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Topic (i): The impact of data warehousing on the management of statistical offices

THE IMPACT OF DATA WAREHOUSING ON THE MANAGEMENT OF STATISTICAL OFFICES

Submitted by ISTAT, Italy¹

CONTRIBUTED PAPER

SUMMARY

1. The evolution of the European legislation in the field of statistics, the development of users' requirements of information, the necessity of reducing the burden on the respondents of statistical surveys and the continuous innovation in the field of information technology are the driving factors in the organisational changes in the National Statistical Institutes (NSIs) of the European Union. These developments increasingly require a change of mentality among the NSIs' statisticians, with an important impact on the methodological and organisational framework.

2. The development of a modern statistical information system (SIS) means more efficient and effective statistical activities and rationalising the collection of data from different statistical units through

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the integration of information from different sources. Thus, the quantity of information supplied to customers is increased and its quality is improved. Integration of individual production processes within the framework of an information system, however, is conditioned by the capability of the statisticians to make a cultural change in the methods used to conduct surveys and produce synthetic information. In a similar way to the national accounts environment, the SIS constitutes the framework in which all the activities related to survey implementation and data processing are located. On the one hand, this reduces the autonomy of the statistician responsible for a single statistical survey; on the other hand, it simplifies the implementation of surveys and facilitates data analysis which, under other conditions, would be either impossible or very expensive. In addition to the statistical and technological difficulties related to the construction of a SIS, it is fundamental to face and to resolve the associated cultural and organisational aspects. If these problems are not solved, it could well result in the failure of the whole operation.

3. The present paper illustrates how the adoption of a SIS approach affects the organisational structure of the Italian National Statistical Institute (ISTAT). We also discuss some reflections of a general nature related to the period of transition from a "classic" organisation to an organisation based on the concept of a corporate data warehouse.