

RECOMMENDATIONS FOR BANGLADESH TOWARDS E-LEARNING READINESS

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ABSTRACT

E-Learning has enormous prospects for Bangladesh. For successful deployment of e-Learning in Bangladesh as a modern teaching method, at first we need to measure our readiness both quantitatively and qualitatively. In this paper we have examined the status of E-Learning readiness of Bangladesh. Several components of e-Learning readiness are analyzed and discussed in the light of successfully e-Learning evolved countries. Depending on the analysis we have proposed some useful recommendations to be implemented for government, industry, society and education for establishing successful and sustainable e-Learning systems.

Keywords: e-Learning, e-Learning readiness, prospects, recommends

I. INTRODUCTION

I.1 What is e-Learning readiness?

Continuous learning is the most important aspect for dynamic organizations. e-Learning provides the necessary environment and appropriate tools for task oriented, up to date and continuous learning. e-Learning also makes organizations capable to train their geographically scattered workforce and make them eligible with the dynamic knowledge and skill demands with greater efficiency but at less cost. For introducing e-Learning the organizations should be prepared with the correct environmental and other technological aspects. Readiness for an organization intending to adopt e-Learning can be defined as the “mental or physical preparedness for that organization for some e-Learning experience or action”. It is important to comprehend that readiness can't take only binary values; rather it is a continuous process. As more and more organizations decide to join and expand e-Learning interventions, it becomes critical to assess their readiness to utilize technology for a successful implementation and accommodating learning strategies with their local needs. Moreover, in order to reduce the risk of e-Learning interventions past failure attempts should also be analyzed [1].

I.2 Prospects of E-Learning

Applying the information technology in organizations particularly in education sector can bring immense opportunities for developing countries like Bangladesh.

Expanding the e-learning applications brings several attractive opportunities for organizations [2]:

1. Saves time, cost and effort.
2. Satisfies educative needs of scholars from remote areas.
3. Provides self-education opportunities.
4. Provides positive impact on learning process.
5. Broadens opportunities to present the course content in a way that better suits the needs of the learners.
6. Overcoming learning problems in certain subjects such as languages and Sciences.
7. Provides a mechanism of collaborative learning.

2. CURRENT STATUS OF BANGLADESH

2.1 Components of e-Learning readiness

Government, Industry, Education, and Society are identified as the key components in the first level of e-Learning readiness. In the second level, the readiness are estimated based on the connectivity, the capability – a country's ability to deliver and consume e-Learning, literacy rates, and trends in training and education – content and culture [1]. Rosenberg focused on the concept of sustainability and proposed the components of business readiness, changing nature of learning and e-Learning, value of instruction and information, role of change management, reinvention of training organizations to support e-Learning efforts, e-Learning industry, and personal commitment [3][4]. Chapnick posed the components of psychological, sociological, environmental, human resource, financial, technology, equipment, and content readiness. [5]. The overall e-learning readiness is defined by seven key components.

Business Readiness refers to the link of organizational business priorities and characteristics, to e-Learning efforts. Organizations operate in a highly competitive environment where strategy, environment, and smoothness of internal problems affect primarily their viability and profitability. Technology Readiness focuses primarily on the technical infrastructure. Content Readiness studies issues concerning e-Learning content material such as interactivity, reusability, interoperability, etc. Training Process Readiness refers to the ability of organizations to organize, analyze, design, develop, implement and evaluate a concrete training program. Culture Readiness determines organizations' perceptions and cultural parameters concerning e-Learning adoption and use. Human Resources Readiness refers to the availability and set-up of the human-support system. In this component some parameters such as receptivity and the prerequisites of humans to learn successfully in the new environment are defined. Financial Readiness refers to the budget allocation and investment for establishing a robust e-Learning setup [1].

2.2 READINESS COMPONENTS WITH RESPECT TO BANGLADESH.

2.2.1 Business Readiness

For any business, key components are the viability and profitability. Now a day, in the current competitive market these capabilities depend on the strategy of the business and the skilled manpower, which can execute the strategy.

In Bangladesh, organizations who are competing too much, are in the area of telecommunication and information technology, garments industries etc. Among them telecommunication and information technology related organizations provide training for their employees in a regular basis to achieve the strategic goal. For the training purpose they arrange in house training and/or outdoors training. By these training programs they make some of their employees to build expertise in some fields. There are some big issues on selection procedure of the employees for training. But if e-Learning could be provided on those organizations, then the interested employees could avail the training based on their own interests and build the expertise on fields they like most, which certainly would be more effective than the traditional training system. In this context these organizations are ready to adopt e-Learning system for their in house training, and should take steps to introduce e-Learning in corporate levels.

Bangladesh government has started planning and implementing e-Governance with various service sectors (Bangladesh Telegraph and Telephone Board (BTTB) for example) through electronic media. For successful implementation of e-Governance, employees in government organizations need to be trained to use these services first. If these trainings were provided through e-Learning systems, it would be a fast, easy, efficient and cost effective way and would play a very significant role on this purpose.

2.2.2 Technology Readiness

E-Learning is based on the technology involved with computer and internet. From the last few years the computer and internet technologies in Bangladesh becoming cheaper and easy to access due to engagement of both the public and private organizations. Beside this the technology awareness of people are rapidly increasing. So more peoples are widely using Internet technology in their daily life. Current status of computer and Internet infrastructure is summarized in table-I [6]:

Table I: Computer and Internet Infrastructure

Number of ISPs	219 (80% ISPs are located in Dhaka)
Number of Internet Users	0.3 Million
Internet users	19.04 (per 10,000 inhabitants)
Computer ownership	0.782 (per 100 inhabitant)
No of active Cyber Cafes / Internet Kiosks	500
Cyber Café's / Internet Kiosks	0.19 (per 10,000 inhabitants)
Bandwidth provided by Cyber Cafes	32 kbps – 4 mbps
National bandwidth within the country	68 Mbps (data)
National bandwidth to and from the country	112 Mbps
Available Highest Bandwidth of link	10 Mbps

Moreover Bangladesh is going to be connected to the information super highway SEA-ME-WE-4 (SMW4) submarine cable [7]. This will provide higher bandwidth and further reduce the cost of accessing Internet.

2.2.3 Content Readiness

To make the e-Learning process effective and popular, the content should be provided in Bangla language in Bangladesh. This is a big issue since education through native language is important for the mass people. In Bangladesh distance learning program is conducted through radio, television program. Also there is use of compact disks (CDs) to deliver the content to the student. Some universities also offer course materials to their students through intranet. Now in case of introducing e-Learning we have to take an initiative to review all those existing material and then follow some way to ensure the reusability of the content.

2.2.4 Training Process Readiness


The educational and research institute in Bangladesh mainly conducts training. These organizations design and implement the training materials by themselves. Also the assessment procedure is introduced and controlled in decentralize manner. In some cases Government also controls the standard of those training program.

2.2.5 Culture Readiness

Peoples in Bangladesh are interested in job oriented training. The young people are interested in training for increasing their skill. Government also encourages the training procedure by giving loan and environment to establish their business. The private organization always introducing training to their employees to sustain and make themselves profitable.

2.2.6 Financial Readiness

The SEA-ME-WE-4 project is funded by Bangladesh Government, which is a huge investment in increasing the Internet infrastructure of the country. Government is also funding for the e-Governance of several



sectors. Beside this, the Government also funds the government employee training costs. The private sectors also investing for establishing countrywide internet infrastructure. All those budgeting are intending the country towards the eligibility to introduce e-Learning.

3. CRITERIA GAINED BY COUNTRIES PRACTICING E-LEARNING

The Economist has published a e-Learning readiness ranking of based on 150 qualitative and quantitative criteria. These criteria are grouped into four categories Government, Industry, Society and Education. Usually the developed countries are at the top of the rankings. Because of their high degree of IT infrastructure and strong educational systems as well as the government and business embraced technology on a cultural level [8]. From the ranking it is evident that:

- Government usually plays a significant role for fast development of e-Learning,
- Corporations, industry associations and government agencies collaboratively take e-Learning as a mean to boost their economic competency.
- e-Learning producers and consumers jointly responsible for the development of the infrastructure resources, costs and expertise.

4. RECOMMENDATIONS TOWARDS E-LEARNING READINESS

From the above discussion and analysis it is obvious that a developing country like Bangladesh has a long way to reap the full potentials benefits of E-Learning. As a first step, we should follow the proven path already been taken by the high ranked E-Learning ready countries. From those perspectives we can make the following recommendations to follow in several sectors in Governments as well as other organizations based on the criteria considered by Economist for e- Learning readiness ranking.

4.1 Recommendations for Government

Government should play the leading role to spread and reap benefits from e-Learning. We come up with some useful recommendations for doing this:

1. Analyze the needs of the end users- learner's requirements, learner' environments and choice, etc.
2. Recognize the benefits and take steps to grow confidence through success stories.
3. Should take the necessary steps to develop proper ICT infrastructure required for e- Learning.
4. Define a national strategy for moving towards and encourage others towards deploying e- Learning.
5. Build cooperation with other non-government sectors and organizations.
6. Should take strong and goal oriented initiatives to migrate all of it's paper based services into e-Governance
7. Should take positive steps to develop various training programs for government employees to improve their efficiency.
8. Should give encouragement and proper incentive to participate in the training programs.
9. Should guide the members for advocating E-Learning for mass motivation.
10. Should take necessary steps to provide financial facilities for those who are interested to deploy e-Learning.
11. Develop and legal issue concerning e-Learning.

4.2 Recommendations for Industry

In Bangladesh private sector organizations play a very significant role in the economy. So they should prepare themselves to introduce and advance e-Learning through their organizations. Some useful recommendations are:

1. Develop ICT infrastructure within the organization and provide in house training through e-Learning systems.
2. Encourage production of e-Learning modules by being a consumer of the modules or by producing them.
3. Take initiatives to build partnership programs with government and other peer organizations on a win-win condition.
4. Develop sustainable business models by bringing innovative ideas to create new horizons.
5. Gain sustainability by involving with government strategies, action plans and implementations.
6. Organize and support research and development works in novel ways.

4.3 Recommendations for Society

Mass people and culture is important for adoption of e-Learning. Social view for technology and modern learning methods should be adaptive. Recommendations for people can be summarized below:

1. Social motivation should be positive towards education.
2. Positive attitude to adopt innovating technology and thinking such as novel learning methodologies.
3. Activities should be taken to increase self-awareness.
4. Understanding the need of current competitive world.
5. Motivate the government and other organizations to reflect views of mass people.

4.4 Recommendations for Education

Education sector will establish e-Learning and in return will be nourished by e-Learning. For the purpose of educating mass people of Bangladesh and to reach the general education to the remote areas e-Learning can play very important role. To fulfill these purpose, education system should

1. Provide improved and sustainable platform for e-Learning
2. Open ICT departments to enhance ICT based knowledge.
3. Present an integrated framework for e-Learning.
4. Introduce ICT as a tool for improved teaching and learning experience.
5. Develop curriculum and content for e-Learning preferably in native language.
6. Arrange training for teachers and instructors
7. Design standard for evaluation of e-Learning systems.

5. CONCLUSION

The recommendation mentioned in this paper is not the unique approach to prepare Bangladesh ready for e-Learning. But these can be considered as an important approach. We can start to move forward with these recommendations and the further details will come out along the way. We have done this task as an initiative for e-Learning movements of Bangladesh and for accomplishment of this huge task all government and non-government sectors should have to come on a single platform and take an integrated plan.

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