Introduction

Bangladesh is primarily an agrarian economy. Agriculture is the single largest producing sector of economy since it comprises about 30% of the country's GDP and employs around 60% of the total workforce. To provide food and nutrition of the population, the government of Bangladesh established two veterinary colleges in 1995. A new Chittagong Veterinary and Animal Sciences University (CVASU) was established in 2006. The library for this new university started its journey to provide up to date bibliographic and scholarly information for the faculties, students, and researchers. Gradually its collections have been increasing simultaneously with an increase in the size, students, faculties, researchers, officers and staff. The CVASU Central Library was intended to introduce modern library service but there were many constraints include inadequate financial resources, lack of library automation software, technical staff, erratic power supply etc. In 2012, the University Grants Commission of Bangladesh (UGC,B) granted funding for a "Modernization of Central library and Establishment of an E-resource Center at CVASU". The library was being operated manually until this project was funded.

The CVASU library started to implement the project from April 2012 onward and accomplished it successfully in March 2014. The major areas of improvement were:

- introduction of an open source integrated library management system (ILMS) for acquisitions, circulation, serials control, and patron records
- establishment of e-resource access center with WIFI, ejournals, ebooks, CDs, DVSs and other audio visual materials to support veterinary education
- digitization of rare and out of copyrighted works,
- close-circuit camera television (CCTV) based surveillance system,
- anti-theft library security electro-magnetic gate,
- introduction of institutional repository system,
- development of library website, and
- open source library search engine.

The ultimate goal of the was to: produce quality graduates equipped with substantial knowledge and help researchers by providing accurate information at the right time and to enhance the quality of library services, along with continual internet connectivity and better reading environment. The main aims and objective of the project was to: implement library automation software with providing digital depository systems for enhancement of quality education and learning; and establish e-resource facilities to provide easy access to information for upgrading knowledge and skills for both students and faculties of CVASU.

This paper describes our experiences with implementation of the vast improvements we made. Articles in the literature were reviewed to get an idea of best practices and valuable knowledge of implanting automation project funded by the international donor agencies. Our experiences have also been shared with developing and developed countries during selection of ILMS software. Followed guidelines directed by the World Bank and University Grants Commissions of Bangladesh.

Staff and Equipment

At the very beginning, the project team felt the necessity of developing work flows for planning purposes and called several meetings with experienced professors and senior executives of the university. A Project Team Management Committee was formed to oversee all activities and the following appointments were made: an office manager/IT professional, Data entry operators for inputting bibliographical data to the IMLS database, an accountant for tracking funds and an office attendant for the project office. A consultant who is expert in IT as well as library science has been appointed to install, customize and configure of KOHA, Dspace, VuFind and development of library website. Purchased: ATIZ Book Drive DIY (Book scanner) for scanning books, journals, conferenceproceedings, theses, dissertations, newspapers etc. to building a digital library, two photocopiers for library users, A LED TV (42 inch) for watching video documentaries, close circuit television (CCTV), Multmedia Projector with screen, Digital Camera, Air Conditioning, computers, Printers, Barcode Printer and readers, DVD Player, and Head Phones, and furniture.

The software selection for automation for the CVASU Central Library was a crucial factor. Since Bangladesh is a developing country and the CVASU Library has financial constrains, the project implementing authority took the decision of choosing Open Source Software (OSS). Visiting other academic libraries of Bangladesh that are working Open Source Software and having consultation with senior library professionals, the CVASU library decided to introduce KOHA Integrated Library System as it includes acquisition, cataloging, classification, circulation, serial control, patron management, database management and so on. DSpace software was also selected for building digital repositories. The project manager who was appointed earlier made technical specifications of computers, laptops, server, and necessary accessories for acquiring by tender that was needed for library automation. Debian 7.8 wheeze was installed as an operating system. Then Koha 3.20 version was installed, configured and customized.

Established an E-resource center

An E-resource center was established for access to e-journals, e-books and others e-materials for reading, downloading and printing. There are thirteen core i5 computers with high speed internet connections and a set of powerful multimedia capabilities. The E-resource center is being used for training purpose, watching documentaries of critical operations of different pets and large animals, documentary of prominent farms management, fisheries and food factories.

E-Resource Center after refurbishment

Cataloging with Koha according to MARC 21

After successful installation of Koha automation software three library staff was appointed for cataloging. A cataloger first searched the book in the Z39.50 gateway by the title, subject, author, ISBN etc. If the particular book was found in the Z39.50 gateway of the library of congress it was imported from that gateway and completing any necessary modifications. the MARC Editor was also used when a similar book was found and downloaded as a .mrc file. The files were then converted into .mrk files for modifying the bibliographical record of the book. After completing the necessary corrections of the bibliographical information, the .mrk file again converted back into a .mrc file for uploading in the Koha database.

Other Koha Features

Cataloging and patron records were input in a parallel way. A patron record sheet was customized according to needs of the CVASU central library. There were some fields that were optional and some were compulsory. Usernames and passwords were inserted that were used for accessing user records. At the time of inserting patron records in the database a common password was used. After completion the input activities, library users were taught how they can change their password. Patron images were uploaded in the patron's record sheet. A unique library card number was generated for each library patron to use for borrowing and returning of library materials. After completion of cataloging, a barcode was generated from the system for each book and was attached in the book by gum tape. Human error can be avoided by the use of barcode reader.

After completing all activities including inputting bibliographical data of books, other learning resources and library patron in Koha database software library finally started circulation.

Challenges

The project implementation team faced many challenges during the implementation of the project. These challenges include among others: staff and patron technical expertise, data entry in MARC21 format, erratic power supply, bandwidth problem, and technical staff and so forth.

Modernization in library day to day activities and setting up an e-resources center changed the CVASU library radically. Patrons are getting information quickly. Maximum information is available in the web and navigation is possible by the user through remote access. Due to availability of information and right information at the right time, research activities have increased and both Library staff and users are very satisfied with the new library services.

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