Chapter 5
A Multi-Perspective Theoretical Analysis to Web Accessibility

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ABSTRACT

Accessibility has become increasingly important in information technology, particularly due to legislation pressure to make affordable public services to all. Being end-users and software companies those who have direct contact with accessibility problems, other stakeholders are committed to defining methods and change mentalities in Web accessibility implementation. In addition to a conceptual definition, this chapter presents entities views with responsibilities in the area, taking into account their work done in the past and the prospects for future. The understanding of the interaction between all these perspectives will help to realize the way it will go, which carries with it great challenges and opportunities, widely explored in this work.

INTRODUCTION

Information and Communication Technologies (ICT) represent a good opportunity to reduce the exclusion of people with some sort of disability. As a result, the Web can be viewed as leverage for increasing communication possibilities and users' autonomy. On the other hand, Internet is making the world more connected and globalized. Organizations, in this context, are present not only in their own national territory but in the entire world.

Continuous change in how users make use of Web applications is an irreversible fact, perceivable in the increasingly complexity associated with the available content and the existing needs for it to be dynamic and personalized. By merging this reality with the need to make the referred content more accessible to all, one can clearly understand that entities and organizations, such as development agencies, education institutions and governments, have a very important role in this process.

With the above in mind, from our point of view, a broader analysis to the Web accessibility topic is need in order to understand how the various entities and organizations perspective the topic. This is even critical when the scientific and professional communities, with common interests in Web accessibility, have difficulties in interacting, find consensus and sharing information and solutions.

The purpose of this study is to try to clarify the perspectives of the various relevant stakeholders associated with Web accessibility, and doing so by performing an extensive literature review. During the research project a set of perspectives was achieved and considered the most relevant to the topic:

1.   End users;
2.   Organizations;
3.   Governmental entities;
4.   Education institutions; and
5.   Associative entities.

This paper was organized into six sections. Section 1 is the introduction and the second section provides the main theoretical concepts. Web accessibility according to the various aforementioned perspectives is characterized in Section 3. Section 4 contains a set of challenges and opportunities in the context of Web accessibility. Finally, the last section of the chapter presents the achieved conclusions, limitations and future work.

WEB ACCESSIBILITY: CONCEPTS AND PERSPECTIVES

Internet has been growing in size and complexity since its inception. Some arguments explain that this is because of its decentralized property, where anyone can contribute without there being a central authority to dictate what can and cannot be published (Lopes, Gomes & Sedge, 2010). With the integration of the Web in people's daily lives cannot be ignored potential accessibility barriers, as these barriers make this important resource inaccessible to a certain set of users (Van der Geest & Velleman, 2014).

WHO (2014) stated a disabled person covers impairment, limited activity or restricted participation. Still, according to data collected by the same organization there are over one billion people with type of disability, which amounts to 15% of the world population. At the European level, according to data collected by the European Union, there are more than 80 million citizens in the same context (EU-FRA, 2015).

The exclusion in the use of IT is not a single issue only of those people with disabilities. There is another group of users who have constant difficulties in interacting with the Web, the elderly (Arch, 2008). As society ages there is a serious probability of people suffering from some sort of disability, whether temporary or not (Díaz-Bossini & Moreno, 2014). This is even more relevant when considering that in 2050 the number of people with more than 60 years old is going to triple (United Nations, 2008).

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