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## PROCESE INFORMAȚIONALE ȘI DE DECIZIE

*(Information and Decision-Making Processes)*

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It is possible at present to distinguish in the literature on the subject two basic trends of the information system surveys made at the industrial enterprise level.

A first and heavy category is devoted to the study of the flow-charting itself, aiming at specific information processes, such as the issuing of information, its receipt, transmission and storage. Widely circulated throughout the country, and among various economic bodies, the main purpose of these surveys is to introduce the electronic data processing and as such, owing to the contribution made by the important computer firms (I.B.M. for instance), they avail themselves of carefully designed methodologies.

A second trend evidenced by the information system surveys, however, is ever increasingly asserting itself by approaching the idea of improving the information transmission and processing within the more comprehensive objective regarding the overall improvement of the corresponding economic body management. This is how through a supplementation and a more thorough concern for the meaning of information, one certainly arrives at the analysis of the decision-making processes which occur in the system, while the system itself is defined in all its complexity as an information-decision making system.

After reviewing the modern organization and management disciplines and methods, among which he is able to establish interesting relationships and affinities, — without however, the possibly at the present moment ill-timed claim of a classification and hierarchy, the author logically undertakes to define the information as well as the decision-making processes. To this end the co-ordinates characterizing the utility and decision problems have to be defined.

First, it is significant the remark regarding the existing possibilities for utility objectivation which, even if maintaining the prevalently subjective feature, is amenable to quantitative expressions. In order to support this idea, several utility estimation methods are described — i.e. the method devised by Neumann and Morgenstern, the interval halving method, the probabilistic estimation method applied

when considering the binary criteria, the indiference curve method, the estimation method applied to a qualitative criterion through association with a quantitative one.

In pursuing the same purpose of laying the least possible subjective foundations at the basis of the decision making process, the utility and decision objectives are correlated; the conversion of utility units with a material significance, to conventional, additive units, is substantiated.

In order to solve some multidimensional linear programming problems, an interesting original contribution is described; furthermore, the description of decision modelling through the game concept is also of great interest.

Within the complexity of decision-making processes, a higher degree is bestowed upon the group decision. The group decision function, Arrow's conditions and paradox, as well as several solutions aimed at the elimination of this paradox, lead the author to the design of the complex model of the decision process.

It might be judged that the content already scanned would be sufficient for the scope of a single book; we consider, however, that the analysis of the decision-making and information system is organically integrated in the author's intention structure, i.e. to substantiate theoretically as well as practically the methodology he further develops.

The second part of this book is a genuine handbook for the information and decision making system analysis — the first of this kind to be published in the Romanian literature on the subject. The methodology is defined at the practical level, starting with the rules for setting up the complex teams of analysts, followed by a description of the working stages involved in scanning the preliminary surveys and the operational studies in the critical analysis and design of the new system. The analysis file is gradually enriched at each stage, with typified forms which have been filled in such a way as to gradually deepen the analysis up to a thorough knowledge of the information-decision phenomenon.

Through the application of the soundness criteria — in which we recognize a new original contribution — a redesign of the information-decision system belonging to the economic body is obtained.

The book "Information and decision-making processes" appeals to experts in economic enterprises, to the staff having the responsibility of organizing and managing economic organizations, as well as to research workers and students in technical and economic faculties. It completely meets the very actual requirement of transposing scientific research results into real economic life.

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