Infrastructure and e-Learning Readiness in Bangladesh

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ABSTRACT :

Corporate and business world is the ultimate goal for business students to show professional competence whether they study through traditional system or through open and distance learning (ODL). The ODL system is a new genre for business studies and this ODL system faces challenges for the same acceptance as much as traditional education has in Bangladesh. This study demonstrates that e-Learning offers a platform for professional skills developments to the learners of the academic programmes, Commonwealth Executive Master in Business Administration (CEMBA), Commonwealth Executive Master in Public Administration (CEMPA) and Master in Business Administration (MBA) of Bangladesh Open University (BOU). BOU has offered these programmes through ODL. To cope with the contemporary ODL system and challenges in business world, BOU is working to develop e-Learning material and train its manpower to be competent for making the learning material available for learners through local area network or intranet and through Internet. In this perspective, the study has tried to find out what the additional benefits as well as supports e-Learning system introduction can offer to the distant students through online academic materials and lectures. A research initiative has been taken to know the availability of mobile phone, laptop and desktop computers with Internet connection and the skills of students as users of computer and mobile devices for learning. In the study, the respondents are learners of the programmes e.g. CEMBA/CEMPA, MBA which are taught in distance mode. The methodology of the research work is both qualitative and quantitative since the data collection techniques involve structured questionnaire as well as open-ended questionnaire. Few focus group discussions (FGDs) were also arranged at the classroom to cross-check the information, the respondents have provided in the structured questionnaire. The research report will definitely support the university authority to decide whether open universities would be with the e-Learning and would explain its impact on learners' skills improvement in assuming the role of acting as development workers for national development.

1. INTRODUCTION :

Business in Bangladesh is changing rapidly and this country requires more capable manpower to handle business situation. Even in 1970s, Bangladesh is totally dependent on agriculture (wikipedia, 2010) and during the 1980s, there have been starting new establishments for garments factories which make clothes for the foreign apparel business. However, the situation has been changed during the last 20-30 years.

Steel, cement, electronics, furniture factories have been built and real estates entrepreneurship becomes a good business. These all industries require business professionals. The changeable factors become demand for establishing a new system university that is ODL based university which may address tomorrow's knowledge based society and may equip people with professional knowledge for maintaining life style of the twentieth and twentieth first century.

In this perspective, Bangladesh Open University (BOU) has been established in 1992 and it has been an expectation that this university generates an immense opportunity for gaining professional knowledge, skill and establishing value to those corporate people who do not have enough leisure hours to follow a formal course in a university. For offering the professional programmes through ODL, the policy makers of the university was very much concerned to know what would be the fruitful strategies for the business people and how these courses would be acceptable to the corporate people as the corporate world accepts the traditional degrees. With the view of developing new professional, BOU offers CEMBA/MPA and MBA programmes through School of Business. BOU has started MBA programme in 1998 and CEMBA/MPA programmes in collaboration with Commonwealth of Learning (COL), Canada in 2002.

2. BACKGROUND OF E-LEARNING:

By the early sixties, the computer technology has been evolved towards personal ownership and in 1968, the term 'personal computer' made its first appearance in an advertise for a Hewlett-Packard desktop calculator (Markoff, 2001) and by the early 1970s, people in academic or research institutions had the opportunity for single-person use of a computer system in interactive mode for extended durations (wikipedia, 2010). By the successful invention of Internet and user-friendly Graphical User Interface (GUI) and along with these, the email, messenger services, chat room, search engine etc have created new opportunities for business, personal and academic communication as well as invented new horizon for education. Education using Internet can be defined as Web Base Learning or e-Learning. "E-learning' is defined by the New Zealand Ministry of Education (2004, 3) as "learning that is enabled or supported by the use of digital tools and content. It typically involves some form of interactivity, which may include online interaction between the learner and their teacher or peers.

e-Learning opportunities are usually accessed via the internet, though other technologies such as CD-ROM are also used in e-learning." Thus, e-Learning system allows us to learn from anywhere and generally at any time, as long as we have a properly configured computer with necessary application software. e-Learning can be CD-ROM-based, Network-based, Intranet-based or Internet-based. This learning system can include text, video, audio, animation and virtual environments. So the e-Learning encompasses the various systems of technology and flexible ways for the learners to attend and finish a course of any non-formal or formal educational programme. The prospective usage of Internet is so huge and pervasive to "school the illiterate, bring job training to the unskilled, open a universe of wondrous images and knowledge to all students, and enrich the understanding of the…learner" (Web-Based Education Commission, 2001). The possible revolutionary changes in the sector would help to revitalize the backwards and dropout students of Bangladesh. The benefit and support from Internet is unparallel to provide an instant access to the sea of information and knowledge which is an instrument for the advancement and development of mankind. Those people, who believe in the challenges and possibilities of online teaching and learning, find that they are bringing new technology skills, new teaching strategies, and a revitalized enthusiasm for teaching back into their local classrooms, thus passing the benefits of their experiences on to countless additional students and colleagues" (Droste, 1999).

3. PERSPECTIVE OF THE STUDY:

For understanding the existing facilities and the abilities of the corporate and business students for studying those e-learning materials and ODL programmes through e-Learning, this research initiative was taken in 2010. It is also believed that research study is an essential part of higher study. It is expected that this research work does not only contribute to the confidence of the students but this research work also

enriches a university with the information how its professional programmes are meeting the demands of the nation through ODL. An academic programme of a university through e-Learning is arranged, planned and implemented after considering factors like learners' capacity for using personal computing, mobile devices e.g. mobile phone Internet access, along with social demand for the professional programme, economic status of a country and other factors are standard of contemporary education in a country, and utility of natural resources. However, the research concentrates on the acceptance of ODL based professional programmes and assistance of offline e-Learning matters.

4. OBJECTIVE OF THE RESEARCH:

Bangladesh Open University necessitates complete adapting this technology-based education since its advantageous features can provide prompt academic and administrative services to learners of BOU. BOU can move to approach this new genre as BOU has already gathered experience in distance education and other ICT technologies. BOU can understand what is the practical situation prevailing among the learners and whether the learners are able to participate in a web based course. Further, it is also necessary to know the state of learners of BOU as ideal eLearners should have the infrastructures like email access, Internet facilities, knowledge of chat and online interaction and their mental readiness like self-motivation, clear writing capabilities (Horton, 2000). That is why this study also tried to identify those essential characteristics of the ideal e-learners. So, the researchers approached the learners of BOU with the following objectives:

a. To show the present technological infrastructure and technical expertise of Bangladeshi students emphasizing prospective and current learners of Master of Business Administration (MBA), Commonwealth Executive Master of Business Administration (CEMBA)/Commonwealth Executive Master of Public Administration (CEMPA) of BOU.

b. To explain learners' personal ability to study alone.

c. To know learners' ability of communication for learning individually.

5. RESEARCH METHODOLOGY:

Since I am an employee of Bangladesh Open University and the respondents too are the learners of CEMBA/CEMPA, MBA of BOU, the sampling of the research work could be explained as availability or convenient sampling. In collecting data from the learners, I firstly talked to the respondents face to face and explained questionnaire of this research work to the respondents, and also discussed web based learning and e-Learning system with an active participation from the respondents. Then I distributed structured questionnaire which was used to collect the data from the informants. There are 17 structured questions which are under 4 sections that targeted to know respondents' access to mobile phone, laptop or desktop computer, their basic skills for computer, their technology adaptation skill, expertise in using online media (audio/video). In the questionnaire, there were some open ended questions in which they had the options that they could have mentioned their requirement for success. So, the respondents have had options to comment their views on e-Learning or Web Based Learning while they are answering the open ended question. Along with that, I have the opportunity to arrange focus group discussion among the respondents regarding their ease and other requirement for using and participating in an e-Learning programme. The respondents shared their views among themselves and talked about the services they get from the university and they also mentioned their expectation from Bangladesh Open University.

6. PRESENTATION:

The number of respondents of MBA, CEMBA/ CEMPA programmes of BOU was 39 who completed their first degree and even the post-graduation and they joined these programmes for professional reasons. Among the respondents, 16 students (41%) belonged to the age group of 24-30 years, 11 students (28.84%) to the age group of 31-40 years and 12 students (30.76%) belonged to the age group above 40 years and of them, 8 students were female and 31 students male.

The research focuses on the learners' access to mobile phone, Internet facilities in a mobile phone, laptop or desktop computer as well as Internet facilities in those computer and necessary hardware e.g. RAM, Hard Disk, CD ROM Driver, Speakers etc, Operating System software such as like Windows XP/ Windows Vista/Windows 7 etc. application software availability like software like Word Processor, Spread Sheet, Adobe Acrobat Reader/Writer etc. These are some basic requirement for participating in an e-Learning programme. All of the students (100%) have mobile phone and they are all (100%) aware that they can access to the Internet through mobile phones by just sending a message. In the research, it is enquired that the mobile configuration, which are compatible to e-Learning software, is available or not. So, they have been asked whether they know about special configuration which they may need to study online. 61.53% (24 students) have the configuration of the mobile phone that they may need to study online, and other 38.46% (15 students) do not have the configuration for studying through e-Learning. 48.71% (18 students) have Internet connection in their mobile phones.

Of the 39 respondents, 35.89% (14 students) have portable computers and 87.17% (34 students) respondents of 39 MBA, CEMBA/CEMPA programmes have their own laptop computers or desktop computers and other to use and other 12.82% (5 students) respondents have their access to computers with other members of their families or at workplace.

The availabilities of an updated computer with enough RAM, Hard Disk, CD ROM Driver/Pen Drive, Speakers etc have been questioned and 58.97% (26 students) respondents have the availabilities and 23.07% (9 students) respondents have an operational and working conditioned computer in those technology and other 10.25% (4 students) respondents do not know or are not aware about the software. 53.84% (21 students) respondents have 24 hours ready internet connection and 46.15% (18 students) respondents have to access to the Internet connection at the office or if necessary, they can activate their connection in their mobile phone or they can use Internet at Cyber Café.

71.78% (28 students) respondents have up-to-date system software e.g. Microsoft Windows XP or Microsoft Windows Vista or Miscrosoft Windows 7, Microsoft OfficeXP, Acrobat Reader/Writer'6 etc in their computers and 28.20% (11 students) respondents have system software e.g. Microsoft Windows Millennium Edition (ME) or Windows Professional 2004 or Microsoft Windows 2000 (Enterprise Edition) in their computers.

The study also looks into the students' basic operational capacity for running a computer application using start menu, creating a new file, deleting a file and recovering a file from recycle bin, opening a file and using the "save" and "save as" options, viewing print preview, doing page setup, printing a file etc. 58.97% (23 students) respondents have sufficient knowledge about the use and the function of the Start option of the taskbar of the desktop, creating a file, deleting a file, recovering a file from recycle bin, the difference between "save" and "save as" options, printing option of a file and cut, copy and paste options within a file and between files. 41% (16 students) respondents can the handle the options but sometimes they can ask for help.

This section also tries to know whether the learners are able to participate in a course and communicate with online teachers and other students using mobile

message, emails, messenger services for chatting to complete assignment with learners to maintain timely correspondence with other learners and instructions and capacity to ask questions and comment clearly. 100% (39 students) respondents believe that they have ability to keep correspondence with other learners and instructors using mobile message or email from mobile and have their ability to study alone using online materials or from pen drive, CD-ROM and have sufficient ability to understand online audio/video lectures. All of them believe that they have sufficient ability to take notes from online audio/video lectures.

7. DISCUSSIONS ON INFORMANTS:

The learners of MBA, CEMBA/CEMPA programmes are main participants in the research work entitled "Professional Skills Development through e-Learning: An Evaluation on CEMBA/ CEMPA/ MBA at Bangladesh Open University". I have talked to the informants, served questionaire to them and collected information about their expectation from e-Learning programme. In an interactive environment, the informants provided information about their present status. The informants talked about themselves as a group as well as an individual state for approaching e-Learning programme. They queried whether this e-Learning would be a substitute to the present tutoring system, whether this e-Learning system would totally replace the present way of teaching or whether this system would be an a complementary system to the existing system. They talked about their own capacity, qualification and skill or even apprenhension for partaking in the ICT based system for education. One informant told me that most of them would be benefited from the web based programme, they were busy professionals, doing their daily official works, they could be able to participate in the web based programme. One informant said infrastructure for ICT technology should be introduced in the Regional Resource Centre (RRC) and the MBA, CEMBA/CEMPA tutorial centres before starting web base

programme. One informant claimed that they were talented and high professional since in their batch, there were government officers e.g. Joint Secretary, Deputy Secretary of the Bangladesh Government, Army Officers e.g. Brigadier General, Colonel, Major of Bangladesh Army, Mid Level Executives and Top Level Executive from other public organizations as well as private orgazations, Doctors and Engineers, so it would be easy for them to participate in an e-Learning programme. However, a middle aged lady, a student of MBA from the tutorial centre of University of Rajshahi asked what she would do as she had computer, Internet at her home and necessary software like MS Office, Acrobat Reader but she never used those things and even she didn't have email address. However, she believes she can take help from her son or fellow students for following an online course, in case the University offers an e-Learning course.

8. REQUIREMENT AND RECOMMENDATION FOR STARTING E-LEARNING AT BOU:

Among 39 respondents, most of them referred to the following requirements for the effective e-Learning programme through Bangladesh Open University. The same ideas which have been echoed in several times in learners' comments, though they are from different tutorial centres are summarized into following short sentences for easy understanding of learners' perspective. The requirements are listed in the following:

- More computer facilities with available Internet infrastructure in the libraries of RRCs as well as tutorial centres should be available.
- It is necessary to ensure free Internet browsing for the students at tutorial centres.
- Learners feel if they have had a separate computer lab with instructors in their tutorial centres.

- It is really helpful for them if open university makes their course materials available at the website.
- Students who are in job have been benefited as BOU arranges computer based courses.
- Some learners write that they need complete accessibility to email, Internet facilities, updated computer systems in the tutorial classroom too.

The following are interest and recommendation which comes from the learners' comments and these are worthy from the point of this research work too:

- Learners are enthusiastic to see that BOU is successful in providing online education.
- Some learners comment that e-Learning or online education is now necessary for all.
- BOU website is very much necessary for complete web base learning. The website should be updated with all courseware files.
- Learners recommend that networking and practical computer program should be incorporated into the professional programmes through MIS course.
- They always welcome the initiative of a University for starting e-Learning system. This education system would be helpful for busy professionals like them. They also feel that web base learning is required and suitable for professional people.

10. CONCLUSION:

Thus the study reflects the Learners' present capacity to participate in an e-Learning programme and to describe learners' knowledge, skill and ability, this research work shows technological capacity, prior experience and knowledge about communication through Internet and their personal requirement in participating e- Learning and in continuing education online.

The information, which this research demonstrates that e-Learning system for delivering education in Bangladesh is possible since the expected participants are ready for this programme. The research also displays that the learners have potential efficiency to admit in web based education and to continue an e-Learning programme, though there needs some institutional initiative from BOU for solving learners' wants like computer lab with instructors, Internet connectivity in each tutorial centres of CEMBA/CEMPA, MBA programme, a library in each Regional Resource Centre (RRC), a full fledged website of BOU which should equipped with study materials. Further, the government should take initiative to provide low cost Internet services which the learners can use in their computer at the households. It is also reflected that the web based learning system is a new genre in Bangladesh which needs to launch by a university like Bangladesh Open University which has prior technical knowledge in delivering education through distance method using radio and television technologies. Since this study mainly focuses on the existing students of Bangladesh Open University and the majority of students have technology, skill and eagerness to participate in an academic programme through e-Learning system, BOU can start developing e-Learning module for launching online education for MBA, CEMBA/CEMPA students. In a final sentence, it can be mentioned that the data of this research can positively ensure that the learners are ready to accept the new method of education, now it is only the institutional attention, preparation and arrangement on the part of BOU to meet learners' requirement in initiating the new system, e-Learning or web based learning.

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