USABILITY EVALUATION OF VGI SYSTEMS INTERFACES IN GEOGRAPHICAL FEATURES DESIGN TASKS.

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ABSTRACT. A VGI system is a computer application in which an individual voluntarily visualizes, organizes, and disseminates geographic data and information for a free use of any user (TULLOCH, 2008). The main goal of a VGI is getting volunteered geographical data, so it is essential to consider the user interaction with the interface in its development. As an interactive map, the interface of a VGI system can be divided in two different interfaces: computer interface and the map interface, regarding respectively the functionalities of the system and the geographic representation (MAZIERO, 2007). The interaction covers the processes that stimulate the user's actions on the system interface (MORAN, 1981), as well as their perception and cognition in the understanding of the proposed representations (MACEACHREN, 1995). VGI systems such as OpenStreetMap have different processes of interaction with the user, which entail different interfaces, functions and forms, for example the execution of the same task performed in different ways depending on the system used. The different interaction processes can lead to several user's experiences and affect the retention and addition of volunteer users. The research aims to obtain an overview of the usability of VGI systems, specifically the geographic features design, from the system access until the success or failure of the task. To achieve these goals we used the direct experimentation tests of Wikimapia, OpenStreetMaps and Wikiloc systems, with predefined tasks of feature design, verifying the positive and negative aspects of the interaction of three different user's levels (non-user, occasional user and frequent user). The results were qualitatively evaluated indicating good practices in the user experience and possible improvements in the system requirements specification that may encourage the user to adopt a VGI system.

Keywords: VGI, Usability, User's experience