

# Usability testing on the Drug e-Dictionary using the Think-Aloud Retrospective Method and USE Questionnaire

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## Abstract

The physical form of the drug dictionary has many shortcomings, one of which is thick, impractical and it takes a long time to search for the drug terms. This is the motivation for the development of a drug dictionary application, namely the drug e-dictionary. The drug e-dictionary that was developed in 2019 has not been tested for usability. Usability testing is very important for applications that have been developed because it is the key to the success and requirements of user acceptance of the application. This study aims to test the usability of the drug e-dictionary. The usability testing method used is the Retrospective Think-Aloud Method and the USE Questionnaire. The results of the first usability test provide some suggestions in the form of adding an autocomplete feature, query suggestion to the search function. Also, other suggestions are in the form of a display interface and page functions on the A-Z drug index. After making improvements according to the suggestions, the second usability test is carried out. The results of the second usability test showed an increase in the usability value from 75% to 86%. This shows that the input from respondents from the results of the first test can improve the quality of the drug e-dictionary application so that the application can be accepted by users.

## Keywords

Usability, usability testing, retrospective think-aloud, use questionnaire, drug e-dictionary.

## Biographies

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**Abdul Talib Bon** is a professor of Production and Operations Management in the Faculty of Technology Management and Business at the Universiti Tun Hussein Onn Malaysia since 1999. He has a Ph.D. in Computer Science, which he obtained from the Universite de La Rochelle, France in the year 2008. His doctoral thesis was on the topic Process Quality Improvement on Beltline Moulding Manufacturing. He studied Business Administration in the Universiti Kebangsaan Malaysia for which he was awarded the MBA in the year 1998. He's a bachelor degree and diploma in Mechanical Engineering which he obtained from the Universiti Teknologi Malaysia. He received his postgraduate certificate in Mechatronics and Robotics from Carlisle, United Kingdom in 1997. He had published more 150 International Proceedings and International Journals and 8 books. He is a member of MSORSM, IIF, IEOM, IIE, INFORMS, TAM, and MIM.