

DEVELOPMENT OF A USABILITY MODEL FOR SMART PHONES (UMSP)

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Abstract:

Usability is considered as a significant subject for product design and service which yield overall quality and achievement of a product. The use of smart phones has dramatically increased in recent years that providing users to perform various tasks. It differs from rest of the products by involving both software and hardware features. Therefore, there is a need for specific enhanced usability measurement framework as compared to existed approaches. In this study, considering smart phone users' expectations and requirements and synthesizing previous usability researches, a new generic model called Usability Model for Smart Phones (UMSP) is proposed. This measurement model is a state of art and involves following aspects; design, needs and expectation, quality, innovation, perception and finally usability. The reliability and validity of the proposed model was tested using structural equation model for the questionnaire data collected from 500 smart phone users. The findings and results provide strategic and valuable information for designers and marketing people to understand user perceptions for smart phone usability, and for users to select best products using index scores that the UMPS generates. Moreover, the proposed model makes an insightful contribution to the literature and application of usability field.

Keywords: Usability, Smart Phones, Usability Measurement Model, Structural Equation Modeling