R.N.I. No.: PUNENG/2014/59759 ISSN: 2348-9936

REVIEW OF THE IMPACT OF E-LEARNING APPS ON COLLEGE-GOING STUDENTS

Dr. Madhuri P. Kamble*

ABSTRACT

The objective of this present paper is to investigate the effectiveness of e-learning and e learning apps in the higher education in India. It also evaluates the role of e-learning apps as an educating tool for the students with reference to their studies. A structured questionnaire was distributed online among students pursuing higher education. The collected data was analyzed and presented in tabular form. The present research revealed that role of e-learning apps is playing an immense role in students learning. The results indicated that the e- learning apps can be very useful in the higher education environment. Furthermore, the results showed that the students had adequate knowledge and awareness to use latest e-learning technology and the Internet in their educational environment. The present study is very useful for the policy makers to develop course curriculum which may include e- learning apps as substitute for classes. The findings emphasize the popularity of e- learning apps among students of higher education in India. It also reveals that e- learning apps can be used effectively in the higher education.

Keywords: *E-education, E-learning, Mobile applications*

Technology has taken over our entire life and education is no exception to it, technological advancement has great effect on how learning is imparted and also consumed. E-learning can be termed as a network enabled transfer of skills and knowledge. While teaching can be based in or out of the classrooms, the use of computers and the Internet forms the major component of E-learning. The e-Learning market in India was worth 247 million US dollars, covering around 1.6 million users in year 2016. It is expected witness an 8X growth to reach USD1.96 billion and the current user base will grow at 44 percent CAGR to 9.6 million users by 2021. Just as technology has become an intrinsic part of our lives, it has penetrated all areas of teaching and learning at the HE level. From radio, films and television, we have entered the computer and the internet age. Computers and their varied and ever changing applications are becoming part of the educational scene today. Computers and internet have brought in an astonishing change in the lives of most people across the world.

Communications, messages, visuals, photographs can be exchanged instantaneously from one part of the world to any other. Gupta (2008) moved from the industrial age to the networked age. We have moved from the agricultural and industrial revolutions to the information revolution. Unlike chalk and board method e-learning makes study easier, fun and very effective. The eLearning platforms i.e., Apps or the websites evaluate the learning pace of the students, which enable them to have self-paced, personalized content which they can access in their own comfort, as and when they require.

An internet connection is required to operate the internet and create a new content McQuiggan, McQuiggan, Sabourin and Kosturko (2015). As the rapid development of Information Technology, ERP has not only developed in Education sector Its also developed in various enterprises and organization supporting and managing business and decision making. In the case of application-oriental talent education, it is necessary to have a great

* Assistant Professor, Dept. of Commerce, NCRD's Sterling College of Arts, Commerce & Science

understanding of ERP's content, meaning, and strategy. According to (Hahn, 2014) mobile application is continuously growing technology and also its use in the academic sector. ERP (Gartner, 2018) is prestigious as a powerful weapon to grab the competitive advantages and achieve the strategic goals of Enterprises. ERP has taught should focus much more attention on restructuring the Education's system or management and supporting the strategy development. Recent years, many academic documents about ERP modules reform had been published. However, few papers of ERP modules reform, especially for application-oriented talents education. In spite of pursuit of the mobile device is a well-used document in the fundamental and high level of education system. In current years, various academic documents about ERP educational program reform had been published. However, the research of ERP (Robert, 2015) in an educational program which is especially for application- the oriental high level of education through mobile in the institute. This paper is practical research did through teaching on ERP to MBA for a long time. Though this considers that ERP teaching should improve and trend in the higher level of education in the current scenario and support the strategy development.

E-learning (Portio research, 2018) is also helping to positively impact individual development plans within the education sector, to motivate and support employees to achieve their short and longer-term career goals. Within an e-learning portal, training paths can be developed that give clear insight into the required learning that has to be undertaken before the progression can happen. This helps the individual, teacher or educator see clearly the expectations and requirements of them to continue their progression. It also helps the manager of the individual to track progress and make recommendations based on learning still required for the person to take the next step in their career. The learning paths can be agreed at the beginning of a term, year or contract to ensure that all parties involved work together to achieve the end goal.

M-learning (UNESCO, 2013) is considered as the next form of e-learning using mobile technologies to enable learners to conduct their learning process anywhere and anytime at their convenience. However, the main difference between e-learning and m-learning is set in the add-on capabilities and limitations in the evolution aspects (Lavoie, 2007). Traditional e-learning system have two main types of services that are pedagogical services such as learning materials and information services such as admission, notification and registration related. The use of m-learning is growing rapidly in the higher education environment because of its dynamic features. Mobile technologies potentially create a wide variety of ranges for users that differ significantly from desktop and laptop technologies. Some expected benefits of using the mobile device such as mobility which is the primary component of m-learning technology

Objectives of the study

The objective of the present paper is to investigate the effectiveness of mobile learning apps in higher education in Navi Mumbai region. It also evaluates the role of mobile learning apps in students' life.

Method

The survey method was used for the study. A structured questionnaire was prepared and distributed online among students pursuing higher education in Navi Mumbai.

Sample

Students pursuing higher education in Navi Mumbai selected as a sample for research study.

Measures

A structured questionnaire of was prepared for data collection.

Results and Discussions

The reliability coefficient of questionnaire is found to be 0.89 (Cronbach's alpha). Regression analysis was applied for data analysis.

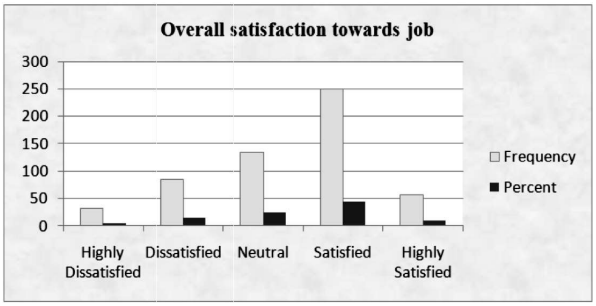
Following is the result analysis of job satisfaction based on Organizational factors

Table- 1: Frequency Distribution Analysis

Overall satisfaction towards usage of mobile App				
	Frequency	%	Valid %	Cumulative %
Highly Dissatisfied	31	5.6%	5.6%	5.6%
Dissatisfied	84	15.1%	15.1%	20.7%
Neutral	135	24.3%	24.3%	45.0%
Satisfied	250	45.0%	45.0%	89.9%
Highly Satisfied	56	10.1%	10.1%	100.0%
Total	556	100.0%	100.0%	

Source: Primary Data

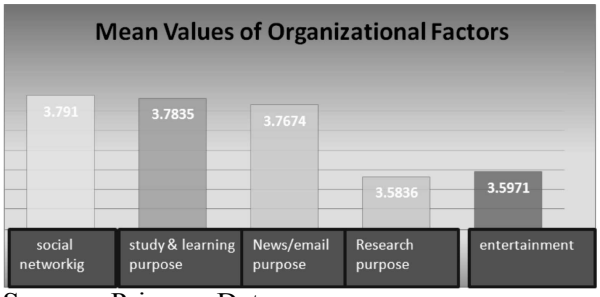
Graph 1: Frequency distribution



Source: Primary Data

Interpretation: Table 1 and Graph 1 shows the overall satisfaction of students towards the mobile applications. It was found that 45 percent of the total students surveyed during current study were found to be satisfied towards their utility of mobile applications, followed by the students who were found to be neutral means neither satisfied nor dissatisfied .Hence, it can be said that the majority of the students are satisfied with the usage of mobile applications

Graph- 2: Mean values (Purpose of Mobile apps)



Source: Primary Data

Interpretation: Graph 2 shows the mean values of the organizational factors. The highest mean value was found to be 3.79 for the variable 'Social networking, followed by the study and learning purpose and news and email purpose. While the least mean value was found to be 3.58 of the variable research purpose followed by entertainment industry.

Regression Analysis

Multiple regression analysis is used to identify the influence of the factors and the association between the independent variables and the dependent variable. Researcher has measured the impact of mobile learning apps on the utility or usage of students pursuing higher education. Researcher has used the following regression equation:

$$X = \alpha + \beta_1 Y_1 + \beta_2 Y_2 + \beta_3 Y_3 + \beta_4 Y_4 + \beta_5 Y_5 + \xi$$

Where; α, is the constant term, $\beta_1, \beta_2, \beta_3, \beta_4$, and β_5, is the value of regression coefficients for the independent variables, ξ denotes the error term, X is the dependent variable i.e. overall satisfaction and Y_1, Y_2, Y_3, Y_4, and Y_5 are the independent variables. The equation is explained as follows:

Overall satisfaction towards apps = α+ β_1 Social networking + β_2 Study and learning purpose+ β_3 News/Email+ β_4. Research purpose + β_5. Entertainment +ξ

The regression model summary given in table 2 shows that the R value as 0.375, it shows that there is a positive but low degree of correlation between mobile learning apps and the overall satisfaction students towards its utility. The value of R square was found to be 0.141, which indicates that social networking explain only 14 percent of the variation in the overall satisfaction of students usage for app. While rest of the 86 percent of the variation is caused due to other factors.

As per results of one-way Anova, the f-value was found to be 17.998, at 99 percent confidence level. Hence, it can be said that the dependent variable and independent variables are significantly related and the regression model emerged between dependent variable i.e. overall satisfaction and the independent variables i.e. social networking, study and learning purpose, news/email, research purpose

and entertainment purpose

Hence, it can be said that the overall utility of mobile apps for social networking is much higher than being used for research purpose

The following Table 2 presents the aggregate results of above analysis:

Table 2: Regression Analysis (Organizational factors & Job)

Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.375[a]	.141	.133	.96671

a. Predictors: (Constant), social networking, study and learning purpose,news/email, research purpose and entertainment purpose

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	84.099	5	16.820	17.998	.000[b]
	Residual	513.988	550	.935		
	Total	598.086	555			

a. Dependent Variable: satisfaction towards current job

b. Predictors: (Constant), social networking, study and learning purpose, news/email, research purpose and entertainment purpose

Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.607	.254		6.334	.000
Social networking	.262	.081	.191	3.240	.001
Study and learning	.226	.107	.144	2.111	.035
News/Email	.516	.100	.394	5.178	.000
Research purpose	.205	.075	.201	2.752	.006
Entertainment	.120	.072	.106	1.666	.096

a. Dependent Variable: satisfaction towards mobile app

(Source: Primary Data)

Thus, overall it can be said that mobile apps plays a crucial role in the students dependency on various factors. These apps made the learning process very smoothly and effectively. A large number of apps are freely available in the market which can be downloaded and used according to the requirement of the learner. We asked people about integration of mobile learning apps in the higher education and most of the respondents (87.86%) feel that mobile learning apps can make a great impact on higher education whereas some people (12.14%) are not agree with them

Conclusion

The findings represented the opinions of different levels of students from different universities from different parts of India. The results indicated that the mobile learning apps can be very useful in the higher education environment. Furthermore, the results showed that thestudents had adequate

knowledge and awareness to use mobile technology and the Internet in their educational environment

References

Beardwell, J. & Claydon, T. (2010). *HRM a contemporary approach*. Harlow: FT Prentice Hall.

Gartner (2014). A Review of Current Studies of Mobile Learning. *Journal of Educational Technology & Online Learning*, 1 (1), 14-27.

Gupta , A. (2008). Education in the 21st Century : Looking Beyond University Shipra Publications, Delhi.

Hahn, J. (2014). Undergraduate research support with optical character recognition apps. *Reference Services Review*, 42(2), 336-350.

Hidayat, A. & Utomo, G. (2014). Open source based m-learning application for supporting distance learning. *Telkomnika*, 12 (3), 657-66

McQuiggan, S., McQuiggan, J., Kosturko, L. & Sabourin, J. (2015). *Mobile learning: A handbook for developers, editors and learners*. North Caroline: SAS Institute Inc.

Portio Research (2013). Mobile Applications Futures 2013-2017. http://www.portioresearch.com/en/mobile-industry-reports/mobile-industry-researchreports/mobile-applications-futures-2013-2017

Robert (2015). ERP Systems Functionalities in Higher Education. *Procedia Computer Science,* 65, 385 – 39.

UNESCO (2013). A Review of Current Studies of Mobile Learning. *Journal of Educational Technology & Online Learning*, 1(1), 14-27.