Human Work Interaction Design Meets International Development

Campos, Pedro; Clemmensen, Torkil; Barricelli, Barbara Rita; Abdelnour-Nocera, Jose; Lopes, Arminda; Gonçalves, Frederica

Human Work Interaction Design Meets International Development

Pedro Campos, Torkil Clemmensen, Barbara Rita Barricelli, Jose Abdelnour-Nocera, Arminda Lopes, and Frederica Gonçalves

Article in proceedings (Accepted version*)

This is a post-peer-review, pre-copyedit version of an article published in *Human-Computer Interaction: INTERACT 2017, 16th IFIP TC 13 International Conference Mumbai, India, September 25–29, 2017 Proceedings, Part IV*. The final authenticated version is available online at:

DOI: https://doi.org/10.1007/978-3-319-68059-0

Human Work Interaction Design meets International Development

Pedro Campos[1], Torkil Clemmensen[2], Barbara Barricelli[3], Jose Abdelnour-Nocera[1,4], Arminda Lopes[1] and Frederica Gonçalves[1]

[1]Madeira-ITI, University of Madeira, Funchal, Portugal
[2]Copenhagen Business School, Denmark
[3]University of Milano, Italy
[4]University of West London, UK
{pedro.campos,arminda.lopes,frederica.goncalves}@m-iti.org
tc.itm@cbs.dk
barricelli@di.unimi.it
Jose.Abdelnour-Nocera@uwl.ac.uk

Abstract. Over the last decade, empirical relationships between work domain analysis and HCI design have been identified by much research in the field of Human Work Interaction Design (HWID) across five continents. Since this workshop takes place at the Interact Conference in Mumbai, there is a unique opportunity to observe technology-mediated innovative work practices in informal settings that may be related to the notion of International Development. In this unique context, this workshop proposes to analyze findings related to opportunities for design research in this type of work domains: a) human-centered design approaches for specific work domains (workplaces, smart workplaces); b) visions of new roles for workplaces that enhance both work practice and interaction design. In order to do this, participants engage with field trips, gather data and discuss their experience at the workshop on the following day.

1   INTRODUCTION

Today, it is a true challenge to design applications that support users of technology in complex and emergent organizational and work contexts. To meet this challenge, the Working Group 13.6 (WG13.6) on Human Work Interaction Design (HWID) was established in September 2005 as the sixth working group under the International Federation for Information Processing specifically the Technical Committee 13 on Human Computer Interaction (HCI). A main objective of the WG13.6 as defined in 2012 is the analysis of this complexity and its relationships between extensive empirical work domains studies and HCI designs [1] .

This workshop follows along the – already long – series of HWID discussions, focusing on identifying HCI patterns and its relations to the HWID field and related fields.

On this occasion and since this workshop takes place at the Interact Conference in Mumbai, there is a unique opportunity to observe technology-mediated innovative work practices in informal settings, in a social development context. This is why WG 13.6 has decided to offer this workshop jointly with WG. 13.8 on Interaction Design in International Development, whose main interest since its creation in 2006 is to promote the application of interaction design to address the needs, desires and aspirations of people across the developing world.

Today's technologies change the way we work with pervasive interfaces and smart places, often shifting our physical boundaries and our operational modes. From health care, to traffic control, interaction with new technologies, researchers have raised challenging issues for HCI researchers and experts. This is even more challenging when one is away from the mainstream industrial sites of the global north.

In line with recent suggestions that HCI should "turn to practice" [2] and do practice based research [3], the utility and merit of defining a field from its published works stems from providing a conceptual frame to organize a variety of issues emerging in recent HCI research [4]. In this workshop, we take a practice oriented, bottom up approach where a group of HCI researchers will analyze and synthesize relevant field work in an around Mumbai completed on the previous day.

Stephanidis (Stephanidis, 2015) states that interactive technologies are entering all aspects of everyday life, in communication, work and collaboration, health and well-being, home control and automation, public services, learning and education, culture, travel, tourism and leisure, and many others. An extensive variety of technologies are already available, and new ones tend to appear frequently, and on a regular basis. Because of this we have to be attentive towards the development of studies that will help the growth of new technologies itself.

To fully exploit the opportunity mentioned above, we define a liaison between field trips and workshop, which is conducted in three major stages: (i) pre-field trip, (ii) the field trip (day one) and the workshop itself (day two), and (iii) a post-workshop reflection.

References

1. P. Campos, T. Clemmensen, J. Abdelnour-Nocera, D. Katre, A. Lopes, R. Ørngreen e (Eds), Human Work Interaction Design – Work Analysis in HCI. IFIP AICT 407, Springer, 2012.

2. K. Kuutti e L. J. Bannon, "The turn to practice in HCI: towards a research agenda.," em *Proceedings of the 32nd annual ACM conference on Human Factors in computing systems*, 2014.

3. V. Wulf, C. Müller, V. Pipek, D. Randall, M. Rohde e G. Stevens, "Practice-Based Computing: Empirically Grounded Conceptualizations Derived from Design Case Studies Designing Socially Embedded Technologies in the Real-World," Springer, 2015, pp. 111-150.

4. C. Stephanidis, "Design for all," em *The encyclopedia of Human Computer Interaction 2nd edition*, Interaction Design Foundation, 2015, pp. 2453-2550.