Thematic session invitation: Acquisition perspectives on ergonomy and usability of information technology

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1. Thematic session
The tradition for achieving usable and ergonomic information technology prescribes that User Centred Design and Ergonomic Design mainly are activities performed by system developers, and the responsibility of system developers. For several decades this assumption has driven user centred design towards stability and institutionalization.

As a consequence most human centred design models and methods, as practiced, rely on the considerate developing organization and that the producer is performing all the user centric tasks. All expects, and wants, usable and ergonomic systems – it seems so obvious that many organisations assume that it does not have to be dealt with or specified until the producer starts to develop the system. It is common that users are mentioned when training is mentioned, when access rights to the potential system are discussed, and in some cases when tests before delivery are described. These assumptions are supported by the fact that literature on user involvement mainly concentrate on the producers’ role (see e.g. Schuler & Namioka 1993).

In the Scandinavian tradition of systems development, the focus has been on the relationship between users and developers (Greenbaum & Kyng 1991). In cases when this truly works, the result can be of benefit to the user. This approach is not without problems, and in this thematic session we are focusing on relationships between developers, procurers and users (see e.g. Holmlid, 2004).

This thematic session will focus on the arena defined by procurer organizations, acquisition processes and buyers of information technology and systems development. The goal is to compose an issue of high international standard reviewing the state of the art as well as the research frontier of ergonomics and user centred design within acquisition, and also defining some of the issues ahead within a roadmap of research and development.

2. The acquisition arena
As becomes evident quickly, the singular easy-to-pinpoint starting point, the contract, is a construction of convenience; most systems’ development starts already when the procurer starts to think in terms of, or is forced to make, organizational change by means of technology. Typically, ergonomics, usability and user centred design receive little attention in such early work, as well as in requests for proposals/requests for tenders.

Regardless, the procurer organizations management holds the initiative, and has the ultimate decision over how the organization should develop and how that should be done. This, in the end, means that it is the procurer who decides what kinds of activities will be accepted in the contract and which will be possible to perform.

Methods and provision for making the procurer organization utilize their knowledge of users, work-tasks, organizational and strategic change is lacking, and need to be defined, developed and evaluated.
Some of the research performed within HCI can be read and analysed from a procurer perspective even though that was not the primary focus for the research performed (e.g. Näslund 1996, Näslund & Löwgren 1999). Moreover, some work has been done regarding government contracting (Winkler & Buie 1995). As such, it poses challenges because of legislation and more or less rigid processes set up for equality purposes. It also poses opportunities because governments employ a lot of personnel, they are large procurers, and sometimes have the moral obligation to act as role models.

Literature that focus on procurement (e.g. Kapur, 2005) often focus on economical or legal issues of procurement or on functions rather than functioning.

Markensten (2005), on the other hand, shows how usability methods successfully can be deployed as part of prospects for request for tender. Other recent research has shown that user centred issues are included on the behalf of the procurer (Artman, 2002; Artman & Zällh, 2005).

By shifting focus from producing usable systems to procuring usable systems we see an avenue of research supporting the goals of users, interaction designers, usability architects, ergonomists and others interested in the use quality of the interactive artefact.

2.1 Scoping the arena

To this thematic session we invite original research that focus on the arena provided by taking the perspective based on procurers, acquisition processes and buyers of information technology. The idea is to put together research papers on how procurers can be engaged in and require usability as well as user centred design as product criteria and process requirements.

The arena of acquiring usable systems consists of several intertwined areas. It comprises economic and management issues related to technology and change, methods for understanding and extracting usability and ergonomical issues, user centred design methods to enhance the requirement and contractual processes, techniques and methods to connect change with usability, legal processes connected to contracts and tenders, as well as a range of other issues. Contributions to this thematic session should base their research in the arena of acquisition of IT systems or systems development, and report on user centred design and ergonomics within this arena. The research might, among other topics, problematize and theorize about the procurement process, give empirical case and field studies of actual procurement, describe interactional studies between procurer organizations and developer organizations, present structures and models of products, contractual and internal development as well as theoretical reviews focusing on procurement and acquisition.

3. Goal of the thematic session

The goal of the thematic session is to compose a set of original research papers of highest international standard defining and reviewing the state of the art as well as the research frontier of ergonomics and user centred design within the acquisitions arena, and also defining some of the issues ahead within a roadmap of research and development.

3.1 Format and submission

Contributions should adhere to the submission requirements for the WWCS conference (see http://www.wwcs2007.se/papers.asp). Submissions should be sent to: Stefan Holmlid [SteHo@ida.liu.se].

3.2 Review and notification procedure

You submit an extended abstract of about 1 page. Abstracts will be published on the conference webpage, on a CD and printed in the book of abstracts. The review of the extended abstracts will be performed by the session leaders and additional reviewers, and you will, at the latest, be notified of the decision on December 31. The number of accepted papers is limited.

We are also planning for a special issue of a journal. It will be required, for those of you who get accepted into that procedure, to write a full paper of about 10 pages.

Deadline for abstracts December 15, 2006
Notification December 31, 2006
Deadline full paper tbd

4. Organizers background

Stefan Holmlid is associate professor at Human-Centered Systems, Linköpings universitet. He earned his PhD in human computer interaction from Linköpings universitet, and before returning to university has been working as a consultant and at Ericsson. His research interests are design methods for interaction and service design, usability procurement, design theory and philosophy, as well as qualities and economy of design. Across these topics he has been the editor of a research anthology, published papers, and
edits a publication series at the Linköping university Electronic Press. http://www.ida.liu.se/~steho/

Henrik Artman is associate professor at the Royal Institute of Technology (KTH) in Sweden. He earned his PhD in Communication studies from Linköpings universitet and has worked as usability consultant. At KTH he is managing a project on the procurer organizations role in systems development and has published several papers on the matter. His research interest is in dynamic decision making, usability procurement, and design processes. Spread over these topics he has published about 50 research publications. http://www.nada.kth.se/~artman/

5. References


