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THE USE OF MOBILE LEARNING AND ITS FUTURE DIRECTION DEVELOPMENT IN INDONESIA

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Abstract

The utilization of mobile devices and broadband has grown rapidly in Asia. The number of users of mobile devices in Asia has reached 49% of mobile devices users in the world including Indonesia. As a country with a population of 240 million, Indonesia is a potential market in the use of mobile devices. It provides a significant opportunity for use as a medium of learning. However, no research has been done on how far mobile learning has been utilized in Indonesia. Therefore, it is very useful to consider the prospect of the use of mobile learning as part of the learning process in Indonesia. This study aimed to determine how organizations in Indonesia are positioned in the area of mobile learning and what should be done for Indonesia and Indonesian organizations to become one of the pioneers *in the field. The primary method used in this research was survey. The sample was selected by using the stratified random sampling method. The total participants who completed the survey were 62 organizations and 4 participants for* in-depth interviews.

Keywords: mobile learning, e-learning, distance education

Introduction

The development of mobile technology has opened up opportunities for every individual to communicate more quickly and obtain information easily. The number of users of mobile devices in Asia has reached 49% of mobile devices users in the world. At the end of 2013, the use of mobile devices in Indonesia was about 260 million out of the total population of 240 million (Chandrataruna & Wibowo, 2013). As a country with a population of 240 million, Indonesia is a potential market in the use of mobile devices and the Internet. The users of mobile devices in Indonesia in the two years from the end of 2011 has increased from 150 million to 260 million in 2013. This data shows that one person can have more than one mobile device. The big number of mobile device users in Indonesia has given a significant opportunity for its use as a medium of learning. Baggaley (2007) speculates the possibility that Asia will be the pioneer in the use of mobile learning and will become a leader in the world in using mobile learning. There is no study being conducted to gather information on the use of mobile learning in Indonesia. Thus it is interesting to explore how organizations in Indonesia currently utilizing mobile learning are positioned in the area of mobile learning and what should be done to become one of the pioneers in the field.

Definition of mobile learning

From a number of definitions of mobile learning there are three fundamental elements required in mobile learning activities, namely: (1) the network connection to access the Internet, (2) learning services facilities used by learners, both printed materials and technologies such as mobile phones, and (c) tutor service facilities for assisting learners in their learning process (Miftah, 2012). According Miftah (2012) there are at least four benefits of mobile learning: First, increased learning interactions between learners with tutors/teachers, among fellow learners, and between learners with learning materials (Enhanced interactivity); Second, the flexibility of time and place; Third, reaching learners in wider coverage (potential to reach a global audience); Finally, the ease in updating the content as well as archivable capabilities. The utilization of various software and the Internet is very useful in learning since it periodically updates the materials and easily fits the demands of scientific progress.

Research Purposes

This study aimed to determine how organizations in Indonesia are positioned in the area of mobile learning and what should be done for Indonesia to become one of the pioneers in the field. Specifically, the purpose of the study was intended to explore the following:

• The types of mobile learning use in Indonesia

• Access to learning and training using mobile equipment
• The involvement of the content and software development
• The use of mobile devices for learning and professional development
• Indonesia's position globally in terms of mobile learning utilization

Methodology

This research used a descriptive analysis. The population of the study was drawn from organizations in Indonesia from various sectors such as education, agriculture, health, and other sectors. The data were collected through a survey. The participants who completed the survey comprised 62 respondents, with four respondents volunteering for in-depth interviews.

Data collection

The data were collected using a questionnaire consisting of 36 items obtained online, following up with a face to face interview. The research instrument was developed based on indicators related to the use of mobile learning in Indonesia. This study is the replication of a similar study conducted in Canada. The questionnaire was adapted from the previous research questionnaire by accommodating the circumstances existing in Indonesia (cross-cultural). The questionnaires were distributed online to the respondents who had been determined through a stratified random sampling. The respondents were then asked to be interviewed based on guidelines that had been developed to enrich the research results. The data obtained from questionnaires and interviews were analyzed descriptively. The use of quantitative analysis supported by qualitative analysis through questionnaires and interviews was conducted as a measure to support data triangulation.

Participants

The stratified sampling method is used to determine the sample of the population from throughout Indonesia. To collect the data from various sources, a stratified sampling was applied to the organizations of various sectors. Sample size was based on the proportion of the population. There are three variables or stratification criteria, namely: (1) industry, (2) the size or level of the organizations (small, medium, and large), and (3) the location of the organizations or companies. The data were collected from 62 institutions/organizations from various fields, and 4 participants were willing to be interviewed.

Of the 62 organizations from various sectors that completed the questionnaire, the majority of participants (69%) came from the education sector, 18% from agriculture-forestry-fishery services (7%), government, (5%), communications and construction (4%), field services (3%), other fields (3%). Referring to the number of employees in the institutions or organizations filling out the questionnaires, the data show that organizations with more than 500 employees represented 6% of the respondents, 56.5% employed between 100-499 employees, and 37% had less than 100 employees. Another aspect to be obtained from the respondents was the role of the respondents in their institution/organization. The roles of the respondents within each organization were quite varied, i.e. teachers/lecturers (37.1%), owners (22.6%), managers of Technology and Information (3.2%), excecutive managers (3.2%), researchers (3.2%), instructional designers (3.2%), chief information officers (1.6%), other (24.2%). This study also revealed the units or sections in which the respondent works. The data show that the respondents worked in various units, i.e. the training department (22.6%), academic (16.1%), information technology (17.7%),research units (11.3%), management units (8%), the design of the curriculum/instructional design units (3.2%), distance education, continuing education, human resources (3.2%), consultancy (1.6%), while 9.7% worked in other fields.

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