

Computer-assisted article search in do-it-yourself-stores – Formative Evaluation of a Search Engine for Mobile Shopping-Robots

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Abstract

Against the background of the current development status and state of research of shopping assistants, the study presented deals with a formative evaluation of a search engine for an interactive, mobile shopping-assistant for do-it-yourself-stores. The focus of the study lies on the possibilities for improvement of the search engine, an examination of usability, acceptance and the customers' willingness to use the future service robot. The design of the examination is based on the basic criteria effectiveness, efficiency and satisfaction according to DIN EN ISO 9241-11, as well as on the seven usability-principles according to DIN EN ISO 9241-10. In the course of an iterative three-phased process of evaluation and implementation with a repeated-measures design and a total of N = 210 subjects, fundamental operation problems could be identified and solved. It was shown that the future willingness is correlated with the customers' judgement of usability, whereas it is independent of user characteristics.



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