## Symposium on Usability, Information Design, and Information Interaction to Communicate Complex Information

East Carolina University February 24 & 25, 2012

Recent scholarship on usability studies has called for a revamping of the methods we use when testing more complex systems or has encouraged us to develop a collaborative knowledge space so that we might better share our approaches and data. Still other scholarship has focused on the usability profession. Johnson, Salvo, and Zoetewey, writing in the *IEEE Transactions on Professional Communication*, call for a better balance in usability studies between empirical observation and rhetoric, arguing that technical communicators are best suited to deal with the challenges of such a new approach. Albers and Still edited a book, *Usability of Complex Information Systems*, which examined these issues in greater detail.

This symposium will continue that discussion.

The future will see the design of information and communication technologies that serve ever more complex purposes and problems. For these technologies, creating user centered design is particularly challenging when users are engaged in sophisticated knowledge work and collaborations and do not want to become power users to conduct this work electronically. Quality designs must make usability and human-information interaction simpler, not more complex and difficult. The challenge is figuring out how to "harness" complex phenomena in requirements, design, and testing so that our systems support and enhance the proper level of understanding for open-ended, dynamic knowledge work. To meet these challenges, this workshop will address some of the most pressing issues in designing useful and usable digital information.

As teachers, practitioners, and scholars, how can technical communicators and interaction designers contribute to such a new approach, to the design and evaluation of more complex systems, to the more open exchange of data and methods, to defining what we mean by usability of these systems?

Goals of this workshop are to define what we already know about communicating complex information across the spectrum of casual users to domain experts and clarify our understanding of what issues urgently need further research.

The workshop is being co-sponsored by East Carolina University and ACM SIGDOC and accepted papers will be published in the ACM Digital Library.

Keynote address will be by Carol Barnum, Southern Polytechnic State University.

This 2 day workshop is designed to maximize the exchange of information and ideas among the participants. The workshop will feature a highly interactive format with each

participant giving a 15-20 minute presentation followed by a 20-30 minute discussion. We wish to encourage high interactivity and in-depth discussion about each topic.

Please submit a 2-page position paper about your ongoing work, new interaction designs, opinions or approaches to the problem, or conceptual frameworks or theories. Papers will be peer-reviewed and 10-14 selected by relevance and likelihood of stimulating and contributing to this discussion. Email your paper, in PDF, to albersm@ecu.edu with subject "Workshop Submission."

Possible examples for paper topics could include but are not limited to the following:

- Analysis of the ways that the technical communicator-turned-usability tester differs from the HCI specialist or the cognitive scientist-turned-usability tester.
- Arguments about the extent to which usability is a core element of technical communicator knowledge and examinations of how degree programs address usability.
- What is common and what is different based on domain demands that should inform our analysis of needs, generation of requirements, designs and testing? How do we design for knowledge work among interdisciplinary groups of experts?
- New methods required for evaluating complex systems (e.g., health care situations, resources allocated among many projects (intelligence analysis of multiple sources of data, customer service working across multiple technologies and/or cultures).
- Methods of measuring users' comprehension of complex material and ensuring maximal comprehension.
- Methods of developing usability tests that are appropriate for a specific domain and that account for users' extensive domain knowledge or lack of domain knowledge.
- Examinations of domain experts' retrieval and use of information on the web and best practices for designing usability tests for this audience and these tasks.
- Reevaluations of usability in light of visual analytics, i.e., using interactive visual interfaces to conduct analytical reasoning and complex knowledge work.
- Community websites as complex sites that require new usability approaches.
- Descriptions and analyses of the ways that domain experts perceive complexity and simplicity in unique production environments, such as health care.

If you have any questions, contact: Michael Albers (albersm@ecu.edu).

## Schedule

2 page proposal due: August 1, 2012 Notice of acceptance: September 30, 2012 Papers for workshop due: February, 15, 2012 Workshop dates: February 24-25, 2012