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## Identifying Factors Affecting Mobile Learning Deployment In Universities (Case Study: University of Sistan and Baluchestan)

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### Extended Abstract

#### Abstract

The present study aimed to identify the factors affecting the deployment of mobile learning in sistan and baluchestan university. The method of this study is applied in terms of the purpose, applied and in terms of data type; the pattern in this study is based on the qualitative method of, which was determined using the meta- synthesis method of 49 mobile learning article in universities, and the importance and priority of each was determined by the quantitative method of shannon entropy. In order to validate the model, questionnaire number one was designed and distributed among the statistical population. the statistical population of this study includes all students of the university of sistan and baluchestan in the number of 21217, the statistical sample using the morgan table was the number of 377 and was used to analyze the data from a confirmatory factor analysis method with the help of smart pls software. according to research findings, effective factors in this model are in two dimensions of infrastructure (tools and technology and support infrastructure), and individual (user personality traits and user skill attributes).

#### Introduction

Nowadays; Traditional and traditional methods of teaching and learning have lost their effectiveness and effectiveness with the advent of new technologies. Learners are looking for new ways to keep up with the constantly changing

environment. Mobile technology is one of the aspects of information technology that has come into the field of education. One of the new ways of teaching is training through mobile devices (Bagherian far & Jawadi por, 2015). Mobile learning is designed from simple programs to support traditional education to more complex systems and even ecosystems, especially for teaching and learning practices. There are various applications of mobile technologies for both formal and informal learning modes. Students' attitudes are another important element that is strongly influenced by mobile learning acceptance (Yeap et al, 2016). Sistan and Baluchestan University as a comprehensive university and scientific pole of the South East of the country as the mother university in Sistan and Baluchestan province was able to join the Jirga of developed universities of the country with the necessary criteria and to be ranked among the top universities in the country. Mobile learning at Sistan and Baluchestan University is not favorable because students have poor computer and internet literacy. The mobile learning system at the University of Sistan and Baluchistan is facing challenges, and mobile learning managers and planners must provide the necessary infrastructure to address these challenges. Therefore, the present study aims to identify the factors affecting the deployment of mobile learning to provide the necessary framework for implementing this type of learning to some extent for universities and academics.

#### **Case study**

The study was conducted at Sistan and Baluchestan University. Sistan and Baluchestan University as a comprehensive and scientific university in the south-eastern region of the country started its activities by establishing the Department of Road and Building in Zahedan. The university currently has five approved colleges, including two faculties and two active campuses, which admit students in three departments, with three doctoral, postgraduate, and undergraduate degrees.

#### **Materials and Methods**

In this study, the qualitative method of combining indicators affecting mobile learning has been identified. Transcendence is a type of qualitative study that explores information and findings extracted from other qualitative studies related to the subject and the like and, by providing a systematic approach to researchers, by combining various qualitative studies, explores new and fundamental metaphors and themes. The statistical population of this study consists number of 21217 students of Sistan and Baluchestan University. The sample is 377 according to Morgan table. The kappa index was used to measure the reliability of the extracted codes from the combination, using SPSS software, the value of 0.000 and the value of index 0.806 were calculated.

Given the small number of significance of 0.05, the assumption of independence of the extracted codes is rejected, so it can be claimed that the extraction of codes has a good reliability. Shannon's entropy method was used to rank the indices extracted from meta- synthesis.

### **Discussion and Results**

After reviewing the research backgrounds, a cross-synthesis method was used to identify the effective codes on the deployment of mobile learning in universities. In this study, Sandlowski and Bareso's (2007) seven-step method was used. In the first step, information was collected by searching and selecting articles from relevant electronic databases including: GCR, Emerald, Science Direct, Springer, and Database Noor Specialty, Magi Iran, Iran Duck, Comprehensive Humanities Portal, Academic Jihad Database. The articles reviewed were from the years (2018– 2018). In the second step, the field method was used to collect information for accountability and validation of the proposed research model. In the hybrid method, after extracting the final codes, Shannon entropy method was used to rank them. Finally, the qualitative model extracted from the transducer was obtained. In the second stage of the research, confirmatory factor analysis and structural equation modeling were used to validate the model using SMART PLS version 2 software. The obtained model was confirmed by the above software, so that all the extracted indices were not eliminated from the transducer method that formed the research questionnaire questions because the factor loadings of all the above indices were above 0.3 and all the indices were significant.

### **Conclusion**

After applying academic experts' opinions on effective learning on mobile learning, they were categorized into 2 dimensions (infrastructure and individual), 4 concepts (tools and technology and support infrastructure, user personality traits and user skill characteristics) and 21 indicators that were the main elements of the model. They formed the deployment of mobile learning in universities. In the second stage of the research, confirmatory factor analysis and structural equation modeling were used to validate the model using SMART PLS version 2 software. The resulting hybrid model was validated with the software described above. According to the coefficients obtained from Shannon entropy, code, mobile tools (SMS, mobile games, Bluetooth information sharing, social networks), virtual education, positive motivation, intention to use mobile learning are the most important factors, and They have achieved the highest ratings overall, meaning that in the area of mobile learning at universities, these topics have been studied more and more readily, and have more reproducibility than other codes. Mobile learning at Sistan and Baluchestan University is not favorable because students have poor computer

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and internet literacy. The mobile learning system at the University of Sistan and Baluchistan is facing challenges, and mobile learning managers and planners must provide the necessary infrastructure to address these challenges. To implement and implement this approach correctly, the present study suggested that universities and institutes provide the necessary infrastructure and facilities, and take measures and training to enhance students' online skills and literacy. Also considering the cultural and regional issues, further studies should be done to motivate learners of this educational system at Sistan and Baluchestan University.

**Keywords:** Mobile learning, university, information technology