

## DIGITAL INFORMATION LITERACY SKILLS OF LIBRARY AND INFORMATION SCIENCE PROFESSIONALS IN MUMBAI

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***Abstract** -The present project was undertaken as a Minor Research Project sponsored by University of Mumbai during 2015-16. The main aim of the study is to know the Digital Information Literacy Skills of Library and Information Science Professionals in Mumbai. University of Mumbai in its jurisdiction has 72 colleges in greater Mumbai. The college has 21 different faculties. The questionnaire was distributed to all the college librarians in greater Mumbai. The researcher has collected 48 (66.66%) responses from the colleges. All the findings are discussed in detailed below.*

**Keywords:** Information Communication Technology, Computer Literacy, Digital Literacy, Library and Information Science Professionals.

### **Introduction:**

Digital literacy is the knowledge, skills, and behaviors used in a broad range of digital devices such as smart phones, tablets, laptops and desktop PCs, all of which are seen as network rather than computing devices. Digital literacy initially focused on digital skills and stand-alone computers, but the focus has moved from stand-alone to network devices. Digital literacy is distinct from computer literacy and digital skills. Computer literacy preceded digital literacy, and refers to knowledge and skills in using traditional computers (such as desktop PCs and laptops) with a focus on practical skills in using software application packages. Digital skills are a more contemporary term but are limited to practical abilities in using digital devices.

### **Review of Literature:**

**Shabhat Husain and Mohammad Nazim** (2015) studied the academic libraries in India have mostly been involved in applying traditional ICT-based solutions for the management of various library functions and services, particularly for organising and retrieving information. Use of modern ICT-based tools of knowledge creation and sharing such as web discovery tools, blogs, wikis, Real Simple Syndication feeds, social networking and social bookmarking seems uncommon in academic libraries. Lack of trained staff in ICT, low level of ICT skills among library users, unawareness of potential benefits of ICT and inadequate ICT infrastructure were found as the major barriers of ICT applications in academic libraries.

**Fakkirappa Kattimani Shivaputrappa and R. Naik Ramesh** (2013) evaluates the competences in librarianship and information communication and technology (ICT) skills between different designations of library professionals (librarian, deputy librarian, assistant librarian and library assistants and others) working in the engineering college libraries affiliated with Visvesvaraya Technological University (VTU), Belgaum ([www.vtu.ac.in](http://www.vtu.ac.in)) in Karnataka state, India. The majority of the library professionals working in the engineering colleges in Karnataka state have chosen this profession by accident.

**Nosheen, Fatima Warraich, & Kanwal Ameen** (2010) investigates the perceptions of LIS professionals regarding the usage and satisfaction of the Pakistani Higher Education Commission (HEC) National Digital Library (NDL) databases. The NDL Programme provides free access to electronic resources (30 full text databases including 24,000 peer reviewed online journals and e-books) of world-renowned publishers to public and private sector universities and non-profitable research and development organizations, in Pakistan.

**Kanwal Ameen and G. E. Gorman** (2009) explored the overall state of information and digital illiteracy (IDL) in developing countries and how it hampers the growth of individuals and nations. The case of Pakistan is to be used as an example to illustrate the endemic state of poor information and digital literacy. It also aims to discuss the general drawbacks to effective IDL in developing Asian countries.

**Maitrayee Ghosh** (2007) described the use of ICT to disseminate preventive health care information to combat the AIDS epidemic in India. The role of information professionals in various libraries and information centres and the challenges they are facing to increase HIV/AIDS awareness are discussed. Finally, recommendations are given and the conclusion is drawn that libraries and information professionals must develop AIDS literacy programmes to cater to the growing health information needs of the community.

**Esharenana E. Adomi and Silvester O. Anie** (2006) assessed the computer literacy skills/competencies of professionals librarians in Nigerian university libraries. Study reveals the personal characteristics of the respondents, assessment of their levels of computer skills, computer use experience, avenues of computer literacy, software used, library routines computer is used for, benefits derived from computer and problems associated with computer use, recommendations are made in light of the findings.

**Constantine M. Nyamboga** (2004) presents the results of a study of training opportunities for library and information professionals in India and how a selection of Indian university libraries are providing information skills and information literacy programmes for their users. The need for training students, researchers and staff to make appropriate use of resources made available in libraries is recognised. Library and information professionals also need continuing professional development courses as new ways of providing information resources are developed.

## Objectives:

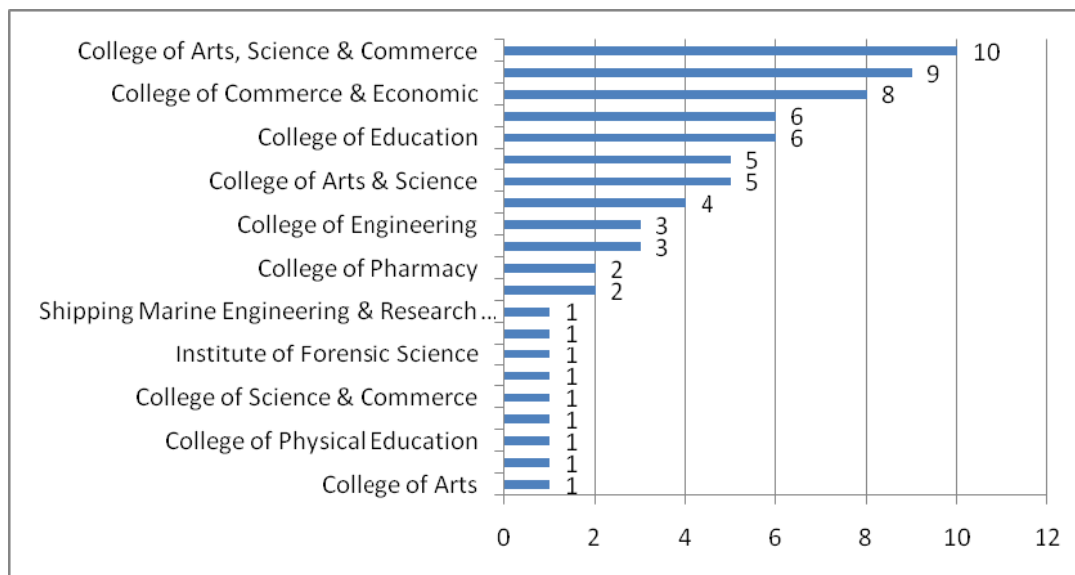
1. To identify the perception of digital information literacy of LIS professionals in Mumbai.
2. To find out the activities are going on for developing digital information literacy.
3. To find out the types of digital information literacy services provided by the LIS professionals.

## Methodology:

The descriptive survey methodology has selected adopted for the present study. The questionnaire as a tool for data collection is used. The scope for the present study is the 72 Colleges affiliated to University of Mumbai in Greater Bombay only. The population of the study was the 72 libraries of the said Colleges. Total 72 questionnaire were distributed out of which 48 questionnaire were received that is 66.66%.

## Data Analysis:

The following is the presentation and interpretation of some of the key issues which has been addressed by the respondents in the questionnaire.



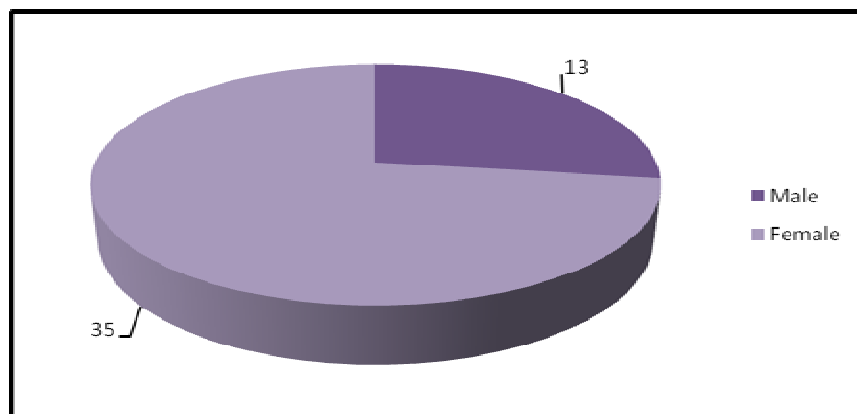
**Graph 1: Distribution of Questionnaire**

It is evident from the graph 1 that the University of Mumbai in its jurisdiction has more than 72 colleges in greater Mumbai. The college has 21 different faculties. The questionnaire were distributed to all the colleges librarians in greater Mumbai. The researcher has collected 48 (66.66%) responses from the colleges.

## Demographics

This part of the questionnaire deals with the demographics of the respondents. This has the gender wise, educational qualification and experience of the respondents. The detail is given below;

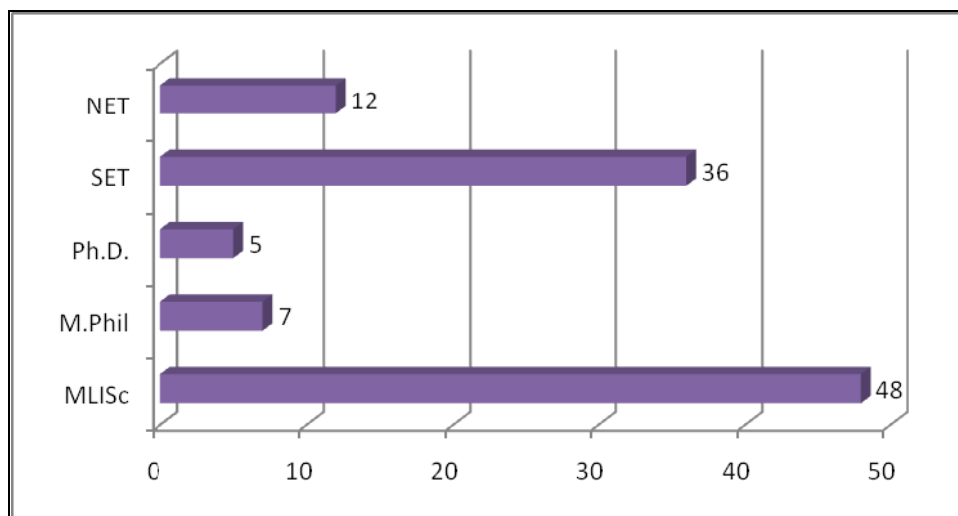
### Gender



**Graph 2: Gender of the Respondents**

It is evident from the graph 2 that 13 (27.08%) are male librarian while 35 (72.92%) are the female librarians working the different colleges of University of Mumbai.

### Educational Qualification

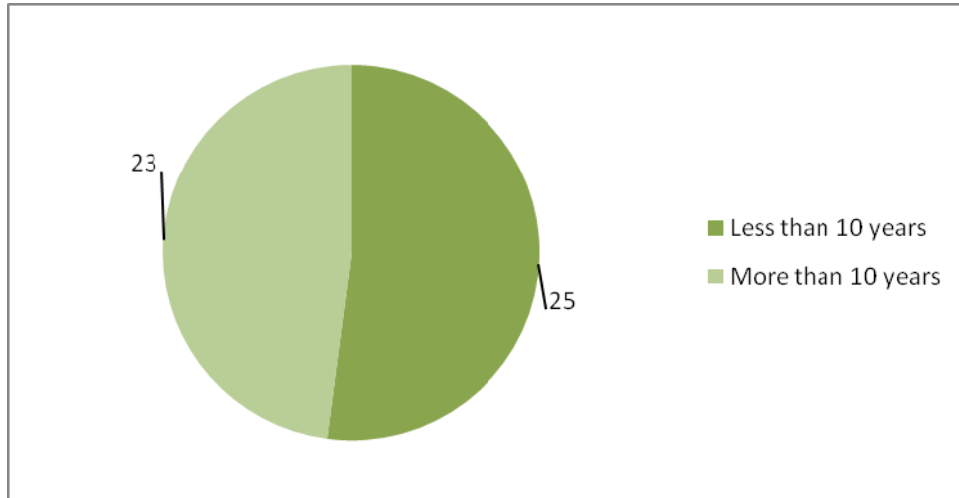


**Graph 3: Educational Qualification of the Respondents**

It is evident from the graph 3 that 48 (100.16%) of the librarian are having basic qualification of M.L.I.Sc. 12 (25.00%) of the librarian are N.E.T. qualified. 36 (75.00%) of the librarian are S.E.T. qualified. 07 (14.58%) of the librarian has qualified the M.Phil degree whereas 05

(10.416%) of the librarian has qualified the Ph. D. degree. It seems that the librarians are also pursuing the highest level of qualification in the field.

## Experience

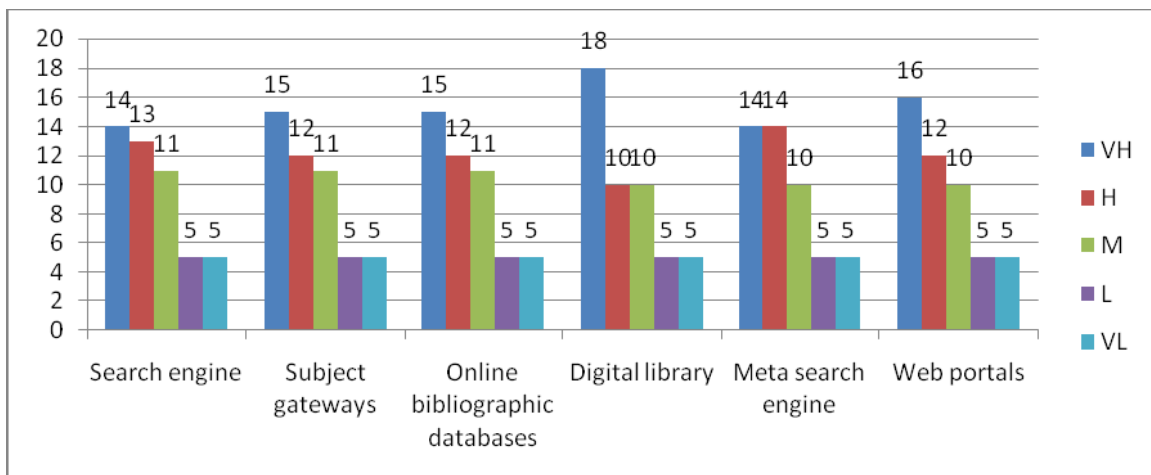


**Graph 4: Experience of the Respondents**

It is evident from the graph 4 that 25 (52.02%) of the librarians has less than Less than 10 years and 23 (47.98%) of the librarians has More than 10 years. It shows that librarian working in the field has a huge way to go in their carrier and definitely will serve the society or users for long time.

## Types of Search Tools

This question is meant to know the types of search tools used by the Library and Information Science professionals. The graph identifies the same below;

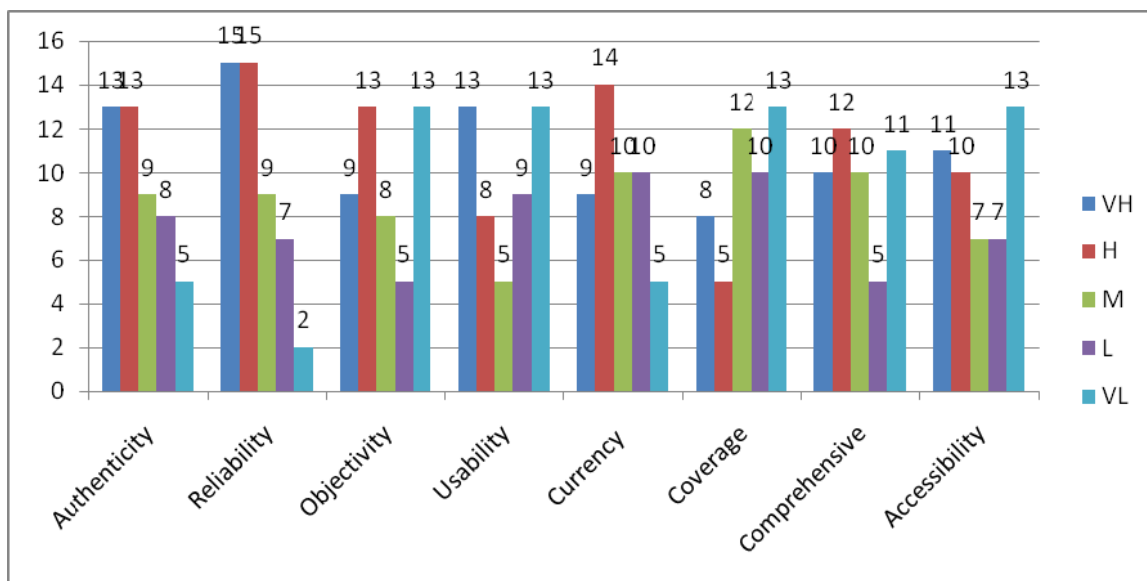


**Graph 5: Types of Search Tools**

It is evident from the graph 5 the responses received for search engines from the Library and Information Science professionals were 14 (29.16 %) for very high, 13 (27.08%) for high, 11 (22.91%) for medium and 5 (10.41%) for low and very low. The responses received for subject gateways from the Library and Information Science professionals were 15 (31.25 %) for very high, 12 (25.00%) for high, 11 (22.91%) for medium and 5 (10.41%) for low and very low. The responses received for online bibliographic databases from the Library and Information Science professionals were 15 (31.25 %) for very high, 12 (25.00%) for high, 11 (22.91%) for medium and 5 (10.41%) for low and very low. The responses received for digital library from the Library and Information Science professionals were 18 (37.50%) for very high, 10 (20.83%) for high, 10 (20.83%) for medium and 5 (10.41%) for low and very low. The responses received for meta search engine from the Library and Information Science professionals were 14 (29.16 %) for very high, 14 (29.16 %) for high, 10 (20.83%) for medium and 5 (10.41%) for low and very low. The responses received for web portals from the Library and Information Science professionals were 16 (33.33%) for very high, 12 (25.00%) for high, 10 (20.83%) for medium and 5 (10.41%) for low and very low.

### Evaluation of Web Resources

This question is meant to know the evaluation of the web resources by the Library and Information Science professionals. The graph identifies the same below;



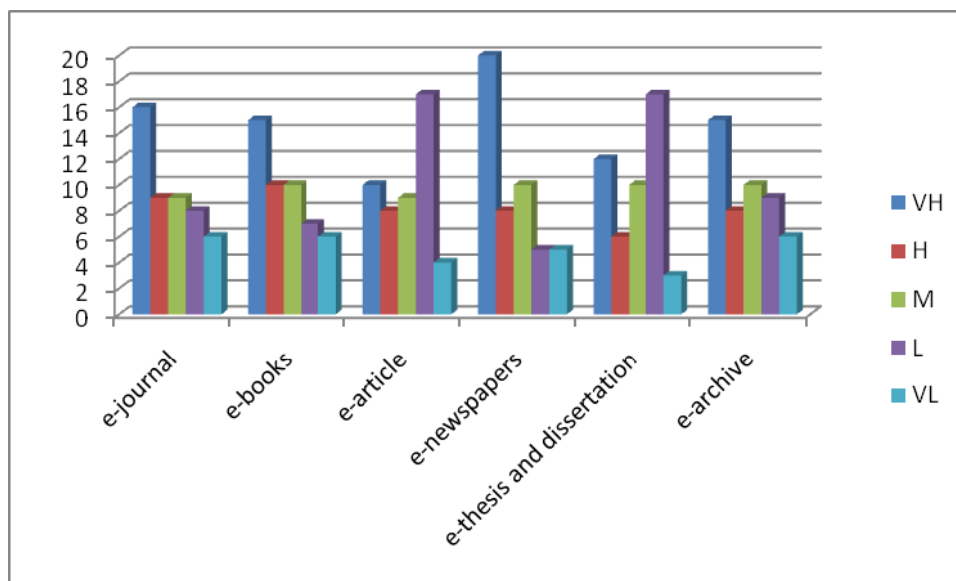
**Graph 6: Evaluation of Web Resources**

It is evident from the graph 6 the responses received for authenticity from the Library and Information Science professionals were 13 (27.08 %) for very high, 13 (27.08%) for high, 9 (18.75%) for medium and 8 (16.66%) for low and 5 (10.41%) for very low. The responses received for reliability from the Library and Information Science professionals were 15 (31.25%) for very high, 15 (31.25%) for high, 9 (18.75%) for medium and 7 (14.58%) for low and 2 (04.16%) for very low. The responses received for objectivity from the Library and Information

Science professionals were 9 (18.75%) for very high, 13 (27.08%) for high, 8 (16.66%) for medium and 5 (10.41%) for low and 13 (27.08%) for very low. The responses received for usability from the Library and Information Science professionals were 13 (27.08%) for very high, 8 (16.66%) for high, 5 (10.41%) for medium and 9 (18.75%) for low and 13 (27.08%) for very low. The responses received for currency from the Library and Information Science professionals were 9 (18.75%) for very high, 14 (29.16%) for high, 10 (20.83%) for medium and 10 (20.83%) for low and 5 (10.41%) for very low. The responses received for coverage from the Library and Information Science professionals were 8 (27.08%) for very high, 5 (10.41%) for high, 12 (25.00%) for medium and 10 (20.83%) for low and 13 (27.08%) for very low. The responses received for comprehensive from the Library and Information Science professionals were 10 (20.83%) for very high, 12 (25.00%) for high, 10 (20.83%) for medium and 5 (10.41%) for low and 11 (22.91%) for very low. The responses received for accessibility from the Library and Information Science professionals were 11 (22.91%) for very high, 10 (20.83%) for high, 7 (14.58%) for medium and 7 (14.58%) for low and 13 (27.08%) for very low.

### Types of Digital Sources

This question is meant to find the types of digital resources used by the Library and Information Science professionals. The graph identifies the same below;



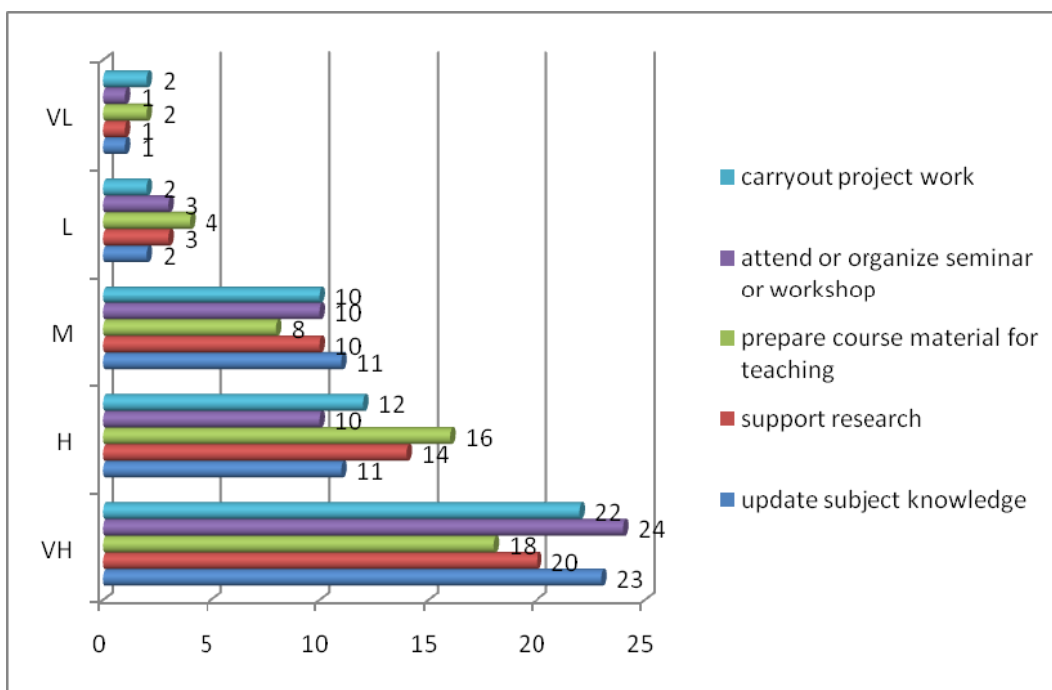
**Graph 7: Types of Digital Sources**

It is evident from the graph 7 the responses received for e-journal from the Library and Information Science professionals were 16 (33.33 %) for very high, 9 (18.75%) for high, 9 (18.75%) for medium and 8 (16.66%) for low and 6 (12.50%) for very low. The responses received for e-books from the Library and Information Science professionals were 15 (31.25 %) for very high, 10 (20.83%) for high, 10 (20.83%) for medium and 7 (14.58%) for low and 6 (12.50%) for very low. The responses received for e-article from the Library and Information Science professionals were 10 (20.83%) for very high, 8 (16.66%) for high, 9 (18.75%) for

medium and 17 (35.41%) for low and 4 (08.33%) for very low. The responses received for e-newspaper from the Library and Information Science professionals were 20 (41.66%) for very high, 8 (16.66%) for high, 10 (20.83%) for medium and 5 (10.41%) for low and 5 (10.41%) for very low. The responses received for e-thesis and dissertation from the Library and Information Science professionals were 12 (25.00%) for very high, 6 (12.50%) for high, 10 (20.83%) for medium and 17 (35.41%) for low and 3 (06.25%) for very low. The responses received for e-archives from the Library and Information Science professionals were 15 (31.25%) for very high, 8 (16.66%) for high, 10 (20.83%) for medium and 9 (18.75%) for low and 6 (12.50%) for very low.

### Digital resources assists

This question is meant to find the digital resources assists by the Library and Information Science professionals. The graph identifies the same below;



**Graph 8: Digital resources assists**

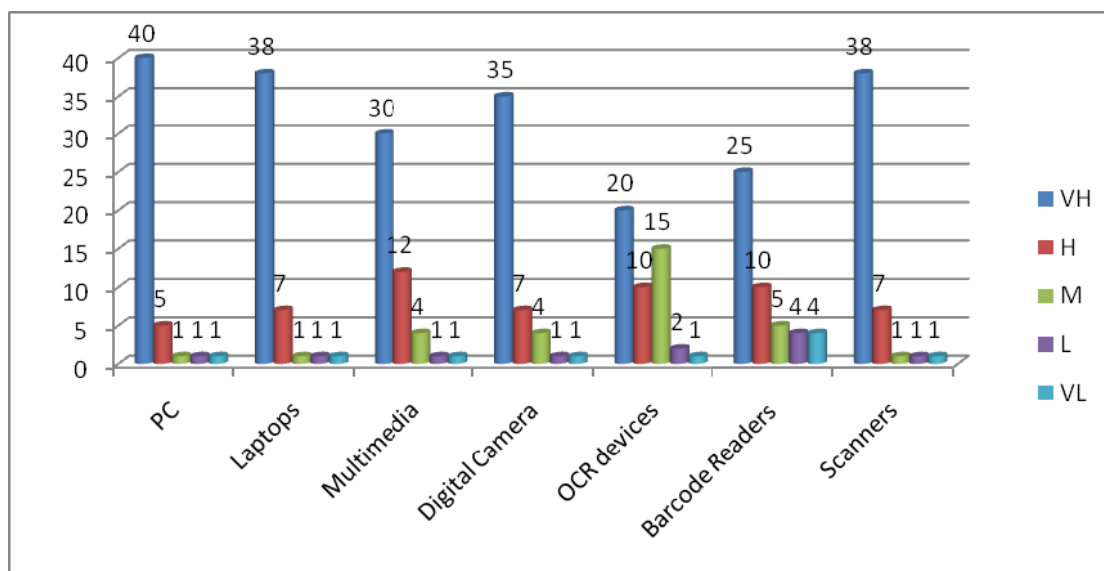
It is evident from the graph 8 the responses received for update subject knowledge from the Library and Information Science professionals were 23 (47.91 %) for very high, 11 (22.91%) for high, 11 (22.91%) for medium and 2 (04.16%) for low and 1 (02.83%) for very low. The responses received for support research from the Library and Information Science professionals were 20 (41.66 %) for very high, 14 (29.16%) for high, 10 (20.83%) for medium and 3 (06.25%) for low and 1 (02.83%) for very low. The responses received for prepare course material for teaching from the Library and Information Science professionals were 18 (37.50 %) for very high, 16 (33.33%) for high, 8 (16.66%) for medium and 4 (08.33%) for low and 2 (04.16%) for very low. The responses received for attend or organise seminar or workshop from the Library



and Information Science professionals were 24 (50.00 %) for very high, 10 (20.83%) for high, 10 (20.83%) for medium and 3 (06.25%) for low and 1 (02.83%) for very low. The responses received for carryout project work from the Library and Information Science professionals were 22 (45.83%) for very high, 12 (25.00%) for high, 10 (20.83%) for medium and 2 (04.16%) for low and 2(04.16%) for very low.

## Hardware Skills

This question is meant to know the hardware skills of the Library and Information Science professionals. The graph identifies the same below;



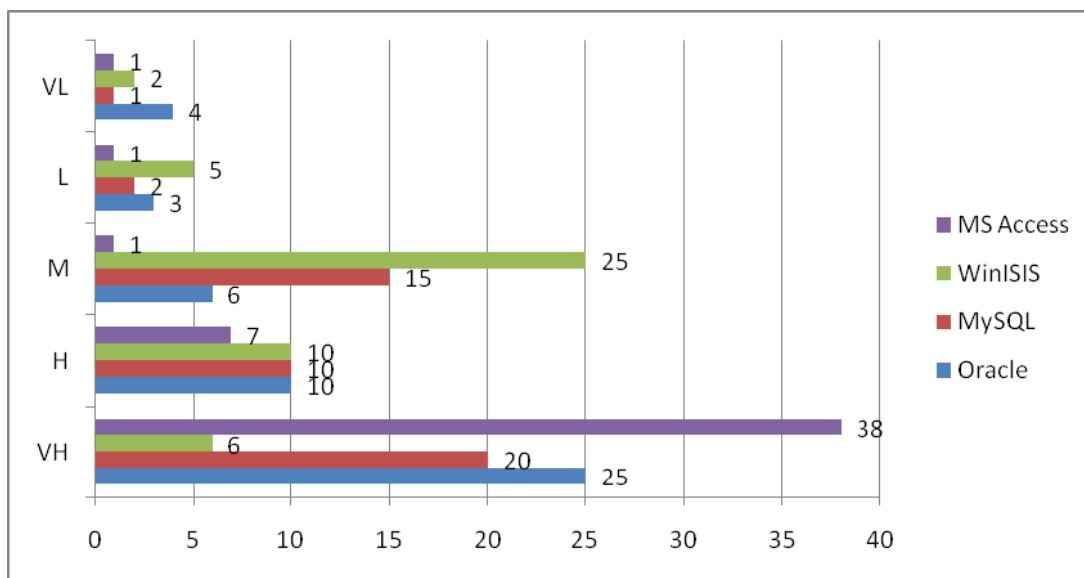
**Graph 9: Hardware Skills**

It is evident from the graph 9 the responses received for P C from the Library and Information Science professionals were 40 (83.33%) for very high, 5 (10.41%) for high, 1 (02.83%) for medium and 1 (02.83%) for low and 1 (02.83%) for very low. The responses received for Laptops from the Library and Information Science professionals were 38 (79.16%) for very high, 7 (14.58%) for high, 1 (02.83%) for medium and 1 (02.83%) for low and 1 (02.83%) for very low. The responses received for Multimedia from the Library and Information Science professionals were 30 (62.50%) for very high, 2 (04.16%) for high, 4 (08.33%) for medium and 1 (02.83%) for low and 1 (02.83%) for very low. The responses received for Digital Camera from the Library and Information Science professionals were 35 (72.91%) for very high, 7 (14.58%) for high, 4 (08.33%) for medium and 1 (02.83%) for low and 1 (02.83%) for very low. The responses received for OCR Devices from the Library and Information Science professionals were 20 (41.66%) for very high, 10 (20.83%) for high, 15 (31.25%) for medium and 2 (04.16%) for low and 1 (02.83%) for very low. The responses received for Barcode Readers from the Library and Information Science professionals were 25 (52.08%) for very high, 10 (20.83%) for high, 5 (10.41%) for medium and 4 (08.33%) for low and 4 (08.33%) for very low. The responses received for Scanners from the Library and Information Science

professionals were 38 (79.16%) for very high, 7 (14.58%) for high, 1 (02.83%) for medium and 1 (02.83%) for low and 1 (02.83%) for very low.

## Software Development Skills

This question is meant to know the Software Development skills of the Library and Information Science professionals. The graph identifies the same below;

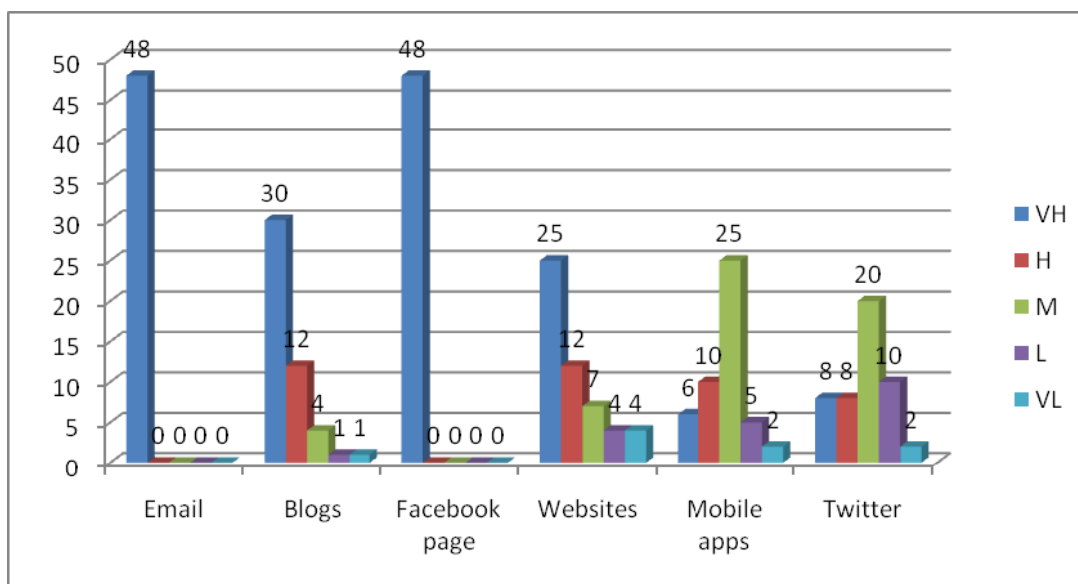


**Graph 10: Software Development Skills**

It is evident from the graph 10 the responses received for Oracle from the Library and Information Science professionals were 25 (52.08%) for very high, 10 (20.83%) for high, 8 (16.66%) for medium and 3 (06.25%) for low and 4 (08.33%) for very low. The responses received for MySQL from the Library and Information Science professionals were 20 (41.66%) for very high, 10 (20.83%) for high, 15 (31.25%) for medium and 2 (04.16%) for low and 1 (02.08%) for very low. The responses received for WinISIS from the Library and Information Science professionals were 6 (12.50%) for very high, 10 (20.83%) for high, 25 (52.08%) for medium and 5 (10.41%) for low and 2 (04.16%) for very low. The responses received for MS Access from the Library and Information Science professionals were 38 (79.16%) for very high, 7 (14.58%) for high, 1 (02.08%) for medium and 1 (02.08%) for low and 1 (02.08%) for very low.

## Digital Media Skills

This question is meant to know the Digital Media Skills of the Library and Information Science professionals. The graph identifies the same below;



Graph 11: Digital Media Skills

It is evident from the graph 11 the responses received for Email from the Library and Information Science professionals were 48 (100.00%) for very high. The responses received for Blogs from the Library and Information Science professionals were 30 (62.50%) for very high, 2 (04.16%) for high, 4 (08.33%) for medium and 1 (02.08%) for low and 1 (02.08%) for very low. The responses received for Facebook from the Library and Information Science professionals were 48 (100.00%) for very high. The responses received for Websites from the Library and Information Science professionals were 25 (58.33%) for very high, 2 (04.16%) for high, 2 (04.16%) for medium and 4 (08.33%) for low and 4 (08.33%) for very low. The responses received for Mobile App from the Library and Information Science professionals were 6 (12.50%) for very high, 10 (20.83%) for high, 25 (52.08%) for medium and 5 (10.41%) for low and 2 (04.16%) for very low. The responses received for Twitter from the Library and Information Science professionals were 8 (16.66%) for very high, 8 (16.66%) for high, 20 (41.66%) for medium and 0 (0.0%) for low and 2 (04.16%) for very low.

**Findings:**

1. 13 (27.08%) male and 35 (72.92%) are the female Library and Information Science Professionals from the different College affiliated to University of Mumbai were responded for the Questionnaire.
2. 48 (100.16%) of the librarian are having basic qualification of M.L.I.Sc. 12 (25.00%) of the librarian are N.E.T. qualified. 36 (75.00%) of the librarian are S.E.T. qualified. 07 (14.58%) of the librarian has qualified the M.Phil degree whereas 05 (10.416%) of the librarian has qualified the Ph. D. degree.
3. 25 (52.02%) of the librarians has less than Less than 10 years and 23 (47.98%) of the librarians has More than 10 years.
4. The responses received for search engines from the Library and Information Science professionals were 14 (29.16 %) for very high.

5. The responses received for subject gateways from the Library and Information Science professionals were 15 (31.25 %) for very high.
6. The responses received for online bibliographic databases from the Library and Information Science professionals were 15 (31.25 %) for very high.
7. The responses received for digital library from the Library and Information Science professionals were 18 (37.50%) for very high.
8. The responses received for meta search engine from the Library and Information Science professionals were 14 (29.16 %) for very high and high.
9. The responses received for web portals from the Library and Information Science professionals were 16 (33.33%) for very high.
10. The responses received for authenticity from the Library and Information Science professionals were 13 (27.08 %) for very high and high.

## Conclusion:

The acquisition digital literacy skills by librarians have been discovered to enhance individual service delivery and career progression. For librarians to fulfill their primary aim of meeting the information needs of users and the institutions, the librarians must be empowered with all necessary digital literacy skills to accomplish their mission. Librarians of this present age have very low knowledge of DLS in the sampled states with a little level of use and proficiency in the skills. Skills have been acquired through informal means like through colleagues, trial and error and sometimes through assistance from friends. Librarians are asset to libraries, therefore training and development of DLS will enhance productivity. The level of expertise of the librarians will determine to a large extent how effectively they are able to perform their jobs and carry out routine jobs in the library. When libraries are automated and functioning, the librarians are also very satisfied with how they perform their jobs and they are also well motivated and progress on their career. However, the challenges with the utilization of these skills must be checked and corrected.

There is an educational imbalance between the rapidly developing technologies and information available to the users. Educating people to use information technologies is becoming an important educational objective for the teaching and research community. Universities should take a lead role in spreading knowledge of digital information resources.

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