Chapter 11
Working Together to Improve Usability:
Exploring Challenges and Successful Practices

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ABSTRACT

In theory, usability work is an important and well-integrated activity in developing software. In practice, collaboration on improving usability is ridden with challenges relating to conflicting professional goals, tight project schedules, and unclear usability findings. The authors study those challenges through 16 interviews with software developers, usability experts, and project managers. Four themes that are key challenges to successful interaction between stakeholders are identified: poor timing when delivering usability results, results lacking relevance, little respect for other disciplines, and difficulties sharing important information. The authors review practices that have successfully addressed these challenges and discuss their observations as encompassing multiple perspectives and as a collaborative cross-professional learning process.

INTRODUCTION

Through their work, usability professionals aim to improve the usability of computer systems. To do this, they seek to inform and influence design decisions, for instance by conducting usability evaluations of systems, by instigating design changes through persuasive reports, and by strengthening the collaboration with colleagues who also have a stake in designing and implementing the systems.

Accordingly, increasing the impact of usability work on system design and implementation can be approached in several ways. Such ways include attempts to improve the quality of usability evaluation methods by trying to identify which method works best in certain contexts (e.g., Karat, Campbell, & Fiegel, 1992), recommending ways of combining methods (e.g., Uldall-Espersen,

Frøkjær, & Hornbæk, 2007), or investigating how to present the results of evaluations so as to facilitate changes to the design (e.g., Hvannberg, Law, & Larusdottir, 2007). Because usability is closely related to the work of for example project managers and developers, one may also seek to improve the collaboration between usability experts and other stakeholders (e.g., Bødker & Buur, 2002; Gulliksen, Boivie, & Göransson, 2006).

The motivation for this paper is that while the literature is strong on most points above, little research concerns the last point, in particular the practical challenges of how to collaborate to improve usability. The aim of this paper is to explore areas that impede collaboration on usability-related issues, provide examples of how practitioners have successfully dealt with this and thus inspire anyone who are interested in working on improving collaboration in the cross-professional realm of usability work. To do so, we conduct an analysis of 16 interviews with 20 stakeholders, and, based on the perspective of the participants, we seek to explore the following questions:

a.   What do key stakeholders – developers, usability experts, and project managers – consider their main challenges when they cooperate on improving usability?
b.   Which successful practices do stakeholders follow to address these challenges to usability work?

Understanding these questions better may help us improve the impact of usability work, for instance by suggesting how to conduct usability work that lessens challenges amongst stakeholders. In relation to research in usability evaluation, the study touches upon themes that could help researchers think about collaboration in new ways. Our study seeks to extend the existing literature by highlighting cross-professional relationships as a new perspective on usability work and to draw attention to the difficult balance between job role and project priority. Further, though the results are perhaps not controversial or entirely new, we seek to present them from other views than that of the usability practitioner, something we think is new.

RELATED WORK

Part of the literature on strengthening the impact of usability work focuses on usability evaluation methods (UEMs) (Chattratichart & Brodie, 2004; Hertzum & Jacobsen, 2003; Hvannberg, Law, & Larusdottir, 2007; Law & Hvannberg, 2004) or on how evaluation results are reported (American National Standards Institute, 2001; Cockton, Woolrych, & Hindmarch, 2004; Dumas & Redish, 1993; Mills, 1987; Redish, Bias, Bailey, Molich, Dumas, & Spool, 2002; Rubin, 1994). Other contributions look into the context of usability work (Gulliksen, Boivie, & Göransson, 2006; Gulliksen, Boivie, Persson, & Hektor, 2004; Iivari, 2006; Uldall-Espersen, Frøkjær, & Hornbæk, 2007) or relate the collaboration and communication among stakeholders to the development process (Bennet & Karat, 1994; Bødker & Buur, 2002; Bødker, Krogh & Petersen, 2001; Hornbæk & Frøkjær, 2005; Madsen & Petersen, 1999; Uldall-Espersen & Frøkjær, 2007). This paper follows the latter trail and views usability work primarily as an organisational activity, in particular as the collaboration between three key job roles (see Figure 1).

Gulliksen et al. (2006) investigated the work context for usability professionals and suggested that the impact of usability work does not solely depend on usability evaluation methods, but also on support from project management and involvement of stakeholders. Most frequently, involvement of stakeholders in systems development has meant user involvement. For many years user involvement has attracted attention as a means for improving the quality of systems (Boland, 1978; Ives & Olson, 1984; King & Rodriguez,

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