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DESING AND APPLICATION OF CODING SYSTEMS FOR SOLVING ECONOMIC AND OPERATING PROBLEMS IN ENTERPRISES BY MEANS OF ELECTRONIC DATA PROCESSING EQUIPMENT

(Projektierung und Anwendung von Nummernsystemen für die Lösung volkswirtschaftlicher und betrieblicher Aufgaben mit EDVA)

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A careful analysis is made in this paper of the subject matter concerning the design and utilization of coding systems, viewed as an absolutely necessary requirement for the organization of the information system based on electronic data processing. The author tackles these important matters by starting with the significance which should be bestowed upon the way the problem is stated (remembering that the coding system should reflect the qualitative features of the reproduction process, its stages and its constituent parts); he then proceeds to the effect exerted by the hierarchical order of management levels and of decisions (hence, depending on the end point towards which the information are directed in accordance with the hierarchy, and on the kind of decisions), as well as to the effect of ensuring unitary information flows for co-operation relationships among the various enterprises (the utilization of different coding systems in various enterprises complicates the problems).

Moreover, the author attempts a presentation of the various digital coding systems designed for data processing with a view to reflecting the processes which occur in the enterprise and the external relationships, namely for:

1. products and services planning and calculating;
2. production planning, supervision and control;
3. inventory and stock planning and management;
4. working time and payroll planning and calculation;
5. statistical evidence of manpower and qualifications;
6. fixed means of production recording and management;
7. sales and financial relations planning and management;
8. documentation and trade marks.

A special emphasis is laid upon the code numbering, viewed as a basic element of coded systematization; finally, the problems of rearranging the coding systems, of facilitating the use of digital systems, of the necessary conditions for adjusting the systems according to the electronic data processing equipment and the reliability of this equipment are also discussed.