

Bookreview

Metadata Management in Statistical Information Processing. K.A. Froeschl, Wien, New York: Springer-Verlag, 1997, 537 pp., DM 98.00, ISBN 3 211 82987 3

The growing importance of statistical metainformation systems in distributed data processing and in data dissemination is acknowledged by both international organizations and National Statistical Offices. The large amount of data collected for and maintained in statistical metainformation systems on the one hand, and the need for efficient links among statistical metadata and statistical data on the other, requires sophisticated approaches to data modelling and to the development of supporting tools.

For several years the author has participated in the programmes launched by UN/ECE and Eurostat aimed at supporting the development and implementation of statistical metainformation systems. The outcome of this cooperation is reflected in the book.

The major goal of the publication is to present a proposal of the user-friendly host language allowing the integrated metadata description of different statistical domains. The design of this language is based on the model of statistical metadata supporting the production of statistical tables from aggregated data. The metadata model is entirely independent of the physical storage of the data.

The book can assist statistical institutions to combine aggregated data coming from different sources, and to design a metainformation system to this end. It is devoted particularly to system designers dealing with statistical data modelling.

The book begins with an overview of the state-of-the-art of the research in statistical data modelling, developments in relevant information technologies and the processing of statistical aggregates (Chapter 1).

The core of the book is Chapter 2, which theoretically explains the proposed metadata model. It presents principles of a formal data language which permits the algebraic denotation of significant properties of individual groups of statistical data covered by the model. The language allows the subject-oriented users to manipulate metadata automatically in accordance with the taxonomy designed in the model (for example, in the case of aggregates). The software prototype supporting the language is also introduced.

The empirically oriented section of the book (Chapters 3 and 4) presents two application cases on Labour Force statistics and Tourism statistics, discussing preconditions and consequences of introducing this tool in these different areas.

The annex to the book includes definitions of the symbolic functions for encoding metadata operations, definitions of steps required for the integration of a data source into the model and a demonstration of the software application on Labour Force statistics.

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