Lecture Notes in Computer Science

Edited by G. Goos and J. Hartmanis

65

Information Systems Methodology

Proceedings, 2nd Conference of the
European Cooperation in Informatics,
Venice, October 10–12, 1978

Edited by G. Bracchi and P. C. Lockemann

Springer-Verlag
Berlin Heidelberg New York 1978

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Library of Congress Cataloging in Publication Data

European Cooperation in Informatics (Organization).
Information systems methodology.

(Lecture notes in computer science ; 65)
Bibliography: p.
Includes index.
1. Management information systems--Congresses.
I. Bracchi, Giampio, 1944- II. Lockemann, P. C.
III. Title. IV. Series.
T58.6.E9 1978 658.4'03 78-12358

AMS Subject Classifications (1970): 00A10, 68-02, 68A05, 68A10, 68A50, 68A55, 90-02, 90B99, 93A05
CR Subject Classifications (1978): 2.10, 2.11, 2.2, 3.50, 4.33, 4.34, 4.35, 4.6, 6.0, 8.1

ISBN 3-540-08934-9 Springer-Verlag Berlin Heidelberg New York
ISBN 0-387-08934-9 Springer-Verlag New York Heidelberg Berlin

Printing and binding: Beltz Offsetdruck, Hemsbach/Bergstr.
2145/3140-543210

EDITORS' PREFACE

In the last decade a new and flourishing activity has developed within organizations: the design and operation of computer-assisted information systems.
The nature of information systems tasks and the large numbers of individuals involved in them create challenging problems for computer specialists, administrators and management personnel.

As in all evolving disciplines, information system analysts and designers debate the question of their profession as an art or a science. We strongly believe that the area of information systems has passed beyond the stage of an art: from modest beginnings as an empirical art in the Sixties, the area has developed into a broadly based, highly interdisciplinary science and technology that draws on the resources of many diverse fields, ranging from informatics through engineering, economics and the behavioral sciences. The development of larger and larger information systems has stimulated new research activities, it has forced the application areas to a more precise analysis of their own needs and institutions, and their social and economic impact has led to the beginnings of legislative control.

The ultimate goal of all these efforts is to provide a set of generally accepted, widely applicable methods and techniques to specify the information needs, predict the effects of computer-based information systems, design them, analyze their operational effectiveness and evaluate them within the context of an organization. A wealth of methods and tools has already been developed or has been adapted from other areas in informatics and from other fields. However, results about information system methodologies are presently widely scattered in various journals and conference proceedings. This fragmentation produces difficulties in communication among interested persons and in integration of interdisciplinary experiences.

The second conference of the European Cooperation in Informatics on 'Information Systems Methodology' that was held in Venice, October 10-12, 1978, has brought together for the first time a wide range of information system experts, from theoreticians through system analysts and designers to users, from the academic world through manufacturers to industry and government.

This book contains the papers selected for the conference, covering subjects such as information system planning, analysis of user needs, specification tools, data modelling, software systems development, implementation and simulation techniques, parallel processes, man-machine interface, operation and evaluation of information systems, relationships among information systems, information technology, organizations and the society.

Elsewhere the reader will find the names of the Program Committee members and the Organizing Committee members, who fulfilled their role with admirable dedication. In selecting the papers to be presented at the conference, the program committee had the help of many wellknown specialists and we wish to thank all of them for their contributions. Considerable support and encouragement were provided by the ECI board.

We also want to thank the sponsors, supporters and cooperating societies who made this conference possible:

Association Française pour la Cybernétique, Economique et Technique (AFCET)

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Association for Computing Machinery (ACM)

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We hope that this book will be useful to the information systems community at large.

Giampio Bracchi Peter Lockemann

October 1978

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Acknowledgement

Every paper submitted was carefully reviewed by three referees. Besides the reviewing done by the members of the Program Committee, invaluable help was provided by the referees listed below. Their assistance is gratefully acknowledged.

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