

EVALUATION USABILITY MEASUREMENT INDEX FOR HIGHER  
EDUCATION INSTITUTE

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This dissertation is dedicated to my family for their endless love, support and encouragement.

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## ABSTRACT

The Usability Measurement Index (UMI) for Higher Education websites is an instrument to measure the usability of higher education websites using the weighted-point based system. It has been proposed to overcome the shortcomings of Webometrics, which merely rank HEI websites based on certain criteria that are not related to usability. Testing of UMI has shown that it can be used to measure the usability of HEI websites. However, this is based on a small-scale study comprising of two HEI websites and 40 respondents. Thus, the aim of this research is to validate the instrument. In order to successfully validate it, ratings were given to each category and factors that had been previously proposed. Then total score were given based on both weights and ratings. Besides that, the Think-Aloud method had been applied as an appropriate add-on value to the UMI in order to increase its validity. In this research, two of the HEI websites from the Webometrics rank were used and an increased number of participants that is 60 participants were involved. The results were compared with their rank on the Webometrics ranking. The result showed that the gap between the two HEI websites were not as huge as shown in the Webometrics ranking. So, the rank of the Webometric is not the true reflection of the overall usability of the website itself. The UMI is considered validated because the instrument had been added an add-on value in Think-Aloud method and higher number of participants involved.

## ABSTRAK

Indeks Pengukuran Kebolehgunaan (UMI) untuk laman web institut pengajian tinggi (IPT) adalah satu instrumen untuk mengukur kebolehgunaan laman web pengajian tinggi dengan menggunakan sistem berasaskan wajaran mata. Ia telah dicadangkan untuk mengatasi kelemahan Webometrics, yang mana ranking Webometrics hanya berdasarkan kriteria tertentu yang tidak berkaitan dengan kebolehgunaan laman web IPT. Ujian UMI yang telah dilakukan sebelum ini menunjukkan bahawa ia boleh digunakan untuk mengukur kebolehgunaan laman web IPT. Walau bagaimanapun, ini adalah berdasarkan satu kajian kecil yang melibatkan dua laman web IPT dan 40 responden. Oleh itu, matlamat kajian ini adalah untuk membuat validasi terhadap instrumen yang digunakan. Untuk membuat validasi dengan berjaya, rating telah diberikan kepada kategori dan faktor yang telah ditentukan. Kemudian, jumlah skor diberikan berdasarkan pemberat dan rating. Selain itu, kaedah *Think-Aloud* telah digunakan sebagai penambahan yang sesuai kepada instrumen indeks ukuran kebolehgunaan bagi meningkatkan kesahihannya. Di dalam kajian ini, dua laman web IPT dari Webometrics telah digunakan dan jumlah responden yang lebih tinggi iaitu 60 responden telah terlibat. Hasil keputusan dari kajian ini dibandingkan dengan kedudukan kedua-dua laman web tersebut di Webometrics. Keputusan menunjukkan bahawa jurang antara kedua-dua laman web IPT tersebut tidak begitu besar seperti yang ditunjukkan dalam ke ranking Webometrics. Ranking Webometrics tidak menggambarkan keadaan sebenar kebolehgunaan laman web itu sendiri. UMI telah divalidasikan kerana instrumen telah ditambah nilai dengan menggunakan kaedah *Think-Aloud* dan jumlah responden yang lebih tinggi terlibat dalam kajian ini.