

Gaming Mouse Redesign Based on Evaluation of Pragmatic and Hedonic Aspects of User Experience

Authors : Thedy Yogasara, Fredy Agus

Abstract : In designing a product, it is currently crucial to focus not only on the product's usability based on performance measures, but also on user experience (UX) that includes pragmatic and hedonic aspects of product use. These aspects play a significant role in fulfillment of user needs, both functionally and psychologically. Pragmatic quality refers to as product's perceived ability to support the fulfillment of behavioral goals. It is closely linked to functionality and usability of the product. In contrast, hedonic quality is product's perceived ability to support the fulfillment of psychological needs. Hedonic quality relates to the pleasure of ownership and use of the product, including stimulation for personal development and communication of user's identity to others through the product. This study evaluates the pragmatic and hedonic aspects of gaming mice G600 and Razer Krait using AttrakDiff tool to create an improved design that is able to generate positive UX. AttrakDiff is a method that measures pragmatic and hedonic scores of a product with a scale between -3 to +3 through four attributes (i.e. Pragmatic Quality, Hedonic Quality-Identification, Hedonic Quality-Stimulation, and Attractiveness), represented by 28 pairs of opposite words. Based on data gathered from 15 participants, it is identified that gaming mouse G600 needs to be redesigned because of its low grades (pragmatic score: -0.838, hedonic score: 1, attractiveness score: 0.771). The redesign process focuses on the attributes with poor scores and takes into account improvement suggestions collected from interview with the participants. The redesigned mouse G600 is evaluated using the previous method. The result shows higher scores in pragmatic quality (1.929), hedonic quality (1.703), and attractiveness (1.667), indicating that the redesigned mouse is more capable of creating pleasurable experience of product use.

Keywords : AttrakDiff, hedonic aspect, pragmatic aspect, product design, user experience

Conference Title : ICAE 2018 : International Conference on Anthropometry and Ergonomics

Conference Location : Osaka, Japan

Conference Dates : September 13-14, 2018