

TITLE:

Review, Report and Refine Usability Evaluation Methods (R³ UEMs)

CHAIR AND CO-CHAIR

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BASIC INFORMATION:

A full day workshop will be held under the auspices of COST294-MAUSE (<http://www.cost294.org>)

Date: 5th March 2007 (Monday)

Location: Athens, Greece

Website: <http://www.cost294.org/>

MOTIVATION:

There exist a variety of usability evaluation methods (UEMs), which are employed in a wide spectrum of contexts by people with different backgrounds, goals and needs. Selecting appropriate UEMs to meet contextual requirements and constraints is the foremost and crucial step that leads to useful evaluation outcomes and presumably effective redesign of the system of interest. Furthermore, emerging information technologies (IT) such as ambient intelligence, pervasive computing and universal accessibility have triggered the development of new evaluation methods and tools, which have been adopted or trialled by a local research group but not yet well disseminated to the entire usability community. A refined and consolidated knowledge-pool about established as well as emerging UEMs based on expertise and experiences of usability practitioners and researchers is deemed desirable. It will not only enable the selection of right methods but also serve as valuable resources for informing experienced members of the usability community about new UEMs as well as for training newcomers about the development of UEMs. With the aim to build such a knowledge-pool, the WG1 (working group) of the project COST294-MAUSE has undertaken the challenge to develop an approach to critically reviewing and analyzing UEMs.

Specifically, WG1 has developed several instruments:

- (i) A classification scheme of UEMs
 - Three major categories are DGMM (Data Gathering & Modelling Methods); UIEM (User Interactions Evaluation Methods); CMs (Collaborative Methods), each of which is further divided into sub-categories.
- (ii) Two templates:
 - «Generic Methods» - to support descriptions of widely used UEMs at the generic level, i.e. mainly using reference material such as publication, courses, etc.
 - «Case Studies» - to support description of actual cases of UEM implementation, i.e. details on how a specific method was used, with its context, its precise usage of the method.
- (iii) A guidance document for these templates.

Selected UEMs are categorized, critically reviewed and analyzed on different aspects, from bibliographical references to advantages/disadvantages, through a set of methodological attributes. Individual reviews are documented as a set of records in the MAUSE Digital Library. Best practices of existing UEMs, covering operational, organizational and cultural dimensions, can be derived from these records and rendered accessible to the usability community.

Up to now, a number of UEMs have systematically been reviewed by some COST294-MAUSE partners with the use of the scheme and templates described above, including:

- Cognitive Walkthrough
- CASSM (Concept-based Analysis of Surface and Structural Misfits)
- Ergonomic Criteria
- K-MADe (Kernel of Model for Activity Description environment)
- MOT (Metaphors Of human Thinking)
- CUT (Cooperative Usability Testing)
- Personas
- Heuristic Evaluation
- User Performance Testing
- EU-CON II Evaluation
- Abstract Task Inspection
- A set of modelling methods: GOMS, KLM, NGOMSL, TAG, HTA, TKS, GTA and CTT

These reviews were compiled (August 2006) into a document entitled «Usability Evaluation Methods Classification, Description and Template: COST294-MAUSE WG1 2nd Interim Report» (hereafter – UEM Reviews).

To further enrich the scope and quality of this knowledge-pool, we aim to invite more contributions from the entire usability community. Case studies from industry are particularly welcome.

GOALS:

The workshop R³ UEMs aims to achieve four major goals:

- To invite more systematic, critical reviews on a variety of UEMs, including those listed above and many others;
- To perform meta-review of existing reviews listed above;
- To derive or refine best practices of established UEMs;
- To explore emerging UEMs, identifying their applicability and potentiality;

EXPECTED NUMBER OF PARTICIPANTS:

30: Usability researchers and practitioners, including:

- Contributors who have already submitted reviews on UEMs (see «UEM Reviews»);
- Contributors who will submit reviews on UEMs that have not been yet covered;
- Meta-reviewers of existing reviews documented in the report;
- Creators of emerging UEMs;

CATEGORIES OF CONTRIBUTIONS:

Two major types of contributions are:

- (a) Review of a UEM not currently covered (i.e., complete a template for a UEM not currently covered in «UEM Reviews»)
 - If you are interested in participating, please send an expression of interest to the Chair and Co-chair of the Workshop who will provide access to draft documents and templates for new method coverage
 - To participate, you would need to complete a template for your selected UEM
- (b) Meta-review of UEM described
 - If you are interested in participating, please send an expression of interest to the Chair and Co-chair of the Workshop who will provide access to draft documents and templates for new method coverage and reviews of existing methods
 - To participate, you would need to complete at least *three* meta-reviews of current method descriptions in «UEM Reviews»

IMPORTANT DATES:

- 15th January 2007: Deadline for submission
 31st January 2007: Authors of accepted contributions notified
 15th Feb 2007: Deadline for application for sponsorship¹

All submissions will be assessed on the relevance to the Workshop. It is expected that at least one of the authors of each contribution will attend the workshop.

WORKFLOW AND ACTIVITIES:

Prior to the Workshop, accepted contributions will be integrated into an enlarged and revised version of the report «UEM Reviews», which will be distributed to the Workshop's participants. A questionnaire will also be administered to collect the participants' opinions, comments and questions about the report. The data thus collected will be consolidated and addressed in the Workshop.

On the day of the Workshop, the following activities will be conducted:

- (i) Invited Talk (~ 1 hour)
 An expert will be invited to present a talk on revision of ISO standards and their impacts on industry work
- (ii) Presentations of emerging UEMs (~ 2 hours):
 Quality contributions that review emerging UEMs will be selected for presentation; 15 minutes are allocated for each emerging UEM. By emerging UEMs, we refer to those methods which have recently been developed (i.e. less than ten-year old), applied and validated, but are not yet widely used in the usability community and not yet described in the current WG1 interim report.
- (iii) Group Discussions (~ 3 hours):
 Contributors who have reviewed or meta-reviewed a specific UEM will form a working group (i.e. approx. 5 members) to discuss various aspects of the UEM:
 - Scoping
 - Strengths and weaknesses
 - Refinement suggestions
 - Best practices and recommendation
 - Proposed changes to the current review templates and review procedures
 Depending on the number and nature of contributions, parallel sessions on different UEMs may be organized.
- (iv) Plenary Reporting and Forum (~ 1 hour):
 Each working group is to present their findings (~ 10 minutes each with follow-up questions from the audience)

FOLLOW-ON ACTIVITIES:

Authors of quality contributions will be invited to engage in follow-on activities listed below:

- A tutorial of usability evaluation methods;
- A practical handbook/guidebook on usability evaluation methods;
- An open library of usability evaluation methods;
- A special issue in an HCI journal on methodologies of usability evaluation;

Proposals on other follow-on activities are welcome.

INTENDED AUDIENCE:

UI designers, usability researchers and practitioners, and advanced postgraduates in HCI

¹ For non-COST294 members: A fixed-rate or a full sponsorship covering travel and accommodation will be granted, depending on the number of eligible applicants.

SUBMISSION:

Interested participants are required to use the given templates (Word file) to write up your contributions, which are to be submitted as an attachment of an email to:

Chair (Dominique Scapin: Dominique.Scapin@inria.fr) and

Co-chair (Effie Law: law@tik.ee.ethz.ch).

Further enquiries can be sent to Chair/Co-Chair.