumptions.

One-off familiarisation costs

54. Other quantifiable impacts include familiarisation costs associated with the new measures. Our current analysis estimates a one-off familiarisation cost of £75-184 million, as businesses learn about and respond to new measures. We are working on further analysis to account for business size where possible.

55. Our suggested modelling of these impacts uses a time-cost approach to estimate the administrative costs of reading the new legislation. This approach to familiarisation costs has been adapted from the ICO's methodology used in its impact assessment for the Data Sharing Code. While the ICO modelled familiarisation costs for a single piece of guidance (the Code), the main difference in our approach is that the familiarisation costs have been broken down by policy measure, as different measures apply to different populations of businesses. Familiarisation costs for each measure have therefore been calculated individually, and then subsequently summed together. These estimates assume that one employee per organisation would be required to read guidance, and estimates hourly unit cost of this work at £26.91. We have assumed that the guidance would be at a similar level of reading difficulty to the ICO's data sharing code, and therefore have used a similar Flesch reading ease score of 40, which

corresponds to a reading speed of 75 words per minute. Assuming an average number of words per page of 500, this gives a reading speed of 9 pages per hour.[29]

56. In order to identify the relevant number of affected businesses per measure, we look at an organisation's data use to determine if they are in scope of the model. We assume that familiarisation costs are borne in year one as all organisations read the new guidance, taking this direct measure of impact.

57. The table below summarises our calculation of familiarisation costs.

	Assumption used	Source
Hourly cost including uplift to wage costs to account for overhead costs	£26.91	ICO/DCMS (2020) Impact Assessment for the Age Appropriate Design Code
Hours required (per organisation)	Expected pages in guidance calculated by measure, from low estimates of 1 page of guidance to 15 pages of guidance	Current estimates taken from complexity of measure and comparable detail of ICO guidance. Assumes 500 words per page and 9 pages read per hour taken from the ICO's analysis of the data sharing code
Businesses affected	Calculated by measure. Varies from around 400,000 affected to 4 million for other measures (Estimated number of businesses that handle personal data).	Affected number of businesses by measure are taken from the UK BDS survey.
Total familiarisation costs	**£75-184 million**	n/a

58. The range of familiarisation costs at this stage is fairly wide, and we will seek to clarify the precise definition and impact of measures in a final stage Impact Assessment. We are also interested in any other familiarisation costs associated with reforms, such as training. We would like to consult with organisations on related, prior familiarisation costs of the UK GDPR and DPA 2018, and the expected administrative costs of familiarisation with this package of measures.

3. Trade impacts

59. The proposed measures that are designed to boost trade and reduce barriers to data flows are likely to have complex effects. At a high-level, the theory of change for the proposed measures is that general improvements in flexibility for data transfers and reduced services trade restrictiveness are associated with an increase in trade. Moving to a system which allows personal data to be transferred more flexibly via alternative transfer mechanisms (ATMs) is expected to lower transaction costs and increase cross-border data flows.

[29] The hourly cost includes a 22% uplift for non-wage costs using figures from Eurostat in line with RPC guidance. Wage costs are taken from the ONS Annual Survey of Hours and Earnings (ASHE), assuming that the relevant 'occupational group' is 'Managers, Directors and Senior Officials'. The 2019 median hourly earnings (excluding overtime) for this group is £22.07. ICO (2020) Impact Assessment for the Age Appropriate Design Code

60. These measures represent a more flexible and risk-based approach to international personal data transfer than the current regime. In particular, reducing the burden on organisations that wish to transfer personal data to non-adequate countries through ATMs is likely to support international data flows to non-adequate countries, and simplify potential non-tariff barriers to trade. Qualitatively, these measures are expected to help domestic businesses connect with and access foreign markets, while attracting investment from abroad by businesses which value the trust and confidence in responsible data use that the UK's regulatory environment inspires.

Value of data transfers to trade

61. Cross-border data transfers are a key facilitator of international trade, particularly for digitised services. While it is difficult to characterise and quantify data-enabled trade, the value of UK trade in potentially digitally delivered (or 'potentially ICT-enabled') services may closely mirror data-enabled trade. Overall exports of potentially ICT-enabled services are estimated to be around £221bn in nominal terms in 2018, with annual growth averaging 5.8% since the end of the global financial crisis over 2010-2018.[30] By another measure, DCMS analysis of ONS data shows that the UK exported £234 billion in digitally/remotely delivered services (74% of total UK services exports) and imported £124 billion services via remote trade (57% of UK services imports) in 2019.[31]

62. Cross-country analysis indicates that both data policies on domestic use and the cross-border movement of data are likely to have a significant effect on productivity.[32] Changes to ATMs will allow organisations more discretion to choose how standards are met. Such reforms and additional mechanisms will augment rather than replace current tools under Article 46 of the UK GDPR. Moreover, these will allow for a more flexible and risk-based approach to use of the adequacy test in the future, alongside changes to ATMs.

Quantifiable trade impacts

63. While methodological approaches exist to quantify the impact on trade, we will seek further information at the consultation stage in order to ensure these are sufficiently robust. Detailed trade modelling of the quantified impact of proposals has not been carried out at this consultation stage.

64. As a modelling approach, we intend to approximate the impact of these policy changes on services trade restrictiveness (as measured by the OECD's Services in Trade Restrictiveness Index - STRI),[33] alongside the use of a gravity model of trade which relates volumes of trade by the 'distance' between two trading partners.[34]

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[30] DIT, DCMS (2020) Understanding and measuring cross-border digital trade
[31] ONS (2020) Trade in services by modes of supply, UK: 2019. Remote trade (or Mode 1) is where a supplier in one country sells a service to a customer in another without the movement of people, for example legal advice supplied by a UK business to overseas customers remotely by email or video conferencing.
[32] European Centre for International Political Economy (2020) Do Data Policy Restrictions Impact the Productivity Performance of Firms and Industries?
[33] The OECD Digital STRI Simulator enables policy makers and experts to explore the impact of a change at a detailed level for any potential changes in regulatory measures or restrictiveness, and to compare the regulatory environment among countries.
[34] Distance is a composite factor which includes both geographical distance and other factors which shrink traditional barriers to trade between partners, such as common language, institutions, trading agreements. In this case, we adjust rules around data transfers, which are found to be a significant determinant of bilateral trade.

Unquantifiable trade impacts

65. From a strategic perspective, a more flexible and risk-based international transfers regime will ease transfers where the risks to data protection standards being undermined are low or immaterial.

66. Accompanying the UKs intention to approach adequacy assessments with a focus on risk-based decision-making and outcomes, the Government is considering reforms which allow for greater scalability when applying the test - or example, by allowing the test to be applied to multiple countries and by amending the review mechanism for adequacy regulations so it is less resource intensive, whilst still ensuring third countries continue to provide high standards of data protection.

67. A more outcomes-focused approach to adequacy assessments and alterations to review periods may reduce administrative requirements.

Impact of changes to UK adequacy status

68. Any future change to the UK's adequacy status would directly affect UK organisations transferring personal data from the European Economic Area (EEA), through the potential impact on trade and the cost of using ATMs.[35] Specifically, under Article 45 of the GDPR, personal data transfers from the EEA to the UK will only be permissible through ATMs in the absence of an adequacy decision. These include:

    - Standard contractual clauses (SCCs), the most commonly used personal data transfer mechanism, which require both parties engaging in an EU to third country data transfer to agree and sign in order for that transfer to be lawful.
    - Ad-hoc contractual clauses (approved by the relevant Supervisory Authority), understood to be rarely used and unlikely to be the primary transfer mechanism in a no adequacy scenario.
    - Approved codes of conduct/approved certification mechanisms, understood to not be used.
    - Approved binding corporate rules (BCRs) may be used to transfer personal data to/from the UK, when dealing with transfers between organisations within a corporate group. BCRs are understood to be far more costly and burdensome to implement than SCCs, although simpler once in place for ongoing new transfers, and typically used by a small number of large businesses.[36]

69. If the UK were to lose its adequacy status, the primary ATM used by organisations is expected to be SCCs. DCMS conducted modelling work to estimate the direct financial impact on UK businesses of having to implement SCCs as a result of the UK leaving the EU without adequacy, providing a guide to the magnitude of potential impacts. This is based on 2017 services trade data from the ONS and data-dependent goods trade calculations from HMRC.[37]

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[35] The European Commission has the power to determine whether a third country has an adequate level of data protection, which enables personal data to be sent from an EEA state to a third country without any further safeguards being necessary ('free flow' of personal data).

[36] New Economics Foundation (2020) The Cost of Inadequacy

[37] DCMS receives *International Trade in Services* data directly from ONS. For context, the goods element is based on work DCMS commissioned from HMRC in 2018.

70. Our model estimates the number of businesses that depend on transfers of personal data from the EU in order to export goods and services to the EU. It then estimates the total cost of implementing SCCs to continue to trade and to transfer personal data, and determines whether:

    - Gains from trade based on individual businesses' EU export revenue outweigh the internal compliance costs, in which case trade continues while firms incur costs; and
    - Compliance costs exceed trading profits, and those firms cease trading with the EU, in which case the trade with the EU ceases, the compliance cost is not incurred, and the model estimates the lost export revenue.

71. The model estimates that the total direct, financial impact on UK businesses would be around £1.4 billion over five years, the period in which compliance and SCCs would fully feed through to affected organisations. This comprises around £1 billion in reduced trading revenue and £420 million in increased compliance costs. EU organisations are also likely to bear compliance costs and it is possible that at least part of that would be passed back to UK organisations through various means, e.g. price increases.

72. This modelling necessarily requires some simplifying assumptions. We assume that the costs of SCCs to businesses of different sizes are set out in the table below.

Number of employees	Average SCC cost to businesses
0	£1,830
1 - 9	£10,126
10 - 49	£13,176
50 - 249	£15,128
250 +	£20,618

73. Individual businesses' SCC costs were estimated using DCMS survey data in which businesses estimated the time required to put SCCs in place. It was assumed that these estimates equate to one full time administrator working for the length of time given by the respondent. ONS published statistics taken from the Annual Survey of Hours and Earnings[38] on average salary by profession were used to calculate the resultant cost. A non-wage labour cost uplift has been applied in accordance with the RPC guidance on implementation costs.[39]

74. We assume that only organisations for whom the one-off cost of implementing SCCs exceeds annual export profits would cease trading, and that this decision is made by all businesses in scope in the first year from which the UK loses adequacy. In reality, broader effects on trade are possible, where all businesses reliant on personal data transfers from the EEA may respond to the potential non-tariff barrier imposed by the loss of adequacy. In this case, it would be possible to measure the typical responsiveness in trade to a higher non-tariff barrier around data transfers. However, it is difficult to assess whether SCCs will pose higher non-tariff barriers to trade relative to an adequacy decision, and it is difficult to simulate such scenarios quantitatively.

75. The model looks at the impact of a loss of adequacy and the resulting decision whether or not to cease trading in isolation. There are, however, other effects of EU Exit that may lead businesses

[38] ONS (2020) Employee earnings in the UK

[39] An uplift of 22% was applied based on 2018 data. Source: RPC guidance note on 'implementation costs', RPC short guidance note, August 2019. Note that 2018 is used because 2017, which is the year the trade data in the model relates to, is unavailable. The final result is somewhat sensitive to this change. Increasing the cost of SCC implementation by 22% added £70m to the overall SCC cost estimate.

to cease trading irrespective of personal data flows. There are also likely to be wider economic implications arising from the direct impacts that the model estimates, such as supply chain effects. These are too complex to model or to separate sensibly from other EU Exit impacts.

76. Some businesses have already implemented SCCs for transfer of personal data between the UK and the EU in order to prepare for the eventuality in which the UK does not receive a positive adequacy decision from the EU, and there may be others that choose to do so to preemptively mitigate the risk of losing adequacy. However, this would not reduce the total cost of implementing SCCs as modelled; it means that a proportion of it will have already been incurred.

77. We are seeking further information from businesses at consultation on their reliance on international personal data flows, and the uptake and costs of transfer mechanisms such as SCCs.

4. Qualitative consideration of impacts

78. Beyond the quantifiable impacts and trade impacts presented above, the package of reforms are expected to have a number of other effects. These are difficult to quantify as they may be qualitative in nature, create subtle or strategic impacts, or bring potential benefits which are difficult to predict and measure accurately. The rest of this section sets out our qualitative consideration of:

    a. Reducing ambiguity for business;
    b. Delivering better public services;
    c. Improving regulatory oversight;
    d. Increasing innovation;
    e. Privacy and trust; and
    f. Other impacts.

Reducing ambiguity for businesses

79. Reforms to deliver better public services are expected to have several key impacts. Measures are expected to reduce ambiguity and result in greater sharing and use of data within the public sector.

Delivering better public services

80. Expected benefits from the package of reforms include increased sharing, coordination and collaboration between the public and private sectors, which would allow the delivery of better public services, ultimately leading to better outcomes for citizens. This is especially pertinent in the context of Covid-19, where responsible data use has been crucial to the public response. For example, globally, around 75,000 scientific publications on Covid-19 were published between January and November 2020, of which more than three quarters were open access.[40] Research databases and scientific publishers removed playwalls so that the scientific community could quickly share COVID-19-related data and publications.

[40] OECD (2021) notes that “the pandemic has triggered an unprecedented mobilisation of the scientific community”

81. Data flows allowed labs at the forefront of the outbreak to share information and rapidly develop tests for the virus.[41] Spirometers, a device used to measure lung capacity, were issued by the NHS to patients at extreme risk from Covid-19. The device allowed patients to measure their lung capacity and share this information remotely with their doctors via an app.

82. However, there is evidence that there remain important barriers to data use in the provision of public services, including time taken to access data and constraints in data access for commercial companies, not just data protection rules. When surveyed, members of the health data user community reported that only 25% of recent requests for data had been completely successful, and only 45% of requests for clinical trial data were successful.[42]

83. Providing clear processing conditions would help to provide data controllers with more certainty. Our proposals aim to address the barriers to data use by clarifying the conditions under which data can be processed and encourage greater data use, whilst empowering public bodies to process data where it is in the public interest.

Improving regulatory oversight

84. We propose measures to reform the Information Commissioner's Office (ICO); this modernising reform agenda is an investment in the ICO's future success and will sustain its world-leading reputation, while preserving its regulatory independence.

85. These reforms aim to move the ICO away from handling a high volume of low-level complaints and towards addressing the most serious threats to public trust and inappropriate barriers to responsible data use. It is understood that the ICO currently allocates a significant proportion of its resources to handling almost 40,000 complaints each year from the general public about data protection.[43] A large proportion of data protection complaints received are found to have no infringement or do not relate to GDPR.[44]

86. Similarly, our reforms of the ICO are expected to generate a range of non-monetised impacts, and it is likely the net impacts of such measures will be positive. Our ICO reforms will also complement other reform areas, such as enabling a risk-based approach to enforcement and supporting a proportionate sanctions regime, and deliver other benefits, including increased transparency and reporting, and clearer guidance for business. However, the degree to which we can assess the monetised impacts of these measures is limited, and we will be seeking further evidence as part of this consultation.

Increasing innovation

87. There is evidence that the current GDPR raises high compliance burdens, relative to size and turnover of SMEs,[45] with evidence that the average SME in the EU could expect its annual costs to increase by £2,500 to £6,000, representing 16 and 40 percent of current annual SME IT

[41] Deepmind (2020) Computational predictions of protein structures associated with COVID-19
[42] MDC (2019) Use of health data by the life sciences industry. Sample: online survey of UK health data user community, including academic and charitable as well as commercial users of health data.
[43] The ICO (2020) received 38,514 data protection complaints in 2019/20, slightly lower than 41,661 from last year
[44]41% of cases resulted in "No infringement" or "No infringement with advice given". 2.9% cases were found not to relate to GDPR - ICO (2020) ICO annual report and financial statement 2019/20
[45] European Commission (2020) Two years of application of the General Data Protection Regulation

budgets compared to 2013.[46] Research on start-ups in Germany found that while the GDPR can stimulate innovation, the cumulative impact of privacy regulation reduces start-ups' access to data making certain products and technologies harder to develop, especially in the field of big data and artificial intelligence. Also, data protection regulation might lead firms to abandon products or product ideas that are judged, possibly incorrectly, to be incompatible with the regulation.[47]

Impacts on privacy and trust

88. Typically, greater data protection may benefit data subjects to the detriment of other potential data users and vice versa. However, many avenues exist to encourage data use without compromising privacy.

89. By nature, any regulations around data protection affect both data controllers and data subjects. Any reforms should therefore carefully assess whether there will be significant impacts in terms of privacy, the rights and powers of data subjects, and potential impacts on trust in data use.

90. We have begun to consider the consumer-side impact of measures on privacy and levels of trust in the data regime. With a view to quantifying these impacts, we have assessed the evidence on the hypothetical value of privacy rights currently enshrined in the UK GDPR, and on the impact of trust on data sharing.

91. Current literature suggests that UK consumers have become less concerned about the use of their data. In 2018, Deloitte reported that 47% of digital consumers were "very concerned" about the use of their data but this halved to 24% in 2020.[48] Moreover, an ONS survey found 70% of adults in Great Britain considered data useful when governments use it to understand and better serve society, and 65% said data was useful when researchers or scientists used it to improve knowledge.[49]

92. The proposed measures are designed to maintain key safeguards and high standards of data protection, while shifting to more outcomes-based requirements and therefore we do not expect the proposals to lead to worse outcomes for individuals. For example, we propose making accountability more flexible and risk-based while still maintaining the accountability framework itself. Data subjects would maintain their rights to a SAR and those that wish to access their data would still be able to. We welcome stakeholders' views on the impact of the proposed measures on trust, the channels of impact and methodological approaches for quantifying this.

Other wider impacts

93. While we attempt to capture some of the benefits of increased data use by organisations through a GVA approach, reforms may have larger potential benefits, enabling new innovation, products and technology. The application of this data is by nature unpredictable, but we expect that significant benefits may be realised through a more pro-growth and trusted regulatory framework

[46] Christensen et al.(2013) The Impact of the Data Protection Regulation in the E.U.
[47] Martin et al. (2019) How Data Protection Regulation Affects Startup Innovation
[48] Deloitte (2020) Digital Consumer Trends survey
[49]DCMS (2020) The Opinions and Lifestyles Survey - Percentage of adults (16+) who agree that data (including personal data) is useful in a range of scenarios.

for data protection. Measures are also likely to have impacts on particularly data-driven industries and the direct data market.

94. Even marginal changes to this regime may have large implications on many data-driven industries, given the size and growth of related markets. Data has become a driving force of the modern economy, at the forefront of technological and scientific progress, driving scientific discovery and new goods and services. The UK direct data market - consisting of value added from the generation, storage, processing and analysis of digitised data - has been estimated to be worth over £15 billion annually.[50] Yet, there are numerous and considerable challenges to unlocking the value of data.[51]

95. Reforms, such as those set out in this consultation, should contribute to realising this value through responsible data use within a pro-growth and trusted regulatory regime for data protection.

[50] Data Landscape (2020) European Data Market Monitoring Tool
[51] Coyle and ODI (2020) The Value of Data summary report

Annex

This document lists questions from the UK Business Data Survey (UKBDS) 2020 that are referred to within the Data Reform analysis paper.

Whether use data in any form, by type*

Any use of personal data (could be employees, customers or both)	65%
Non-personal data	50%
Does not use any data	19%
Personal Data (employees only)	19%

Sample = 4,500. *Answers are derived from multiple questions in the UKBDS.

B2. You said you don't agree that regulatory GDPR and DPA 2018 guidance is clear or easy to understand. Have you experienced any of the following in your business as a result?

Disproportional time spent working out the requirements of GDPR and / or DPA	53%
Outsourced compliance with data protection regulation to specialist staff	17%
Prevented the implementation of a new or significantly improved product, process or business model	10%
Stopped or reduced international trade because of worries around compliance	4%
None of these	40%
Refused / prefer not to say	0%
Don't know	0%

Sample = 494* businesses that disagreed with the statement “My business finds the regulatory GDPR and DPA 2018 guidance published by the ICO clear and easy to understand” in question B1_2.

*A smaller sample size results in a greater margin of error. This means there is less confidence in these results being reflective of the population.

B3. Which elements of GDPR do you feel could be clearer?

The lawful bases that allow data processing	42%
Data Protection Impact Assessments (a process to identify and minimise the data protection risks of a project)	41%
The definitions of 'special category' data	40%
When is a dataset anonymous (i.e. not personal data)	40%
What people's data rights are (e.g. right to be forgotten)	38%
How and when to report a data breach	37%
International transfers of personal data	35%
I do not know specific elements of GDPR	21%
General requirements / what different elements mean in practice	3%
Small businesses	2%

Impact of Brexit	1%
Other	1%
Requirements around data storage (e.g. how it should be stored, when it should be destroyed)	1%
Terminology/Wording	1%
Everything	1%
Don't know	8%
None	2%
Refused / prefer not to say	*%

Sample = 3,945 businesses that collect digitised personal and non-personal digitised data (either from employees or elsewhere).

* Figure suppressed for disclosure control purposes