Knowledge Acquisition and Management

No. 25

RESEARCH PAPERS

Wrocław University of Economics

Knowledge Acquisition and Management

Edited by

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Publishing House of the Wrocław University of Economics
Wrocław 2008

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Wrocław 2008

PL ISSN 1899-3192

Printing and binding: Printing House TOTEM

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Preface

The turn of the 20th and 21st centuries has been characterised by some features, among them one of the most crucial and important is still increasing role of information and knowledge in society and economy. Sometimes it can be heard that we live in the epoch of information and knowledge, we are becoming the information society and the economy is more and more based on knowledge.

The issues of knowledge become dominant not only in scientific research but also in economic practice within enterprises. Knowledge, as any other enterprise asset, should be managed. Knowledge management is becoming the fastest developing scientific discipline.

The history of knowledge management is more 10 years old. In this period of time we could observe very fast progress in development of this discipline. Attempts of depiction to cover the whole complexity of broadly understood knowledge management process seem to be rather simplification and rarely multidimensional approaches. Knowledge management becomes multidiscipline approach to the knowledge issues. Such a point of view has been represented during many conferences devoted to this subject matter.

This year 15th Conference organised by our department is the 4th one devoted to the problems of knowledge management and knowledge acquisition. It has a specific character due to the fact that this year we had less submitted and accepted papers. On the other hand, the paper distribution is rather even within three main topics:

- Knowledge Management,
- Artificial Intelligence Methods,
- Knowledge Acquisition, Learning Systems and others.

The next stream of the conference devoted to **Artificial Intelligence Methods** and The first day of the conference presentations was opened by the invited guest Prof. Jerzy Korczak who presented the lecture "Financial Data Mining using Evolutionary Approach"; the second one – by Prof. Jan Vanthienen with his presentation "Rule Extraction in Data Mining for Comprehensibility and Consistency".

The first research stream, **Knowledge Management,** is represented by the papers of the following authors: Richard Bonner and others, Stefan du Château and others, Agnieszka Durman and Piotr Torończak. These papers depict different aspects of the knowledge function including key issues, especially transformation of information into knowledge and information sciences in knowledge management.

Intelligent Systems Functioning basically shows different applications of chosen software tools as well as its properties. The papers of the following authors represent these problems: Yevgeniy Bodyanskiy and Oleg Slipchenko, Cezary Bolek and others, Stefanka Chukova and Dimitar Christozov, Sebastian Ernst and Antoni

Ligęza, Janina Jakubczyc, Maria Antonina Mach and Olga Sinyavskaya with Boris Zhelezko.

The last track covers topics of **Knowledge Acquisition, Learning Systems and others**. Papers were prepared by the following authors: Alexander Chernyak and Nicolay Pankrutsky, Małgorzata Nycz with Barbara Smok, Mieczysław Owoc, Peter Plesseurs with Krzysztof Węcel and Krzysztof Wilk. The papers of this track concern: participation of experts in knowledge acquisition, new trends in knowledge acquisition and distance learning aspects.

Special thanks are addressed to the Reviewers for their discerning and constructive comments that allowed the Authors to prepare papers of better quality. Separate thanks go to our departmental colleagues responsible for the conference organisation: Dr Barbara Smok, dr Maria Mach and Maciej Pondel.

We hope that this monograph as well as the conference stand valuable contribution in dissemination of knowledge that is the focus of participant's endeavours.

Wrocław, November 2008 *Małgorzata Nycz and Mieczysław L. Owoc*