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Chapter

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Heuristic Evaluation of University Institutional Repositories Based on DSpace

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Abstract

The number of Institutional Repositories (IRs) as part of universities' Digital Libraries (DLs) has been growing in the past few years. However, most IRs are not widely used by the intended end users. To increase users' acceptability, evaluating IRs interface is essential. In this research, the main focus is to evaluate the usability of one type of IR's interface following the method of Nielsen's heuristics to uncover usability problems for development purposes. To produce a reliable list of usability problems by applying the heuristic evaluation approach, we examine the impact of experts and novices on the reliability of the results. From the individual heuristic analyses (by both experts and novices), we distilled 66 usability problems. Those problems are classified by their severity. The results of applying the heuristic evaluation show that both experts and non-experts can uncover usability problems. We analyzed the differences between these types of assessors in this paper. Experts tend to reveal more serious problems while novices uncover less severe problems. Interestingly, the best evaluator is a novice who found 21 % of the total number of problems. The ability to find difficult and easy problems are recorded with both types of evaluators. Therefore, we cannot rely on one evaluator even if the evaluator is an expert. Also, the frequency of each violated heuristic is used to assigned priority to the uncovered usability problems as well as the severity level. The result of the heuristic evaluation will benefit the university through improving the user interface and encouraging users to use the library services.

Keywords

Human computer interaction Heuristic evaluation Digital libraries Digital repositories Institutional repositories Usability problems Scholarly output Dspace

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