

Introduction: 1st International Workshop on Collaborative usage and development of models and visualizations (CollabViz 2011)

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Why Collaborative usage and development of models and visualizations?

The 2011 International Workshop on Collaborative usage and development of models and visualizations is being held as part of the European Conference on Computer Supported Cooperative Work (ECSCW 2011) in Aarhus, Denmark. It brings together researchers investigating the role of models and other visualizations in modern organizations. Given that knowledge on processes and networks as well as flexibility and adaptability for acting in processes and networks becomes one of the most important assets of our economy, the work done by the workshops participants is one of many to follow steps towards understanding and systematically supporting the usage of graphical representations. The importance of research in this area will most likely increase

and the content in this volume provides meaningful insights and points to start additional research from.

Scope and Aim of CollabViz 2011

The usage of graphical representations of static parts of an organization (e.g. diagrams depicting hierarchies in the organization structure or a company's competences) and dynamic aspects (e.g. work and business processes) or results of creative problem-solving sessions (e.g. brainstorming results) can be considered a common practice in modern organizations. These graphical representations include process models, conceptual models and mind maps, and are used to support multiple tasks such as software development, design and engineering, process optimization and reengineering as well as marketing and strategic development. Obviously, these models are not artifacts used by single users, who develop and use them for their own personal needs. These graphical representations are rather developed for larger target groups throughout an organization to support them in sense making and creating shared understanding. Consequently, they are both used by many people and developed collaboratively, thus being part of and influencing the work of multiple stakeholders in an organization.

Alongside the increasing usage and popularity of graphical representations, there is growing interest in the usage and development of models in the CSCW community. This not only comprises the usage and development by modeling experts, but explicitly takes non-expert users into account. The emerging importance of this new field of CSCW research is reflected by tracks at international conferences (e.g. "Collaborative Modeling" at HICSS 2009, 2010 and 2011), papers at different CSCW related conferences (e.g. Baacke et al. 2009, Brosch et al. 2009, Herrmann and Nolte 2010, Klebl et al. 2009, Prilla and Nolte 2010) and journal contributions (Rittgen 2010, Renger et. al. 2009, Heer et al. 2010, Yuille and Macdonald 2010). Additionally, there are various parallel approaches in familiar research communities such as Group Decision Support, Business Process Management and Group Support Systems.

However, despite the fact that as modeling is a popular approach in practice and thus, many models exist in organizations, they are hardly used by non-experts. Even if they are created collaboratively by process stakeholders they have little impact on the people that are actually working in these processes (cf. Prilla 2010). The reasons for this are twofold. First, there are few insights on the spreading and sustainment of process documentation usage in organizations. Second, up to now little is known about the interaction of non-expert users with models. By interaction, however, we not only refer to the creation of models, but also their usage in people's daily work for purposes such as discussions, knowledge explication and creating a common understanding. This raises

questions such as why there is so little use of models after their creation, how this usage can be increased and which kind of tools and modes of interaction are suitable for people who are not modeling professionals.

Besides the usage of models by non-experts, there is an additional research gap in the collaborative modeling of graphical representations. Usually, the collaborative creation of models by non-experts is restricted to collocated workshops and similar modes of interaction and collaboration, where experts facilitate the work and translate non-expert articulations into model or diagram language. Despite their applicability and feasibility in many situations, these workshops simply do not fit the need to rapidly adjust processes to changing conditions inside and outside an organization. Given the distributed nature of many organizations and therefore available expertise, these workshops also do not consider the need to support dislocated collaborative modeling. Therefore, we need to find ways to enable ordinary and also dislocated users to contribute actively to the creation and maintenance of models. This may include 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 indirect contributions.

Given the increasing usage of graphical representations in organizations, their collaborative use and creation is of vital interest not only for the CSCW community, which has a long tradition of researching the usage of common artifacts, the influence on collaboration by artifacts and their collaborative creation, but also for other disciplines.

The content of the papers in this volume point to interesting directions of research and presents cutting edge insights into the collaborative usage and development of models and other graphical representations in modern organizations. Thus, we are convinced it will be interesting for many different researchers and practitioners from several disciplines. We are also convinced that it provides a fertile ground for further research.

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