Communicating User Experience: “Wicked” Problems, Patchwork Personas, and the ICTD Project Lifecycle

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ABSTRACT

Research in the ICT4D field implicates lack of user-centered design in the high rate of ICTD project failure. The field of user experience (UX) offers potentially fruitful approaches for user-centered design. In the ICTD context, these principles and methods clash with the triple constraints of project management (time, scope and funding). This paper introduces the user persona from UX design as a powerful tool for considering the user’s perspective within resource-constrained ICTD projects. Although personas appear simple, they introduce complex communicative affordances, pragmatic benefits, and risks to ICTD projects. A brief conclusion revisits the larger problem of ICTD project failure, and considers the potential role of personas in addressing this problem.

Keywords: Information and Communication Technology for Development (ICTD), Project Management, User Experience (UX), User Personas, User-Centered Design

INTRODUCTION

Information and Communication Technology for Development (ICTD) projects are interventions that design information and communication technologies (ICTs) for poor and marginalized communities, to enable people to “enjoy long, healthy and creative lives” (UNDP, 1990, p. 9). Unfortunately, most ICTD projects fail to achieve stated development objectives or demonstrate any positive outcome (Dodson, Sterling & Bennett, 2012). The high rate of failure has been identified as an intractable or “wicked problem” in the field (Tongia & Subrahmanian, 2006). Wicked problems entangle multiple frames of reference and complex interdependencies with no “readily enumerable” solution (Rittel & Weber, 1973, p. 164). Although the problem of ICTD failure is multifaceted, most scholars trace the roots of the problem to a pervasive “technology-centric” focus in ICTD projects (Dodson et al, p. 1; Heeks, 2009, p. 23). ICTD projects tend to focus exclusively on delivering technology, thus failing to realize the gains in health education.

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and income that boost socioeconomic development. Now, a new generation of ICTD 2.0 interventions rectifies the “technology-centric” focus with principles of user-centered design (Heeks, 2009; Wyche et al, 2012; Dearden & Rizvi, 2014). By considering and designing for the user’s experience, ICTD 2.0 aims to develop ICT interventions that users “value, and have reason to value” (Sen, 1999, p. 291). Yet this solution begets new problems as principles of user-centered design (i.e., understanding and involving users) conflict with the triple constraints of project management (i.e, time, cost and scope) throughout the ICTD project lifecycle (Dearden & Rizvi, 2009; Dunckley, Abdelnour-Nocera & Waema, 2009). The result is often a project that fails to address the user’s unique needs, or a project that runs over budget and behind on deadlines. Solving this problem requires the artful integration of user research, which investigates user experience, and project management, which integrates input from stakeholders (including users) into the project lifecycle.

This article argues that the user persona, a tool from user experience (UX) design, offers a powerful tool for amplifying the target user’s perspective within resource-constrained ICTD projects. Personas are fictional, but representative, profiles of target users. Personas have been a staple of user-centered design since the 1990s (see, for example, Cooper, 1999), and several anecdotal reports indicate that personas have been successfully used in ICTD projects (Dearden & Rizvi, 2009; Meissner & Blake, 2011; Agurre et al, 2013). Their chief affordance is communicative; personas convey a vivid, actionable picture of user experience to cross-functional team members, sponsors and other stakeholders. Moreover, because personas consume few resources beyond “paper and words” (Cooper, 1999, p. 124), they function effectively within the triple constraints of project management. In short, personas contribute to ICTD projects by making user experience manageable. But personas also introduce new risks to a project. Like most solutions to “wicked” problems, personas function by what Simon (1956) calls “satisficing” – that is, by substituting available and sufficient answers for optimal ones. As hypothetical constructs, personas communicate a rendition of user experience that is neither the user’s vision nor the designers, and is neither rigorously scientific nor purely anecdotal. This is a precarious foundation for user-centered design, as it wagers the success of the project on a plausible (but not optimal) approximation.

This article proceeds as follows. After a brief introduction to personas, the body of the article introduces three “wicked” dilemmas for user-centered ICTD projects: starting without users, communicating partial knowledge, and settling feature debates. To illustrate these dilemmas in the most concrete possible terms, the article turns to a case report of a successful project from the ICTD literature: Dearden and Rizvi’s (2009) rural e-Services project in India. Each section frames the dilemma as a conflict between UX and PM, introduces personas as a tool for resolving the dilemma, and overviews the pragmatic benefits and risks of using personas in ICTD projects. The conclusion of the article revisits the larger issue of ICTD success and failure, raising questions for further research on the evolving role of ICT users in the developing world, and the future of ICTD projects.

ABOUT PERSONAS

Personas are archetypal profiles of users; each persona represents a key user group. In user-centered design, personas communicate a nuanced picture of the target user’s experience, including the user’s goals, tasks, environment, and subjective “perceptions and responses” that result from interacting with technology (ISO, 2010). This vivid picture enables designers, programmers and other technology specialists to design products for a specific person instead of an amorphous
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