

One Way Forward for Official Statistics in the New Data World

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Abstract: The foundation of most official statistics in the world is the statistical sampling of target populations and the application of pre-designed measurements on the samples. Falling response rates to those sample surveys have led to increasing costs of those efforts and to risks of nonresponse bias in the resulting statistics.

At the same time, new digital resources are arising, stimulated by the Internet and ubiquitous management information systems. The amount of data on day-to-day economic and social transactions is larger now than ever before in human history. However, the resources are, to a large extent, not owned by institutions that have missions to serve the common good informational needs of the society.

The issues for official statistics in this new data world are discussed, with a focus on the lacunae in measurement theories, the family of statistical models useful in this new world, and the institutional structures that need consideration.