

The future design of a system of economic statistics from the regional and NSO perspective

Statistics Canada

In 2016, recognizing that the demands and expectations of users of statistical information was changing, Statistics Canada embarked on a modernization agenda. This agenda was precipitated by the realization that the responsiveness and scope of information produced by the agency was no longer meeting the needs of governments, businesses and citizens.

It was not so much that the agency was seeing a deterioration in its information as it was the fact that the statistical information and services produced by the agency no longer met the expectations of a world of information consumers. A world where users are use to having information delivered when they want it (as opposed to when we want to give it to them), how they want it (on their preferred device), and at a level of detail that relates to them personally (my neighbourhood rather than my country).

This new reality is encapsulated in the type of questions that our users have asked Statistics Canada to address over the last year.

- What is the degree of foreign home ownership in Canada? Is foreign home ownership behind, at least in part, the rapid increase in housing prices in specific neighbourhoods in Toronto and Vancouver?
- Have reformulated government child tax credits led to a reduction in national, provincial and territorial poverty rates?
- What impact has a \$180 billion investment program had on the well-being of Canadians?
- What is the value of Canada's data – is the stock of data worth more than the stock of our natural resources?
- How have US tariffs on Canadian steel and aluminum impacted the Canadian economy?
- How extensive is the opioids crisis in Canada?

These types of questions are indicative of changes that NSOs are experiencing. These changes can be summarized as follows:

1. The questions of today are more complex and horizontal requiring NSOs to find new ways to integration and package information for users.
2. The questions are more global; NSOs are being asked to provide national information within an international context taking a more global perspective.
3. The type of analysis users undertake and the type of tools they are using requires a revolutionary change in access. Data science and the use of high-powered cloud-based computing are causing NSOs to rethink their dissemination and access models.

4. Users are asking NSOs to adapt classifications, standards, boundaries, concepts in real-time. NSOs and the international community can no longer take decades to change the system – the system needs to move into the open source world where new features can be added on demand.
5. Users no longer see a line between social, economic and environmental statistics. Information pertaining to society, the economy and the environment can no longer be thought of, developed and presented in isolation.

At a national level, in order to respond to this changing environment, Statistics Canada has identified several enabling pillars that will drive the agency to a new modern culture and state of operations. The foundational element recognizes that a modern statistical agency primary goal is to ensure that users have the information they need, when they need it, in the way they want to access it, with the tools and knowledge to make full use of it. In order to achieve this, Statistics Canada is re-tooling.

This new toolkit includes access to a new and diverse range of data inputs such as administrative data, sensor data and satellite images to name a few. Statistical agencies need to be at the forefront of data science and techniques that will transform this data into information which can be further processed into 'knowledge' by a wide range of policy makers, researchers, businesses and citizens. Statistical agencies must understand that we cannot 'go it alone' but that we need to partner with government and non-government organizations in areas like data sharing, the co-development of statistics and access. A natural extension of the partnership is an assumed leadership in the area of statistical capacity building through which we can extend the reach of the NSO by making maximum use of the collective statistical and research resources in Canada.

The question before NSOs and the Friends of the Chair is whether the current system of economic statistics that we have put in place will ensure that it can meet the needs of tomorrow.