

Data is a driver of prosperity, the revolutionary resource that is transforming the nature of economic activity, the capability that differentiates successful from unsuccessful societies.

### Data for better policymaking

There is a great opportunity for more effective policymaking if we use data to inform what we are doing.

There are three areas the government should focus upon to improve data for policymaking:



Evidence must be taken seriously in policy formulation and evaluation, and official statistics should be at the heart of policy debate.

Government should publish the data and evidence that underpin any new policies it announces. We should maintain progress on opening up government data, which can be a rich source of innovation at relatively little cost – particularly if it is effectively marked with standard codes for geography, time and other attributes. The practice of pre-release access to statistics should be ended, so that all users can access data at the same time.

Greater data sharing between government departments for statistics and research purposes could strengthen our public services – improving health, education, housing, transport and the lives of the public. Academics should be given access to government data for research purposes. Privacy safeguards should be built into any sharing of personal data at the outset.

Politicians, policymakers and other professionals working in public services (such as regulators, teachers and doctors) should be given basic training in data handling, statistics and interpreting evidence to help them make the most of the data they have.

# Data: the driver of productivity and prosperity

Our wellbeing depends on economic prosperity, which in turn depends upon exploiting our investment in data, and on our skills as a society to understand and use data.

There are three areas the government should focus upon to improve data for productivity and prosperity:



Government should maintain the commitment to keep pace with other leading scientific nations with a target of 2.4% of GDP investment in research and development. It should produce a clear roadmap of how this will be achieved, and how it can benefit all the regions and nations of the UK.

2.

To give us better and faster insights into the nation and the economy, the Office for National Statistics and the wider Government Statistical Service must be given adequate resources.

Service must be given adequate resources. Statisticians face new challenges, including how to measure a more digital and 'intangible' economy, as well as our environment and 'natural capital'. Investment is needed to use new kinds of digital data sources such as satellite imagery, as well as exploiting government administrative data. This will also require work on new methodology to interpret such data so that it is trustworthy.

3.

To prepare for the data economy we need to **skill up the nation.** We should train teachers, from primary school through to university level, to encourage data literacy in young people from an early age. Basic data handling and quantitative skills should be an integral part of the taught curriculum. We should ensure that all students learn to handle and interpret real data using digital technology.

## Data to strengthen democracy and trustworthiness

Our democracy relies on the quality and trustworthiness of data in the public domain.

There are four areas the government should focus upon to improve data for democracy:

1.

Involve the public in shaping the conversation about how data is used. Data is powerful and we need trustworthy systems that have public support. We should involve the public in discussions about what data is being used for, and any trade-offs involved, to build understanding of the potential for public good. A framework of data rights should be developed that protects individuals and groups.

2.

Misinformation needs countering but without undermining free speech. The public should be given the tools to critically evaluate the claims that are made in the media and on social media. The UK Statistics Authority's role in calling out misuse of statistics should be supported, even when this is uncomfortable for the government of the day. Online political advertising during elections and referenda should be made transparent.

3.

Move beyond national averages and break down data to a much more granular level. Communities should be able to find out about the data for their local area. The public should see themselves reflected in the data. Statistics should be easy to break down by sex, race, disability and age. Government should invest in delivering the 2021 census whilst developing and testing alternatives which would allow for more regular census-type data.

4.

Keep data regulation updated to protect the public. Technology is changing fast, and regulation needs to keep up. For example, use of new kinds of biometric data through techniques such as facial recognition should be done within a framework that protects people and their privacy. Use of machine learning algorithms in public policy should be done transparently and allow citizens recourse if they are not treated fairly. Competition bodies should keep an eye on emerging 'data monopolies' in the private sector.

### ROYAL STATISTICAL SOCIETY

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Our vision is 'A world with data at the heart of understanding and decision-making.'