Aligning E-Learning and Knowledge Maturity for Institutional Success: A Functional Approach

Nazia Ahmad[1]* Dr. Sheetal Choudhary[2]

Abstract – E-Learning is described as a method of delivering information through a web-based platform via the internet. Many organizations namely training centers, private establishments and universities have fostered e-learning as a mode of teaching to complement the traditional class-room model or as a collaborative device. With the improvement of ICT infrastructure in Mauritius, technology is rapidly enhancing online learning to create a digital island. This has led to a dramatic increase in the use of e-learning platforms to deliver education in the nation. According to the statistics in the National ICT Strategic plan (NICTSP) of 2007-2011, Mauritius has an Internet penetration ratio of 29.6% with 380,000 internet users. Moreover, based on the Global Information Technology Report of 2008-2009, Mauritius is ranked 51st on the network readiness index.

Keywords –Aligning E-Learning, Maturity

- x -

INTRODUCTION

Based on the Tertiary Education 2009 report (June 2009), it very well may be noted that 12% of tertiary students representing 10,141 students, examine on Distance Education (DE). Investment in e-learning by educational foundations has developed rapidly, driven in part by the expectation that increased use of technology, will improve the quality and flexibility of learning. Hence, the e-learning technologies can improve the distant mode of access to education and the training capacity. Web-based learning also presents panoply of advantages which can help make Mauritius a knowledge center. The e-learning initiative at the University of Mauritius dates back to 2001 when the Virtual Center for Innovative Learning Technologies was established to promote the use of ICT in teaching and learning and to modernize the distance education concept through the arrangement of high caliber online learning courses.

In 2004, the main online program of studies targeting educators was launched. It was a Masters program in Computer-Mediated Communication and Pedagogies, and as date there are currently four online programs in the field of ICTs and Education Technologies. The e-learning initiative has therefore experienced ceaseless development both for off-campus courses, and the delivery of stand-alone online modules inside the on-campus courses.

The e-learning initiative at the University of Mauritius has focused on three key aspects of quality assurance namely teaching and learning, i.e. educational modules and content development including student support), technology and infrastructure, and approach making (Santally 2013). In 2015, the e-learning initiative furthered its expansion to reach out the region through the signature of a memorandum of understanding with the Global e-Schools and Communities Initiative (GESCI) to offer the online African Leadership in ICT program to the African region. It has also partnered with the Commonwealth of Learning to keep running as from 2016, a number of online stand-alone modules to participants from the Commonwealth region in the context of the COL's Virtual University for the Small States of the Commonwealth (VUSSC) program.

While all the online programs of the University are subject to the same rules and regulations as traditional courses, as well as the thorough processes of quality assurance that are in place, there is a developing need to align the initiative with international benchmark and practices in the areas of online education. The aim of the examination presented in this paper is to use E-learning Maturity Model (eMM) v2.3 to assist the organization in benchmarking its current e-learning capabilities. The eMM is a quality framework designed to help instructional leaders to evaluate and improve e-learning maturity of an organization.The model measures the capability, to analyze and improve the organizational maturity. Foundations that have greater organization maturity in e-learning are described as having greater capability consequently; ensuring that the e-learning design meets the need of the staff, students and the establishment.

Nazia Ahmad[1]* Dr. Sheetal Choudhary[2]

ADOPTION OF E-LEARNING IN INSTRUCTION

E-learning has become more and more widespread across Asia. The continent's rise in web users and therefore the revolutionary changes that have happened in education have created really fertile surroundings for e learning to grow. during this exclusive article, Shivaji Chatterjee, Business Head, Hughes Communications India, Ltd (HCIL) explores e-learning in India, its drivers and its blessings - and therefore the vital role that satellite broadband is taking part in its delivery. Albert Einstein once aforementioned, "Education is what remains once one has forgotten what one has learned in class." whereas Einstein's words could are supposed in mood, they competently mirror the actual fact that effective education is, indeed, constant and continually evolving. In fact, the face of education has knowledgeable a transformation over the decades. Once characterized by the normal room model, education these days has metamorphosed into learning that's instant, online, self-driven and on the go. The journey of education in India, too, has been dotted with numberless milestones-most recently, e-learning.

Indian government is pushing for reforms

The Government of Republic of India (GoI) could be a sturdy supporter of e- learning and therefore the Department of physics and knowledge Technology (Deity) has been actively developing tools and technologies to push it. Specifically, god has supported e-learning-focused R&D comes at varied educational academic institutes throughout Republic of India. These embody content development, R&D technology initiatives; human resource development comes, and school coaching initiatives to enhance acquirement through distance education.

Exploring the scope in Republic of India

The fast increase in web property within the previous couple of years has been a crucial catalyst for the expansion of e-learning in Republic of India. A sturdy web system, with a large number of native and world players, can facilitate on-line learning create additional inroads. The story isn"t restricted to varsities alone. Indian firms area unit adopting e -learning platforms at a fast pace as continuous worker learning has become a strategic necessity. Leading firm"s area unit adopting e-learning to support each short term courses and qualification-focused learning objectives among their workers With the amount of Indian web users expected to succeed in 250 million this year, rivaling the US and second solely to China, India's potential as a large marketplace for e-learning is gigantic.

To boot, an oversized variety of recent user's area unit accesses the net for the primary time from their smart phones that is a perfect, individualized and commerce-enabled platform for e- learning adoption. Fuelling this growth are going to be India's education system,

already one in all the biggest within the world with a network of over a million colleges and eighteen,000 instruction establishments. Over 1/2 the country's one.2 billion population falls within the target marketplace for education and connected services. In the close to future, universities can see additional students accessing their work from outside the standard field and room. In steps with a Gregorian calendar month 2014 report from e-learning solutions supplier Docebo, the worldwide marketplace for self-paced e-learning reached $35.6 billion in 2011. The five-year compound annual rate of growth is calculable to be virtually seven.6 per cent thus revenues ought to reach $51.5 billion by 2016. Whereas the combination rate of growth is seven.6 per cent, many world regions have considerably higher growth rates. The very best rate of growth is in Asia at seventeen.3 per cent, followed by Japanese Europe, Africa, and geographical region at sixteen.9 per cent, 15.2 per cent, and 14.6 per cent, severally. E-learning brings distinctive blessings, the foremost outstanding being the power for on-line instructors to supply individualized attention to any or all students. This is often particularly essential for those students United Nations agency cannot afford non-public face-to-face tutoring sessions or United Nations agency board rural areas wherever such assistance is not offered.

In a very standard created, this is often solely attainable once an extremely arch tutor offers matched tutorials to a student. However, considering that almost all of the establishments have a classroom-based setup, such personalized attention becomes terribly troublesome. Another vital advantage is that individuals living in smaller cities and cities will get access to the simplest attainable learning resources from across the planet, at a really cheap value. This helps produce a level-playing field. The developing wave of reconciling learning also will facilitate students with varied levels of intellectual capabilities to harvest the simplest from the training method at their own pace, while not feeling omitted. Online tutoring will certainly create a threat to traditional strategies of teaching-while on-line learning will ne"er cross-check fully replacement colleges as colleges supply far more than simply tutorial opportunities inside their campuses. However, non-public tuition centres that area unit generally managed by individual academics can have to be compelled to take a review at their business model and adopt digital learning aids to sharpen their offerings.

Aspects of e-learning

Technology has enriched the training expertise for college students. Though the inspiration of education remains reading, writing, and arithmetic, there's 18 little question that today's students will want a broader education so as to be effective contributors within the future.

LITERATURE REVIEW

Ahmad Al-adwan et al., (2012) stated that teachers and students must possess specific abilities to successfully use various e-Learning devices. Students may demonstrate their learning efforts via different types of technology, for example, text, video or audio devices. Teachers often need to restructure their courses to be successfully incorporate e-Learning (Pirani, 2004). These activities represent challenges that all gatherings must overcome to succeed in e-Learning. An investigation conducted on "issues and challenges in implementing e-Learning in malaysia" revealed major problems in implementation of e-Learning as Lack of awareness, Low Adoption Rate, Computer Literacy and Digital Divide, Lack of Quality E-Content, Difficulty in Engaging Learners Online and Improving Accessibility and Connectivity.

India faces a number of obstacles to the spread of digital learning initiatives. In the first place, the affordability of basic technology is an issue. Hardware, software, and expertise are all necessary before the potential of digital technology can be exploited; although, given the trends in technology development and the role of India's possess innovative industry, the problem of expense is perhaps not as significant as it may otherwise be. Secondly, on a purely practical front, the great regional disparities in development make it hard to transport the necessary equipment and knowledge to convey e-learning facilities to the population at large. For example, rural areas remain troublesome of access, and obstinately resistant to change.

Thirdly, Indian social structure may be an impediment to the spread of digital learning. From multiple points of view, attitudes to education in India reflect a traditional society, where knowledge and education were the prerogative, more or less exclusively, of the upper classes. Despite 58 concerted efforts by Indian leaders to extend education to the population at large, progress remains questionable. The higher education system, in particular, is widely considered one of India's weak focuses, and the traditionally educated classes have sent their children to private institutes to acquire training or, where financial resources allow, contemplating abroad. Fourthly, India's complex political system since Independence has proven to be vulnerable to the problems of mismanagement and debasement; lack of interest and initiative often translates into a failure of political will where education, including digital learning, is concerned.

Sanna Juutinen, (2010), et al., the problems of emotional interaction are in this manner, in a key position when we consider the emotional obstacles of e-learning (Picard and Klein, 2002; Klein, 2002; Norman 2004; Oatley, 2004; Boehner, 2007). Empirical research also suggests that emotions have an important role in e-learning. The research has demonstrated that e-learning systems can make the users frustrated, confused and reduce their interest in learning (Shneiderman, Alavi et al., 1995; Hara and Kling, 2000; Zhang, Zhao et al., 2004; Drennan, Kennedy et al., 2005, Juutinen and Saariluoma, 2006,). There are many motivations from an educational perspective, for paying attention to emotions in e-learning. Right off the bat, the importance of emotions in education has been convincingly demonstrated in traditional classroom teaching (Skinner et al., 1993; Meyer, 2002; Weare, 2004; Pegler et al., 2004; Hannula, 2006; Meyer, 2006). Secondly, failures and frustration in utilizing computers is commonplace for almost anyone who has operated a computer (Branco, Firth et al., 2005). This is reflected in technophobia where the existence of emotional problems has been empirically proven (Brosnan, 1998).

Kakoty Sangeeta (2014) found that, in this fastest developing age of e-Learning technology, learner needs, demands and preferences are increasing and changing step by step. Learner choices currently become the primary requirement for the development of the whole e-learning scenario. A learner centric e-Learning system with decision making feature for learner in their learn time can be the main answer for meet the demand and requirement of learner. Hassan M. Selim, (2005), stated that when a higher education establishment attempts to adopt e-Learning based courses the accompanying factors ought to be critically considered:

- Instructors ought to have sufficient figuring abilities and enthusiasm so as to motivate the students.

- Construction of faculty development plans at both the short and long haul to enhance and improve their technology related aptitudes and interactive learning different methods.

- Development of student orientation programs to introduce them to the different teaching and learning styles utilizing e-learning.

- Enhancement of students" registering literacy and e-learning applications abilities (e-mail, presentation, and creative reasoning)

- Construction of an effective information technology infrastructure so as to facilitate fast Web access, email, course management system, and other e-learning services.

- Establishment of e-learning bolster services.

Shaikh Farhat Fatma, (2013), found that majority of population in India is staying in rural areas and

Nazia Ahmad[1]* **Dr. Sheetal Choudhary**[2]

making them aware about the concept of e-Learning is a major challenge. Lack of infrastructure in terms of connectivity, availability of Internet, etc. is another issue. Andersson Annika, (2008), observed the major challenges to be Support, Flexibility, Teaching and Learning Activities, Access, Academic confidence, Localization and Attitudes. These factors concern how the individual student's previous academic qualifications 60 could become a challenge on the off chance that it isn't in tune with course requirements and the help provided. In preparing a course this ought to be taken into account either by changing the requirements or by giving preparatory courses to the students.

Ghulam Muhammad Kundi et al., (2010), stated that one of the challenges facing instructional designers is in creating e-Learning systems, which take account of individual differences, for example, cognitive learning style. Research demonstrates that teachers don't discover e-Learning environments matching with their teaching styles (Mehra and Mital, 2007) however; web-based learning is worldwide accessible, low in maintenance, secure, platform-independent, and always current and can accommodate various learning styles.

- Alexander and McKenzie (2018) reported that e-Learning would fail for the accompanying reasons:

- Being overly ambitious in terms of desired outcomes for the budget and time available.

- Utilizing particular information technologies for their own sake, without sufficient regard for appropriate learning design.

- No change in the assessment of learning to suit the changed learning outcomes.

- Commencing software development without adequate planning.

- Failure to prepare students for participation in learning experiences, for example, working in gatherings.

Failure to obtain copyright clearance In the e-Learning development and use practices, "the organizational context of ICT-integration is a major impediment (Sasseville, 2004)." Similarly, the perceptions, development and use of e-Learning vary with the change in 61 organizational context (Cawson, 2005). Similarly, the perceptions, development and use of e-Learning vary with the change in organizational context (Cawson, 2005).

Tania Broadley, (2008), in its publication "Implementation of e-Learning: A Case Study of Three Schools" found that, There were challenges associated with the implementation of e-Learning by teachers into their classroom, for example, expertise development, changes in their role and the pedagogies they employ. The case considers schools were pilot schools breaking new ground so as to test a new portal technology. Discoveries indicated that successful implementation of the e-Learning environment was dependent on the four key factors of ICT infrastructure, ICT leadership, backing and training initiatives and the teachers' ICT capacity.

Palak and Walls (2009) found that teachers mainly use technology to help their existing teaching approaches and rarely to foster student-centered learning. The contextual factors influence the e-Learning theories and practices, which must be understood by the developers and users. The context is multifaceted which includes network, culture and technology have become critical when understanding and implementing ICTs in education.

Dr. Soumitra Chandra (2014) stated that nothing can replace traditional classroom teaching; however e-learning complements the process and can help reach out to the masses. The biggest advantage of e-Learning lies in its ability to cover distances. For an organization that is spread across multiple locations, traditional training becomes a constraint. All trainees need to come to a classroom to get trained. The trainee's learning pace isn't addressed as all trainees are treated as having equal abilities and there is little flexibility in terms of timing and completion of the course. e-Learning is self-paced, and learning is done at the learner's pace. The content can be repeated until it is understood by the trainee. It tends to be made compelling and interesting with multimedia, and the trainee can be given multiple learning paths depending on his or her needs.

Reid (2012) has indicated that ICT offers students more time to explore beyond the mechanics of course content allowing them to better understand concepts. The use of ICT also changes the teaching and learning relationship. Based on the discoveries of Reid's think about, teachers reported that the relationship between teacher and learner is sometimes reversed with regards to information technology. This relationship supports students' confidence when they are able to help teachers with technical issues in the classroom. According to Tezci (2011), teachers ought to learn not just how to use technology to enhance traditional teaching or increase efficiency, yet in addition ought to learn from a student centered perspective how ICT can be integrated into classroom activities so as to promote student learning. This means that teachers need to use ICT in more creative and productive ways so as to create more engaging and rewarding activities and more effective lessons (Birch and Irvine 2009; Honan, 2008). Hence, Castro Sanchez and Alemán (2011) suggested that teachers keep an open personality about ICT integration in classroom. Yildirim (2007) found that teachers use

Nazia Ahmad[1]* Dr. Sheetal Choudhary[2]

ICT more frequently for the preparation of handouts and tests than to promote critical reasoning.

RESEARCH METHODOLOGY

Studies shall be empirical in nature. Different data tables and models shall be prepared to ascertain the trend in this research. Descriptive research is also called Statistical Research. The main goal of this type of research is to describe the data and characteristics about what is being studied. The idea behind this type of research is to study frequencies, averages, and other statistical calculations. Although this research is highly accurate, it does not gather the causes behind a situation. Descriptive research is mainly done when a researcher wants to gain a better understanding of a topic for example, a frozen ready meals company learns that there is a growing demand for fresh ready meals but does not know much about the area of fresh food and so has to carry out research in order to gain a better understanding. It is quantitative and uses experimental and also the use of probability sampling. Descriptive research is the exploration of the existing certain phenomena. The details of the facts won't be known. The existing phenomena's facts are not known to the persons.

ANALYSIS OF DATA

We prepared a set of questionnaires to the learner educator regarding elearning and knowledge for institutional success. We asked the respondents whether they are aware with the scope of e-learning. In this regard all the respondents gave different response. Therefore, overall response for the question is as follows

Table 1: Response for the question number 1

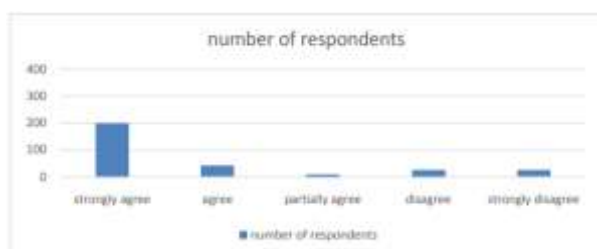| S. No.	Parameters	Number of students
1	Strongly agree	200
2	Agree	040
3	Partially agree	010
4	Disagree	026
5	Strongly disagree	024

Chart 1: Response for the question number 1

CONCLUSION

The outcomes of the study will discuss the scenario of e-learning and knowledge maturity for institutional success. It enables the alignment or integrated course design means creating courses where the objectives or learning outcomes, learning activities, and assessment tasks are consistent or are closely associated. In fact, the closer the association, the more instructionally effective is the course.

REFERENCES

1. Ahmad Al-adwan et al. (2012), "Contributions to a public e-learning platform: infrastructure; architecture; frameworks; tools," Int. J. Learning Technology, Vol. 1, Issue 3, pp. 3-5.

2. Sanna Juutinen (2010), "E-learning, Online Learning, Web-based Learning, or Distance Learning: Unveiling the Ambiguity in Current Terminology," IJSRT, Vol. 4, Issue 9, pp. 45-56.

3. Kakoty Sangeeta (2014), "Teaching and learning online: Pedagogies for new technologies," London: Kogan Page Ltd., Vol. 4, Issue 2, pp. 342-453.

4. Shaikh Farhat Fatma (2013), "The Potential of Synchronous Communication to Enhance Participation in Online Discussions," International Conference on Information Systems, vol. 8, Issue 11, pp. 45-68.

5. Ghulam Muhammad Kundi et. al. (2010), "Training & Retraining: A Handbook for Business", Industry, Government, and the Military, vol. 34, Issue 9, pp. 4667-7874.

6. Alexander and McKenzie, "E-learning: An Application Whose Time Has Come" Strategy, trends & tactics. Gartner Group, vol. 22, Issue 11, pp. 343-543, 2018.

7. Tania Broadley (2008), "Design guidelines for web-based courses, in Abby", B. (ed) Instructional and cognitive impacts of web-based education, vol. 3, Issue 9, pp. 32- 40.

8. Palak and Walls (2009), "Web Based E-Learning in India: The Cumulative Views of Different Aspects," Indian Journal of Computer Science and Engineering Vol. 1, Issue 4 pp. 340-352.

9. Dr. Soumitra Chandra (2014), "Confronting challenges to e-learning in Higher Education Institutions," International Journal of Education and Development using Information and Communication Technology, Vol. 5, Issue 3, pp.101-114.

10. Reid (2012), "Enterprise e-learning Success Factors: An analysis of Practitioner's Perspective," Proceedings of

Nazia Ahmad[1]* Dr. Sheetal Choudhary[2]

the Chais conference on instructional technologies research: Learning in the technological era, Vol. 43, Issue 9, pp. 5-12.

11. Shiva Kanaujia and N R Satyanarayana (2012), "A Framework for Adopting LMS to Introduce e-learning in a Traditional Course," Educational Technology & Society, vol. 11, Issue 2, pp. 227-240.

12. Goyal Mukta et al. (2012). "User Profile modeling in the context of web based Learning management systems," Journal of Network and Computer Applications, Vol. 31, Issue 4, pp. 603–627.

13. Katz, J., Yung, M. (2003), Scalable protocols for authenticated group key exchange. In: Boneh, D. (ed.) Advances in Cryptology-CRYPTO'03, Lecture Notes in Computer Science, vol. 2729, pp. 110-125.

14. Levy, S. (2001), Crypto: How the code rebels beat the Government - Saving privacy in the digital age, New York: Viking Penguin Publishing.

15. Kiran Maraiya, Kamal Kant and Nitin Gupta (2011), "Security Network: A Review on Data Aggregation", International Journal of Scientific & Engineering Research, Volume 2, Issue 4.

16. Mukesh Kumar Jha, T.P Sharma (2011), "Secure Data aggregation in Wireless Sensor Network: A Survey", International Journal of Engineering Science and Technology, ISSN: 0975-5462, Vol. 3, No.3.

17. B. Przydatek, D. Song, and A. Perrig (2003), "SIA: Secure Information Aggregation" in Proc. ACM conf. Embedded Network Sensor Systems.

18. K. Kaneda, K. Taura, A. Yonezawa (2002), Virtual Private Grid: A Command Shell for Utilizing Hundreds of Machines in Proc. 5th Annual Symposium on Operating Systems Design and Implementation.

19. M. Humphrey, M.R. Thompson (2001), Security implications of typical grid-computing usage scenarios, Proc. of the 10th IEEE International Symposium on High Performance Distributed Computing, August 7–9, 2001, pp. 95–103.

20. S. Nath, P.B. Gibbons, S. Seshan, and Z.R. Anderson (2004), "Synopsis Diffusion for Robust Aggregation in Security and Sensor Networks" in Proc. ACM conf. Embedded Network Sensor System.

21. Y. Yang, X. Wang, S. Zhu and G. Cao (2006), "A Secure Hop-by Hop Data Aggregation Protocol" in Proc. 7th ACM Int. Symp. Mobile Ad-hoc.

Corresponding Author

Nazia Ahmad*

naziaahmad786@gmail.com