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## **The data revolution**

**There is greater demand today for increasingly disaggregated, updated and timely information**

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The digital revolution, one of the biggest paradigm shifts seen on a global level, has a major impact that cuts across all of our societies' activities. This has generated exponential growth in the volume and types of available data, which are produced continuously and at great speed by people, machines and sensors, electronic transactions and via the use of Internet, among other sources.

At the same time, there is greater demand today for increasingly disaggregated, updated and timely information.

In addition to the traditional sources of data and indicators—such as censuses and polls by national official statistics systems—other sources have emerged, boosted by information and communications technologies (ICT), the massive use of mobile devices, the Internet of Things and the digital economy. All of these factors have given rise to so-called Big Data.

Big Data goes beyond computer systems that store sizeable volumes and new types of information. It is part of a new digital ecosystem. Its use, through analytical tools for structured and unstructured data, allows for improved decision-making in critical areas of development, such as health care, employment, productivity, crime-fighting, security and natural disaster management.

Due to growing citizen demands for greater transparency, access to information and effective accountability mechanisms, multiple initiatives have been developed that are oriented towards open data.

These phenomena constitute the so-called data revolution, which is already a reality, not an alternative.

Our societies' challenge is to understand this process: we must create awareness about its potential, risks and challenges, while also setting priorities.

This new paradigm redefines the balance of power due to the emergence of new actors that make strategic use of data and question the ways in which public actors, the private sector and civil society act, as we indicated in the report *A World That Counts*, by the Group of Experts convened by the United Nations (UN) Secretary-General.

This year, the UN will adopt a new post-2015 development agenda, in which economic, social and environmental dimensions will be integrated and the Sustainable Development Goals (SDGs) will be defined. How can we ensure that the data revolution will be a vector in this new development agenda?

First, it is essential that it be an instrument for closing gaps in terms of socioeconomics and the accessibility of digital resources.

Secondly, it should serve to echo the voices of the most disadvantaged and marginalised populations, while also reflecting their needs for public action and services.

The data revolution entails significant risks, in particular in terms of privacy and ensuring the anonymity of data in an aggregate form, which is why standards and regulatory frameworks must be established.

Up to now the private sector has led the data revolution thanks to its investment in infrastructure and, especially, due to its ability to innovate and generate, store and process large amounts of new data. On a social level, there is an urgent need to give more opportunities to empowered citizens—who demand reliable and open information in real time—so they can keep contributing to the creation of innovative solutions to social problems.

Governments, public institutions and national official statistics systems must get involved, adapting their capacities promptly. This is an opportunity to obtain new tools to facilitate decision-making and guide an inclusive and sustainable development agenda.

The main challenge for our societies is to convert the data revolution into a powerful catalyst for a new State-market-society equation, with new alliances between governments, the private sector, academia and civil society organisations.

It is also fundamental that innovative initiatives are promoted in the framework of the new digital ecosystem and the sustainable development agenda for the common good.

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