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## Implications of mobile application in m-learning: Challenges & Opportunity

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### Abstract:

Mobiles applications aggressively becoming a part of our daily life since its capability in portable computing it spread in everyone's hand, trend is not only limited to basic functions like call, chat or text but also in for various mercantile services as m-Commerce. Mobile banking, shopping, and social networking are examples of few.

Education Industry has been observing fastest growth by digitizing its various academic function through enterprise ICT applications like Educational ERPs. Many other extension like virtual class room, video conferencing, m-learning adding more value to teaching-learning process.

There is need to study the challenges & opportunity of this current trends of portable application with respect to e-learning as well as its significance on stakeholders like student, faculty in teaching learning process.

Descriptive research methodology is considered for proposed study, random sampling technique will be imposed for choosing the right sample, and data interpretation will be carried out using statistical tool like SPSS, to derive at conclusion & findings.

**Keywords:** mobile application, m-Commerce, enterprise ICT application, Educational ERP, m-Learning

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### 1. Introduction

According to (Daniels, 2002)ICTs have become within a very short time, one of the basic building blocks of modern society. Many countries now regard understanding ICT and mastering the basic skills and concepts of ICT as part of the core of education, alongside reading, writing and numeracy. However, there appears to be a misconception that ICTs generally refers to 'computers and computing related activities'. Modern era of ICT grown from computers to tablets & still evolving as its current extension as Pocket devices or smart phones.

M-learning is extension of e-learning through hand held devices, with features of easiness, cheaper context switching between the application, on demand services, quality

and accessibility of content. User of the application provided with ease of use, this increases the flexibility of delivery of education so that learners can access knowledge anytime and from anywhere. It can influence the way students are taught and how they learn as now the processes are learner driven and not by teachers. This in turn would better prepare the learners for lifelong learning as well as to improve the quality of learning. In concert with geographical flexibility, technology-facilitated educational applications also remove many of the temporal constraints that face learners with special needs. (Moore &Kearsley, 1996). Students are starting to appreciate the capability to undertake education anywhere, anytime and anyplace.

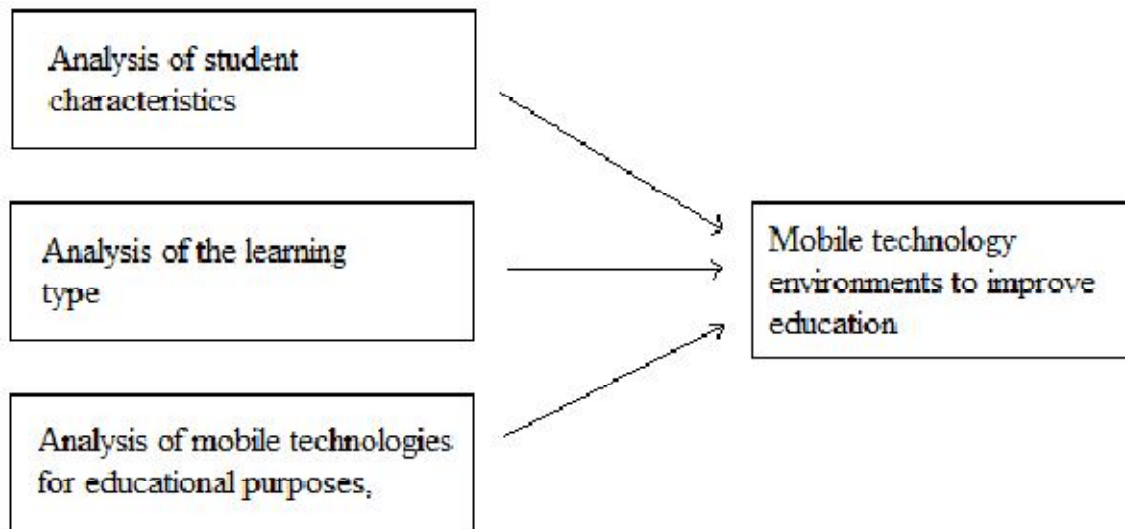


Figure 1 .Educational Development Components (Dickersen & Browning, 2009)

### 1.1m-Learning the new era of e-Learning

The development of m-learning as a new strategy foreducation has implications for the way students and

Teachers in educational institutions interact. Ferry, (2009) describes that modern mobile phones can be used to help students to access web based contents, remix it, share it,collaborate with others and create media rich deliverable for the classroom teachers as well as global audience

### 1.2 Mobile learning applications

(Rana, June 2014)Mobile devices integrate a series of features used invarious learning environments. In some mobile learning applications currently available, mobile features are being utilized for various educational practices include the use of Short Message Services (SMS), GPS, camera, browsing, downloading, Bluetooth, Wi-Fi, voice calls and gaming. Browsing with cell phones is one convenient way for students to surf online. Most of the modern mobile phones are incorporated with browsing applications such as Opera Mini,

Internet Explorer, Mozilla fire fox, Opera and Google chrome.

### 2. Purpose of the Study

2.1 To study the perception towards m-Learning i.e. learning through mobile

Applications and its impact on teaching learning process.

2.2 To study the challenges to adoptm-learning and how it be helpful for getting

Desirable outcome of teaching & learning process

### 3. Research Methodology

#### 3.1 Introduction

This chapter focuses on methods used to collect and analyze data in this research. With a view of m-learning to enhance the effectiveness of continuous quality improvement academics in an Education institutions. This research used a standard questionnaire based on perception, challenges face by the

Reaction of student and Teacher. These levels are the indicators of effectiveness of m-Learning. Primary Data is collected from the students as well as Teacher from different education background. For analyzing the data and significant tests the statistical package for social sciences (SPSS) used.

**3.2 Measurement scale:** The questionnaire consisted of a series of statements, where the respondents needed to provide answers in the form of agreement or disagreement to express their attitude towards the m-Learning. A Likert scale was used so that the respondent could select a numerical score ranging from 1 to 5 for each statement to indicate the degree of agreement or otherwise. Where 1, 2, 3, 4 and 5 denote “Strongly agree”, “Agree”, “Neutral”, “Disagree”, and “Strongly Disagree” respectively.

**4. Scope of the study**

**5. Analysis of Data**

Hypothesis 1:

H<sub>0</sub>: Usage of cell phone device do not differ significantly between male and female

H<sub>1</sub>: Usage of cell phone device differ significantly between male and female

This study proposes the following hypotheses:

Hypothesis 1:

H<sub>0</sub>: Usage of cell phone device do not differ significantly between male and female

H<sub>1</sub>: Usage of cell phone device differ significantly between male and female

Hypothesis 2:

H<sub>0</sub>: Acceptance of m-Learning does not differ significantly between male and female

H<sub>1</sub>: Acceptance of m-Learning differ significantly between male and female

Hypothesis 3:

H<sub>0</sub>: Usage of cell phone device do not differ significantly between Education Background

H<sub>1</sub>: Usage of cell phone device differ significantly between Education Background

Hypothesis 4:

H<sub>0</sub>: Acceptance of m-Learning does not differ significantly between Education Background

H<sub>1</sub>: Acceptance of m-Learning differ significantly between Education Background

**One-Sample Test**

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Gender of Respondent	29.359	79	.000	1.138	1.06	1.21

**One-Sample Test**

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Gender of Respondent	29.359	79	.000	1.138	1.06	1.21
Usage of Cell Phone	33.077	79	.000	1.328	1.25	1.41

Since sig=0.000 < 0.05 we reject null hypothesis hence Usage of cell phone device differ significantly between male and female.

Hypothesis 2:

H<sub>0</sub>: Acceptance of m-Learning does not differ significantly between male and female

H<sub>1</sub>: Acceptance of m-Learning differ significantly between male and female

**One-Sample Test**

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Gender of Respondent	29.359	79	.000	1.138	1.06	1.21
Acceptance of M-Learning	62.982	79	.000	1.062	1.03	1.10

Since sig=0.000 < 0.05 we reject null hypothesis hence Acceptance of m-Learning differ significantly between male and female

Hypothesis 3:

H<sub>0</sub>: Usage of cell phone device do not differ significantly between Education Background

H<sub>1</sub>: Usage of cell phone device differ significantly between Education Background

**One-Sample Test**

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Educational Background	25.157	79	.000	1.350	1.24	1.46
Usage of Cell Phone	33.077	79	.000	1.328	1.25	1.41

Since sig=0.000 < 0.05 we reject null hypothesis hence Usage of cell phone device differ Significantly between Education Background

Hypothesis 4:

H<sub>0</sub>: Acceptance of m-Learning does not differ significantly between Education Background

H<sub>1</sub>: Acceptance of m-Learning differ significantly between Education Background

**One-Sample Test**

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
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Educational Background	25.157	79	.000	1.350	1.24	1.46
Acceptance of M-Learning	62.982	79	.000	1.062	1.03	1.10

Since sig=0.000 < 0.05 we reject null hypothesis hence Acceptance of m-Learning differ Significantly between Education Background

**5. Discussion Conclusion**

M-learning is a form of learning which leverages on the mobile device's portability and affordability (Yamaguchi 2005). M-

learning allows learners to access computer-based learning anytime, anywhere. It overcomes poor internet connectivity, frequent power disruptions and low PC support and availability, especially in remote

and rural areas and is strengthened by the vigor and talent of the mobile phone networks.

(Yusri, 2014)

Before designing and implementing a m-learning system, it is important to ascertain the perception of future users towards m-learning since their perception will influence their willingness and readiness to use the system. This research investigated the perception of students as well as teachers of

mobile learning to ascertain their readiness to engage in m-learning for education. In this study research consider the constructs as perceptions, attitude towards m-learning as well as challenges face by the end user may be technical or financial. The issues like as low band width or low network coverage in the urban and rural area Reseracher proposed for the furture study which if may be address correctlay to realise the potential of m-learning.

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