

A User Centred Based Approach for Designing Everyday Product: A Case Study of an Alarm Clock

Authors : Obokhai Kess Asikhia

Abstract : This work explores design concept generation by understanding user needs through observation and interview. The aim is to examine several principles and guidelines in obtaining evidence from observing how users interact with the targeted product and interviewing them to acquire deep insights of their needs. With the help of Quality Function Deployment (QFD), the identified needs of the users while interacting with the product were ranked using the normalised weighting approach. Furthermore, a low fidelity prototype of the alarm clock is developed with a view of addressing the identified needs of the users. Finally, the low fidelity prototype design was evaluated with two design prototypes already existing in the market through a study involving 30 participants. Preliminary results reveal higher performance ratings by the majority of the participants of the new prototype compared to the other existing alarm clocks in the market used in the study.

Keywords : design concept, low fidelity prototype, normalised weighting approach, quality function deployment, user needs

Conference Title : ICMDE 2017 : International Conference on Manufacturing and Design Engineering

Conference Location : New York, United States

Conference Dates : October 05-06, 2017