ISSUES AND CHALLENGES IN LIBRARY SYSTEM MIGRATION: A CASE STUDY IN INDIA

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ABSTRACT

Library system migration is imperative for providing more efficient services and adopting new technology. System migration is not an easy task and its success depends on various factors. This paper discusses as a case system migration in the Rev. B. M. Pugh Library of Assam Agricultural University (RBMPL-AAU) and the findings from this study would be beneficial for management and staff to refine system migration task in future.

Key words: Integrated Library System, Library staff, System migration, Technology, University library

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1. INTRODUCTION

The library and information centre occupies a unique position as the hub of all the teaching and learning activities in an educational institution. Being an integral part of this process it supports academics through dissemination of knowledge from its vast information resources and pooling together the efforts of modern information professionals and information technology (IT). With the help of IT the housekeeping activities of the modern library and information center have been automated to a large extent to provide efficient information services to the users. To keep pace with the rapid changes in IT, libraries and information centers invariably has to adapt by periodically migrating its systems to newer technology.

A library system migration normally involves upgrading from one Integrated Library System (ILS) to another ILS which may or may not be from the same vendors. Sometimes migration might involve also hardware up gradation and sometimes it may include shifting from a proprietary based ILS to Open Source Software ILS (OSS ILS). Whatever may be the process system migration in libraries is a very costly, time consuming and risky job involving huge bibliographic data and, transaction records and administrative settings.

The data in the library management systems includes the catalogue records holdings information and detail of who has borrowed material from the stock and these are generated as a result of various information processing activities in libraries. Library Automation software are integral part of any library system. The migration process in the library from an old system to a new one is very complicated process especially while doing so from fully proprietary based software which does allow access to its internal architecture. At the same time the integrity of the huge amount of bibliographic information needs to be ensured. The issue of system friendliness and motivating the library staff to work with the new system is also a major challenge.

1.1. Problem Statement

Migration is not an easy task. It has to be planned and executed in such a manner so as not to hamper the normal functioning of the library, without causing discomfort to the user and staff. Studies have revealed many problems as well as advantages of the migration process. Careful studies including feedback from managers, staff and users have to be done to identify drawback and benefits from the migration process. Recently the Rev B.M Pugh Library of Assam Agricultural University (RBMPL-AAU), Jorhat, Assam had undertaken a migration process from its existing library management system to a new one. The present study would investigate the drawbacks as well as the benefits accrued from the migration in RBMPL. Hence the following study was undertaken.

1.2. Literature Review

Clarke & Morris (1998) in their migration study in Oxford University Library found that staff involvement is very crucial. If during the migration process all the staff are properly communicate it makes easier to understand what were the drawbacks of earlier system and how it could be rectified with the new system. Matoria & Upadhyay (2005) opined that, proprietary softwares are not supportive in system migration in libraries. Since XML was compatible to RDBMS, it should be preferred as the exchange format rather than MARC etc. Wang (2009) in his research emphasized on the issue of vendors role in system migration and found that most of the libraries included in the study were satisfied. Vuksanoviü & Sudareviü (2010) in their study on migration involving Integrated Library Management system found that it is comparatively easy to import and export simple bibliographic information from one system to another.

Singh (2017) found that most of the staff is satisfied to migrate to a Open Source Software ILS because of the low cost and range of functionalities. According to Zhu & Spidal (2015) for a successful data migration the following lessons were learned: involve staff, elect a team leader, clean up data, communicate the timeline, make training work, design good testing data, go live with the new system, plan ahead, communicate with the vendor, and ensure a successful migration. Pund and Jain (2016) discusses that migration cannot be overlooked as a simple step. It is a complex process that holds various phases which make it prone to failure.

1.3. Research Objectives

The general objectives of the study are as follows:

- To find out the background information of staff in Rev B.M Pugh Library of Assam Agriculture University (RBMPL-AAU).
- To identify the problems encountered during migration process in RBMPL-AAU.
- To understand about the advantages and disadvantages accrued from the migration process in RBMPL-AAU.

1.4. Methodology

The study adopted case study approach. This study has been conducted to identify the present situation of RBMPL-AAU in system migration. This study also tries to identify the challenges and opportunities of RBMPL-AAU during migration.

The principal tool used in the study for data collection was a questionnaire and reviews of documentary sources both primary and secondary. The questionnaire consisted of closed and open ended questions and the respondents were required to choose an answer whether Yes, No or don't know. For analysis of data, Microsoft Excel software had been used. After receiving all the completed questionnaires, data was entered in excel sheet and coding was done.

2. DATA ANALYSIS AND INTERPRETATION:

After carefully coding the data using MS excel, data analysis was carried out for the various set of responses from the staff. These are discussed below:

2.1. Highest Qualifications of the Respondents

The Highest qualification of the library staff working in RBMPL-AAU is tabulated below. It is clear from the TABLE 1 that 50.0% of the staffs are High school qualified, 37.5% staffs are Higher Secondary and 12.5% are Post graduate qualified.

Table 1 Highest Qualification of the Respondents

Highest Qualifications	Frequency Count
HSLC	4
HS	3
PG	1

2.2. Professional Qualification of the Respondents

TABLE 2 shows percentages of library staffs that had professional qualifications and percentages that did not in RBMPL-AAU. It is clear from the table that 50% Respondent are professionally qualified and 50% are none qualified.

Table 2 Professional Qualification respondents

Qualification	Frequency Count
YES	4(50%)
NO	4(50%)

2.3. Name of the Professional Qualification

In the TABLE 3 shows that 37.5% Respondents were Diploma Qualified 12.5% Respondents were Bachelor degree in Library and Information Science (BLISc) qualified and 50% are have no professional qualification.

Table 3 Name of the professional qualification

Qualification	Frequency Count
Diploma	3
BLISc	1
No Professional qualification	4

2.4. Difficult to Handle Computer System

In the TABLE 4 shows that 62.5% of the respondents faced this problem always. 12.5% Respondents faced this problem never and 25% Respondents faced this problem sometimes only.

Table 4 Difficult to handle computer system

Difficult to handle computer system	Frequency Count
Always	5
Never	1
Sometimes	2

2.5. No Training on Current ILS System

In the TABLE 5 shows that 37.5% respondents faced this problem always. 37.5% Respondents faced this problem never and 25% sometimes faced this problem.

Table 5 No training on current ILS system

No training on current ILS system	Frequency Count
Always	3
Never	3
Sometimes	2

2.6. Data Entry is Complicated

In the table 6 shows that the respondents found data entry process complicated. 62.5% respondents were faced this problem always and 37.5% faced this problem sometime only.

Table 6 Data Entry is complicated

Data Entry is complicated	Frequency Count
Always	5
Never	0
sometimes	3

2.7. Inadequate Power Supply

In the TABLE 7 shows that among the respondents 25.0% faced this problem always. 37.5% respondents faced this problem never and 37.5% faced this problem sometimes.

Table 7 Inadequate power supply

Inadequate power supply	Frequency Count
Always	2
Never	3
Sometimes	3

2.8. Inadequate Staff

In the TABLE 8 shows that among the respondents 25.0% respondents faced this problem always, 50.0% faced this problem never and 25.0% faced this problem sometimes only.

Table 8 Inadequate staff

Inadequate staff:	Frequency Count
Always	2
Never	4
Sometimes	2

2.9. Inappropriate Time Schedule

In the table 9 shows that 25.0% staffs always faced this problem.12.5% never faced this problem, whereas 62.5% faced this problem sometimes.

Table 9 Inappropriate time schedule

Inappropriate time schedule	Frequency Count
Always	2
Never	1
Sometimes	5

2.10. Increase Work Efficiency

From the TABLE 10 it is clear that 75% of the respondents felt that migration would increase their work efficiency. However 25% of the respondent felt otherwise.

Table 10 Increase work efficiency

Will increase my work efficiency	Frequency Count
Yes	6
No	2

2.11. Gain New Knowledge

In the TABLE 11 shows that among the respondents 87.5% respondents found they gain new knowledge and 12.5% respondents felt otherwise.

Table 11 Gain new knowledge

Will gain new knowledge	Frequency Count
Yes	7
No	1

2.12. Improve Career Opportunity

In the TABLE 12 shows that 37.5% respondents felt that migration will help in their career opportunity and 62.5% respondents felt otherwise.

Table 12 Improve career opportunity

Will help in my career opportunity	Frequency Count
Yes	3
No	5

3. FINDINGS

From the data collection on the background information of the respondents, It shows that 4 respondent (50%) were High school qualified, (37.5%) respondents were higher secondary qualified and (12.5%) respondents are graduate qualified. It is clear from the table 2 that (50%) respondents are professionally qualified and (50%) are none qualified. In the table 3 shows that (37.5%) Respondents were Diploma Qualified (12.5%) Respondents were BLISc qualified and (50%) did not have any professional qualification. The present study shows that during migration process the problem “difficult to handle computer system” was responded by 62.5% as “Always”. 12.5% of the respondents never faced this problem “never” and 25% of the respondents faced this problem “Sometimes”. With regard to the problem “No training on current LMS system”, 37.5% of the respondents faced it “Always”, 37.5% of the respondents faced it “never” and 25% faced it “sometimes”. On the problem “Data entry process complicated” the study revealed that 62.5% respondents faced this problem “Always” and 37.5% faced this problem “sometime” only.

“Inadequate power supply” was responded by 25.0% as “Always”, 37.5% as “never” and 37.5% as “sometimes”. On the problem “Inadequate staff”, 25.0% faced it “Always”, 50.0% faced this problem “never” and 25.0% faced it “Sometimes”. About the problem “Inappropriate time schedule”, 25.0% of the respondent faced this problem “Always”, 12.5% “never” faced this problem, whereas 62.5% faced this problem “sometimes”. With regard to the advantages accrued from the migration process it was found that 75% of the respondents felt that migration would “Increase the work efficiency”. 87.5% of the respondents feel that they have “Gained knowledge” from the migration process. However 62.5% of the respondents felt that the migration process will not help to “Improve career opportunity”.

4. CONCLUSIONS

This study has been on the Issues and challenges in library system migration in RBMPL-AAU. With the advent of new technology and growth of information technology it becomes necessary to migrate the data from legacy system to more advanced one. Through understanding of purpose of migration, proper migration design and predicting the migration output can bring down the possible chance of failure drastically .Therefore, being aware of modern software and technology and current issues in data migration execution of steps became easier and can prove to be critical in successfully accomplishing a migration process.

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