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Skill and Attitudes towards the Digital Library Environment: A Study of Information Professionals in the Government Polytechnic College Libraries in Kerala

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Abstract **- Information professionals will require more extensiveness and strength of knowledge and skills across the extent of traditional library knowledge. This study was conducted to observe the skills and attitudes of Information Professionals towards the digital library environments of Government Polytechnic College Libraries in Kerala. The study comprises all the Information Professionals, working in the Government Polytechnic Colleges in Kerala. There are 43 Government Polytechnic Colleges in Kerala. The study was based on a questionnaire survey of Information professionals employed in the Government Polytechnic College Libraries in Kerala. The study identified the skill, knowledge and attitudes required by librarians for the emerging digital library environment. The study reveals that the majority of information professionals are well aware of the ICT skills required for working in the Polytechnic Colleges Libraries. The study also reveals the problems associated with the updating of their skills and strategies to be used for updating their skills. The study proposes for formulating common standards for Polytechnic College Libraries for the better performance of such libraries.**
Keywords: **ICT Skills, Ability and Attitudes, Information Professionals, Digital Library**

I. INTRODUCTION

The improvement of the virtual generation has delivered on new demanding situations for information professionals for information access and delivery. Information Professionals have usually performed a key function in the academic environment. These days, within the digital age, librarian's roles are not merely an information provider. The changes in the generation the use of electronically stored and retrieved information has changed the way customers and college students are capable of access, retrieve and use information. The instant gets entry to of records through the internet has made significant amounts of information and records available to absolutely everyone with the virtual era. Virtual facts are converting the role of Information Professionals from a person who students ask for assistance in locating information in an area known as a library to a person who desires to offer services and preparation irrespective of location, time or format.

The biggest demanding situations facing the profession nowadays are making ready the specialists use technology effectively. The Information Professionals may be required to serve as information service consultant information technology talents. As era has saturated all stages of the library's operations and offerings, the Information Professionals has to expect the changing expectancies of customers and be flexible in adapting and adopting new talents and stages of consciousness. While being skilled in ICT abilities, what each Information Professionals chooses to ignore is the management element of a library.

Similarly to the professional talents mentioned, the Information Professionals of the destiny ought to be ready with an extensive range of personal and transferable abilities to be able to manage the converting virtual surroundings wherein he or she works. The management and interpersonal abilities will make Information Professionals more effective managers of networked resources and services on these virtual surroundings. The information professional ought to exchange and adapt to the new electronic data environment, they ought to study new technologies and be aware of the strengths and weaknesses of them. Information Professionals have to no longer feel threatened by way of computers and technical developments, however, ought to plough ahead with the new era and take a pivotal position within groups. Information professionals inside libraries are playing an increasing function in handling information in digital formats by means of creating new pages to sell their services to external customers and selecting computerized library management systems.

II. REVIEW OF RELATED LITERATURE

Choi & Rasmussen (2006) surveyed the existing digital library professionals in academic libraries in the United States to recognize their activities and skills and to identify any gaps in their training. They analyzed the input from the survey responses to learn more about the nature of digital library work practices and to discover the common and necessary attributes i.e. knowledge and skills required for digital librarians. The findings of the study have the implications for the design of digital library education that meets real workplace needs.

Achugbue & Anie (2011) discusses the attitudes of librarians towards the digital library in e-learning, the

imperativeness of training and knowledge for the effective functioning of digital libraries in Nigerian universities. The study uses the descriptive survey method to identify the attitudes of librarians towards the digital libraries, advantages of digital libraries, and the types of e-learning that can be supported by digital libraries. The study identifies that the training and knowledge are the sines qua none of a positive attitude towards digital libraries in e-learning. There was a high use of the use of online information by researchers and learners but lack of awareness and how best to integrate e-learning resources into digital libraries pose an enormous challenge to the librarians in Nigerian Universities.

Ezema, Ugwuanyi, & Ugwu (2014) are conducted a study to determine the skills requirements of academic librarians for the digital library environment in Nigeria. The survey identified that interpersonal, leadership and management and information technology skills required by librarians for the emerging digital library environment.

Raju (2017) explains in his study to ascertain what ICT knowledge and skills are needed by the academic librarians in the digital library environment. The study examines the empirical evidence from LIS job advertisements and a national online survey of academic libraries in South Africa. It concludes that 70 to 75 per cent of job advertisements in the academic library sector demand requirements for advanced IT skills. The study recommends that the LIS discipline grasp the opportunity presented by what Abbott calls its "interstitial character" and its tendency toward "fractal distinctions in time" to stake an intellectual argument on this technology-driven conservatory of its disciplinary domain.

III. OBJECTIVES OF THE STUDY

The objectives of the study are to:

1. Identify the skills required to Librarians for the digital library environment
2. Identify the ability and attitudes of the information professionals towards the digital environment
3. Identify the problems associated with updating the librarians' skills;
4. Examine the strategies to be used in updating the librarians' skill

IV. METHODOLOGY OF THE STUDY

The study will adopt a survey method for the collection of primary data of Information Professionals working in the Government Polytechnic Colleges in Kerala. The skills and attitudes associated with the digital environment are only considered for this study. The study comprises all the Information Professionals, working in the Government Polytechnic Colleges in Kerala. There are 43 Government Polytechnic Colleges in Kerala. Out of which 39 institutions have only the post of Librarian. The study population comprises of 39 Information professionals. A structured questionnaire-based on the objectives of the study were conducted. The questionnaire consists of both optional type questions and statement in five-point Lickert Scale. 32 questionnaires were returned back out of 39. The collected data was scrutinized, classified and tabulated for the better understanding for analysis. The collected data analyzed through the Microsoft Excel spreadsheet.

V. ANALYSIS OF THE STUDY

The study comprises 39 Information Professionals working in the Government Polytechnic Colleges in Kerala. Out of the 39 questionnaires distributed, 32 questionnaires were received back and it was used for the analysis.

A. Demographic Background

TABLE I SHOWS THE DEMOGRAPHIC ANALYSIS OF THE DATA.

Age	21-30	31-40	41-50	51-60	Total
Male	0	2 (6.30%)	8 (25.00%)	3 (9.30%)	13 (40.60%)
Female	0	15 (46.90%)	4 (12.50%)	0 (0.00%)	19 (59.40%)
Total	0	17(53.20 %)	12 (37.50%)	3 (9.30%)	32 (100%)

The analysis shows that 40.6% (13) are male respondents and 59.4% (19) are female respondents. It shows that the majority of Information Professionals working in the Government Polytechnic Colleges in Kerala are female.

The analysis shows that the majority of the Information Professionals fall in the age group between 31-40 years (53.20 %) at the time of the survey. The Information Professionals in the age group of 41-50 years are 37.50 % and remaining 9.30% are the in the age group of above 51 years. The study shows that not one to be working in the age group of below 30 at the time of the survey.

B. Professional Qualifications

The professional qualifications of the respondents outline in table II. It is evident from the study 81.25% (26) of the respondents have Post Graduate degree in Library and Information Science. It shows that M. Phill/ Ph.D in Library and Information Science are (2), BLISc and CLISC are equal in this study of 6.25% (2).

TABLE II PROFESSIONAL QUALIFICATIONS

S. No.	Qualifications	No. of Respondent
1	C L I Sc	2 (6.25%)
2	B L I Sc	2 (6.25%)
3	M L I Sc	26 (81.25%)
4	M Pill/Ph D	2 (6.25%)
	Total	32 (100%)

C. Professional Experience

The overall professional experience of the information professionals participated in the study revealed in table III.

TABLE III PROFESSIONAL EXPERIENCE

S. No.	Experience	No. of Respondent
1	Below 10 years	13 (40.10%)
2	11-20 years	15 (46.90%)
3	21-30 years	4 (13%)
4	Above 31 years	0
	Total	32 (100%)

The analysis shows that 40.10 % respondents have below 10 years experiences only. The 46.90% respondents have 11 to 20 years and 13.00% have 21 to 30 years. The study shows that there was no one have above 31 years of professional experience.

D. Requirements For ICT Skills

The important part of the study is to find the requirements of ICT skills for working in the Polytechnic College Libraries. The feedbacks of the respondents are presented in table IV.

TABLE IV REQUIREMENTS OF ICT SKILLS

S. No.	ICT Skills	Strongly Agree	Agree	Undecided	Disagree	Strongly disagree	Total
1	Database searching technique	8 (25%)	24 (75%)	0 (0%)	0 (0%)	0 (0%)	32 (100%)
2	Digitization and imaging technology	19 (59.4%)	13 (40.6%)	0 (0%)	0 (0%)	0 (0%)	32 (100%)
3	Hardware and Networking	25 (78.1%)	7 (21.9%)	0 (0%)	0 (0%)	0 (0%)	32 (100%)
4	MS Office	28 (87.5%)	4 (12.5%)	0 (0%)	0 (0%)	0 (0%)	32 (100%)
5	OCR Devices	6 (18.7%)	22 (68.8%)	4(12.5%)	0 (0%)	0 (0%)	32 (100%)
6	Online classification	23 (71.9%)	7 (21.9%)	2 (6.2%)	0 (0%)	0 (0%)	32 (100%)
7	Online cataloguing(MARC)	4 (12.5%)	24 (75%)	4 (12.5%)	0 (0%)	0 (0%)	32 (100%)
8	Software design	6 (18.7%)	22 (68.8%)	4(12.5%)	0 (0%)	0 (0%)	32 (100%)
9	Software installation/operations	4 (12.5%)	24 (75%)	4 (12.5%)	0 (0%)	0 (0%)	32 (100%)
10	System analysis and design	4 (12.5%)	24 (75%)	4 (12.5%)	0 (0%)	0 (0%)	32 (100%)
11	Transformation of data	6 (18.7%)	22 (68.8%)	4(12.5%)	0 (0%)	0 (0%)	32 (100%)
12	Web design	4 (12.5%)	24 (75%)	4 (12.5%)	0 (0%)	0 (0%)	32 (100%)

Table IV shows 75 % of respondents agree and 25% strongly agrees that database searching techniques required for working in digital libraries. 59.45 of respondents strongly agree and rest of them is agreeing that digitization and imaging technology are required. 78.1% are strongly agreed about the skill of hardware and networking and 87.5% are strongly agreed with the importance of MS Office. The majorities (68.8%) of the respondents are aware of OCR devices and 71.9% are strongly agreed about the use of online classification in Libraries. 75% of the respondents are agreed that the opportunity of the online cataloguing in libraries. The majority of the respondents participated in this survey agrees that the different skills of software development, installation, the transformation of data, system analysis and web design are necessary for professionals working in the digital library environment.

E. Identify the Ability and Attitudes

The study focused to identify the ability and attitudes of information professional for working in the digital environment. The data received from the respondents are presented in table V.

TABLE V THE ABILITY AND ATTITUDES

S. No.	Ability and attitudes	Strongly Agree	Agree	Undecided	Disagree	Strongly disagree	Total
1	Flexibility to adopt the changes	6 (18.75%)	18 (56.25%)	2 (6.25%)	6 (18.75%)	0 (0%)	32 (100%)
2	Customer satisfaction	8(25%)	18 (56.25%)	4 (12.5%)	2 (6.25%)	0 (0%)	32 (100%)
3	Problem Solving	4 (12.5%)	22 (68.75%)	6 (18.75%)	0 (0%)	0 (0%)	32 (100%)
4	Creativity	8 (25%)	22 (68.75%)	2 (6.25%)	0 (0%)	0 (0%)	32 (100%)
5	Professionalism	18(56.25%)	14 (43.75)	0 (0%)	0 (0%)	0 (0%)	32 (100%)

How to understand the ability and attitudes of information professional toward digital environments is a difficult mission. 56.25% of respondents agree and 18.75% strongly agree that the flexibility of the information professionals could understand the ability and attitudes towards the digital environment. Most of the respondents' i.e., 56.25% agree and 25% strongly agree that the feedback from the customers will help to identify their ability and attitudes. The respondents with 68.75% agree and 12.5% strongly agrees that they can understand their ability attitudes while solving specific problems related to ICT. The respondents with 68.75% agree and 25% strongly agrees that the creativity from a professional will help to understand their ability attitudes. The respondents with 56.25% are strongly agreed and 43.75% are agreeing that the professionals of an individual will help to identify their ability and attitudes.

F. Problems Associated With Updating the Professional Skills

The information professionals are facing some difficulties with updating their skill for working in a digital platform. The extents of the problems are expressed in table VI.

TABLE VI RESPONSES FROM THE INFORMATION PROFESSIONALS RELATED TO THE PROBLEMS OF UPDATING THE ICT SKILLS.

S. No.	Problems with Skill updating	Strongly Agree	Agree	Undecided	Disagree	Strongly disagree	Total
1	Poor Infrastructure	8(25%)	24 (75%)	0 (0%)	0 (0%)	0 (0%)	32 (100%)
2	Inadequate financial assistance	20 (62.5%)	12 (37.5%)	0 (0%)	0 (0%)	0 (0%)	32 (100%)
3	Inactivity of the professional bodies	2 (6.25%)	8(25%)	2(6.25%)	16 (50%)	4 (12.5%)	32 (100%)
4	Lack of support from higher authorities	4 (12.5%)	8 (25%)	4 (12.5%)	16 (50%)	0 (0%)	32 (100%)
5	Personal inabilities	0 (0%)	8(25%)	0 (0%)	24 (75%)	0 (0%)	32 (100%)

The 75% respondents are agreeing and 25% are strongly agreeing that the poor infrastructure is one of the barriers for updating the professional skill. The 62.5% of the respondents strongly agreed and 37.5% agreeing that the financial barriers are one of the reasons for updating their professional skill. Most of the respondents (50%) are disagree and 12.5% strongly disagrees with the inactivity of a professional organization is a reason for the failure of achieving technical skills. The respondents of 50% disagree with the lack of support from higher authority is one of the reasons for updating technical skills. The 75% of the respondents have disagreed with the personal inabilities are one of the problems for updating the technical skill and rest of them are agreeing with us.

G. Improving the ICT Abilities

The information professionals are using different ways for improving their ICT abilities. Table VII expresses the methods in which they are updating their skills.

TABLE VII METHODS OF IMPROVING ICT SKILLS

S. No.	Improving ICT Abilities	Strongly Agree	Agree	Undecided	Disagree	Strongly disagree	Total
1	Attending short term courses	6 (18.75%)	24 (75%)	2(6.25%)	0 (0%)	0 (0%)	32(100%)
2	Participating seminars and workshops	4 (12.5%)	22(68.75%)	4 (12.5%)	26.25%)	0 (0%)	32 100%)
3	Trial and error methods	10 (31.25%)	18(56.25%)	2(6.25%)	2(6.25%)	0 (0%)	32(100%)
4	Help from other professionals	8 (25%)	16 (50%)	4 (12.5%)	4(12.5%)	2(6.25%)	32(100%)
5	Read the manual	7 (21.88%)	25(78.12%)	0 (0%)	0 (0%)	0 (0%)	32(100%)

The study aims to understand the methods for improving their ICT skills. The 75% of the respondents are agreeing that the short-term course will help to improve the ICT Skills. The respondents of 68.75% are agreeing that participation in the seminar and workshop help to improve the ICT Skills. Most of the respondents are using trial and error methods for improving their ICT skills. The respondents of 50% are agreeing that the assistance from other professionals will help for improving their ICT skills. The majority (78.12%) of the respondents says the manual of the equipment will help for improving the ICT Skills and 21.88% are strongly agreed with us.

VI. FINDINGS OF THE STUDY

The survey exhibits the following findings are given below:

1. The study reveals that the majority (81.25%) of the information professionals have MLISc degree.
2. The study reveals that the majority of information professionals are well aware of the ICT the skill required for working in the Polytechnic Colleges Libraries.
3. The majority of respondents agree that customer satisfaction is used for measuring their ability towards the ICT Skills.

4. Most of the respondents say disagree with the inactivity of the professional associations is a failure for achieving ICT Skills.
5. The information professionals are agreeing that attending the short-term course and workshops are helpful for improving their skills.
6. Most of the information professionals are receiving help from other professionals.
7. A few information professionals only agree that personal inabilities are constraints for achieving ICT skills.
8. The study reveals that finance is one of the constraints for implementing digital environment.
9. Majority of the respondents agree that the poor digital infrastructure is one of the barriers for updating their digital skill.

VII. SUGGESTIONS

The interpretation through the study and comments offered by the respondents has enabled the investigations to offer some practical suggestion to improve the skill and attitude of Information Professionals towards the digital environment.

1. The working environment of digital libraries is collaborative of computing systems to traditional library functions and many libraries will sooner or later be transformed into digital libraries. It requires professionally educated and this job will be very attractive to the next generation.
2. The information professionals attain different skills which include management, leadership, Human Relation skill and Information and Communication Technology.
3. Provide minimum infrastructure and formulate common standards for Polytechnic College Libraries. The Director of Technical Education, Kerala, formulates these policies for the better performance of such libraries.
4. The opportunities for regular and continuous training help to develop the technical and information skills for a realistic and operational understanding of digital libraries.

VIII. CONCLUSION

In the digital environment, information professionals should be able to manage the Digital Information System as this includes the overall competencies skills and attitudes necessary to generate, accumulate, examine, categorize, retrieve and disseminate digital information in digital libraries. Digital libraries are the prospect of academic institutions, and Information professionals will be required to have more extensiveness and strength of knowledge and skills across the extent of traditional library knowledge. Our survey was limited to the ICT skills and attitudes of information professionals in Government Polytechnic College Libraries. Conducting a similar survey for identifying other skills and attitudes, such as management, leadership, social responsibility and human relation would be useful for creating a better understanding of the professionals.

REFERENCES

[1] Achugbue, E. I., & Anie, S. O. (2011). Attitudes of Librarians in Selected Nigerian Universities towards Digital Libraries in E-Learning. *International Journal of Digital Library Systems,2*(1), 52-57. doi:10.4018/jdls.2011010103

[2] Choi, Y., & Rasmussen, E. (2006). What Is Needed to Educate Future Digital Librarians. *D-Lib Magazine,12*(9).doi:10.1045/September 2006-choi

[3] Ezema, I. J., Ugwuanyi, C. F., & Ugwu, C. I. (2014, September 1). *Rnational Journal of Library and Information Science (IJLIS), 3*(1), 17-31. Retrieved from http://www.iaeme.com/IJLIS/issues.asp?JType =IJLIS&VType=3&IType=1

[4] Ghosh, M. (2009). Digital infrastructure and attitudes towards access and sharing: A case study of selected engineering libraries in the Maharashtra state of India. *International Information & Library Review, 41*(2), 89-120. doi:10.1080/10572317.2009.10762803

[5] Mansour, E. (2017). A survey of digital information literacy (DIL) among academic library and information professionals. *Digital Library Perspectives, 33*(2), 166-188. doi:10.1108/dlp-07-2016-0022

[6] Raju, J. (2017). Information Professional or IT Professional: The Knowledge and Skills Required by Academic Librarians in the Digital Library Environment. *Portal: Libraries and the Academy, 17*(4), 739-757. doi:10.1353/pla.2017.0044

[7] Shrivastava, D.K. (2012). Professional Requirements of LIS Professionals in E-World and Digital Environment: A Case Study of Public Libraries in Rajasthan. *International Journal of Scientific Research,3*(4), 237-239. doi:10.15373/22778179/apr2014/82

[8] Sridhar, M. S. (1999). Skill requirements of LIS professionals in the new e-world. *Library Science with a Slant to Documentation and Information Studies, 36*(3), 141-149.