

Advantages and Disadvantages of m-Learning for University Students in Thailand

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Abstract: Purpose of this research was to study advantages and disadvantages of m-Learning. Sampling group chosen for this study consisted of 36 Ramkhamhaeng University students. Tool for data collection was a questionnaire. Data were analyzed by using frequency, percentage, mean (\bar{X}), Standard Deviation (S.D.), and content analysis. Results of this study were that most respondents were males and 20-25 years of age. They used mobile phone and WAP function to learn the following subjects: Thai and English languages, statistics, accounting principles, production management, geological sciences and Thailand geology. The strengths of m-Learning were as follows: Its application of the data received in their real life, the ability to distribute m-Learning in groups, and the interaction between learners and learners as well as learners and instructors. Moreover, the respondents found that the effect of m-Learning instructional system on the learners was at a high level. As for the disadvantages of m-Learning, it was found that there was no efficient evaluation of activity participation, and learners had to take their time and change their habits of how to use m-Learning. Besides, there was less information on how to use m-Learning.

Keywords: Advantages, Disadvantages, m-Learning

Introduction

Ramkhamhaeng University is an open university where everybody could attend without any entrance examination. Therefore, the university students come from every part of Thailand. The university was forced to utilize e-Learning in all university operations, for example, satellite learning and/or fibre optics as well as distance learning via internet to all 20 campuses all over the country (Computer Center of Ramkhamhaeng University, 2006). Nevertheless, due to restrictions of e-Learning system at present like network connectivity and transfer speed, there were limits in data channels and no relations between data and network, causing delay to the destination. The devices and peripherals needed to be taken with learners to anywhere they want. As for the contents, the quality seems static, causing learners bored with lessons after repeated times. Yet learners found convenience in learning both online and offline, as well as synchronous and asynchronous, but they needed a computer, a network, and a peripheral in order to learn via this approach. Moreover, learners also found convenience in accessing the database.

Due to the development of education from past till present and the restrictions of d-Learning (Distance Learning) as well as e-Learning (Electronics Learning), Ramkhamhaeng University initiated a project called "RU Mobile Learning" to improve educational potential with effectiveness (Computer Center of Ramkhamhaeng University, 2006) which uses m-Learning as an alternative to e-Learning. This resolves the restrictions of distance, time and location, as well as promote personal privacy which gains attraction from teenagers (Atteweel, 2003). Therefore, the researchers decided to study advantages and disadvantages of m-Learning to find out an approach for development in the future.

Objective of the Study

Objective of this research was to study advantages and disadvantages of m-Learning for university students in Thailand.

Outcomes of the Study

1) Instructors could apply the advantages of m-Learning in supporting d-Learning or e-Learning so that instruction becomes flexible delivery or blended learning with more effectiveness.

2) Learners could use the advantages and disadvantages in using m-Learning to plan their study according to their learning style with appropriateness to the nature of subjects, time and locations in the future.

Research Methodology

a) Sample

Sampling group was 36 Ramkhamhaeng University students at the first semester of the academic year 2006 as shown in Table 1.

Table 1: *Sampling Group Divided into Faculties and Fields*

Faculties	Fields	N	%
Business	Marketing	5	13.89%
Administration	General Administration	4	11.11%
Humanities	Mass Communication	6	16.67%
	English	2	5.56%
Education	Educational Technology	10	27.78%
	Thai	4	11.11%
Political Science	Political Science	5	13.89%

b) Instrument for Data Collection

Instrument for data collection was a semi-structured interview with open-ended question.

c) Data Collection

The research was conducted in the following steps:

- 1) Review the literature regarding the adoption of m-Learning for instruction.
- 2) Develop a open-ended questionnaire regarding Advantages and Disadvantages of m-Learning for University Students in Thailand.
- 3) Collect data and interview using the questionnaire developed.
- 4) Analyze the data and conclude the results.

d) Analysis of Data

Data were analyzed by using content analysis.

Results of the Study

The results of the study were as follows:

Phase I: General Status of Respondents

From the sampling group of 36 respondents, 22 (66%) of them were male undergraduate students, 14 (40%) were female, 7 (20%) of them were less than 20 of age, 23 (62.9%) of them were 20-25 of age, 6 (17.1%) of them were 26-30 of age. All of them used m-Learning and had a mobile phone.

Phase II: Advantages and Disadvantages of m-Learning.

From the study of the responses from Ramkhamhaeng University students, the results were concluded using Mind Mapping as shown in Figure 1:

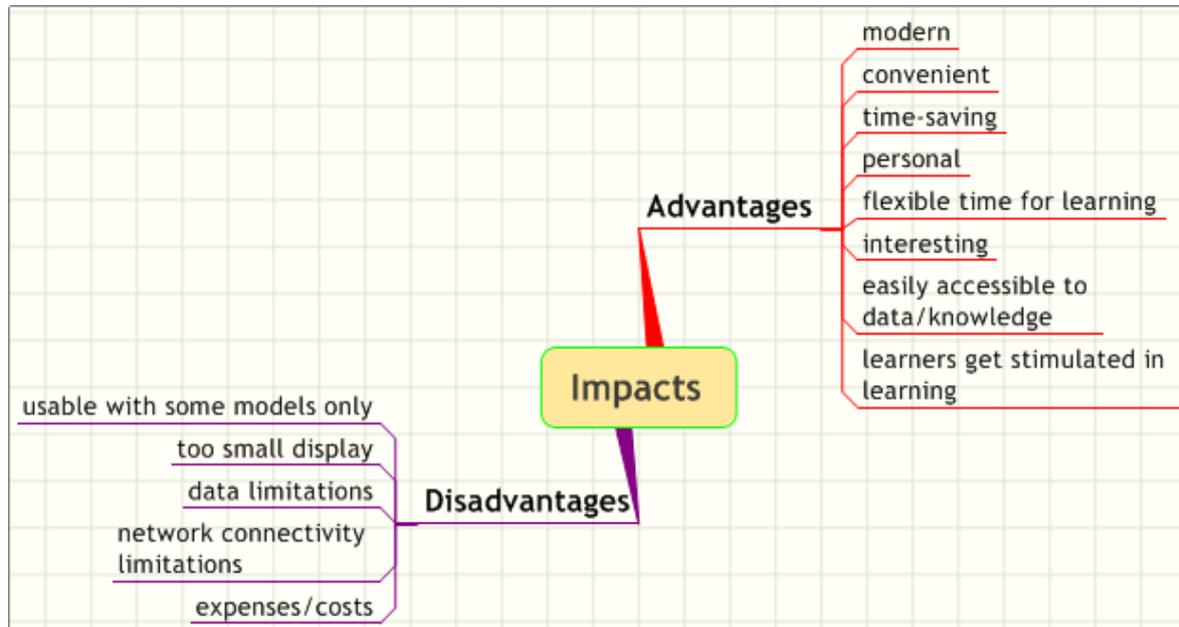


Figure 1: *Advantages and Disadvantages of m-Learning for Ramkhamhaeng University Students in Thailand*

From Figure 1, advantages and disadvantages of m-Learning for university students in Thailand would be as follows:

1) Advantages

Instruction through mobile devices is related to the following ideas: modern, convenient, time-saving, personal, flexible time for learning, interesting, and easily accessible to the data/knowledge. Moreover, since learners are still young of age and curious of technology, they get stimulated in learning and have fun with learning.

2) Disadvantages

It can be usable with some models only. The display is too small, making difficulties in viewing data. There are also limitations in network connectivity since Ramkhamhaeng University installed the connectivity with only one telecommunication provider D-TAC, making users of other providers could not use it. Besides, the expense for this service costs a learner 399 baht per month, making learners unwilling to pay for the service.

Discussion

The result of the study would like to discuss as follows:

1) According to the research of Sunshil K. Shamar and Fred L. Kitchens entitled 'Web Service Architecture for m-Learning', there will be a dramatic change in educational environment when many educational institutions proposed to use mobile phones in classroom due to economic impacts and other reasons both from instructors and learners. Process in m-Learning will change the roles of instructors, education, contents and activities in classroom. However, m-Learning needs supports from different structures (Sushil K. Sharma & Fred L. Kitchens, Miller, 2003). The National University of Singapore (NUS) has applied m-Learning in engineering classes with PID Control Simulation System which turned to be

satisfactory. Since m-Learning needs to be done in compatibility with software standards, this study provided impacts, both advantages and disadvantages of using and providing structures of the server for m-Learning. The instruction via wireless devices is new to Thailand; therefore, a lot of development needs to be done.

2) In the future, 3G technology or Third Generation which is the era of wireless world full of perfection in rapid data transfer via mobile phone, in other words, the era of multimedia, the instruction through wireless devices could be done with more effectiveness. Figure 2 shows a businessperson using 3G technology to search for data he needs although he is in the subway (Christian Hardless, Johan Lundin & Urban Nuldén, 2001)



Figure 2: *A businessperson Using m-Learning to Find the Data Using 3G System.*

3) Besides, it was found that m-Learning was a part of Blended Learning in that m-Learning makes use of electronic devices to support learner's accessibility to the learning content with effectiveness and efficiency due to limitations of location, time, communication method between learner and learner, between instructor and learner, and contents to be presented.

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