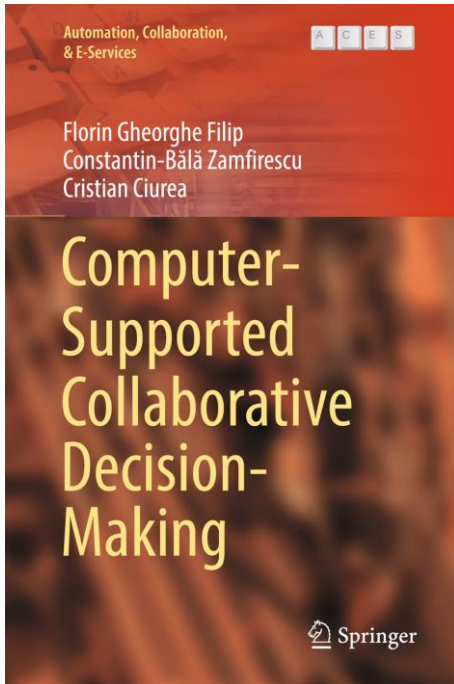


Book Review: *Computer-Supported Collaborative Decision-Making*

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The book entitled *Computer-Supported Collaborative Decision-Making*, published by Springer International Publishing AG in 2017, is a new book about how management and control decisions are made by persons who collaborate and possibly use the support of an information system. The book was published in the new series *Automation, Collaboration & E-Services (ACES)* of Springer, coordinated by Prof. S.Y. Nof, which was considered by the authors as a valuable possibility to make available an up-to-date view of computer-supported collaborative decision-making to various readers.

The book has the objective to present a balanced view of the computer-supported collaborative decision-making domain that includes both the key concepts of the field and a selection of new results obtained by applying the methods and key technologies.

The book is intended to be a reference in the field for researchers, analysts and system developers, and is meant

to be used also in supporting management and control decision-making. The book is also recommended as a learning material for graduate students in automatic control, computer science, economic informatics, industrial engineering, management, and business administration.

The book entitled *Computer-Supported Collaborative Decision-Making* is the result of an intensive research and previous documentation undertaken by the authors over several years. Previous results were presented at international scientific conferences on applied economic informatics and computer science and were published in scientific journals or in other books. In 2007, the second edition of the “Decision Support Systems” by F.G. Filip was published in Romanian by the Technical Publishers, Bucharest.

The book contains 216 pages and is divided into five chapters. Each chapter includes a section of *Notes and comments*, which presented the conclusions of the chapter and a section of *References*, which includes all the bibliographic materials that were cited in that chapter.

The first chapter is entitled “*Collaboration and Decision-making in Context*” and is meant to be an introduction for the following chapters by describing the business context and defining the key concepts that are used throughout the text. The main concepts concerning management and control schemes, the mission and allocated functions of the human agent in the loop, and basic aspects of multi-attribute and multi-participant decision-making were reviewed by the authors.

The second chapter is entitled “*Decision Support Systems*” and it reviews basic concepts of the decision support systems domain. Several topics are addressed in sequence by the authors, such as decisions and decision-makers, particular subclasses of the general DSS class, the DSS construction, in order to offer to the reader a view of DSS “physiology” (functions and usage), “anatomy” (composition), and “ontogeny” (design and construction). A special atten-

tion is paid to group/multi-participant decision-support systems and intelligent DSS.

The third chapter of the book is named “*Collaborative Activities and Methods*” and is meant to review the most important methods used in collaborative human activities with a particular emphasis on group decision-making. The chapter starts with the explanation of several key concepts, including e-collaboration, collaborative groups, crowd participation, and reviews the development history of computer-supported collaboration. The chapter continues by reviewing the most frequently used voting rules defined in the social choice theory and their extensions employed in knowledge-driven DSS. The final section of the chapter presents the engineering issues of deploying computer-supported collaborative activities in real working environments.

The fourth chapter is entitled “*Essential Enabling Technologies*” and includes a review of the most important technologies which have significantly influenced the design and usage of information systems. Key technologies, such as Business intelligence and analytics, Web technology, social networks, mobile and cloud computing are presented in parallel sections that have a similar structure. Their impact on computer-supported decision-making is highlighted. The final section of the chapter presents biometric systems and serious digital games, as such as their possible usage to ensure the authorized access and facilitate users’ training.

The fifth chapter of the book is entitled “*Applications*” and contains three sections regarding the usage of biology inspired models to simulate the facilitator activity, such as a practical swarming model for facilitating collaborative decisions. The second section of the chapter includes an application of big data in labor market analysis, and the third section presents an integrated and evolving information platform used in various collaborative decision-making cases.

The book ***Computer-Supported Collaborative Decision-Making*** is an important result of the studies and researches carried out by the authors from different institutions: the National Institute for Informatics (ICI), the Centre for IT and Decision-Making of the National Institute for Economic Research (INCE) of the Romanian Academy, the “Lucian Blaga” University of Sibiu, and the Academy of Economic Studies (ASE) of Bucharest, which demonstrates the possibility of collaborative writing and collaborative decision-making processes.

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