A follow-up study on the adoption of an integrated library system at Kyambogo University

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Introduction

- Library automation is not new, it can be traced to as far back as in the 1950s in the western world (Uma & Suseela, 2017).

- Started with the circulation function but later in the 1980s other functions like the cataloguing, online access, patrons management were automated to create integrated library systems (ILS).

- It was in the 1990s that developing countries started automating their library systems mainly because of the expense involved.

- Owing to the slicing of library budgets, libraries resorted to using open Source software (OSS) in the 2000s.

Introduction cont…

- Kyambogo University (KyU) was established in 2003 after a merger of UPK, ITEK and UNISE.

- KyULS started nursing ideas of setting up and Integrated Library System in 2011 .

- This was precipitated by the Consortium of Uganda University Libraries (CUUL) that organized Koha training in 2012 for its member institutions, which includes KyU.

- Koha was later installed on the university server and customized in June 2013. Koha was not yet fully functional; it is only the cataloging and Online Public Access Catalog (OPAC) modules that were utilized. The circulation, acquisition and serials management modules were not yet entirely operational then.

- In 2017, KyU acquired a AfDB loan and started constructing a new library building.

Barclays Library

New Library building

Aim of the study

The aim of this study is to conduct a comparative follow-up study to establish what has changed or remained the same as far as the drivers and barriers to the adoption of OSS ILS at the Kyambogo University Library Service.

Objectives of the study

- To establish the new developments since 2014 at KyUL as far as the adoption of an ILS is concerned.

- To compare the drivers and barriers of adopting an ILS at KyUL in 2014 and now.

- To explore the contribution of Koha on improving service delivery in KyUL.

- To follow up the responses taken by library management on the barriers to adoption of an ILS at KyULS.

Literature Review

- Integrated library systems refer to computer software that ease the operations of the routine functions of the library like; 'circulation, cataloguing, online public access', acquisition, reporting and serials management among others (Webber & Peters, 2010, p. 2).

- The ILSs are mainly categorised into two: proprietary or commercial ones, and Open Source Software (OSS).

- OSS offer the user freedom to review, alter, enhance and modify it to suit a specified local library need.

- Koha falls under the open source and its program source code is freely available for copying, modification and redistribution.

Koha

- Koha and Evergreen are one of the leading OSS ILSs in the world today.

- Koha was designed by by Chris Comack while working with Katipo communications in New Zealand in 1999.

- In 2000, the first version was released to the world and ten years later over 945 libraries had adopted it.

- Its now close to twenty years since its creation and its used in over 15,000 libraries around the world (Breeding, 2016).

- Kyambogo University adopted 2013 but only the cataloguing and OPAC modules were functional.

Theoretical Framework
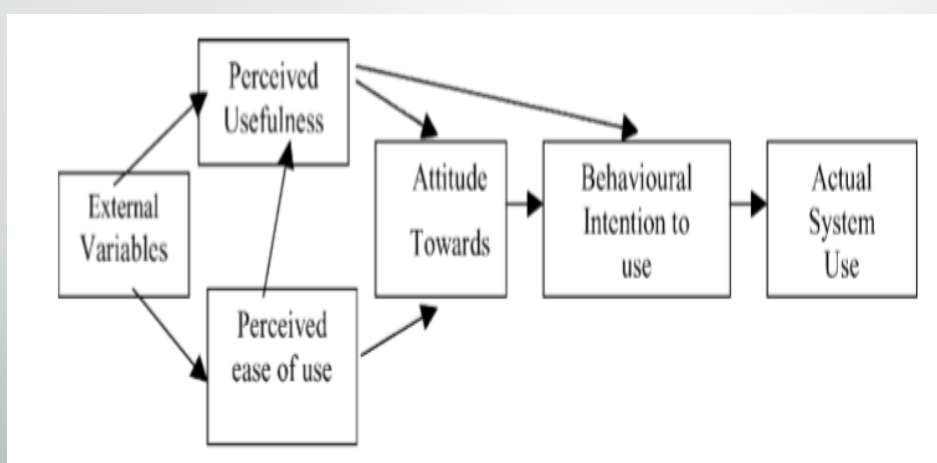
Technology Acceptance Model (Legris, Ingham, & Collerete, 2003, p. 193)

Methodology

- The study employed a comparative longitudinal organisational case study design in order to identify and analyse variables with strong interactions and pattern recognition amongst the two statuses of 2014 and 2018 (Robert et al., 2011).

- A longitudinal study design was employed 'to measure the extent of the change in the phenomenon'(Kumar, 2005, p. 97).

- In this case, the study was measuring the extent of change in the adoption of the ILS in KyULS from 2014 to 2018.

- So although the data was collected from the same study population, it was not necessarily collected from the same respondents (Rossman & Rallis, 2017, p. 81)

- Having used a qualitative approach, data was collected using interviews from fifteen (15) respondents after reaching the saturation point.

- Analysis was first done thematically then later some portions of data were converted into quantitative formats to allow better presentations (Patton, 2015, p. 545).

Respondents' Academic Qualification

S/No.	Academic qualifications of respondents	2014		2018	
		Count	Percentage	Count	Percentage
1	PhD	1	3.85	0	0
2	Masters	3	11.54	4	26.7
3	Bachelor's Degree	7	26.92	6	40
4	Diploma	13	50.00	4	26.7
5	Certificate	2	7.69	1	6.6
	Total	26	100	15	100

Representation of the respondents

S/No.	Library and KU sections of the respondents	2014		2018	
		Count	Percentage (%)	Count	Percentage (%)
1	Kyambogo University Top Management	1	3.85	1	6.7
2	Kyambogo University Library Committee	2	7.69	2	13.3
3	KyU Library Management	3	11.54	2	13.3
4	Library ICT Unit	5	19.23	1	6.7
5	Library Staff	12	46.15	6	40.0
6	KyU ICT Directorate	1	3.85	1	6.7
7	Students Guild	2	7.69	2	13.3
Total		26	100	15	100

Registration of patrons

A student library user is being registered on the Koha by a KyUL library staff under the patron management module

Drivers for adoption of Koha at KyULS

S/No.	Koha adoption drivers in KyULS	2014		2018		%Δ
		Count	(%)	Count	(%)	
1	Continuous Training	22	19.0	14	22.6	3.6
2	KyU top management support	12	10.3	8	12.9	2.6
3	Demand from students for automated services	5	4.3	3	4.8	0.5
4	Library automation trend in sister universities	11	9.5	6	9.8	0.3
5	Qualified staff	24	20.7	13	20.9	0.2
6	Positive attitude towards Koha	19	16.4	8	12.9	-3.5
7	Open source software	23	19.8	10	16.1	-3.7
Total		116	100	62	100	

Functionality of Koha in 2018

S/No.	Functions liked about Koha	Count	Percentage (%)
1	Integration of the Cataloguing module	14	21.5
2	Integration of the OPAC module	14	21.5
3	Remote access function	13	20.0
4	User friendliness	8	12.4
5	Customisability	7	10.8
6	Integration of the Circulation module	6	9.2
7	Integration of the Acquisition module	3	4.6
8	Integration of the Serial Management module	0	0.0
Total		65	100

Barriers to the adoption of Koha at KyUL

S/No.	Koha adoption barriers in KyULS	2014		2018		%Δ
		Count	Percentage (%)	Count	(%)	
1	Shortage of funding	24	19.8	14	31.1	11.3
2	Procurement bureaucracies	10	16.4	12	26.7	10.3
3	Shortage of Infrastructure	22	20.7	12	26.7	6
4	Insufficient Training	12	10.3	2	4.4	-5.9
5	Internet Instability	17	19.0	5	11.1	-7.9
6	Unsuitable for Persons with visual Impairment	5	9.5	0	0	-9.5
Total		90	100	45	100	

Discussion of findings

- Continuous training and KyU top management support were the **leading drivers** to the adoption of an ILS in KyULS.

- This is brought about by both personal interventions and support from development partners like the University of Pretoria and Carnegie corporation (Holmner & Bothma, 2018).

- Shortage of funding and procurement bureaucracies still are the **leading barrier** to the adoption of an ILS at Kyambogo University.

- There is a changing trend where both library staff and users are abandoning traditional librarianship which is largely passive and embracing modern librarianship which engages, is creative, and loves to share new ideas.

Conclusion

- Today libraries are facing immense and extreme pressure to cope with the ever increasing technological changes and demands (Kwanya et al 2015).

- KyULS too is experiencing the same as far as the adoption of an ILS is concerned.

- For the last four years since Koha was adopted, continuous training and presence of qualified staff were the main drivers of adopting Koha while shortage of funds and infrastructure have been the key barriers to the adoption.

- With new library space, KyULS needs to strategically plan for the 4th industrial revolution and it transform itself into a smart library with virtual capabilities.

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