

The most important thing is to write for everyone and to tell the story in a way that your readers understand



This article is written by Catherine Hope, and was originally published on the [Data in Government GOV.UK Blog](#). Read the original article [here](#).

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I've been passionate about presenting data clearly for over 10 years now, and recently took the lead of a cross-government group of "Presentation Champions". We share best practice for designing charts and tables, and we're learning about writing for the web to help everyone understand the huge amount of data that government publishes.

In this role and in my day job as a statistician for DWP Digital, I tell stories with [data](#).

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Sometimes these stories help teams to make decisions about whether a change they made to a process has worked, or if they need to try something else. Or sometimes the stories make government data available to the public in an easy-to-understand way.

In all cases, the most important thing is to write for everyone and to tell the story in a way that your readers understand. With that in mind, I've pulled together some tips on presenting data that I hope will help you to make it as open and accessible as possible.

You are not your audience

It's really easy to write something or present data in a way that you understand. But you have a lot of baggage: your subject knowledge of the thing you're presenting, its historical context, your technical knowledge of the way you did the analysis, and what conclusions can be made from the analysis. It would be very unusual for everyone seeing your data presentation to have exactly the same knowledge as you. Otherwise, what would be the benefit of sharing that knowledge with them?

It's essential to think about who your audience is going to be and to write for them. If you don't know who your audience is going to be, like when I present government data for the public, you can't make any assumptions about what they already know.

Keep it simple

The use of plain English will make your analysis easier to understand for everyone — even those as steeped in jargon as you are. Nobody ever read a simple sentence and thought “well, that was too easy to understand.”

[Jargon](#) and acronyms, which are often used in government, can alienate people. You might be presenting your work to a team you know really well and assume everyone knows what HRTs and JBCs are. (habitual residence test and the Joint Biosecurity Centre if you were wondering). However, if one member of the team is new to the role, you risk making them feel excluded because they can't keep up.

Explain your acronyms, and give a bit of context about the subject.

This is the case with technical concepts and language too. When I analyse whether a change to a process has made a difference, I use statistical tests to see whether that change might have happened by chance, or whether it was a “significant” change. When I present the results to the team, I will always talk about what the test means and what conclusions we can or can't make.

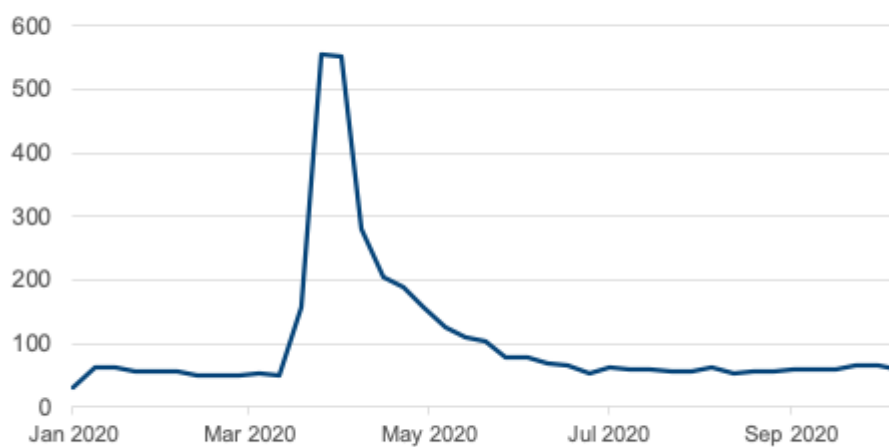
Use annotations to help tell the story

I'm steeped in the detail of the things I present analysis about, but my audience might not be. I try to tell the story and give enough context so that people can understand why the data I'm showing them is important.

Simple annotations can really help this. Below are two charts I made from data about the social security benefit Universal Credit (UC). It is a payment to help with your living costs. You may be able to get it if you're on a low income, out of work or you cannot work.

Claims to Universal Credit

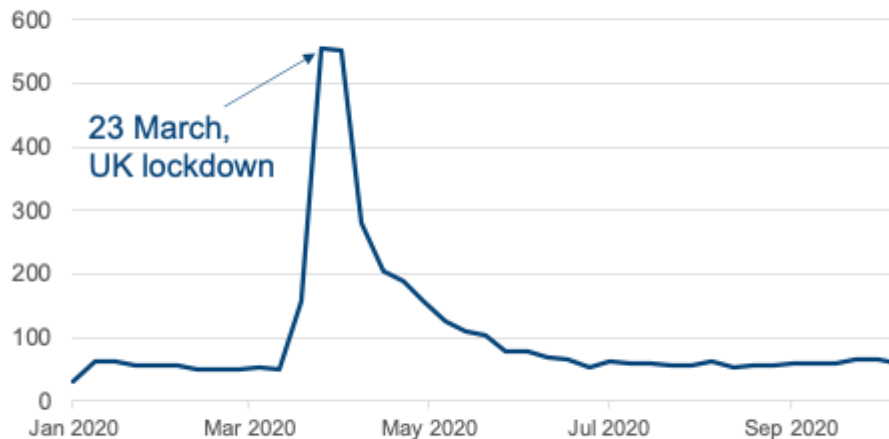
Applications per week, in thousands



The title of this chart tells you what the chart shows: the number of claims to UC. It shows a massive peak during the year, and that the number has gone back down again. But it doesn't say what caused that peak.

Claims to Universal Credit peaked when lockdown began

Applications per week, in thousands



Simply by adding an “active title” to the second chart, I’m explaining more: that claims to UC peaked when lockdown began. I’ve also added an annotation directly onto the chart to point out where 23 March is — I’ve not assumed that you know when the lockdown happened in the UK.

Doing this helps people to think “oh, I see” and it helps me to know that they’ve understood from the chart what I wanted them to. I’ve told my story.

Accessibility = Inclusivity

Accessibility isn’t (just) a legal box to tick, it helps us make sure that everyone can use government statistics and data, regardless of the technology they use. This is for everybody.

Making data easy to understand is only one of the ways of making it accessible: information published on the internet needs to meet all of the [Web Content Accessibility Guidelines \(WCAG\)](#).

In the cross-government group of presentation champions that I lead, we’ve been focusing on how to make government statistics meet these guidelines. WCAG asks that content should be:

- perceivable: having captions on video/audio, and contrasting colours that can be seen by people with colour-blindness
- operable: can be navigated by people who use only a keyboard not a mouse, or use screen-readers

- understandable: using plain English, or identifying errors and helping people correct them if a website needs input from you, like applying for UC
- robust: being compatible with assistive technologies and using mark-up correctly

The GOV.UK platform does a lot of the technical side of this for us, which is why we have focused on the way we present charts and use words to describe what's happening.

The presentation champions carry out reviews of government publications and offer advice to the authors about meeting best practice in how we design charts and the words we use. While similar to user research, where researchers would talk to people who use the statistics, but it can help to get an “outsider’s” perspective — to take a step back from the detail.

Remember that data helps people to make decisions

Data has taken much more of the limelight this year than before. Charts were being shown on the television on a daily basis during the early phase of the [COVID-19 pandemic](#).

People need access to information like this in an easy-to-understand way, because they are making decisions about how safe it is to leave the house. This may sound overly dramatic, but these could be life and death decisions for some people. It is our duty to make sure they can make well-informed decisions.

Data presentation training

If you'd like to learn more about presenting data, here are some resources that are free to use.

- [DWP's Data Visualisation Thinking](#)
- [Government Statistical Society's Writing about Statistics](#)
- [Government Statistical Society's Introduction to Data Visualisation](#)

— Catherine Hope