

# TAProViz'15

## ***4th International Workshop on Theory and Application of Visualizations and Human-centric Aspects in Processes***

Innsbruck, Austria – 31<sup>st</sup> August, 2015

### **In conjunction with the 13th International Conference on Business Process Management (BPM2015)**

Web Site: <http://wst.univie.ac.at/topics/taproviz15/>

#### **Workshop Goals**

The representation of business process models has been a continuing research topic for many years now. However, many process model representations have not developed beyond minimally interactive 2D icon-based representations of directed graphs and networks, with little or no annotation for information overlays. In addition, very few of these representations have undergone a thorough analysis or design process with reference to psychological theories on data and process visualization. This dearth of visualization research, we believe, has led to problems with BPM uptake in some organizations, as the representations can be difficult for stakeholders to understand, and thus remains an open research question for the BPM community. In addition, business analysts and process modeling experts themselves need visual representations that are able to assist with key BPM life cycle tasks in the process of generating optimal solutions.

With the rise of desktop computers and commodity mobile devices capable of supporting rich interactive 3D environments, we believe that much of the research performed in computer human interaction, virtual reality, games and interactive entertainment have much potential in areas of BPM; to engage, provide insight, and to promote collaboration amongst analysts and stakeholders alike. We believe this is a timely topic, with research emerging in a number of places around the globe, relevant to this workshop.

This visualization workshop seeks to develop into a high quality international forum to present and discuss research in this field. Via this workshop, we intend to create a community to unify and nurture the development of process visualization topics as a continuing research area. Furthermore, this workshop will seek to strengthen and provide

diversity to the BPM conference and collaboration with other researchers in the field, as such visualization approaches have many domains of application.

## **Workshop Theme**

Visualizations can make the structure and dependencies between elements in processes accessible in order to support users who need to analyze process models and their instances. However, effectively visualizing processes in a user-friendly way is often a big challenge, especially for complex process models, which can consist of hundreds of process components (e.g., process activities, data flows, and resources) and thousands of running process instances in different execution states.

Many challenges remain to be addressed within the broad area of process visualization, human interaction and user led design such as: scalability, human-computer interaction, cognitive aspects, applicability of different approaches, collaboration, process evolution, run-time requirements of process instances and applications, user-engagement etc.

### ***Topics of interest include (but are not limited to):***

- Visual Metaphors in Processes
- Visual Design and Aesthetics for Processes
- Visualization of Dynamic Data in Processes
- Change Visualization for Processes
- Interface and Interaction Techniques for Process Visualization
- Visualization Techniques for Collaboration and Distributed Processes
- Visualization of Large-scale Processes
- Cognition and Perception in Process Visualization
- Evaluation and User Studies of Process Visualization
- Evaluation Methods for Human Aspects in PAIS
- Visual Modeling Languages
- Analysis Techniques and Visualization for Processes
- Process Visualization of Large Screens
- Mobile Process Visualization
- Visualization Tools and Systems for Processes
- Visualization Techniques for Processes

- Process Visualization and Sonification
- Virtual World Process Visualization
- Immersive Process Modeling Approaches
- Human Computer Interaction Design Applied to Process Systems
- 3D Process Visualization Approaches
- Human-centric aspects in business process management
- User-centered design for BPM
- User Interface design for Processes

### **Format of the Workshop**

The half day workshop will comprise accepted papers and tool evaluations. Papers should be submitted in advance and will be reviewed by at least three members of the program committee.

This year will also include an innovation in the program. Part of the workshop time (depending on the number of prototype submissions) will be set aside for focus group assessments of tools. We will be requesting tool report authors, successful workshop paper authors and panel members attending BPM, to assist in the assessment of demonstration visualization techniques and software. This evaluation process will be a service to attendees, as these heuristic assessments can be written up later as separate papers, or by the workshop chairs as an aggregated workshop outcome. Such evaluations will be an exciting addition to the workshop, as people experienced in Information Visualization, BPM, HCI and related fields, will provide detailed feedback on your prototypes. The evaluation approach is largely in the hands of the tool report writers, but at a minimum, should involve direct interaction with your software and some form of validation via a questionnaire.

All accepted papers will appear in the workshop proceedings published by Springer in the Lecture Notes in Business Information Processing (LNBIP) series. There will be a single LNBIP volume dedicated to the proceedings of all BPM workshops. As this volume will appear after the conference, there will be informal proceedings during the workshop. At least one author for each accepted paper should register for the workshop and present the paper.

### **Intended Audience**

Researchers, practitioners and software vendors in the BPM space performing research into using graphics and interaction techniques to provide process visualizations across many topics will find this workshop to be of interest.

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## Important Dates

- Deadline for workshop paper submissions: **29 May 2015**
- Notification of Acceptance: **29 June 2015**
- Camera-ready version: **20 July 2015**
- TAProViz Workshop: **31 August 2015**

## Paper Submission

Prospective authors are invited to submit papers for presentation in any of the areas listed above.

Three types of submissions are possible:

- (1) full papers (12 pages long) reporting mature research results
- (2) position papers reporting research that may be in preliminary stage that has not yet been evaluated
- (3) tool reports, to be evaluated at the workshop

Position papers and tool reports should be no longer than 6 pages.

Only papers in English will be accepted and must present original research contributions not concurrently submitted elsewhere. Papers should be submitted in the LNBIP format. The title page must contain a short abstract, a classification of the topics covered, preferably using the list of topics above, and an indication of the submission category (regular paper/position paper/tool report).

All accepted workshop papers will be published by Springer as a post-workshop proceedings volume in the series Lecture Notes in Business Information Processing (LNBIP). Hard copies of these proceedings will be shipped to all registered participants approximately four months after the workshops, while preliminary proceedings will be distributed during the workshop.

Submitted papers will be evaluated, in a double blind manner, on the basis of significance, originality, technical quality, and exposition. Papers should clearly establish their research contribution and the relation to the theory and application of process visualization.

Tool reports should include a brief evaluation plan as an appendix, for the evaluation session at the workshop on the day.

Papers (in PDF format) should be submitted electronically via EasyChair.

## Registration

Accepted papers imply that at least one of the authors will register for BPM2015 and present the paper at the TAProViz workshop.

## Workshop Co-Chairs

- **Ross Brown**  
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## Program Committee

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- Kathrin Figl (Austria)
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- Sonja Kabicher-Fuchs (Austria)

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