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DATA FILES, BASES AND BANKS

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The continuous diversification and growth of the complex socio-economic activity and of the information-decision processes has led to the intensification of preoccupations for an ever greater use of electronic computing equipment able to process, transmit and store a huge volume of data. The informatic systems which are being designed in various branches of activity of the economy aim mainly to ensure a structure and a high quality of the processed information, providing the necessary data for decision-making at all management levels.

The present study aims at outlining a number of methods and techniques for the design, organization and use of data in the electronic processing and teleprocessing systems which have become self-imposed by their efficiency, being conceived so as to be a working instrument both for specialists in the improvement of complex information systems, for analysts, designers, programmers and for the teaching staff, researchers and students in higher education.

The extremely rich and valuable material presented in the volume is well organized and enables the reader easily to tackle all the techniques and methods of an important field in electronic data processing.

Thus, the evolution of the methods and techniques for the organization of data, the general techniques for its organization and the recording sockets are presented in the first part of the study.

An important part of the study is devoted to the presentation of the methods and techniques of data design, organization and exploitation organized in data files and banks by an approach which is at the level of the possibilities provided by the contemporary electronic computers both as software and as hardware.

The standard systems for the organization and administration of integrated files and data banks BOMP, IMS, TOTAL, GIS usable on IBM computers or on computers consistent with them, such, as for example, are those of the ES computer system and the standard SCF, SOFOCLE, SOCRATE systems usable on Romanian FELIX-C 256 computers, are also presented. There, where it has been the case, necessary reference was also made to the DBMS system used on UNIVAC computers particularly usable in the achievement of teleprocessing networks and of using data files techniques and data banks.

The analysis of various systems is being oriented as a remarkable concern towards the utilization of the practical aspects in selecting and implementing them in the informatic systems, the study being marked by many examples of concrete applications.

We consider that through the publication of this work, signed by a collective with a rich practical experience in the design, organization and utilization of informatic systems, the data banks included, with preoccupations and important results in the development of software as regards the organization and scheduling of data files and banks, a great demand of the Romanian specialist literature is being fulfilled. At the same time, the work is of particular interest to the academic staff and the students attending the courses in informatics and cybernetics and to the staff in economy specializing both as workers in the field of informatics and as users of electronic computers for solving problems in various fields of activity.

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