M. Zeleny (ed)

MULTIPLE CRITERIA DECISION MAKING

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We know to solve decision situations taking into account au objective function, which allows the decision-maker to rank, in order of desirability, the results which follows from different decisions about the variable under his control. But what is the way to solve decision situations when more objective functions are considered? Very broadly, MCDM is concerned with matters of this kind, and this volume proves clearly that it is now a respectable field of inquiry fifteen papers by twenty-three authors originally prepared for the session on Multiple Criteria Decision Making at the XXII International Meeting of TIMS held in Kyoto, Japan, July 24—26, 1975, discuss problems of human judgement, group decision analysis, mathematical programming and applications to manpower planning, water ressources and other managerial decision processes.

As stated in the preface "this collection of articles aspires to be a permanent record of ideas which are likely to become important determinants in the future of management sciences".

In a bit greater detail, the general objectives of the book may be said to be to practice the art of MCDM, to clarify the nature and limitations of mathematical method and to move away from the traditional utility assessment toward an interactive decison aiding process.

As Milan Zeleny so clearly points out in an article which we highly recommend to the reader "The Theory of Displaced Ideal", it is only when facing multiple attributes, objectives, criteria, functions, etc., that we can talk about decision making and its theory. As alternatives become more complex and are characterized by multiple attributes as well as multiple conflicting objectives, the problem of combining these various aspects into a single measure of utility becomes correspondingly more different and impractical. This reorientation and redefinition of the theory of decision making is reflected in the recent proliferation of terms like decision taking, decisioning, decision aiding, decision dynamics or decision management. The shift of interest toward the essential process itself is unmistakable.....Decision making is a dynamic process: complex, redolent with feedback and sideways, full of search detoun, information gathering and information ignoring, fueled by fluctuating uncertainty, fuzziness and conflict. .... the ideal alternative, infeasible in general, provides the highest score

with respect to all individual attributes considered. The infeasibility of the ideal creates a pre-decision conflict and generates the impulse to move "as close as possible" towards it.

The underlying phylosophy of the volume is that the methodology of modern management necessitates consideration of humanistic aspects of decision-making.

The student as well as the researcher would certainly profit idealing it. The editor, a pioneer in the field of human systems management, has done an excellent job.

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