

II. RECENZJE I OMÓWIENIA

Infonomics for Distributed Business and Decision-Making Environments: Creating Information System Ecology

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The issue of appropriate management of information resources in New Economy is considered in various forms. Dealing with such a comprehensive issue as information resource management requires interdisciplinary studies. Consequently, there are attempts to approach it in the form of new scientific disciplines, such as information economics or infonomics, within which integration of different disciplines occurs.

For this reason, one should highly appreciate the book *Infonomics for Distributed Business and Decision-Making Environments: Creating Information System Ecology* edited by M. Pańkowska (Pańkowska (ed.), IGI Global, Harshey, 2009, p. 429), in which an attempt is made to shed light on this extremely complex issue. The Editor is also due credit for the fact that 31 individuals from such countries as Australia, France, Germany, Greece, Latvia, Poland, Romania, Slovenia, Sweden, Taiwan and the US were encouraged to contribute. Such a selection of authors has conferred an international dimension to the effort, which indicates that the publication constitutes a synthetic overview of research undertaken in different parts of the world.

The key issue addressed in this book focuses on the possible discrepancies in the interpretation of information by management, which causes methodological problems. An attempt to systematize this research theme is offered in the first part of the work. Good examples of this are the Concepts and functions of information (Chapter 1) and Infological interpretation of information (Chapter 3), the Use of ontology-based network management (Chapter 2) and the proposal of a method of modelling communication and learning. Considerations included in this section let the Reader become familiar with diverse interpretations of information and the understanding of limitations that apply to selected approaches to information modelling.

The formalization of the term *information* and defining its ontology permit the undertaking of activities that transcend the area of an individual organization. Consequently, it is so important to present information management from the point of view of a company's strategy and the operation of a company in its distributed business environments. In this way, the legitimacy of the use of the term *information system ecology* is ascertained, which means that its study is no longer confined to the classical, narrow way in terms of a company information system, but reflects the current trends in management that take into consideration the broader background of its operation. A response to this challenge is the Integrated model of enterprise business processes and enterprise information interaction activities

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(Chapter 5). What is interesting is the presentation of the organization of health care from the vantage point of its operation in an environment (the so-called e-health business environment) (Chapter 6). The use of IT in such situations is possible through the so-called intelligent agents, which was discussed in Chapter 7. Additionally, actions integrated within the management system called the Information Governance Model (Chapter 8) are to help with complex information management within an organization.

Operation under such conditions requires evaluation of information that keeps changing when it is analysed more broadly. Different points of view concerning information valuation are presented in part three of the book. The first one contains an Analysis of the value of information in distributed decision-support systems (Chapter 9) with useful considerations on methodical aspects of the evaluation of e-banking services (Chapter 11). In the context of developing the system of data monitoring in a virtual organization, various strands appear that illustrate the complexity of accounting and billing in computing environments (Chapter 10). An interesting example of the need to adapt to the line of business as a result of the rapidly developing information technology is the case of health informatics (Chapter 12). A different point of view concerning value – from the standpoint of evaluating the information sector in the economy – demonstrates the need to standardize both international and national classifications (Chapter 13). Accordingly, just as in the first section, this one also presents the diversity of approaches in the evaluation of information, which results from different interpretations. Examples from e-health and e-banking testify to the fact that a shared methodology for evaluating information has not been developed yet, and still pose an open axiological research problem.

One of the special strengths of this book is the presentation of the unusually complex issue of collaboration in networks. The adopted infonomic approach permits the isolation of such issues as the Infrastructure supporting such collaboration (Chapter 14), and Collaboration in virtual networks (Chapter 15). The Authors have demonstrated that the network organization as a new organisational form requires supplementary research in order to facilitate collaboration and excellence in management. Collaboration of this kind is also connected with issues bordering on morality. These are supported by the issues related to Digital confidence (Chapter 17) and Ethics (Chapter 18). This non-typical set of themes admirably supplements the traditional outlook on information management demonstrating how many issues need further research.

In the light of the above considerations, one ought to state that the work edited by M. Pańkowska fills a research gap and contributes to a better understanding of contemporary trends in enterprise information management. Despite the extremely varied contents of individual chapters, the Editor succeeded in arranging them in an order that makes it possible to learn in succession about the new area of research within the framework of the information system ecology and more broadly, within the framework of the new scientific discipline – infonomics. The exploration of different aspects – technological, organizational, sociological and philosophical – testifies to the fact that research into information in the 21st century requires an interdisciplinary approach. Such a synthesis, thanks to the integration of ontologies typical of different research disciplines, may contribute to a better deployment of information in management. As a result, apart from utilitarian value, the book contributes to the development of the discipline of infonomics.

Without doubt, a comprehensive presentation of this problem area even in such an extensive volume is impossible, however, the fine selection of studies highlights its most important elements. Consequently, the book can also be treated as diagnosis of the current state of infonomics with clearly laid out directions for its further development.