Call for Papers:

Collaborative Usage and Development of Models and other Visualizations



A Special Issue of the Journal: International Journal of e-Collaboration

Guest editors:

Michael Prilla, University of Bochum, Germany Alexander Nolte, University of Bochum, Germany Thomas Herrmann, University of Bochum, Germany Stephan Lukosch, TU Delft, Netherlands Gwendolyn Kolfschoten, TU Delft, Netherlands

IJeC editor:

Ned Kock, Texas A&M International University

Important dates:

Submissions due on January 6, 2012 Special Issue out in Winter/Spring 2012/2013

Scope:

The usage of graphical representations of aspects of an organization (ranging from rather static to rather dynamic such as hierarchies, competences, work and business processes etc.) or results of creative problem-solving and design meetings (e.g. brainstorming results) becomes increasingly important and valuable for modern organizations and can be considered a common practice in a lot of organizations. Corresponding graphical representations include process models, conceptual models and mind maps. They are used to support multiple tasks such as software development, design and engineering, process optimization and reengineering, knowledge explication and transfer as well as marketing, strategic development and cooperation planning. Regarding this background, it is obvious that such representations are not intended to be used by single users creating them for their own personal needs, but rather for the usage of larger target groups throughout organizations, where they can be used to support sense making and to create shared understanding – this collaborative usage, in turn makes such representations even more useful. Analogically, their development should not be done solely by a group of a few expert individuals but include multiple people representing multiple perspectives and experiences in order to increase the quality of a design or a solution being represented. However, despite the fact that models are common and available artifacts in many organizations and notwithstanding the benefits of using and creating them collaboratively, in practice they are hardly used by or available for non-experts – even if they are created collaboratively they still have little impact on actual work in these processes.

One of the reasons for the lacking usage of and interaction with graphical representations is that there are only a few (research) insights on the spreading and sustainment of process documentation and usage in organizations. Moreover, up to now we only know little about the interaction of non-expert users with models, that is, how people can make use of them in practice and interact with them. Interaction in this context includes the contribution to the content of models as well as their usage in people's daily work for purposes such as discussions, knowledge explication and creating a common understanding. Supporting such interaction needs insights on means for increasing the usage and availability of models after their creation and on suitable tools and modes of interaction with models for people who are not modeling professionals.

Besides the usage and interaction dimensions, there is also a research gap in the collaborative development of graphical representations. Nowadays, this development is usually supported by collocated workshops and similar approaches, in which experts facilitate the work and translate non-expert articulations into a model language. However, despite their applicability and feasibility in many situations these approaches afford organizational overhead, restrict user involvement to certain times, require physical presence instead of dislocated interaction and thus do not fit the need to rapidly adjust processes to changing conditions inside and outside an organization. Fostering the collaborative development of models and including non-expert users into this process needs ways to enable users to contribute actively to creation and maintenance, whether they are co-located or dislocated, synchronous or asynchronous in time or possess different levels of expertise in modeling. This includes enabling users to use modeling languages and contribute directly to a model as well as finding other means such as textual or graphical annotations to enable contributions.

Topics for the Special Issue:

Tapping the potential of collaborative usage and development of graphical representations needs further insights on the interaction of non-experts with graphical representations, their usage for supporting individual and collaborative work as well as on their collaborative development. We welcome submissions dealing with either of these topics and stemming from collaboration research, knowledge management, business information systems, business process management and related disciplines. Examples of topics for submissions include, but are not limited to the following:

• Designing means and functionality for user interaction with models and visualizations

- o Supporting users in contributing to existing visualizations, e.g. helping them to translate their thoughts into a model language
- o Fostering the continuous usage of models by non-experts in their daily work
- o Interplay between formal and non-formal elements of diagrammatic representations

• Supporting work and collaboration with models and visualizations

- Communicating about shared models and creating a shared understanding
- Usage of common visualizations for (collaborative) learning and reflection e.g. reconsideration of processes with models
- Using models for knowledge documentation and transfer
- o Using models and visualizations for collaborative design and engineering

• Supporting collaborative development of models and visualizations

- Tools and mechanisms for collaborative modeling in workshops or dislocated settings
- Settings and modes for the collaborative development of representations
- Roles and participants in collaborative model development, e.g. the role of a facilitator
- The influence of users on models (e.g. collaborative modeling participants on models) and the influence of models on users (e.g. users discussing a model and behavior changes)
 - Case studies on applications of the collaborative usage and / or development of models in practice
 - Theoretical framework and approaches on the role of graphical representations in collaborative settings

Important dates:

Below are the dates for all the main steps involved in the production and publication of the Special Issue:

- January 6, 2012: All submissions are due to the guest editors.
- March, 2012: Decisions and review comments are sent to authors.
- May, 2012: Revised and resubmitted manuscripts are sent back out for review.
- June, 2012: Final decision letters are sent to authors.
- July, 2012: Final revised manuscripts are due to Editor.
- August, 2012: Special Issue goes to Idea Group for publication.
- September, 2012: Proofs go to authors.
- Winter/Spring 2012/2013: Special Issue is published.

Submission guidelines:

All submissions must be in English, and should represent the original work of the authors. Improved versions of papers previously published in conference proceedings are welcome, provided that no copyright limitations exist. Submissions must be made electronically via e-mail to the guest editors (collabviz@iaw.rub.de). The manuscript should be included as an attachment in MS Word format.

Manuscripts should be between 4000 and 6000 words in length. Submissions should include the following:

(a) On the subject of the e-mail message: the text "Manuscript submission" followed by the title of the manuscript being submitted. Please do not include any character (@#\$%/&, etc) in the title.

(b) On the body of the e-mail message, for each author: Name, university/organization affiliation, e-mail, mailing address, phone/fax numbers. Please indicate who the contact person is for the submission.

(c) On the paper: Submission title, an abstract of the submission, the main body of the submission, references and/or bibliography.

Please do not include the name of the authors or any information that would allow for their identification on the paper. Reviews will be blind.

All paper submissions and the submission review process will be managed through e-mail. The receipt of submissions will be quickly confirmed by e-mail. Submitted manuscripts must be written in the APA (American Psychological Association) editorial style. References should relate only to material cited within the manuscript and be listed in alphabetical order, including the author's name, complete title of the cited work, title of the source, volume, issue, year of publication, and pages cited. Please do not include any abbreviations.

Information on camera-ready copy preparation will be provided to submitting authors upon acceptance.

About the guest editors:

Michael Prilla is a senior researcher at the Information and Technology Management work group lead by Thomas Herrmann at the University of Bochum. Michael's research is focused on the intertwining of process management and collaboration support, including the transfer of organizational knowledge via process models, the usage of process models by non-expert users and the collaborative creation of models. He holds a diploma in computer science and a PhD in engineering. His doctoral thesis is titled "Knowledge Management Support for the Development and Usage of Process Models as Artefacts for Knowledge Transfer". Michael has (co-) authored multiple international conference, book and journal contributions. He is one of the organizers of the workshop "Collaborative Usage and Development of Models and Visualizations" held at the European Conference on Computer Supported Cooperative Work (ECSCW) in 2011.

Alexander Nolte is a researcher at the Information and Technology Management group headed by Thomas Herrmann at the University of Bochum. His particular research interest lies in the collaborative development of process models in different collaboration scenarios such as collocated workshops or dislocated asynchronous settings with special respect to web based modeling tools. Additionally he is interested in enabling non-expert modelers to directly contribute to model development. Alexander holds a diploma in computer science with his diploma thesis being titled "Concept and prototype of a usability-oriented web-based editor for semi-structured modeling".

Thomas Herrmann is a professor of Information and Technology-Management at the Institute of Applied Work Science (IAW), University of Bochum, Germany since 2004, and a fellow of the Electrical Engineering Department. Current research interests include design methods for sociotechnical systems in the areas of knowledge management, (work-)process management, computer supported collaborative learning, and concepts of social software for the support of creativity. He teaches courses in Groupware, Knowledge Management, Socio-technical systems Design, Information Systems and Privacy, Human-Computer Interaction, Organizational Communication, and Process Management. He was an Associate Professor from 1992-2004 at the Computer Science Department at the University of Dortmund and was in charge of the development of infrastructure and new media for the University of Dortmund as a vice president from 2002-2004. He holds a PhD in Computer Science of the Technical University of Berlin (1986) and a Master of Art in Communication Science of the University of Bonn (1983).

Stephan Lukosch is associate professor at the Delft University of Technology. His current research interests include process and tool support for collaborative design and engineering, intelligent and context-adaptive collaboration support and design patterns for computer-mediated interaction. From 2003 to 2008, he was assistant professor at the FernUniversität in Hagen where he lead a research group that focused on environments for cooperative working or learning. His articles appeared in various journals including the International Journal of Cooperative Information Systems, International Journal of Human Computer Studies, and Journal of Universal Computer Science. Currently, he is a steering committee member of the special interest group on Computer-Supported Cooperative Work (CSCW) of the German computer science society and CRIWG conference on Collaboration and Technology. He further serves on the editorial board of the Journal of Universal Computer Science (J.UCS) and the International Journal of Cooperative Information Systems (IJCIS).

Gwendolyn L. Kolfschoten is an Assistant Professor at Delft University of Technology in the Netherlands. She is an experienced facilitator of thinkLets based Group Support Systems workshop having worked with numerous public and private organizations. Her research focuses on the quality of thinkLet-based collaboration process design for complex tasks. She developed the first example of Computer Supported Collaboration Engineering (CACE) technology – an integrated support suite to assist collaboration engineers in process design. She has organized successful minitracks and tutorials at HICSS for the past four years. Her research has been presented at HICSS, CRIWG, AMCIS, EE and GDN conferences and has been published in the Journal of Management Information Systems, International Journal of Human-Computer Studies, Journal of the AIS and Group Decision and Negotiation.

Contact Information for the special Issue editors

Michael Prilla Information and Technology Management Institute for Applied Work Science University of Bochum Universitaetsstr. 150 44780 Bochum +49 234 32 27735 michael.prilla@rub.de http://www.imtm-iaw.rub.de/personenund/personen/mp/index.html.en