Jacques Mélèse.

MANAGEMENT BY SYSTEMS. AN ESSAY OF PRAXEOLOGY

(LA GESTION PAR LES SYSTEMES, ESSAI DE PRAXEOLOGIE).
Editions Hommes et Techniques, 1968, 235 p.

No doubt that the history of this highly contested 2oth century could be written by following up the just fantastic evolution of its favourite child, of this "enfant terrible" — the enterprise. It can render, better than any other social organism, the evolution and the deep mutations of society.

Among the many sides of the enterprise, the aspects connected to organization and management request the highest attention.

Yesterday, the problem was put in terms of structural organization (at the same time with working-process rationalization): an adequate structure, correctly delimited functions and competences, seemed intended to automatically solve the enterprise life problems.

Today, the efficient management is topical, as it emphasizes information processes, especially the decision-making ones, and the whole range of optimization procedures.

To-morrow, piloting and systems management (in a cybernetical sense: directed towards targets for the future) will surely be the sole way of ensuring value, viability and competivity of enterprises.

In fact, the cybernetical conception in the enterprise management has become possible and actual, due to the appearance of the most wonderful and complex device, destined to automatically data processing — the electronic computer. As a consequence, with the very view of organizing and letting to act the man-machine symbiosis, the orientation towards systems becomes a great role of contemporaneity.

Similar reasonings undoubtedly lead a well-known theorist of the French school of operational research — and at the same time a reputable practitioner — Jacques Mélèse, to rally, through the present work, to the cybernetical orientation of intervention stages in the enter-

prise management, with a view to systematizing and redesigning it. "Management by systems" is an orientative book. It does not contain any practical recipes — moreover, the author himself denounces the faults consisting in easy imitation and transposing of solutions from an enterprise to another. The book is, in exchange, intended to major options, from all those who are indebted to watch over the destinies of a social organism.

At present, we are not at all deprived of means and counsels in this respect, but we can find — with a certain irony — situations when managers have "l'embarras du choix" — since all these instruments at hand are far from furnishing but partial solutions, with limited efficiency.

As is well known, the total optimum cannot be the arithmetical sum of all partial optima.

In such situations, the system concept offers a strong way of progress: it leads to considering the enterprise as an aggregate of interconnected processes, combined into a unified program, aiming at a total objective. It is a matter of course that each process operates like a genuine subsystem, observing the same rules, and it is possible — according to the methodological needs — to divide it into interconnected subsystems, a.s.o.

The enterprise does not appear any longer as a conglomerate which sums up, by mere juxtaposition, different mechanisms — but as a live mechanism, on its own account!

The four-level functioning model, presented by the author, is very suggestive: it embodies the "time" factor influence in the various regulating processes and in the interdependence between levels, leaving, at the same time, to each level, convenient limits for its own specific existence, for self-regulation.

It seems that, presently, a majority's consensus was reached concerning the way of approaching the enterprise study as a total system, and the objectives meant to direct this system (objectives are, in a way, the management's substance).

The way of intervening into the system shows further on a deficit i. e. in connection to the carriyng out of „piloting", since a unitary acting methodology — in a word — a praxeology, is missing.

The analysis of the intervention system, and approached as such, in the sens of ordering and, piloting the various phases of the experts' analysis, with a view to designing and implementing the new system, whose necessity was demonstrated.

The very different behaviour of the experts taking part in the OPERATION "SYSTEM" puts itself important problems while considering the systems analysis.

We can say that there are no basic problems of integrating people into a "man-machine" system, but that the true problems are those of the relations between people who are conceving and building up a system, and those who are meant to make it live.

The presentation of the directing lines of the OPERATION "SYSTEM" fills the central part of the book.

Similarly to what we currently denominate "Information-Processing-Decision System Analysis", we distinguish the stages of this very complex operation:

— objective formulation (diagnosis)

— strategic study (defining the objective-system and the general trajectory)

— tactical studies (materialized into designs of different subsystems).

In the same logical order, the carrying out of the subsystems and their putting into service are following.

The success of such an action is conditioned by many factors. Among them, the author very sensibly points out the importance of the active participation of all interested levels in the enterprise, especially of the managing staff.

This interesting book is concluded by some very useful notions of cybernetics and piloting.

A translation in Romanian of the book would be wellcome. The similitude of opinions with the Romanian school of operational research and of information-processing-decision system analysis would thus get a confirmation and would facilitate the research progress.

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