



What NSIs must do to stay relevant in the age of the echo chamber

Ulrik Rongved Amundsen, Statistics Norway, ulr@ssb.no

Abstract

It is easy to lose heart in a world where everyone inhabits a private world of information, increasingly super-charged by AI. Knowledge as such is in flux, and the future is deeply uncertain. It is hard to see how producing official statistics, no matter how reliable, is enough to cut through the veil of commercial and political misinformation that surrounds us. How can NSIs possibly build trust across all individual echo chambers, and what is our value if we can't?

However, if it is easy to throw one's hands in the air and give up, it is rarely a winning strategy. To keep going at all, one must find a way forward, even in uncertain times. And this can only be done through exploring our changing relationships with our users, and then discerning what that tells us about the future.

For even if the public is no longer beating down our doors to pick up the latest statistical yearbook, their need for reliable statistics is not gone. They are simply, and in ever-growing numbers, finding the numbers in other ways. Our job, in simple terms, is to be there for them, wherever they are. And that entails understanding how the modern public consumes information, through search engines, proprietary platforms, and, indeed, AI. How do we know what to expect from the future, and can we be ready for it?



1 The democratization of information

Once upon a time, in the Nordics, at least, everyone agreed. Not, of course, on what to do, who should make the decisions, and so on, but people were in general united on the facts around which discussion took place. When in doubt, politicians, the media and others naturally consulted official statistics, as published by the national statistical institutes. Although the conclusions reached were always up for debate, the facts as such were not put to a vote. The word of the NSI was taken at face value.

Then came the internet. And at the time, this was supposed to be a good thing. The prophets of “cyberspace” proclaimed a utopia, better and freer in all ways. Gone were the days when the poor or otherwise disadvantaged could not fully join the discussion. “Information wants to be free”, ran the slogan¹, implying everyone would have access to the necessary data, not just those with time and resources to spare. The age would be no less than “a world that is more open, more accessible to everyone and just a nicer place to live in”, as one central proponent put it². Everyone’s voice would be heard, because everyone would have a space in which to raise it. Authoritarianism of all stripes would disappear, and a fair, happy and prosperous society would result. All NSIs had to do, was put their statistics on the internet. Easy!

As we now know, about three decades on, these hopes turned out to be just a little bit naïve. Not because data was not put on the internet, and not because people did not have places to be heard. But because it turned out that, freed from their gatekeepers, people preferred their own facts, thank you very much. Humans, as NSIs have learned the hard way, tend not so much to change their opinions according to the available facts, but rather to change the facts according to their opinions.

And so it was that we splintered Utopia and entered the age of the echo chamber. The internet made it easier for people to self-sort into communities of the like-minded, and lessened their need to look out. Those who were so inclined could bounce their ideas off the walls of their own narrow chat-room world, and receive nothing but praise for it from peers. This reinforced their faith, whatever it was, and in many cases marked a clear break with the existing world of accepted facts.

As guardians of these very facts, NSIs might easily see themselves as faced with a technology-driven data dystopia. Their authority has been eroded, because as new voices

¹ https://en.wikipedia.org/wiki/Information_wants_to_be_free

² Esther Dyson, as quoted in <https://www.nytimes.com/1997/10/28/books/books-of-the-times-cyberspace-and-you-the-golden-rules-of-order.html>



have joined the debate, they have not used our data in the way that the already existing actors did – or, indeed, as we think they should have. Although the topmost strata of society are still backers and users of official statistics, that now seems an ever-thinner veneer over a teeming undergrowth of newly empowered stakeholders who find their preferred facts in other places.

Bringing the story up to the present day, generative AI must also be brought into the picture. For suddenly one day, every individual today had access to an all-knowing, personal chat partner – or at least one that presents as such. In reality, of course, AI knowledge is neither deep nor all-encompassing. But it is good at writing confidently, and that, very often, is enough. In addition, the AI is a bootlicker, utterly lacking in professional pride, and only too happy to conform to its user's already-formed views. In fact, whenever it is suggested it has made a mistake, it will excuse itself profusely and agree with its interlocutor – the actual truth be damned. This turbocharges the echo chamber, spewing out plausible arguments and textual backing for whatever craziness is proffered.

The world of public facts is on quite the trajectory, in other words. What can the future possibly bring to NSIs, other than still more pain?

2 What are we going to do?

We stand today in the middle of technological change, with unprecedented sums of money being routed to the development of AI technologies. One might deem it preposterous if this did not change the world. Whatever else happens, we can be pretty sure that AI will make its mark on our lives in ways both good and bad.

And this paper will not advise ignoring technological change. But it is wise to remember that technology is a means to an end, a lever to be pulled, not a moral imperative. We must always look past it, to see what it can do for us. When spreading the word on official statistics, we must ask, what does this allow us to do that we previously could not?

When evaluating the road ahead, we will start from the supposition that the one thing that is not changing, is the human element of the equation. Technology may shape *how* we satisfy our needs, but *what* those needs are, is relatively constant. It is defined by our human nature. No one needs to use an AI chatbot, although an AI chatbot may satisfy some of our needs.

It follows, then, that whatever technology becomes dominant in the information market will become so because it satisfies our already-existing needs for information. If LLMs turn out



to supplant the web, it will be because it is a better way for a large proportion of users to find information.

Anyone who previously had a need of statistics will still need it, whether there is AI in the world or not. The thing that will change, and certainly so, is how that need is met. Thinking that you already understand the ways in which your users are relying on new technology, is the greatest trap in our near future. If we want to reach into the echo chambers, we cannot have an approach where we expect things to sort themselves out: Our future depends upon standing on the barricades, and seeing early where things are heading. Leaning back is not the key to the echo chambers, as much as the latch to the bathroom door: When you flip it, you will invariably find yourself alone.

3. Opening the echo chamber of secrets

To build, then, a closer understanding of how to move on, we might start with the observation that the good old days may not all have been so good. Nostalgia tinges the world with gold, but that does not mean that earlier ages really were golden. Back in the analog ages, doubts about the word of the NSIs rarely surfaced in public. However, that may not have been a good indication of what people were really thinking: Dissenting voices may also simply not have been heard. We did not then have strategies for brand management and communication, but there was also no reason to: The levers needed to reach the population over the heads of the media simply were not there to be pulled. NSIs were as much victims of media gatekeeping as the population at large.

In this view, the main difference might be said to be that today, these levers exist. And in profusion. The NSI of the 2020s is not just a producer of statistics, but also a popularizer of figures. Going back to the days of thick volumes of tables published yearly is no longer a real option. Today we are all in the business of explaining our numbers to the world at large, as much as providing background for policy choices to government. This puts us in a more precarious situation, to be sure – we did not before need to know how to handle attacks from right-wing populists on social media – but it is also a more actionable world: At least now, what happens and how we are viewed is to a greater extent up to ourselves.

With the right approach, then, the echo chambers of the online world can be conquered. If we are not invited in, we can at least impress ourselves through the cracks. For just as, though the mountain would not come to Muhammed, he could go to it, the modern age affords us ways to reach the users even if they do not come to us.



In a digital world of a million channels, we cannot expect the user to run down our doors. If we conclude from that, that we should just leave them alone, then, indeed, we are leaving them to their echo chambers. But if we choose to reach out, we can, verifiably, give quality data to the public at large – something we arguably were never good at in earlier times.

How do we confirm that we have successfully reached out? More science than art, this is the area of UX research – so named because what is being researched is the User's eXperience of a website. The UX specialist has many tools at her or his disposal, at varying price points – though the most important investment is the UXers themselves. Although many NSI still lag behind, a good UX operation is essential in professional web development, for the reasons given above.

UX research typically combines quantitative and qualitative sources of insight, ending up with a body of knowledge and understanding that can be communicated to all stakeholders, underlying the important decisions that need to be made by the modern NSI. Some of the major elements of this include³:

- **Web analytics**

Web analytics tells us what users do: which pages they find, where they come from, what they search for, and where they leave. For an NSI, where ads are never presented, this is more than just traffic data. It is evidence that official statistics are reaching the people who need them – or not.

- **User testing**

User testing shows how real users solve real tasks. It reveals where our websites, words and structures make sense, and where they do not. When the users fail to understand the statistics, we ought typically to take the view that it is we who have failed to explain them clearly.

- **Prototyping**

Prototyping lets us test possible solutions before we build them fully. Simple versions of pages or functions can be tried out early, helping us see what supports users, what confuses them, and what may be worth developing further.

- **Analysis**

Analysis brings the evidence together. Web analytics may show where users give up, while user testing may explain why. The purpose is to turn separate observations into a clearer understanding of user needs, barriers and possible improvements.

- **Reporting to the organization**

UX research only matters if it changes decisions. Reporting means translating

³ See eg. Rohrer (2022)



findings into arguments and recommendations that editors, statisticians, developers and managers can use. In this way, user insight becomes part of how the organization works.

Doing this work may at times strain both timeframes and budgets in projects, but an amount of UX really is the least we can do. Refraining from it is tantamount to abstaining from the tools of the modern world, and then somehow assume that we will still be alright in the end. It exemplifies the hubris of thinking that we know what is best for the users of official statistics, and that really, they have no alternative but to listen. This path does not lead to the future, nor indeed does it argue the case for the continued existence of the NSO as we know it. With proper UX, at least we will have reason to think that what we are doing is the right thing.

4. Conclusion

Nordic NSIs have a proud history and a solid foundation in today's broader society. That is no guarantee of survival, but it is not a bad place to be in. We are well-established organizations, and we have strengths to build on. What can work against us is a tendency to conservatism, to withdraw when confronted with change. We are prone to the shortcut of seeking refuge in tables and technical terms, when we might have been reaching out and finding new audiences.

It has been the goal of this paper to acknowledge the changes facing the modern NSI without underestimating them, while at the same time showing that there is a reliable way forward. We cannot stop time, but we can move with it, and still work to reach what have always been the goals of official statistics. It is true that some of these changes may cause pain, but it will still be better than the alternative. Wishful thinking is not a strategy.

Archimedes famously said that to move the Earth, he only needed a lever long enough and a firm place to stand⁴. And our world is growing steadily poorer in firm places to stand. Facts are hard to grasp, and lies all too easy to accept. Will there still be NSIs in fifty years? In a hundred? We do not know. But if there are, it will clearly be because we managed to change with the changing times. It will be because we did, in fact, continue to supply that one firm place from which our users felt that they could still move the Earth.

⁴ Pappus (340)



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