

THE PERCEIVED IMPACT ON THE ADOPTION OF KOHA IN A STATE UNIVERSITY LIBRARY'S MANAGEMENT SYSTEM

kohacon17

ABUBAKAR S. MAMA

Head, IT Services Division
Mindanao State University

INTRODUCTION

Library automation is one of the major technology applications implemented in libraries locally and globally. The Integrated Library System is a Library Automation System consisting of hardware, software, peopleware, procedures and data that provide a number of benefits to the library.

Library usually selects:

Open source library system is a library software where the programming codes are “open,” that is, the source code for the programming is free and available to anyone

Open Source
Library System



users can look at it, can be modified for own specific purposes, and most importantly, it can be used and redistributed for others to use for free.

KOHA...A SHORT BACKGROUND

The Koha Integrated Library System (ILS) is one of the free softwares licensed under Open Source Software. This particular library system was developed in [2] New Zealand by Katipo Community for the library that preferred to use free software instead of a commercialized software. This is also the software used in the library, where the researcher is currently working. This software was deployed in early 2013 to replace the in-house library system which was made by one of the former IT employees of the said university.

DIFFICULTY IN ADOPTION!

- This study explores the willingness of the Koha Integrated Library System employees to use the Koha Integrated Library System.
- Practice of the participants, the higher their "improvement on their assigned tasks, such as, in the areas of Resource Organization and Management, Circulation Services, and in some impacts in the Organization and Management of the library's activities."
- Report Generation Management necessary skills and knowledge on how to use and operate resources, circulation services, and reporting of the library's activities.

STATEMENT OF THE PROBLEM

1. What is the participants' **level of awareness** of the functionalities Koha Integrated Library System considering: Acquisition; Cataloguing; Circulation; Member Registration; and Reporting Module?

2. To what extent do the participants demonstrate practices relevant to the Koha Integrated Library System?

3. What are the perceived barriers of Adopting Koha Integrated Library System in the areas of: Organizational Management; Circulation Services; and Library Reporting and Management?

4. Are the participants' level of awareness and practices on the Koha Integrated Library System significantly related to their perceived impact of adopting the system?



CONCEPTUAL FRAMEWORK



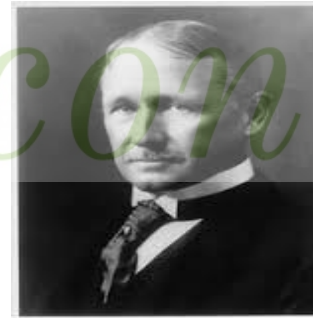
Figure 1: Schematic presentation on the Interrelationships of Concepts Used in the Study

THEORETICAL FRAMEWORK

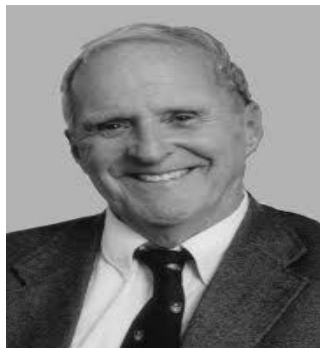
This study is anchored on the following theories:



Diffusion of Innovation theory by [4]
Everett Rogers (2003),



Scientific Management by [5]
Frederick Taylor (1964),



Expectancy theory by [6] Victor
Vroom (1909).

METHODOLOGY

- A **descriptive-correlation** research was employed in this study since the main intention was to determine the level of awareness and practices of the library employees towards the Koha ILS in relation to the perceived impact of adopting the said library system.
- The study used the **descriptive statistics** (frequency, mean, percentage and standard deviation) to determine the level of awareness and practices towards the Koha ILS, and **inferential statistics** (Spearman Rho) to measure the relationships of the variables of the study.
- The researcher intended to involve the entire **121 library employees** of the Mindanao State University, Marawi City as the participants of the study. A researcher-made questionnaire were used in the study.

METHODOLOGY

The questionnaire underwent content validity by pilot testing to the library employees to determine the reliability. Using the Alpha Cronbach coefficient, the instruments yielded the following values:

Acquisition Module = 0.885, Cataloguing Module = 0.891, Circulation Module = 0.884, Members Registration Module = 0.847, Reporting Module = 0.953, Ease of Use = 0.791, Organization and Management = 0.865, Circulation Services = 0.865, Library Report Management = 0.809.

According to [7] Spiliotopoulou (n.d.), editors and reviewers consider a measure with alpha equal to or greater than **0.70** as reliable for research purposes. From the Alpha values yielded, the items in instruments were considered “reliable”.

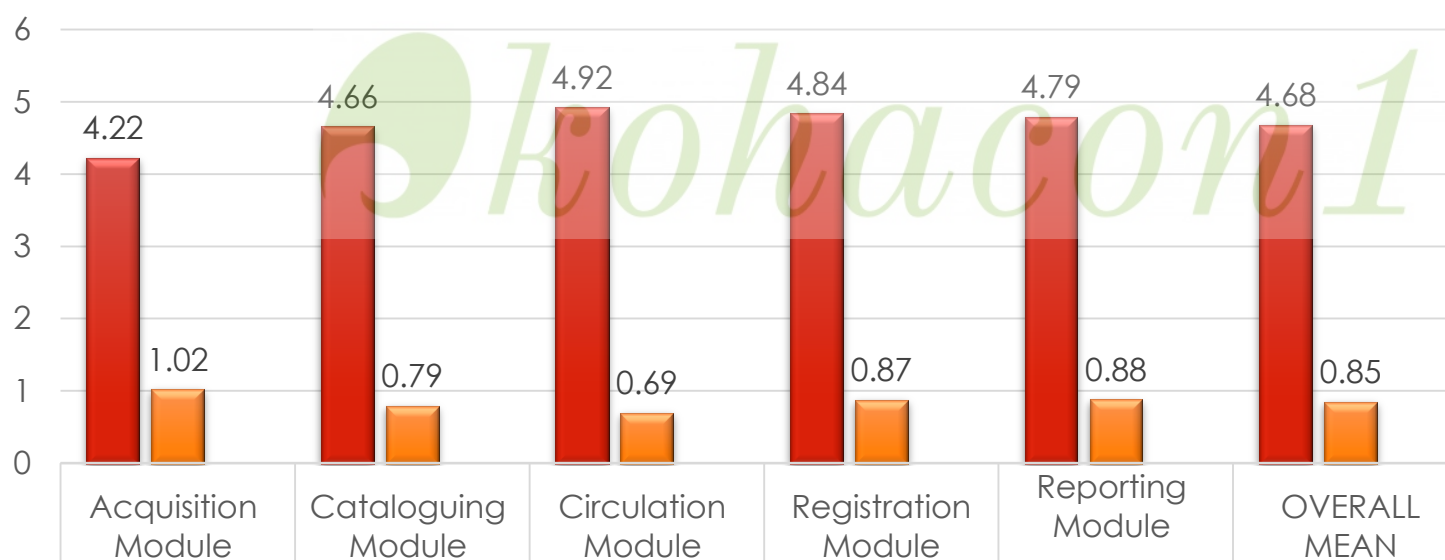




FINDINGS OF THE STUDY

Shoham17

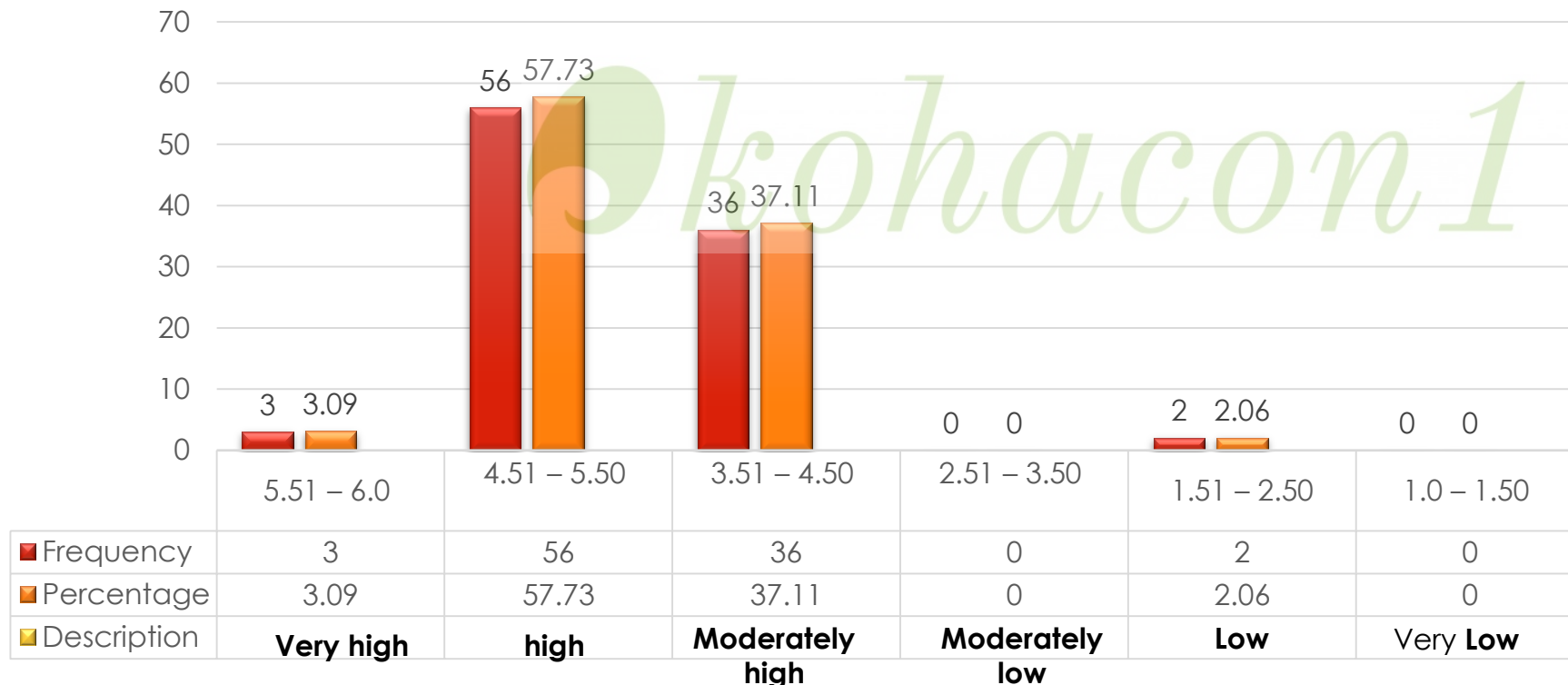
SUMMARY TABLE of the Participants' Level of Awareness of the Functionalities of Koha Integrated System



Mean	4.22	4.66	4.92	4.84	4.79	4.68
Standard Deviation	1.02	0.79	0.69	0.87	0.88	0.85
Description	Moderately high	high	high	high	high	high

The participants were highly aware of the functionalities of the Koha Integrated Library System as indicated with an overall mean of 4.68. It was on circulation module that got the highest mean of 4.92, while acquisition module got the lowest mean of 4.22.

Distributions of Participants' Demonstration of Practices Relevant to the Koha Integrated System (Ease of Use)

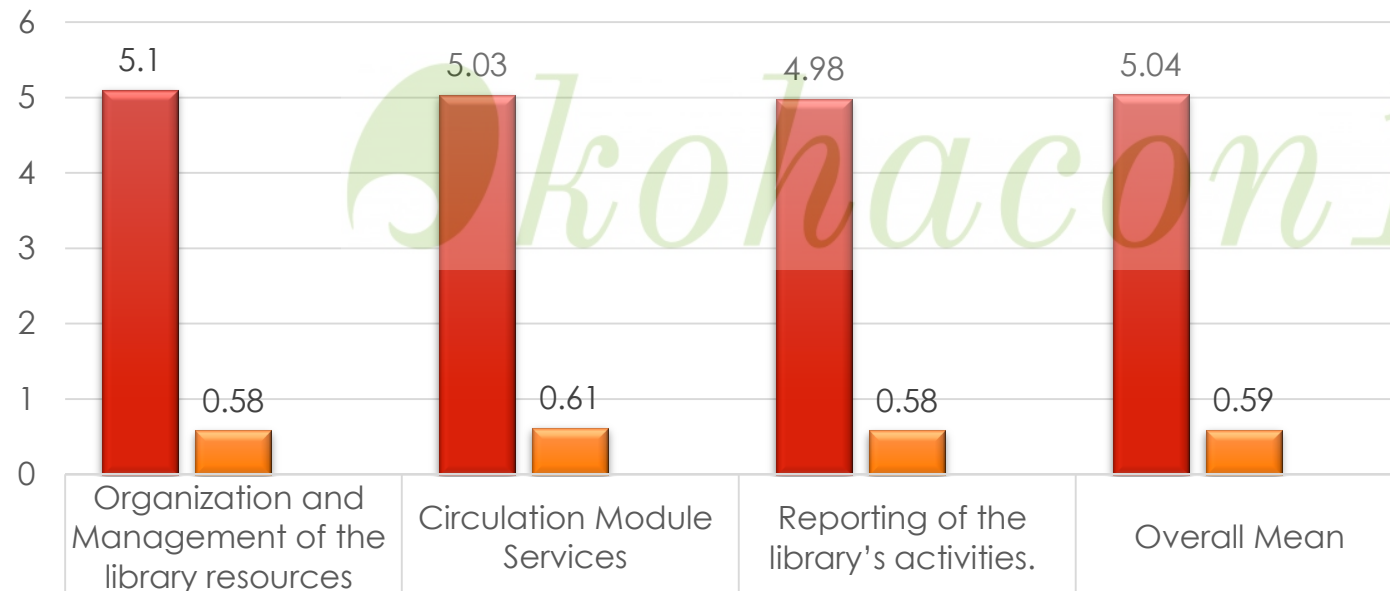


Overall Mean: 4.64 SD: 0.54 Description: High

This result suggests that the adoption of the Koha Integrated Library System is not actually difficult because the library employees of the State University demonstrate positive practices.

Similarly, the Koha is not difficult to learn and to adopt because of the positive attitudes of the employees towards the system such as they don't feel irritated when somebody is teaching them on how to use the system (M=2.38), and they also exercise fairness and equality in delivering the best and excellent library services to its user community with the provision of the Koha Integrated Library System (M=5.02).

Summary Table of the Participants' Perception of the Impact of the Use of the Koha Integrated Library System



The participants' perception of the adoption of the Koha were all described as **high** with an overall **mean of 5.04**. This result implies that the adoption the Koha has a perceived impact in the areas of Organization and Management of the library resources, Circulation Module Services, and Reporting of the library's activities

Mean	5.1	5.03	4.98	5.04
Standard Deviation	0.58	0.61	0.58	0.59
Interpretation	high	high	high	high

ORGANIZATION AND MANAGEMENT

- The result on the Organization and Management of the library resources implies that the adoption of the Koha ILS has a high Impact in the Organization and Management of the Library and its holdings because of the flexibility the system is capable of doing.
- Because of the integration of the different aspects and facets of the library, the librarian can check, see, and identify the different transactions made by the library users in each of the library anytime.
- The Koha is also a great tool in monitoring the day-to-day operation of the library regularly because it operates in a so-called networked environment of computers which the system runs via the web-browsers.

CIRCULATION SERVICES

- The result on the circulation services also implies the great advantages of the library, particularly in circulating the library resources to its library user community with the use of the system's circulation module.
- The traditional way of circulating library resources was very tiresome because it used a paper-based recording where the librarian needs to record the time and the date of the transactions. The records were then combined and consolidated as a circulation report in a very long period of time.
- With the use of the circulation module of the Koha ILS, all the transactions were recorded by the computer each time a transaction took place and stored in the database of the said system, there it can be retrieved anytime the librarian wanted to retrieve them.

REPORTING OF LIBRARY ACTIVITIES

- The result on the reporting of the library's activities implies that the Koha ILS is a big help to the library in terms of the generation of reports because all of the reports can be generated by the Koha ILS whenever the librarian needs them.
- The report module of the system is used to produce a variety of reports from the system; examples are the number of loans of circulation count of particular library borrowers, number of overdue loans, and other reports to support the library activities.
- Moreover, the library employees were also tried and experienced the benefits of the electronic reports generated by the library system.

Table 4

Spearman Rho Correlation Coefficients Showing Significant Relationships Between the Participants' Awareness, Demonstration of Practices and Perceived Impact of the Koha Integrated Library System

Hypothesis:

The participants' level of awareness and practices on the Koha Integrated Library System are not significantly related to the perceived impact of adopting the system

AWARENESS OF THE FUNCTIONALITIES OF KOHA INTEGRATED LIBRARY SYSTEM	Measures	PERCEIVED IMPACT OF THE KOHA INTEGRATED LIBRARY SYSTEM		
		Organization and Management	Circulation Module Services	Library Report Management
Acquisition Module	Correlation Coefficient	.262**	.258*	.332**
	Sig. (2-tailed)	.010	.011	.001
Cataloguing Module	Correlation Coefficient	.245*	.324**	.374**
	Sig. (2-tailed)	.015	.001	.000
Circulation Module	Correlation Coefficient	.456**	.545**	.546**
	Sig. (2-tailed)	.000	.000	.000
Member Registration Module	Correlation Coefficient	.524**	.470**	.511**
	Sig. (2-tailed)	.000	.000	.000
Reporting Module	Correlation Coefficient	.605**	.499**	.538**
	Sig. (2-tailed)	.000	.000	.000
PRACTICES OF THE KOHA INTEGRATED LIBRARY SYSTEM (Ease of Use)	Correlation Coefficient	.273**	.393**	.341**
	Sig. (2-tailed)	.007	.000	.001

The data shows that the participants' level of awareness and practices on the system are significantly related to their perceived impact of adopting the system.

The data further imply that the higher the awareness of the participants on the modules and the demonstrated practices of using the library system, the higher the perceived impact of the system.


RECOMMENDATIONS

- The university must frequently conduct an **in-house awareness program** of the functions of the different modules of the Koha Integrated Library System, especially when the library system is updated to the latest version.
- The university library must also conduct a **training-workshop** to teach the senior library employees the necessary skills to understand the basics of the computer and to diagnose some technical problems of the library system as well.
- Finally, that the university library should hold a **system-wide forum** to discuss the possibility of **adopting the same library system on the other campuses** of the university to promote a **bibliographic sharing** of the records of the other campus libraries.



CONCLUSION

konacn17



The Koha Integrated Library System can transform the library in delivering and providing an effective and efficient library services if it is highly utilized by the end-users, the librarians. The said library system can offer various enhancements because of the nature of its programming codes which are open. It can also offer a number of benefits to the library employees especially in the generation of the various records of their activities whenever it is needed by their user community. Furthermore, the library system can also, in one way or the other, contribute in attaining the mission, vision, goals, and objectives of the library to support to the information needs of its parent institution.

REFERENCES

- [1] Kumar V. Vimal and Thomas Abraham. (n.d.) Eight Things You should Know about Open Source Integrated Library Systems. <http://eprints.rclis.org/13858/1/20.pdf>
- [2] Sharma, Sabitri Devi (2007). Library Automation Software Packages used in Academic Libraries of Nepal: a comparative study. <http://eprints.rclis.org/22581/1/Sabitri%20final%20thesis.pdf>
- [3] Sing, D K and ohammad Nazim (2008). Impact of Information Technology and Role of Libraries in the Age of Information and Knowledge Societies. <https://core.ac.uk/download/files/418/11883554.pdf>
- [4] Everett M. Rogers (1983). Diffusion of Innovations. 3rd edition. New York: The Free Press. <https://teddykw2.files.wordpress.com/2012/07/everett-m-rogers-diffusion-of-innovations.pdf>
- [5] Taylor, Frederick W. (1919). The Principles of Scientific Management. New York: Harper and Brothers Pub. http://www.saasoft.com/download/Taylor_FW_Principles_of_Scientific_Management_1911.pdf
- [6] Hosoi, Mihoko (n.d.). Motivating Employees in Academic Libraries in Tough Times. <http://www.ala.org/acrl/sites/ala.org.acrl/files/content/conferences/pdf/hosoi05.pdf>
- [7] Georgia Spiliotopoulou (n.d.). Reliability reconsidered: Cronbach's alpha and paediatric assessment in occupational therapy. Retrieved from <http://dspace.brunel.ac.uk/bitstream/2438/3260/1/Reliability%20reconsidered%20BURA.pdf>
- [8] Kumar, Vimal V and Jasimudeen S (2012). Adoption and user perceptions of Koha library management system in India. Annals of Library and Information Studies. Vol. 59, December 2012, pp. 223-230 <http://nopr.niscair.res.in/bitstream/123456789/15700/1/ALIS%2059%284%29%20223-230.pdf>
- [9] Ukachi, Ngozi B., Victor N. Nwachukwu, and Uloma D.Onuoha, 2014). Library Automation and Use of Open Source Software to Maximize Library Effectiveness. Information and Knowledge Management. <http://www.iiste.org/Journals/index.php/IKM/article/viewFile/10939/11242>
- [10] Elisha O. Makori and Norah Osebe Mauti (2016). Koha enterprise result planning system and its potential impact on the information management organization. Library Philosophy and Practice (e-journal). <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=3778&context=libphilprac>



THANK YOU SO MUCH...

holow.com 17