Triangulation in UX Studies: Learning from Experience

Ingrid Pettersson
Volvo Car Group
Sweden
ingrid.pettersson@volvocars.com

Andreas Riener
University of Applied Sciences Ingolstadt (THI),
Germany
andreas.riener@thi.de

Anna-Katharina Frison
University of Applied Sciences Ingolstadt (THI),
Germany
anna-katharina.frison@thi.de

Jesper Nolhage
Volvo Car Group
Sweden
jesper.nolhage@volvocars.com

Florian Lachner
University of Munich (LMU)
Germany
florian.lachner@ifi.lmu.de

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Abstract
While the consideration of User Experience (UX) has become embedded in research and design processes, UX evaluation remains a challenging and strongly discussed area for both researchers in academia and practitioners in industry. A variety of different evaluation methods have been developed or adapted from related fields, building on identified methodology gaps. Although the importance of mixed methods and data-driven approaches to get well-founded study results of interactive systems has been emphasized numerous times, there is a lack of evolved understandings and recommendations of when and in which ways to combine different methods, theories, and data related to the UX of interactive systems. The workshop aims to gather experiences of user studies from UX professionals and academics to contribute to the knowledge of mixed methods, theories, and data in UX evaluation. We will discuss individual experiences, best practices, risks and gaps, and reveal correlations among triangulation strategies.

Author Keywords
User Experience; Evaluation; Mixed Methods; Triangulation

ACM Classification Keywords
H.5.2 [Information interfaces and presentation (e.g., HCI)]: Evaluation/methodology

Introduction

As an academic discipline, the field of User Experience (UX) research has a multi-disciplinary heritage, involving a variety of different perspectives that focused on studying human experiences with products, systems, and services. This led to a wide spectrum of methods that are used for studying users' experiences. Traditional Human-computer interaction (HCI) theory has passed on methodological approaches akin to those used in usability evaluation studies. Other disciplines that have significantly influenced UX research are those of social sciences, ethnography, and philosophy.

There have been great efforts in academia to create new methods for effectively evaluating UX, aimed at both academic and industrial application [1]. Our proposition in this workshop is, however, that we often do not need to develop new methods but rather use existing tools and approaches from the wide flora of UX evaluation more efficiently. UX evaluation is no longer an unknown territory and we want to encourage reflection on established approaches as well as lessons learned along the way. We want to explore the existing know-how of UX professionals, from academia and industry, in combining different UX evaluation methods (e.g., qualitative and quantitative methods) within so called mixed methods approaches and triangulation strategies.

Background & Motivation

Past workshops in the ACM community have already explored UX methods from different perspectives [4, 6, 3, 5]. However, a focus on triangulation, also called mixed methods, or multi-method approaches, is still missing. To combine different ways of research to get a more holistic view on UX is nowadays one of the key areas for further UX research [1, 4, 8]. Within a SIG session Roto et al. 2009 [4] analyzed UX evaluation methods in the industrial and

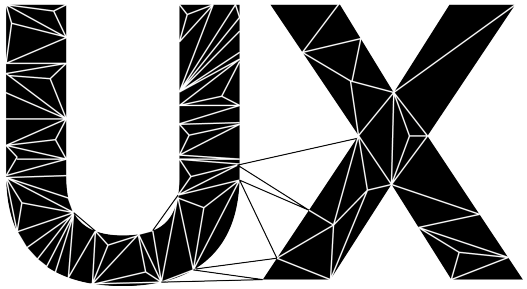

Figure 1: How can holistic User Experience (UX) evaluation be optimized by triangulation?

academic context. They revealed that rich data can be collected by applying mixed methods e.g., through the combination of system logging with subjective user statements from questionnaires and interviews. The authors conclude that mixing methods allows to understand the reasoning behind the concept of UX. Van Turnhout et al. [7] investigated common mixed research approaches of the NordiCHI proceedings 2012 to lay a foundation for further research and a more thoughtful application of multi-methods. However, best practices for using such multi-method perspectives inspired by the needs of academia and industry are not yet explored in depth.

Employing a mix of methods and theories to study a subject has been claimed to contribute to more reliable, holistic and well-motivated understandings of a phenomenon [2]. Furthermore, a mixed methods approach can uncover unexpected results, generate important and unforeseen research questions while at the same time providing answers to those new questions. This is particularly important for complex topics, such as the concept of UX. We argue that investigating UX design and evaluation from different angles will lead to a well-founded understanding of UX.

Workshop Theme & Goal

Researchers and practitioners have developed their own best practices over decades based on experiences, reflection, theoretic background, or intuition. We want to bring this wide-spread knowledge together and learn from each other by uncovering basic challenges, aims, and strategies related to UX work.

It will be an opportunity to share experiences with different UX evaluation methods, collect empirical data of practices, and a way to jointly suggest ways of improving the learning process from user studies. Finally, we want to support a more holistic understanding of the quality of a certain experience, which should be applicable for research projects in academia and industry. Specifically, we want to answer following questions:

- What are the motivations and the outcomes of different UX research and evaluation methods?
- How do we best draw conclusions from multiple and different sources, such as qualitative and quantitative or attitudinal and behavioral data?
- Can combinations of contrasting theories that exist in UX be better exploited, and if so how?
- How can we define best practices and where are gaps or development needs in mixed method approaches in the field of UX?

Duration

The presented theme and questions shall be discussed and edited in one full-day workshop.

Intended Outcome & Future Work

Our ambition is that the workshop will evolve and spread knowledge as well as awareness of how to get more out of UX studies. Consequently, participants will be able to apply particular methods more efficiently and effectively. A cooperatively developed mixed method map will summarize the outcomes. In combination with an already ongoing literature review on documented UX studies, the outcomes of the workshop will unfold the state of the art of using mixed method approaches in UX research. Further future work can be identified during the day and within the networking session.

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