

The Landscape of UX Requirements Practices

Gregorio Convertino¹, Nancy Frishberg², Jettie Hoonhout³,
Rosa Lanzilotti⁴(✉), Marta Kristín Lárusdóttir⁵,
and Effie Lai-Chong Law⁶

¹ Informatica Corporation, 2100 Seaport Blvd, Redwood City, CA 94063, USA
gconvertino@informatica.com

² Financial Engines, Inc, 1050 Enterprise Way, 3rd FL,
Sunnyvale, CA 95089, USA
nancyf@acm.org

³ Philips Research, High Tech Campus 34, 5656 AE Eindhoven, Netherlands
Jettie.hoonhout@philips.com

⁴ Dipartimento di Informatica, Università di Bari Aldo Moro,
Via Orabona 4, 70125 Bari, Italy
rosa.lanzilotti@uniba.it

⁵ School of Computer Science,
Reykjavik University, Reykjavik, Iceland
Marta@ru.is

⁶ Department of Computer Science,
University of Leicester, Leicester LE1 7RH, UK
elaw@mcs.le.ac.uk

Abstract. Studies of development practices reveal that usability and user experience (UX) are often not addressed consistently or explicitly in current development projects. A key reason is that UX requirements are either omitted or not formalized enough for their implementation to be objectively verifiable. This workshop brings together researchers and practitioners who have faced this problem and have experimented with methods to resolve it. The expected result is a descriptive framework that will summarize the current best practices, differentiate them along key dimensions and in relation to known obstacles. Then, a set of recommendations to formalize and verify UX requirements will be provided.

Keywords: Requirements specification · Usability · UX practices

1 Workshop Topic and Rationale

The primary motivation for this workshop is the need for systematic methods, based on empirical research, to define and confirm statements of usability and UX requirements for software systems. The problem of omission or poor formalization of UX requirements is limiting the success of projects in the public and private sectors. For example, too many companies have not yet integrated usability and UX methods and approaches as part of the software development process.

For the public sector, studies of ICT companies that work with public authorities in Europe suggest that a critical problem is the lack of formal UX requirements in the Call for Tenders or CfT (cf. Request for Proposals or RFP). In fact, during the implementation, the

company that obtained the contract from the public authority is likely to focus only on the requirements agreed upon as part of the CfT. Thus, the contracting company has no incentives to consider additional requirements.

For the private sector, perhaps the hallmark of a successful UX professional is flexibility, due to the recurrent need for negotiation, tighter time constraints and multiple stakeholders. The post hoc narratives of UX contributions to products often sound like the idealized exploratory phase followed by a narrowing of the scope with a steady progress toward a product that meets the requirements expressed by users. In practice, however, the real story often is of projects with processes and methods that differ widely across development projects but follow common principles and lead to similar artifacts, such as personas, story mapping, and prototypes. Some projects may never create a formal requirements document, but will reveal the increasingly formalized UX requirements through a sequence of prototypes and product versions. This is a challenge for requirement formalization methods – i.e., a workshop topic.

For both public and private endeavors, the problem of formalizing requirements is a balancing act among various factors, such as identifying the user classes and competing requirements for such user classes, satisfying the buyer, driving innovation, and keeping consistency among products from the same organization.

As the agile and lean software development processes become pervasive, renewed attention is necessary on defining more suitable methods to build and preserve high-quality UX designs along the development process.

2 Target Audience and Expected Outcomes

The workshop aims at bringing together researchers and practitioners who face the problem of formalizing usability or UX requirements and have tried effective methods to resolve it. The expected outcome of the workshop is a descriptive framework that helps to organize the current best practices and a set of recommendations for formalizing and verifying usability/UX requirements in specific contexts.

3 Workshop Organizers

Gregorio Convertino, PhD, is a Senior User Researcher at Informatica. His research focuses on UX, information visualization, collaborative and social computing.

Nancy Frishberg, PhD, heads the User Research Program at Financial Engines, Inc. Her research interests include harnessing the creativity of groups, accessibility (for aging or Deaf populations), and successful UX in agile projects.

Jettie Hoonhout is a Senior Scientist at Philips Research. Her research interest is in methodologies, methods and tools that address the UX of products, and that support the development process of products and product-service concepts.

Rosa Lanzilotti is a researcher at the University of Bari (IT). Her research interests include usability and UX, accessibility, UX practices in industry and public institutions.

Marta Kristín Lárusdóttir is an assistant professor at Reykjavik University (IS). Her main research area is the interplay between usability and UX activities and software development processes.

Effie Lai-Chong Law is Reader at the University of Leicester (UK). Her research focuses are usability and UX methodologies and their applications in various contexts including education, health, law, and cultural heritage.