

Chapter 11

Developing a Participatory Approach to Accessible Design

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ABSTRACT

This article describes how accessibility to ICTs is understood as conformity to standards, which usually ends in designs that do not consider the singularities of people. This article delves into a participatory approach to accessible design, as an alternative to design guided simply by standards. It first defines a relevant network of stakeholders for accessible participatory design, based on the expertise that each of them can provide. It then discusses the issue of consensus among stakeholders, necessary to make design decisions when there are conflicting views. Finally, it addresses the question of non-technological outcomes and methodological concerns of Participatory Design that should inspire the accessible design agenda.

INTRODUCTION

Although accessibility to Information and Communication Technologies (ICTs) has been promoted for more than ten years as a fundamental human right of people with disabilities (United Nations, 2006), as an unprecedented opportunity for communication and autonomy, many communities remain excluded. The reasons for this situation of relegation are many and diverse (economic, technical, cultural, political, geographical, etc.) but a major cause is the standardized design of mainstream ICTs. Standardized or normalized design implies certain norms, like young, white, male, heterosexual, Western, middle-class, non-disabled, and marginalizes individual identities (Lewthwaite, 2014). As postulated by the social model of disability (World Health Organization, 2001), exclusion is generated by the environment in which the person lives, by the normalized design of mainstream technologies, and not by their personal attributes.

In the accessibility arena itself, there is a generalized understanding of accessibility to ICTs as conformity with norms. Several countries granted law status to Web Content Accessibility Guidelines (WCAG, 2008), promoting web design projects based exclusively on accessibility standards. These guidelines are lists of verification criteria, designed more to evaluate existing websites than to address new design projects. It was shown empirically, by user test, that accessibility guidelines do not cover all the problems

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encountered by people with disabilities when they browse the Web (Power, Freire, Petrie, & Swallow, 2012; Rømen & Svanæs, 2011). Guidelines define accessibility as a property of the digital content and not as a property of the relationship between the user and the content in a context of use (Cooper, Sloan, Kelly, & Lewthwaite, 2012), as a property of the user experience. The W3C Accessibility Guidelines Working Group, aware of these limitations, is currently working on a next major version for 2020 that hopes to expand the scope beyond content and beyond the Web (Lauriat & Spellman, 2017). One of the goals in this elaboration process is to involve more stakeholders by doing user research with people who use the standard.

This paper delves into a participatory approach to accessible design, as an alternative to design guided simply by standards. Participatory design calls for democratization and stakeholder involvement in the design process, for empower relevant stakeholders rather than being restrict them to a prescribed way of interacting (Fischer, 2002), for emancipate specially “groups of people whose views, opinions and needs might be the most ignored by mainstream society.” (Vines, Clarke, Wright, McCarthy, & Olivier, 2013). At least two rationales, one moral and one pragmatic, support participatory design. The first is that the people most directly affected by the design result have the right to judge that result. The pragmatic reason is that directly including users will increase the chances of a successful design result because they are the ones who will need to adopt and to adapt to the design result (Carroll & Rosson, 2007).

The three main goals of the participatory design philosophy—sharing expertise, sharing control and inspiring change (Vines et al., 2013)—are explored in the context of accessible design. The author outlines opinions developed through experience and loosely guided by these three goals. She took part as a researcher/designer in a series of technology design projects for social inclusion carried out in the city of Rosario (Argentina), the majority of them within a public program of accessible tourism.

Thus, the objectives of the article are three. First, to identify who are the relevant stakeholders, based on the expertise needed to design an accessible artifact. Second, to discuss the issue of consensus among stakeholders, necessary to make design decisions when there are conflicting views. Thirdly, to address the question of the outcome of an accessible participatory design project and the outcome aspects that should concern the accessibility research agenda.

The contributions are not intended to be a formal or reproducible methodology for the accessible design of ICTs. The socio-technical systems “involving humans and technology contain far too much variability to be reproducible in any straightforward way” (Brown, Reeves, & Sherwood, 2011). The proposed suggestions are only intended to motivate and inspire more reflections on accessible participatory design. It is up to each designer or researcher to adapt, via re-signification and non-mechanical dissemination (Thomas, Juarez, & Picabea, 2015), these proposals to other local contexts.

SHARING VIEWS ON ACCESSIBLE DESIGN

Participatory design conceives design as a process of inscribing knowledge in material forms (Karasti, 2014). This knowledge is not owned by a single person but possessed by different stakeholders in an asymmetric and often controversial way (Fischer, 2000). Relevant stakeholders for accessible participatory design are all those people with some knowledge of accessibility, capable of share their points of view and produce new ideas and artifacts. This definition extends the classic triad developers-content-users of the W3C’s Web Accessibility Initiative (Chisholm & Henry, 2005) to a wider network conformed by: ICTs professionals, sponsors, owners and external suppliers on the production side; people with

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