

OFFICIAL STATISTICS – A FRESH FOCUS ON USE

Summary

This paper has been prepared by the Royal Statistical Society and the Statistics User Forum, to make the case for the Office for National Statistics (ONS) establishing and implementing a strategy for improving user engagement across the Government Statistical Service (GSS). Such a strategy should embrace not only the existing users of current statistical outputs, but also recognise that there are unmet demands and potential new users. A strategy is needed to put into effect the welcome promise that users will be at the centre of the production of UK official statistics: a promise that so far has only been realised in a limited number of places. Producing a strategy is only the essential first step: it needs to be underpinned with a change of culture throughout the GSS, to spread the good practice found in the parts of the GSS that are clearly focussed on the use of the statistics and the data for which they are responsible.

Evidence for the need for improvement is clear from many of the assessments and compliance checks of official statistics carried out by the Office for Statistics Regulation, part of the UK Statistics Authority¹, and from OSR and other wider reviews of official statistics. In some cases, these are leading to improvement programmes and other transformations². However, user engagement issues and unmet needs continue to be flagged with the GSS, including through the Statistics User Forum, hosted by ONS, and the topic-based user groups. Illustrative examples are given in boxes in this paper. There are pockets of good practice across the GSS, some of which has been recognised in RSS awards for excellence in official statistics³. Nevertheless, there is much more to do to raise the standard across ONS and the whole of the GSS.

In this paper we emphasise the case for official statistics as a public good, recognising their value to society, because we believe that case has still to be realised. We then recommend action that we wish producers of official statistics to undertake to improve the use and usefulness of official statistics through better engagement with users.

Our key message is that the RSS and the SUF urge the UK Statistics Authority, in conjunction with the senior management of the ONS and statistical heads of profession across the GSS, to develop, drive and fully implement an effective user engagement strategy, with the aim of substantially improving the use and the usefulness of official statistics.

“We know the price of a beer and a pint of milk. Why not the cost of educating a child?” Laura McInerney, *The Guardian*, 20 November 2018

¹ <https://www.statisticsauthority.gov.uk/osr/what-we-do/>

² Eg to respond to Professor Sir Charles Bean’s independent review of UK economic statistics, 2016

³ Eg the 2018 awards reported at <https://www.statslife.org.uk/news/3841-campion-awards-for-official-statistics-2018-winners>

The value of official statistics to society

Statistics from official sources inform and influence decisions and actions, in government and public administration, business, the voluntary sector and by individuals and interest groups. Those ‘uses’ of the statistics affect all our lives, such as our earnings and the prices we pay, or the provision of health services and local amenities. There is substantial public investment in the production of statistics. The return on that investment should not simply be computer systems full of data, but their use to improve the lives of people and make the world a better place. It is the responsibility of the UK Statistics Authority, the ONS and the wider GSS, not just to produce data but to seek actively to maximise the societal benefit from their use.

“While various measures of income inequality and poverty exist, the UK no longer has an official measure of poverty for children, adults or pensioners. This leaves a situation where policymakers and politicians are less able to track progress and it is more difficult to hold them to account for effectively tackling the causes of poverty or improving the lives of those in poverty.” Final report of the Social Metrics Commission, September 2018

The Royal Statistical Society’s Data Manifesto⁴ observes that data is to the 21st century what steam and oil were to earlier centuries. It’s the driver of prosperity, the resource that can transform economic activity, and offer the capability that differentiates successful from unsuccessful societies. The Data Manifesto starts with the need for more effective engagement with statistics to support public policy-making, But it also stresses that there are many socially beneficial uses of official data that are not directly related to that agenda, be that individual decision making, community engagement, strengthening democracy and trust, or in commercial developments. Individually they might not have the influence of policymakers, but collectively they may be equal importance in our day-to-day lives. Whether it is management decisions in the health service, targeting crime prevention initiatives, identifying the most deprived and vulnerable communities, or in business investment, marketing, or other commercial decision-making, official statistics are used way beyond the world of policy.

The 2018 Code of Practice for Statistics issued by the UK Statistics Authority supports this theme when it states *“Users of statistics and data should be at the centre of statistical production; their needs should be understood, their views sought and acted on, and their use of statistics supported. Statistics producers should maintain and refresh their understanding of the use and potential use of the statistics and data. They should consider the ways in which the statistics might be used and the nature of the decisions that are or could be informed by them.”*⁵

But this formulation is often implemented in ways that side-step the obligation to maximise the societal benefit from the statistical services of government. The most worrying of these

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http://www.rss.org.uk/RSS/Influencing_Change/Data_manifesto/RSS/Influencing_Change/Data_democracy_sub/Data_manifesto.aspx?hkey=5dd70207-82e7-4166-93fd-bcf9a2a1e496

⁵ <https://www.statisticsauthority.gov.uk/code-of-practice/>

ways appear to start not from how *statistical products* might be developed to better support beneficial use but from how the *user* might be better supported in using the statistics that government decides to produce. It says in effect, we will produce what we want to produce and help you to make best use of that for your own purposes. It is, perhaps not surprisingly, the perspective of what has been hitherto effectively a monopoly producer. However, it does not fit comfortably with the full vision for official statistics and it is certainly not the position for producers of official statistics to maintain in an increasingly digital society, with increasing competition from providers who are mining new, ‘big data’ sources.

“We think there is a need for public debate to be better informed. Our initial investigations suggest that current statistics and data on policing don’t tell the narrative of how policing has changed or reflect to the public what the police do and the resources they use to do it.” Announcing review of the value of statistics on policing to public debate, Office for Statistics Regulation, 22 October 2018

In calling for a strategy for use, usefulness and user engagement, we are especially concerned about maximising all of these at a time when ‘big data’ and data linkage are increasingly seen as the way forward. While these bring benefits in cost-effective access to a diverse range of data, there are also some public concerns. Data linkage, for example, has to be safe as well as effective, and to be seen to be safe and effective. Demonstrating use and usefulness will, we believe, help considerably with that. So, in responding to our call for a strategy, we anticipate that ONS will integrate the strategy with the actions it is planning in response to recent recommendations from the OSR, including:

- “Actively seek input from the public in major decisions about statistics production and statistical research using data linkage
- Identify clear, consistent and meaningful language to use when engaging with the public about data safeguarding, linkage and use
- Maximise opportunities to identify the questions that society wants answered by exploiting existing networks of senior leaders e.g. Heads of Profession, Chief Statisticians, Directors of Analysis and Chief Scientists”⁶

The importance of understanding and communicating use and potential use

Statistics can only do good when they are used in beneficial ways. Any initiative to enhance value must therefore start with an understanding of, and some assessment of, current uses, potential uses and unmet needs. Too often the challenge for the producer has been presented simply as how best to communicate their product to users. Many different fora and arrangements are in place as the means of communication. Formal consultations do invite responses, although users and potential users still need to know that a consultation is open. For much other communication, including use of social media, website blogs and

⁶ <https://www.statisticsauthority.gov.uk/publication/joining-up-data/>

StatsUserNet, official statistical producers are often only in broadcast mode, giving little or no encouragement for users to respond.

“We set out three principles which should shape any government use of [data] dashboards. First, identify purpose and use.” Jamie Bartlett and Nathaniel Tkacz, *Governance by Dashboard: A Policy Paper*, Demos, March 2017

Establishing a strategy for user engagement should enable the goal of dialogue with users and potential users to be identified, understood and shared: why it *is* worth the investment of significant time and resources to better understand the full user base and their needs. Without that underpinning rationale, user engagement will be limited and unproductive.

The United Nations recognises the issue in its Fundamental Principles for Official Statistics, in which it states:

“.. official statistics that meet the test of practical utility are to be compiled and made available on an impartial basis by official statistical agencies to honour citizens' entitlement to public information” (United Nations, 2014)⁷.

Implicit here is that national statistical agencies should apply a test of practical utility – do the statistics do any good? – and that citizens are entitled to have access to the relevant information. For this to be meaningful, the test of practical utility must be transparently applied and based on open dialogue.

The principles put great emphasis on meeting user needs. However, over the years it has been apparent that one of the challenges to this is that statisticians can have a tendency to focus more on technical aspects of quality, such as accuracy, than on relevance. While it is important that official statistics offices attempt to represent the data they collect objectively, so that the data speak for themselves, this should be done in a way that permits accurate and relevant answers to user needs. Some rebalancing of effort is needed across these aspects of official statistics when implementing the fundamental principles.

One example of this is from Professor Sir Charles Bean’s recent review of economic statistics in ONS. He recommended that ONS should refocus its culture “towards better meeting user needs ... Staff should be proactive, rather than reactive, in engaging with users and responsive to those users’ needs”⁸. While, as we noted above, there is now a programme of improvement to economic statistics, culture change here and more widely is still needed.

The National Statistician, the government’s chief adviser on statistics, recognised the issues in a statement in 2016 in which he said:

“We need to reach beyond debates around incremental changes to the status quo via set piece consultations, to understanding and capturing user insight to make the radical changes UK official statistics demands. Our decision making needs to be well informed by the best expertise in a given

⁷ <https://unstats.un.org/unsd/dnss/gp/fundprinciples.aspx>

⁸ C.Bean, *Independent Review of UK Economic Statistics: Final Report*, 2016

<https://www.gov.uk/government/publications/independent-review-of-uk-economic-statistics-final-report>

field whether from government or beyond, and the voices of senior experts and users need to be better integrated into our activity.”⁹

“There is still a focus across the GSS on key government users (HMT, Bank of England, etc) and there needs to be more thought about the public's data needs.” Comment at SUF meeting discussion on user engagement, 2 November 2017

As one key stage in implementing the National Statistician’s vision, government statisticians need to understand better, and openly acknowledge, the beneficial uses to which official statistics can be put. This covers not only the statistical products for which they are responsible but also understanding the needs for statistics in the area for which they have responsibility. The product - which comprises both statistics themselves and essential advice about them - must continuously evolve to better meet changing needs. Only in this way can the value of the work of government statisticians be maximised and more widely appreciated.

“These are good - and rare - examples of engaging beyond immediate policy customers and key stakeholders. We want lots more of that!” Comment by one of the assessors of the 2018 Champion Awards for official statistics, June 2018

An objection that is sometimes raised is that understanding this wider use of statistics is too much work for a service under pressure to keep the wheels of production turning. But this need not be the case. A ‘use’ of statistics need only be described in broad terms. The use of health data in targeting local initiatives to relieve deprivation; the use of the RPI or CPI to determine pay rises; the use of GDP to make international comparisons of national income; the use of unemployment data in gauging the strength of the economy. These things change only slowly but having them written down provides a reference point when changes to statistics are being considered, to ensure the changes maximise public utility. Identifying and acknowledging these uses and drawing attention to the strengths, pitfalls, and alternatives that the user should consider alongside the statistical data is the key to maximising the value of the service.

Ultimately, use drives resources and the development of services

The funding of any government function depends, inevitably, on the understanding of its public value in competition with other demands on public funds. A good understanding of the importance of statistical services in shaping vital decisions and actions is crucial to their recognition as worthy of public resources. We understand the tension faced by the GSS, to demonstrate direct public value as well as to provide advice and information to Ministers

⁹ John Pullinger, Transforming our user insight, 2016, available as Item 4, Annex 1 here: <http://www.statsusernet.org.uk/viewdocument/agenda-and-papers-for-suf-meeting-2?CommunityKey=ce7d4fe7-9072-44da-afb2-d6b48077edb6&tab=librarydocuments>

and policy officials, as the government's statistical service. It also takes time to explain statistics and to attempt to prevent misuse or misunderstanding.

In addition to helping to maximise the value of the product, improved communication about the current use of official statistics stimulates dialogue with users, leading to the development of new statistical outputs and services. In a world of fake news and political abuse of data, the advisory role of the professional expert has never been more important and needs to overcome the volume of competing data-noise to prevent becoming marginalised.

These are all reasons for a strategy to improve the use and usefulness of official statistics, including through better user engagement.

"As has been widely acknowledged since the banking crisis of 2008-09, and with the environmental threats now confronting us, we urgently need measures other than GDP to assess and track human progress." Leader, The Guardian, 30 November 2018

Hand-holding not leading

The role of professional statisticians in government is not to tell people what they should use the statistical product for. However, it is entirely appropriate for the professional statistician to draw attention to current known uses and to offer professional advice in relation to those uses, based on the properties of the product. For example, when hospital waiting times are used as an indicator of the relative performance of different institutions, there are important cautionary considerations that must be kept in mind, such as differences in the mix of specialisms and treatments available and in the composition of the population, as well as understanding how these administrative statistics are compiled. The use of recorded crime statistics to focus crime prevention activity at a local level is a valid use of official statistics. But it requires an understanding of various weaknesses in those statistics, and awareness of alternative data sources, both official and otherwise. The estimation of net migration to the UK is much less precise than many who would use the statistics in political debate seem to be aware. While there are good examples of statistics being explained by those who produce them, it appears this is far from widespread. And even though much has been written about uses of price indices, as an example, the use of the Consumer Prices Index to value pensions has implications for millions of people. Highlighting all strengths and weaknesses of the index is essential for informed debate.

It is part of the role of government statisticians to promote and guide the use of the statistics for which they have direct responsibility. But as professional advisers, statisticians must also focus on the perspective of the user, encouraging and stimulating a beneficial use of all the available statistical material, whether official or not. That requires a level of subject knowledge and expertise, not least gained by meeting with users and with topic experts, including through establishing outward-facing, topic-based, statistical centres. Providing a full professional service to users has implications for the staffing, structure and training of the Government Statistical Service that need to be captured through a more strategic approach to user engagement.

Some users of official statistics, which include many statisticians, economists and social researchers, do have a deep understanding of the statistics and require little support from government statisticians. That should not obscure the fact that many of the most important decisions taken in the light of statistical outputs are taken by people without that level of understanding. Users of official statistics include not only expert analysts but committees, institutions and individuals whose expertise lies elsewhere.

“We believe that government communications will need to change to become more focused on actively earning and keeping trust with the public. The skills needed to communicate effectively with the public are different now from what they were. It is increasingly about being able to have a two-way conversation with the public and showing rather than telling them what they can trust.” Tackling misinformation in an open society, A Full Fact paper, 2018

By openly communicating known uses of the statistical product, the professional statistician will enable users to draw attention to other, previously unacknowledged uses. This is vital information for both the producer and potential users – as well as for those whose lives may be affected by the use of the statistics.

The way forward

While it is easy to say that users should be at the heart of everything that producers of official statistics do, putting that into practice is more problematic. It is also not simply about reaching more users but, more fundamentally, about delivering more - and more effective – use of official statistics in an increasingly crowded information space. This requires more – and more effective – understanding by producers of the use of their products, through user engagement and by outreach to prospective users.

There are many factors that militate against the provision of a full service as envisaged here. They include: lack of time due to the demands of the statistical production cycle; anxiety about giving a lower priority to the needs of the government of the day; lack of experience and expertise among staff in key positions; dominant government users who do not want the statistical voice to be heard if it appears to be at variance with current policy; and so on. Clearly there are resource implications, although this may be more about re-distributing and using existing resources more efficiently than seeking significant additional resources. Our call for a strategy is not just for a document but also for planned and resourced action to tackle all of these factors and to change culture where there is currently a belief that openly engaging with users to discuss the use of the statistics will prove too difficult and unrewarding.

As the examples in the box below show, some government statisticians do tackle these obstacles and are finding a way forward; taking specific steps that make a real difference. Some business areas within official statistics do have a strategy and an engagement team. The broad uses of official statistics are often well known already. Drawing attention to those uses when statistics are published, along with pithy advice about the relevance of the statistical product and possible alternative sources, provides a platform through which users

can be engaged and the service developed. Demonstrating a desire to support the user and encouraging dialogue about the use of the statistics is possibly the single most important step.

SHOWCASING EXCELLENCE IN OFFICIAL STATISTICS – ENGAGEMENT, INSIGHT AND BUILDING TRUST

The Champion Awards, jointly awarded by the RSS and by the UK Statistics Authority, recognise and celebrate developments in official statistics. In 2017 the winners and commended entries were:

- The Scottish Government, winners of the Award, with the Scottish Index of Multiple Deprivation (SIMD16). This was commended for excellent processes to develop understanding of user needs, communication of findings to decision makers, clever use of case studies and user engagement to build public trust, and clear advice on what the SIMD can and cannot be used for.
- The Department for Work and Pensions on the presentation of the Work, Health and Disability Green Paper Data Pack and on work to strategically bring together the outputs to improve public accessibility and user engagement.
- The Health and Safety Executive on its work on user-focus and accessibility of Health and Safety Statistics for Great Britain 2015/16.
- The Ministry of Housing, Communities and Local Government on innovations and improving ease of use of its Live Performance Dashboard.

Source: <https://www.statslife.org.uk/news/3485-excellence-in-official-stats-awards-winner-announced>

Clearly improving use and usefulness of outputs is not just an issue only for producers of official statistics to tackle. The same issue is apparent in the growing interest in drawing on anonymised data for research and analysis. Data science offers great steps forward in access to and analysis of administrative and transactional data. However, any development of statistical or data products needs supporting through provision of training for developers and producers in relevant engagement skills, user capacity building and data ethics. ONS can and does play a part in all of that and this should be included in delivering the strategy for user engagement.

Our conclusion is that there is more that ONS should do to support engagement between producers and users of statistics and data. High level vision statements need to be supported with clear goals, embracing the societal value of official statistics that we have set out here. That is one element of what should be included in a strategic framework for ONS and the rest of the GSS. This would also provide ways of identifying, rewarding and sharing best practice in user engagement. Implementing the framework might, among other things, cover best practice for engaging with users and prospective users, along with guidance on how and when to do this. It should recognise that some uses span different sets of statistics and that users vary widely in their knowledge and skills. It should define roles and responsibilities, both within individual statistical areas and those in central support and advisory functions. Management responsibilities should be highlighted, including to recognise good practice and to share it. And as this will take time and resources to achieve,

there also needs to be a resourced implementation plan and timetable, against which progress can be monitored and shared with all stakeholders.

It is for ONS to develop such a strategic framework, engaging with users and with other producers as it does so. One approach that could be adopted as a way of launching this work draws on well-established marketing practices¹⁰. So, for example, ONS senior managers might start the ball rolling by challenging each of their teams on their current user engagement, along the lines of:

- 1) Who currently uses your statistics, how are they used, and how do you know?
- 2) What are your modes and methods of engagement? How, and how often, do you reach out to users and seek out potential users? Do you have (or have you considered) a strategy for statistics and analysis. If so, is there a team with responsibility to implement that?
- 3) How do you liaise with other business areas that engage with the same users? What scope is there for building relationships with users that take recognise all their uses of official statistics?
- 4) Have you identified other sources of data, statistics, analysis and commentary that users are drawing on, as well as your outputs? How do you position your outputs in that wider 'information space'?
- 5) How easy, or not, is it for users and potential users to find your outputs? What effort is required (which might count against the value of the statistics)?
- 6) What steps are you taking to draw public and parliamentary attention to the beneficial uses made of the statistics you produce? What further steps might you be able to take if you had access to additional resources or stronger senior management endorsement?

We believe ONS then needs to review the results of such an exercise, share the findings across the GSS and with other stakeholders in order to develop a strategy for improving the use and usefulness of official statistics.

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¹⁰ Allin, P. (2017) "Official Statistics and the Politics of Sustainable Development", WSEAS Transactions on Environment and Development, Vol 13, Pages 49-56.

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