

Big Data Strategies for Official Statistics

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Abstract

The environment of National Statistical Institutes (NSIs) is rapidly changing in many respects. The emergence of new data sources provides a number of opportunities for official statistics. At the same time this creates challenges, including how to deal with quality issues when for example developing so-called experimental statistics and turning them into official statistics. As many NSIs have started using big data for statistics, the need for a strategic approach has become increasingly clear. The paper describes and assesses strategic options and explains the big data strategy of Statistics Netherlands, which is now being implemented in the Dutch Center for Big Data Statistics.

In essence, big data strategies are about positioning NSIs in the changing environment. The paper identifies the true game-changers for official statistics and formulates the associated strategic questions. Their answers depend on where the value added of official statistics is sought, which is to no small extent related to quality considerations associated with the use of new data sources. New approaches may be called for.

In any event, the role of NSIs is bound to change. The traditional role of quasi monopolistic provider of statistics on the many facets of society will erode through the rise of competition. However, the institutional and professional foundation of NSIs may also be exploited for assuming new roles. Ideally this will result in a society that is better informed about relevant phenomena and better equipped to counter tendencies where the value of facts is discredited.