Software usability improvements for Generation Z oriented software application

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Abstract

User Experience (UX) which focuses on having a deep understanding of users, what they need, their abilities, and their limitations is one of the most important consideration when developing software applications today. Developing sustainable software application is the aim of any software company. To achieve this, software usability should be improved in the software as one of the main nonfunctional requirements. Sustainability of software usability is determined by user experience. Main users of software applications are people who belong to the workforce since they are working in the complex nature of the businesses and with time limitations. Generation Z is the new addition to the workforce and it will be increasing in the future. Therefore, it is important to pay extra attention to increase usability of software for Generation Z who have been exposed to digital technology from an early age. Accordingly, a survey method was used to identify specific characteristics, behaviors of Generation Z when using software applications and significance of usability attributes of Generation X, Y and Z with the sample size of 77 and 25 respectively. This study found that Generation Z has special software usability requirements than Generation X and Y. Based on findings, features that need to be incorporated with Generation Z oriented software applications were proposed. Moreover, a prototype was developed to demonstrate the features identified. The proposed model together with the prototype was validated trough software engineers and UX engineers and validity of the model was assured by them. The model was recommended to use when developing software application for Generation Z.

Keywords: Software usability, User Experience, Generation Z