A model of Information Systems Success for assessing the effectiveness of statistical learning tool on university students performance in statistics

ABSTRACT

The purpose of the study was to validate the DeLone and McLean Information systems (IS) success model to determine the effectiveness of statistical learning tool (SLT) in facilitating learning statistics among graduate students. In order to test the model, a quantitative method was employed such as distributing questionnaires. A total of 129 graduate students registered for statistics in social science course from selected faculties in Universiti Putra Malaysia were chosen based on stratified random sampling. In this study, structural equation modeling (SEM) which is a data analysis method was employed to provide the info of statistics performance through the analysis of direct and indirect effect. The results of the study demonstrated that service quality was the most influential variable in this model (followed by system quality), thus highlighting the importance of service quality for students' performance in statistics; nevertheless, the findings did not support the mediation of an intention to use and users' satisfaction. Implications of our findings will enable future researchers to continue studies on SLT on a broader basis of theoretical support.

Keyword: Information system success model; Statistical learning tool; University students; Statistics performance