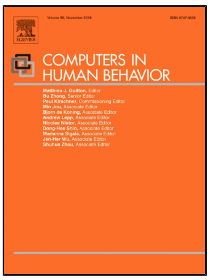
Accepted Manuscript



A hybrid modeling approach for predicting the educational use of mobile cloud computing services in higher education

Ibrahim Arpaci

PII:	S0747-5632(18)30445-X
DOI:	10.1016/j.chb.2018.09.005
Reference:	CHB 5696
To appear in:	*Computers in Human Behavior*
Received Date:	20 January 2018
Accepted Date:	10 September 2018

Please cite this article as: Ibrahim Arpaci, A hybrid modeling approach for predicting the educational use of mobile cloud computing services in higher education, *Computers in Human Behavior* (2018), doi: 10.1016/j.chb.2018.09.005

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

A hybrid modeling approach for predicting the educational use of mobile cloud computing services in higher education

Ibrahim Arpaci, Ph.D.

Tokat Gaziosmanpasa University, Department of Computer Education and Instructional Technology, Tokat, Turkey, ibrahim.arpaci@gop.edu.tr

ABSTRACT

The decision to integrate mobile cloud computing (MCC) in education without determining optimal use scenarios is a universal problem as the adoption of such services becomes widespread. Accordingly, this study developed and validated a predictive model that explains the role of students' information management (i.e. retrieve, store, share, and apply) practices in predicting their attitudes toward using the MCC services for educational purposes. This study validated the model by the complementary use of machine learning algorithms alongside a classical SEM-based approach based on data collected from 308 undergraduate students. The SEM results indicated that the students' information management (i.e. retrieve, store, share, and apply) practices were significantly associated with their attitudes, which were significantly associated with the behavioral intentions. The structural model explained a significant portion of the variance in the behavioral intentions. Likewise, the classifier model suggested that the students' information management practices and attitudes predicted the behavioral intentions. Further, the applied algorithms predicted the behavioral intentions with an accuracy of more than 72% in most cases. Thereby, the study extended an original theory (TRA) into the MCC area by using a multi-analytical approach. The findings implied that employing the MCC services for personal information management should be supported and encouraged in the higher education by designing authentic learning environments

Download English Version:

https://daneshyari.com/en/article/10132562

Download Persian Version:

https://daneshyari.com/article/10132562

Daneshyari.com