Digital Transformation. From digital questionnaires to automatic reporting

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Abstract

Previously data for business statistics have been collected via questionnaire based surveys supplemented by administrative data. In the last 10 years digital modernization of this data collection has been focused on transition from paper based to digital questionnaires. The use of digital questionnaires has made it possible to implement business specific routing and online error validation of data, which has led to a lower burden and higher quality in the reported data.

Recently new technologies have emerged, which open up for new modes of data collection. New IT and management systems are introduced within the enterprises and small and medium size enterprises (SME) are migrating from offline systems and internal databases to online systems and data in clouds.

When new enterprises are established, new online systems are readily available, inexpensive and easy to use and therefore these systems are widely spreading among SMEs. The increasing use of online system means that more and more data become available in clouds in a standardized format, and that data sharing become easier.

The registration of data in cloud based systems become more and more automated, and data is often generated and stored directly in the cloud from webpages, apps or other online components. Many enterprises expect that data should only be registered once and then automatically shared among relevant systems. Thus SMEs are more and more likely to consent to the sharing of data between systems as a natural and necessary part of managing the enterprise – given that this sharing can remove administrative tasks, including reporting of statistical information.

Statistics Denmark is working toward utilizing these new data sources and technologies, to reduce the burden associated with reporting data for business statistics. Ideally, data should be submitted automatically and without unnecessary costs. The use of new technologies and systems in the enterprises should therefore be matched by new technologies in the statistical offices.
In Denmark, a strategic project across public sectors is currently attempting to identify the extent to which it is possible to meet this objective in relation to the automatic reporting of financial information. The ambition of the project is to automate the annual account reports to the Danish Business Authority, the annual tax reports to the Danish Tax Authority and the annual report of accounting data to Statistics Denmark.

Automatic reporting will introduce a significant reduction in the reporting burden. At the same time, it will allow Statistics Denmark to receive a complete set of reports from all enterprises, instead of data from a sample of enterprises. This shift from survey data to complete data sets means that Statistics Denmark must develop new processes with regard to statistical quality.

At the UNECE meeting different aspects of new technologies will be presented:
- The Danish project on automatic reporting
- Similar initiatives in other areas
- Quality aspects related to automatic reported data
- New data sources and the “single statistics” process model
- Perspectives of new technologies and cloud based It systemsText.