THE MODEL OF INFORMATION TECHNOLOGY FACILITIES AND SERVICES IN UNIVERSITY LIBRARIES: THE CASE OF LIBYA

HEND ALI MESBAH JEBRIL



MASTER OF INFORMATION TECHNOLOGY
INFRASTRUCTURE UNIVERSITY KUALA LUMPUR

THE MODEL OF INFORMATION TECHNOLOGY FACILITIES AND SERVICES IN UNIVERSITY LIBRARIES: THE CASE OF LIBYA

Ву

HEND ALI MESBAH JEBRIL

Project Paper in Partial Fulfillment of the Requirement for the Master of Information

Technology

IUKL

2017

Abstract of thesis presented to the Senate of Infrastructure University Kuala Lumpur in fulfilment of the requirement for the degree of Master of Information Technology Management.

THE MODEL OF INFORMATION TECHNOLOGY FACILITIES AND SERVICES
IN UNIVERSITY LIBRARIES: THE CASE OF LIBYA

BY

HEND ALI MESBAH JEBRIL

March / 2017

Chair: Mr. Haslin Hasan.

Faculty: Creative Media and Innovative Technology.

This study aimed to identify the minimum requirements for information technology facilities and services in university libraries in Libya and to create a framework for information technology facilities and services for these libraries, the study also aimed to scrutinise the status of the libraries from the point of user's perspective in Libya. The study population consists of the target from the universities' students and universities' libraries staff, the sample total number was (160). Descriptive statistics were used for analysing the quantitative data collected by the research questionnaire and the data was entered into the computer and analysed with the aid of SPSS software, then the data collected was summarized and the results recorded in form of cumulative tables. The study concluded with a set of results identifying that the most important facilities provided by universities' libraries are computers in a good condition and performance with headphones and with comfortable monitors and also connected to printer's scanners. Nevertheless, the results also showed that libraries' computers do not have network facilities to share files among computers and libraries are not so suitable for using computers and libraries working hours do not meet the students' needs. In addition, the staff do not help students for using computers. The statistical analysis results also identified that the most important services that the libraries provide are internet with good enough speed with searching facilities, software and the websites provide the ability to search. The results identified the best ICT model for Libyan universities' libraries should contain the facilities of providing suitable libraries to use computers and improving networking facilities to provide file sharing and resources and libraries working hours

should be managed to meet the students' needs and libraries staff should be more helpful with students. In term of services, libraries should improve their websites to provide easy and efficient. Based on the results, the study recommended that, the universities' libraries in Libya need to improve some facilities and services to suit the ICT standards such as enhancing the libraries websites and add more facilities such as providing electronic libraries, in addition, libraries should provide networking facilities in order to help students share files and resources.

ACKNOWLEDGEMENTS

I wish to express my sincere gratitude to my guide Mr. Haslin Hasan, Professor and Head, Janagi Ramasamy, Faculty Of Creative Media And Innovative Technology for her valuable guidance, support and encouragement given to me during the course of the thesis work and always. I sincerely wish to thank her especially for her patience with me, without which I would not have been able to complete this work successfully. I wish to express my sincere thanks to Mrs. Fadzilah Binti Hussin, the staff of the library for their help and co-operation during the course of the thesis work. I would like to record my appreciation and gratitude to my husband Mr. Esam Hnaish, who was a great inspiration and support for me and who encouraged me throughout the journey. I also acknowledge here the support provided by my kids and my family members my father, brothers and sisters whose affection and patience had provided me the strength to complete my master. I wish to express my sincere thanks to all my colleagues and friends in IUKL who have given me constant support and inspiration over the years for the completion of the dissertation. Above all, I thank the Almighty Allah for his blessings on me for the successful completion of this dissertation.

APPROVAL

We have examined this manuscript and verify that it meets the program and university requirements for the Master of Information Technology.

Name of Supervisor: Mr. Haslin Hasan.	
Name of Faculty of Creative Media and Innovative Coordinator Signature Franchise Programm Faculty of Creative Media and Innov Infrastructure University Kua	
Name of Internal Examiner: Madam. Kamarul Na	emi Karudin . Kanarudu
Name of Faculty of Creative Media and Innovativ	e Technology IUKL
Director: Asssoc. Prof .Dr Manal Mohsen Abood	
Centre for Postgraduate Studies (CPS) IUKL	Assoc. Prof. Dr Manal Mohsen Abood Director Centre for Postgraduate Studies Infrastructure University Kuala Lumpur (IUKL)
Signature 7/4/17	×

DECLARATION

I declare that, this Project Paper, entitled "The Model of Information Technology Facilities and Services in University Libraries: The Case of Libya" is the result of my own work except as cited in the references. This report has not been previously submitted for any degree and is not concurrently submitted in candidature of any other degree.

HEND ALI JEBRIL

TABL	E OF C	CONTENTS	Page
ABSTRACT		ii	
ACKNOWLEDGEMENTS			iv
APPROVAL			\mathbf{v}
DECLARATION			vi
TABLE OF CONTENTS			vii
LIST OF TABLES			ix
LIST	OF FIG	GURES	X
CHAI	PTER		
1	INTR	RODUCTION	1
	1.1	Introduction	1
	1.2	Libyan University Library	3
	1.3	Libraries Misurata	5
	1.4	Problem Statements	5
	1.5	Definitions	6
	1.6	Objectives of the Study	7
	1.7	Research Questions	8
	1.8	Significance of the Study	8
	1.9	Conclusion	10
2	LITE	RATURE REVIEW	12
	2.1	Introduction	12
		2.1.1 ICT in University libraries	12
		2.1.2 Professional development and educational needs	s of 13
		library	
	2.2	National studies	13
	2.3	Global Studies	15
	2.4	Why IT required for libraries	27
	2.5	Types Open Source used in Integrated Systems in Librar	ries 29
		2.5.1 Application of Open Source KOHA	30
		2.5.2 Integrated library systems (ILS)	31
		2.5.3 Open Source Software Libraries (OSS)	32
		2.5.4 Open Riblio	35

	2.6	The term "Information Technology" (IT)	36
	2.7	Use of Information Technology to Library Services	38
	2.8	Conclusion	41
3	MAT	ERIALS AND METHODS/METHODOLOGY	44
	3.1	Introduction	44
	3.2	Research Methodology	45
	3.3	Research Objectives	46
	3.4	Research Scope	47
	3.5	Questionnaire Design	47
	3.6	Data Collection	47
	3.7	Data Analysis	48
	3.8	Online Questionnaires	49
	3.9	Report on the Survey Online	50
	3.10	Conclusion	51
4	RES	ULTS AND DISCUSSION	53
	4.1	Introduction	53
	4.2	Reliability Study	53
	4.3	Normality Test	53
	4.4	Descriptive Analysis	56
	4.5	ANOVA Analysis	64
	4.6	Sample Trending Statistical Analysis	65
5	SUM	MARY, CONCLUSION AND RECOMMENDATIONS	69
	FUT	URE RESEARCH	
	5.1	Introduction	69
	5.2	Results Discussing	69
	5.3	Research Recommendations	71
	REF	ERENCES	72
	APP	ENDIX	75

LIST OF TABLES		
Table 4.1	Cronbach's Alpha value of the factor of university library services and facilities	53
Table 4.2	Normality tests for demographic variables	54
Table 4.3	Normality tests for "university library services and facilities" items	55
Table 4.4	Gender descriptive analysis	56
Table 4.5	Age descriptive analysis	57
Table 4.6	Marital status descriptive analysis	58
Table 4.7	The descriptive analysis for educational level	59
Table 4.8	The descriptive analysis for educational field	60
Table 4.9	How many times do you visit the university library a week	61
Table 4.10	How many hours do you spend in the library a visit	62
Table 4.11	Does the library open in holidays	63
Table 4.12	ANOVA results for the demographic variables	64
Table 4.13	Weighted means of the university library services and facilities factor items	65

LIST OF	FIGURES	Page
Figure 1.1	Content of Chapter1	11
Figure 2.1	Model of ICT University Libraries	42
Figure 3.1	Research Process Framework for Chapter Three	52
Figure 4.1	Gender descriptive analysis	56
Figure 4.2	Age groups descriptive analysis	57
Figure 4.3	Marital status groups' descriptive analysis	58
Figure 4.4	Descriptive analysis of educational level	59
Figure 4.5	Descriptive analysis of educational fields	60
Figure 4.6	How many times do you visit the university library a week	61
Figure 4.7	How many hours do you spend in the library a visit	62
Figure 4.8	Does the library open in holidays	63
Figure 4.9	Model of Information Technology University Library in	67
	Misurata	

CHAPTER1

INTRODUCTION

1.1 Introduction

With the innovation in information and communication technology, libraries now utilize different types of advances to help users whom they cater to. Therefore, data applications and the manner in which data is disseminated and controlled is heavily depended on the new advances in technology. The effects of the new advancements are felt by libraries at each angle. Processing innovation, correspondence innovation, and mass stockpiling innovation are a portion of the territories of persistent advancement that reshape the way libraries access, recover, store, control and scatter data to their respective consumers or clients. The scholastic library had, from the very beginning, played an important role in higher adapting, instead of being just an addendum or an addition. Oyedun (2007) characterized scholarly libraries as libraries that are for established, often, for tertiary organizations, built up, to bolster learning, in both instructing and scrutinizing forms. In the course of the last twenty-seven years, scholarly libraries have been influenced by changes in data and correspondence innovation. The rate of changes is as yet quickening.

The presentation of different data innovation (ICT) patterns has led to the revamping and change in work examples, with interest for new aptitudes, work retraining, and renaming positions. The innovative progression of the previous quarter century, for example, in electronic database, online administrations, CD-ROMs and presentation of the web has profoundly changed access to data. Rana (2009) opines that ICT holds the way to the achievement of modernizing data administration. Utilization of ICT is various, but however, is fundamentally utilized as a part of changing over the current paper-print records, all in the whole procedure of capacity, recovery, and scattering.

ICT has positively affected each circle of the scholarly library action in areas related to library accumulation, advancement procedures, library building and consortia. ICT provides a chance to give an esteemed added data administration and access to a wide assortment of digitally based data assets to their customers. In addition to that, scholastic

References

Bawden, David, Vilar, P.,&Zabukovec, V.(2005) "Education and training for digital librarians: a Slovenia/UK comparison." Aslib proceedings. Vol. 57. No. 1.

Cholin, V. S. (2005). Study of the application of information technology for effective access to resources in Indian university libraries. *The International Information & Library Review*, 37(3), 189-197.

Chouhan, L. B. (2010). *Open Source Software* (OSS) for Library Management-A Study.32

Da Rosa, Barreto,I.,&Lamas.D.(2007) "Digital library for digital divide and environment of scarce access to printed Materials: the case of university Jean Piaget of cape Verde." Proceedings of IADIS International Conference on e-Society. Lisbon,

Emeka, C., JESUDUNNI, O., & CHUKWUMA, A. (2015). The Use and Application of Open Source Integrated Library System in Academic Libraries in Nigeria: Koha Example.

Erich, Agnes.(2013) "The role of the university library for an efficient use of the electronic resources." *Studii de Biblioteconomie și Știința Informării* 17: 75-83.

Fu, P., & Fitzgerald, M. (2013). A comparative analysis of the effect of the integrated library system on staffing models in academic libraries. *Information Technology and Libraries (Online)*, 32(3), 47.

Guha, &Nabonita.(2006) "ICT for Continuing Professional Education for LIS Professionals." Conference on ICT for facilitating Digital Learning Environment, DRTC, Bangalore.

Khan, Ahmad,S,. Bhatti,R,. & Aqeel Ahmad Khan.(2011) "Use of ICT by Students: A Survey of Faculty of Education at IUB."

Krubu, D., & Osawaru, K. (2010). The impact of information and communication technology (ICT) in Nigerian University libraries.

Kumar, Praveen, Bahl,G,.,& Nath.,A,.(2007) "Information and Communication Technology Knowledge and Skills of Librarians in The Chandigarh City Libraries."

Lochhaas, Sherry, & Moore, M., (2010) "Open Source Software Libraries.

Müller, T. (2011). How to choose a free and open source integrated library system. *OCLC Systems & Services: International digital library perspectives*, *27*(1), 57-78.

Obajemu, A. S., Osagie, J. N., Akinade, H. O. J., & Ekere, F. C. (2013). Library software products in Nigeria: A survey of uses and assessment. *International Journal of Library and Information Science*, 5(5), 113-125.

Omekwu, C. O., and R. I. Echezona. (2008). "Emerging challenges and opportunities for Nigerian libraries in a global information system." *Libraries without Borders: Globalisation of Library and Information Services*: 63.

Patience N. Ejimofo & Isaac K. Ohaji (2008) *Network and Networking among Libraries and Information Providers*: The University of Nigeria, Enugu Campus (UNEC) Library Experience p 13.

Saleem, A., SZ, S. T., & Batcha, M. S. (2013). Application and uses of Information Communication Technology (ICT) in academic libraries: an overview. International Journal of Library Science, 2(3), 49-52.

Sharma, Ravindra N.(2009). "Technology and academic libraries in developing nations." *International Conference on Academic Libraries (ICAL)*.

Sheeja, N. K., & Antherjanam.S. D., (2008). "Impact of ICT on Library and Information Science: Major Shifts and Practices in CUSAT Central Library.".

Siddike, A. K., Munshi, N., & Sayeed, A. (2011). The adoption of information and communication technology (ICT) in the university libraries of Bangladesh: an exploratory study.

Singh, K. P., Sharma, S., & Negi.N., (2009) "Availability, use and barriers to ICT in the R&D institutions: A case study of the libraries and information centres in Noida." *DESIDOC Journal of Library & Information Technology* 29.6: 21-31.

Susan Mathew, K., & M. D. (2011) Baby. *Impact of information communication technology (ICT) on professional development and educational needs of library professionals in the Universities of Kerala*. Diss. Cochin University of Science & Technology,.

Susan, K., Baby, M. D., & Sreerekha, P. S. (2010). Professional Development of Academic Library Professionals in Kerala.

INFRASTRUCTURE UNIVERSITY

Tiwari, & Kumar, S. (2011) "A Study on Impact of ICT on Library and Information Services."

Wilson, Kerry M., & Halpin.E.,(2006) "Convergence and professional identity in the academic library." *Journal of librarianship and information science* 38.2:79-91.

Zhang, & Sha Li. (2003) "Effectiveness of Support Staff Training and Development in Selected Academic Libraries in Kansas and Oklahoma."

Zhou, S., Zheng, X., Wang, J., & Delisle, P. (1993). Utopia: a load sharing facility for large, heterogeneous distributed computer systems. *Software: practice and Experience*, 23(12), 1305-1336.

Lutfi on Alkmici (2008), university libraries and challenged the digital age Fateh University Libraries (Libya) model, Fateh University-Tripoli-Libya

Melhem, Essam Tawfiq Ahmed. *Sources of electronic information in university libraries*. *Bean.* 506. Naif Arab University, 2011