

## MAUSE : Towards the MAturation of Information Technology USability Evaluation

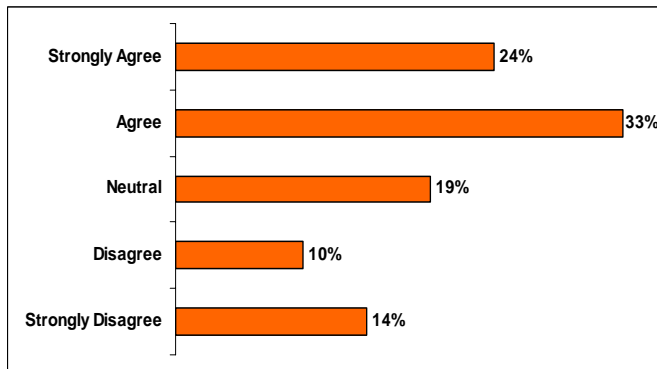
### Sharing Your Experience about User eXperience (UX): Get Involved!

#### What is your opinion on a UX statement?

*"There is a definite need for a standardized definition of the term UX."*

If you are asked to indicate to which extent you agree on this statement with the scale from 1 (strongly disagree) to 5 (strongly agree), what will be your choice?

More than 100 UX researchers and practitioners have already been invited to perform this exercise, the bar chart below displays the initial results based on the responses thus far collected (NB: the data collection is still ongoing):



Do you find this preliminary outcome surprising or predictable?

Indeed, the variation of responses shown above can well reflect the diverse views on UX, leading to a plurality of definitions. The compelling concern is: *Why is it so difficult to reach a common definition of UX?*

#### Why is the lack of a shared definition?

There are several reasons: First, UX is associated with a broad range of fuzzy and dynamic concepts, including emotional, affective, experiential, hedonic, and aesthetic variables. Typical examples of so-called elemental attributes of UX like fun, pleasure, pride, joy, surprise, and intimacy are but a subset of a growing list of human values. Inclusion and exclusion of particular values or attributes seem arbitrary, depending on the author's background and interest. Second, the unit of analysis for UX is too malleable, ranging from a single aspect of an individual end-user's interaction with a standalone application to all aspects of multiple end-users' interactions with the company and the merging of the services of multiple disciplines. Third, the landscape of UX research is fragmented and complicated by diverse theoretical models with different foci such as emotion, affect, experience, value, pleasure, beauty, etc.

#### Why is the need for a shared definition?

We recognize several critical uses of a UX definition: (i) It facilitates scientific discourses, especially when scholars from multiple disciplines are involved; otherwise, communication breakdowns are bound to occur; (ii) It enables managing practical applications of UX, which needs to be operationalized and evaluated against measurements; (iii) It helps the teaching of the term with the fundamental understanding about its nature and scope. While reaching a common definition is not a panacea for resolving a number of problems pertaining to UX, it serves as an initial and crucial step towards an integrated framework of UX.

#### How to address the challenge to reach a shared definition?

We tackle this challenge by collecting opinions from people working on the UX field and by organizing a Special Interest Group (SIG) in CHI 2008. Next we develop a questionnaire (pp.3-4 of this Newsletter) with 5 UX definitions and 23 UX statements, which have been carefully selected and distilled from the pool. Our second step was to collect responses to the questionnaire from known UX researchers and practitioners. Results of this first-stage survey will be presented and discussed in our SIG session at CHI 2008, Florence, Italy (**April 9th 2008, Wed., 11:30 -13:00**)

Our third step is to invite you to join our SIG session *and* to complete the questionnaire. It is very important to know how in general members of the HCI community with heterogeneous background perceive as well as experience the issues of UX. Presumably, there will be some interesting commonalities and contrasts between this second-stage survey and its first-stage counterpart. Results of the two surveys, outcomes of the SIG session, and future work will be made available at <http://cost294.org/sig-ux-results.html>.

Thank you very much for your generous support and co-operation!

Looking forward to experiencing the challenge with you all!

Kind regards,

Effie Law, Virpi Roto, Arnold P.O.S. Vermeeren, Joke Kort & Marc Hassenzahl

### Currently Available COST294-MAUSE Deliverables

At: <http://cost294.org/deliverables/>



#### Downstream Utility 2007 : The Good, the Bad, and the Utterly Useless Usability Evaluation Feedback.

Effie L-C Law, Marta Kristín Lárusdóttir and Mie Nørgaard (Eds.)

6th November 2007

IRIT Lab, Université Paul Sabatier (Toulouse 3), France



#### Towards a UX Manifesto COST294-MAUSE affiliated workshop.

Effie Law, Arnold Vermeeren, Marc Hassenzahl, & Mark Blythe (Eds.)

3rd September 2007

Lancaster, UK



#### UX'2006 : 2nd International Workshop on User eXperience.

Effie Lai-Chong Law, Ebba Thora Hvannberg & Marc Hassenzahl (Eds.)

14 October 2006

Oslo, Norway

Held in conjunction with Nordichi'2006.



#### UIQM'2005 : 1st International Workshop on User Interface Web Quality Models.

Jean Vanderdonck, Effie Lai-Chong Law & Ebba Thora Hvannberg (Eds.)

12-14 September 2005

Rome, Italy

In conjunction with 10th IFIP TC13

International Conference on Human-Computer Interaction (INTERACT'2005)

<http://cost294.org/>



<http://cost294.org/>



<http://www.esf.org/>



<http://cost.cordis.lu/>

5<sup>th</sup> COST294-MAUSE Open Workshop**Meaningful Measures: Valid Useful User Experience Measurement (VUUM)**

Date: 18th June 2008 (Wed.)

Venue: University of Iceland, Reykjavik, Iceland

Website: <http://cost294.org/vuum/>**Background**

While some HCI researchers and practitioners are strongly convinced about the need for measurement, others are ambivalent about the role of numerical values in providing useful, valid and meaningful assessments and understanding of complex interactions between humans and machines. Some go further and deny the measurability of affective states such as love, beauty, happiness, and frustration. Strictly, one can measure (almost) anything in some arbitrary way. The compelling concern, however, is whether the measure is *meaningful*, *useful* and *valid* to reflect the state or nature of the object or event in question.

In usability evaluation, measures can objectively be taken by usability professionals (e.g. task completion time) or subjectively by users (e.g. self-perceived duration). The debate on objective vs. subjective measurements animates many HCI discussions. In dispute are not only which type of measure is more appropriate, but also whether and how they are related and under which conditions. More important perhaps however, is the question of how to interpret measurements taken and use them to support improvement of an interaction design.

Usability manifests as quality in design, in interaction and in value, with diverse measures from many methods and instruments. The challenge is how to select appropriate measures to address the particularities of an evaluation context. The necessity and utility of usability measures is apparent. However, both the construct validity and predictive power of some usability measures are of particular concern.

Whereas some qualities of intangible interactions/products may be considered as *non-measurable*, there are *un-measured* but tangible qualities such as affordances and constraints of interfaces. Furthermore, there is a substantial philosophical literature on *qualia*, which are not even directly detectable, never mind measurable. It is intriguing to consider indirect measurement and inference of *qualia*. Besides, we should consider alternative approaches from the fine arts where there are not systematic measures, but critical assessments of artefacts. Most importantly, all sorts of measurements should be rooted in sound theories, usability measures are no exception.

**Goals & Objectives**

The overall goal of this workshop is to understand challenges relating to measures of usability and user experience (UX), and to identify effective practical responses to these challenges. Submissions are invited that address the following objectives:

- to gather evidence of the contextual bases for meaningful and useful usability and UX measures;
- to identify validity and reliability concerns for specific usability measures;
- to identify practical strategies for selecting appropriate usability measures and instruments that meet contextual requirements, including commercial contexts;
- to explore the notion of *qualia* from the philosophical perspective and its practical implications for usability engineering;
- to identify whether non-measurable properties of usability/UX exist, and propose alternative critical methods and techniques for their assessment;
- to extend the range of measures to currently tangible but unmeasured and under-used physical and other properties, such as affordances and constraints inherent in interfaces;
- to review and analyse the theoretical frameworks underlying different usability measures;
- to examine the applicability of existing usability measures to new interaction styles.

**Publication**

Accepted papers will be published in the workshop proceedings in both online and printed versions. Selected papers may be invited to submit an extended version to a special issue of an HCI journal

**Participants & Submissions**

Target groups of the workshop are students, researchers and practitioners working on usability, user experience and related areas. Papers addressing the above objective(s) are invited. Each paper should be up to 6 pages long and follow the SIGCHI paper format (<http://www.chi2008.org/chi2008pubsformat.doc>) in pdf. The format of the file name is: {the main author's lastname}-VUUM.pdf. Papers should be sent to the first co-organizer, Effie Law, per e-mail: [law@tik.ee.ethz.ch](mailto:law@tik.ee.ethz.ch). All papers will be peer reviewed by members of the program committee with regard to the relevance and originality of the work and their ability to generate discussions among the participants of the workshop.

**Important Dates**

Submission Deadline: 25th April 2008 (Friday)  
 Acceptance Notification: 5th May 2008 (Friday)  
 Camera-ready Deadline: 16th May 2008 (Friday)

**Workshop Organizers**

Effie Law, ETH Zürich/University of Leicester, Switzerland/UK  
 Nigel Bevan, Professional Usability Services  
 Georgios Christou, European University Cyprus, Cyprus  
 Mark Springett, Middlesex University, UK  
 Marta Lárusdóttir, Reykjavik University, Iceland

**Upcoming COST294-MAUSE Events****COST294-MAUSE Training School: DEVISE**

(Designing and Evaluating Innovative Interactive Systems)

The overarching goal of DEVISE is to improve participants' theoretical and practical understanding of emergent Design & Evaluation methods for interactive software and media, as well as techniques and tools being employed in different IT-enhanced sectors, through exploring differences and commonalities.

Date for Application Submission: Friday, March 7, 2008

Notification of Application Result: Tuesday, April 1, 2008

Arrival date: Sunday, June 29, 2008

DEVISE School: June 30 - July 4, 2008

Departure date: Friday, July 4, 2008 (afternoon)

Place: Bertinoro (Forli-Cesena), Italy

Organizer(s) : Effie Law

Contact : [law@tik.ee.ethz.ch](mailto:law@tik.ee.ethz.ch)Web: <http://www.tik.ee.ethz.ch/~law/DEVISE/>**9<sup>th</sup> MC + WG Meeting**

Location: Reykjavik, Iceland

Organizers: Ebba T. Hvannberg and Marta Lárusdóttir

Contact: [Marta@ru.is](mailto:Marta@ru.is)

Date: 18-19 June, 2008

**Related Events****CADUI 2008: Computer-Aided Design of User Interfaces**

Location: Albacete, Spain

Web: <http://cadui2008.albacete.org/>**DSVIS 2008: Design, Specification and Verification of Interactive Systems**

Location: Kingston, Ontario, Canada

Date: July 16-18, 2008

Web: <http://www.cs.queensu.ca/dsvi2008/>**IWWUA: 2<sup>nd</sup> International Workshop on Web Usability and Accessibility (WISE 2008 workshop)**

Location: Auckland, New Zealand

Date: September 1-4, 2008

Web: <http://gplsi.dlsi.ua.es/congresos/iwwua08/>**HCSE 2008 (2<sup>nd</sup> Conference on Human-Centred Software****Engineering) & TAMODIA 2008 (7<sup>th</sup> International workshop on TAsk MOdels and DIAGrams)**

Location: Pisa, Italy

Date: September 25-26, 2008

Web: <http://wwwswt.informatik.uni-rostock.de/HCSE2008/>**CHI 2008 and CHI Workshops**

Location: Florence, Italy

Date: May 5-10, 2008

Web: <http://www.chi2008.org/>● **Evaluating User Experiences in Games**Web: <http://workshops.icts.sbg.ac.at/chi2008/>● **BELIV'08: BEyond time and errors: novel evaluation methods for Information Visualization**Web: <http://www.dis.uniroma1.it/~beliv08/>● **Designing and Evaluating Mobile Phone Based Interactions with Public Displays**Web: <http://www.comp.lancs.ac.uk/~corina/CHI08Workshop/>**UIST 2008: ACM Symposium on User Interface Software and Technology**

Location: Monterey, CA

Date: October 19-22, 2008

Web: <http://www.acm.org/uist/uist2008/>**INTERACT 2009: 12<sup>th</sup> IFIP TC13 International Conference on Human-Computer Interaction**

Location: Uppsala, Sweden

Date: August 24-28, 2009

Web: <http://www.interact2009.com/>**COST294-MAUSE Management Committee**

Effie Lai-Chong Law &amp; Ebba T. Hvannberg

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**COST294-MAUSE Dissemination Activity**

Marco Winckler &amp; Philippe Palanque

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## Share your views on UX – a critical means to bring UX to maturity!

We are organizing a Special Interest Group (SIG) session entitled "Towards a Shared Definition of User eXperience" in CHI'08 (April 9<sup>th</sup>, 11:30-13:00). Your views on UX are very important for the HCI community to understand this significant area and bring it to maturity. Please fill in the questionnaire and return it to the collection boxes located at the CHI'08 **Information Booths**, one close to the Registration area and the other to the Interactivity area. You can also bring the completed questionnaire to the SIG session and pass it to us directly. Alternatively, you could fill in the questionnaire online: <http://cost294.org/sig-ux-questionnaire.html>. Thanks a lot!

### Your background (please choose just one answer)

**I work in:**  Industry  Academia  Both or between

**My primary role is:**  Researcher  Consultant  Manager  Practitioner  Student  Other:

**I was originally educated in the field of:**  Arts / Design  Marketing / Business  Quality/Processes

Psychology/Social Sciences  Technology/Software  Human-Computer Interaction  Other:

### Which of the following statements applies the best to your primary interest in User Experience?

I'm interested in understanding the nature of UX:

per se  to design better products  to better sell products  to make people happier  Other:

**In the moment, how central is UX to your professional work?**      

**My age is:**

**For how many years have you been working in the field of User Experience?**

**For how many years have you been working in the field of User Centered Design?**

**My country of residence is:**

**My gender is:**  Female  Male

### UX statements

Could you state how much you agree or disagree with these statements?	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	I don't understand
UX is highly dynamic - it changes constantly while interacting with a product	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Imagined use of a product can result in real experiences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Usability is a necessary precondition for good UX	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
UX can change even after a person has stopped interacting with the artifact	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prior exposure to an artifact shapes subsequent UX	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
UX must be approached qualitatively	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
UX should be assessed while interacting with an artefact	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
UX is based on how a person perceives the characteristics of an artifact, but not on the characteristics per se	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
UX is not new, it is already covered by existing engineering approaches	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fleeting and more stable aspects of a person's internal state (e.g., needs, motivations) affect a person's experience of something	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
UX should be assessed after interacting with an artefact	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
UX can be quantified and, thus, compared across similar (or competitive) artefacts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
UX is best viewed in terms of marketing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Only an individual person can have an experience. An experience is something personal, something 'within' a person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
UX occurs in, and is dependent on the context in which the artifact is experienced	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
UX is not about people's performance (ability to understand and use) in their relation with an artifact, but about the person's perception of that performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There is a definite need for a standardized definition of the term UX	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People will never have comparable UX - each and every interaction with a product results in a unique experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We cannot design UX, but we can design for UX	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
UX refers to affective states, i.e., any combination of valence (good - bad, pleasant – unpleasant) and physiological arousal (calm – excited)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
UX is equal to emotional attachment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Measuring UX implies determination of merits, values, and significance of an artefact in relation to a person's goals and needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Designing (for) UX must be grounded in user-centred design	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Do you have any additional comments on these statements? Please elaborate**

**Please indicate for one or more definitions what you like or dislike about the definition and how you think it could be improved:**  
(Obs. *The origins of each definition are hidden here, but we will provide the references on request and in the results report*)

**Definition 1:** All aspects of the end-user's interaction with the company, its services, and its products. The first requirement for an exemplary user experience is to meet the exact needs of the customer, without fuss or bother. Next comes simplicity and elegance that produce products that are a joy to own, a joy to use. True user experience goes far beyond giving customers what they say they want, or providing checklist features.

**Definition 2:** A consequence of a user's internal state (predispositions, expectations, needs, motivation, mood, etc.), the characteristics of the designed system (e.g. complexity, purpose, usability, functionality, etc.) and the context (or the environment) within which the interaction occurs (e.g. organisational/social setting, meaningfulness of the activity, voluntariness of use, etc.)

**Definition 3:** The entire set of affects that is elicited by the interaction between a user and a product, including the degree to which all our senses are gratified (aesthetic experience), the meanings we attach to the product (experience of meaning), and the feelings and emotions that are elicited (emotional experience).

**Definition 4:** The value derived from interaction(s) [or anticipated interaction(s)] with a product or service and the supporting cast in the context of use (e.g., time, location, and user disposition).

**Definition 5:** The quality of experience a person has when interacting with a specific design. This can range from a specific artifact, such as a cup, toy or website, up to larger, integrated experiences such as a museum or an airport.

**If you would have to pick one of these UX definitions, which one would it be?**

Definition 1     Definition 2     Definition 3     Definition 4     Definition 5

**Could you comment the reasoning for your choice?**