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Web 2.0: Applications and Mechanisms

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This special issue features extended papers from the International Conference on Knowledge Management and Knowledge Technologies 2010 (I-KNOW 2010) held in Graz, Austria, September, 1-3, 2010. It comprises seven articles discussing Web 2.0 applications as well as technical mechanisms.

The first three papers are concerned with Web 2.0 applications in different settings. The first paper is about the convergence of knowledge management and Enterprise 2.0 and describes the possibilities for an overarching exchange and transfer of knowledge on the basis of a case study at T-Systems Multimedia Solutions in which the decentralised development of ideas, collaboration and assistance to performing responsibilities played a central role. On this basis a regulatory framework as template for systemisation/definition of Enterprise 2.0 activities was developed. The next paper is about a web-based application at Siemens including knowledge references, discussion forums, and basic social networking services in order to enhance knowledge, experiences and best-practices sharing. The focus is on the latest extension of the platform by micro-blogging services, whereas motivation, experiences and advantages are comprehensibly discussed. The third paper explores the application of Web 2.0 technologies to support product development efforts in a global, virtual and cross-functional setting and introduces the concept of Engineering 2.0 as a knowledge sharing approach in virtual and cross-functional product development teams. The results from a cross-company study suggest how to further develop blogs, wikis, forums and tags. Opportunities, challenges and no-go areas in this context are highlighted.

The next four papers discuss technical mechanisms enhancing user experience. In the first paper the authors introduce how the integration of a tagging module and the adoption of tag clouds aids the navigation of hierarchical web content. As one of the limitations the pagination effect is discussed in detail. A solution to the pagination problem is introduced, implemented as a part of an Austrian online encyclopaedia called Austria-Forum, and analysed. The second article is concerned with Collaborative Filtering which is a well-known technique in recommender systems exploiting relationships between users. However, because of sparsity it delivers imprecise and inaccurate results. In order to meet this problem the authors propose a clustering approach based on social information of users. The third paper picks up

interactive videos as an increasingly dominant feature of media platforms and discusses its limited options as regards graphical annotations. The authors introduce an approach that integrates dynamics and interactivity of video annotations. The last paper in this block is about online communities and their negative effects such as grievances, claims and disputes. As a solution the authors introduce new approaches to Online Dispute Resolution and provide a description of the design and structure of Ontomedia, a web-based platform to facilitate online mediation in different domains.

Finally, before you immerse yourself into this interesting readings, let us thank the authors for their excellent contributions and also thank the PC members of I-KNOW 2010 as well as external reviewers who contributed with their reviewing efforts to this high quality special issue.

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