Agent-Mediated Knowledge Management

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Agent-Mediated Knowledge Management

Papers from the 2003 AAAI Symposium

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Knowledge management (KM) has been a predominant trend in business in the recent years. Not only is knowledge management an important field of application for AI and related techniques, such as CBR technology for intelligent lessons-learned systems, it also provides new challenges to the AI community, like context-aware knowledge delivery. Scaling-up research prototypes to real-world solutions usually requires an application-driven integration of several basic technologies, e.g., ontologies for knowledge sharing and reuse, collaboration support like CSCW systems, and personalized information services.

Typical characteristics to be dealt with in such an integration are

- Manifold logically and physically dispersed actors and knowledge sources
- Different degrees of formalization of knowledge
- Different kinds of (web-based) services and (legacy) systems
- Conflicts between local (individual) and global (group or organizational) goals.

Agent-based approaches have already been successfully employed for many partial solutions within the overall picture: Agent-based workflow, cooperative information gathering, intelligent information integration, or personal information agents are established techniques in this area.

This recognition leads to the growth of interest in agents as a comprehensive approach for knowledge management. The 2003 AAAI Symposium on Agent-mediated Knowledge Management (AMKM) seeks to analyze the credentials of agent-based approach to deal with the inherent complexity of more comprehensive solutions for Knowledge Management, and to gain insights into what AMKM will look like. Some thirty-one papers were submitted to the symposium, following a call for papers on all aspects of AMKM, and in particular:

- Methodology for AMKM
- Functionality of AMKM systems
- Implementation of AMKM systems
- Basic research questions for AMKM

Last, but not least, we would like to acknowledge all contributions to the symposium: by the authors, the reviewers, and the participants. Thanks also to Carol Hamilton and Elizabeth Ericson, for technically supporting us whenever necessary. We think that the presented papers reflect very well the state of the art in the field and we anticipate that they will provide an excellent basis for in-depth discussion during the symposium and for further research on this topic.

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Workshop Cochairs