

Professional Skills and Soft Skills for LIS Professional in ICT Era

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Abstract: ICT tools empowered web-based library, which provides services to its user throughout computer networks. LIS Professional plays an important role in the field of Information Generation and dissemination to the end users based on information storage and retrieval process tools and techniques. In this paper the author explain the list of skill and its impact on LIS fields. This paper discusses the professional skills and soft skills required for the library professionals to provide effective services to the user's community. Further it deliberates, the competencies required by the professionals such user's needs assessment, application of new technology and development the non-print collection and also discusses the soft skills one should have to serve the users effectively such as communication skills, leadership skills, interpersonal skills, presentation skills etc.

Keywords: Library professionals, Soft Skills, competencies, Communication skills, Leadership skills

1. Introduction

The role of Library and Information Centres and library and Information professionals took new shape and way. This is due to advancement in ICT and adoption and changes in the LIS fields also. Due to this change, library professionals also require some of the special skills and competencies apart from the basic skills and practices of librarianship. The LIS Centres

experiencing tremendous change, the electronic information has occupied huge place in the publishing industry during current era. New type of information transfer channels have come in existence, such as electronic terms in all traditional services as well as activities within and outside the library and Information dissemination centres. Hence, the present day library professionals apart from their educational based practices, required different types of soft skills and competency to provide right information to right user at right time.

2. Literature Review

Different kinds of skills which are imparted through different programs for providing best services, achieving goals for success. The basic skills like Technical Skills, Professional Skills and Soft Skills are the major areas one professional should know for the development of the profession. Time has come to draw out and develop set of soft skills in students in library and information science program through multiple methods and channels during their academic years.

The past research in India and other country has often focused on:

- The Role of the Library and Information Science Professionals As Managers: A Comparative Analysis. (Ahmad & Yaseen, 2009).
- Soft skills for librarians (Gole, 2008).
- How do you develop Administrative Leadership skills? (Kadzielawski, 2016).
- Competencies and Soft Skills For Library Professionals in Information Era (Kolle & Parmeshwar, 2014).
- Technological Skills for LIS Professional in the Digital Era (Loganathan, Sekar & Kasirao, 2015).
- Skills for Library and Information Professionals Working in Borderless Library (Mazumdar, 2007).
- Comparative Study of Web 1.0, Web 2.0 and Web 3.0 (Naik & Shivalingaiah, 2008).
- ICT Skills for LIS Professional in the Digital Environment (Narasappa & Kuma, 2016).
- ICT Skills of LIS Professionals in Engineering Institutions of Orissa, India: A Case Study (Satpathy & Maharana, 2011).

3. Objectives

The primary objective of the study is

- To show the role of the LIS professional to provide ICT based resources and services to the users
- To identify the list of ICT based tools and techniques available for implement worldwide, 24x7, desktop and instant service to the users.

- Have an in depth understanding of the technical, conceptual skills, and communication skills between LIS professional and how to manage ICT based resources and services.
- To find out the overall tools, services and activities of ICT based library work and services to the end users

4. Methodology

Web-based research methods are ways in which researchers can collect data via the internet. Many of these online research methods are related to existing research methodologies but re-invent and re-imagine them in the light of new technologies and conditions associated with the internet. The field is relatively new and evolving. In this article, we will take a look at what extension methods are and how to collect and use the data.

Adopted an online (Internet) surveys research tool for collecting the data including the different metadata standards and its availability status, subject coverage, detailed information about that standards, and its emblem. Based on the URL the investigator finds the detailed information about the metadata standards.

5. LIS Professional Skills

The library and Information professionals must able to understand the information/knowledge needs of the users and also need to know the how to fulfill the user's needs and also while planning the new service, they should able to maintain the balance in serving the users community. But the needs of the users keep changing, hence, the library professional must able cope up with situation.

6. Soft Skills for LIS Professionals

In an age of specialization, technical skill is perhaps the most familiar one, required of the greatest number of people. Soft skills are a combination of interpersonal people skills, social skills, communication skills, character traits, attitudes, career attributes and emotional intelligence quotient among others.

6.1. Levels for soft skill performance

(i) Install (ii) Configuration (iii) 3 Results

Information Technology is a generic term with wider implications. In the present context it includes computer and telecommunication technologies used for collecting organizing and disseminating information. According to Rowley (1996), information technology includes the following four major areas:

Information Activity	Conventional Method	New Technology
Generate, Originate	Writing, Typing	Word Processing, Text Editing Voice Recognition etc
Preserve, Store	Manuscript, Paper, Print Media	Print Media Magnetic tape, Video Text, Tele-Text, CD-ROM
Process	Cataloging, Classification, Indexing	Classification, Artificial Intelligence/Expert Systems etc
Retrieval	Catalogues,	Indexes Online/ Offline etc
Disseminate , Communicate	Lists, Bibliographies, Abstracts, Hard Copies	Abstracts, Hard Document Delivery, Teleconferencing, Tele Facsimile etc
Destroy	Physical	Weeding Erasers, Reuse the Medium

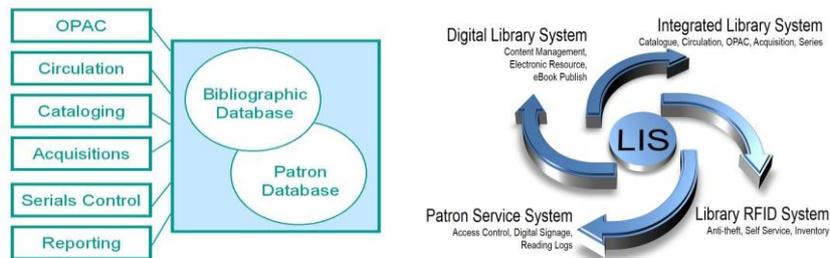
6.2. Soft Skill Attributes for LIS Professionals

- Communication - oral, speaking capability, written, presenting, listening.
- Courtesy - manners, etiquette, business etiquette, gracious, says please and thank you, respectful.
- Flexibility - adaptability, willing to change, lifelong learner, accepts new things, adjusts, teachable.
- Integrity - honest, ethical, high morals, has personal values, does what's right.
- Interpersonal skills - nice, personable, sense of humor, friendly, nurturing, empathetic, has self-control, patient, sociability, warmth, and social skills.
- Positive attitude - optimistic, enthusiastic, encouraging, happy, confident.
- Professionalism - businesslike, well-dressed, appearance, poised.
- Responsibility - accountable, reliable, gets the job done, resourceful, self disciplined, wants to do well, conscientious, common sense.
- Teamwork - cooperative gets along with others, agreeable, supportive, helpful, and collaborative.
- Work ethic - hard working, willing to work, loyal, initiative, self-motivated, on time, good attendance.

6.3. ICT Skills and LIS Professionals

In the ICT driven knowledge economy, library professionals has a very important role to play as they have to satisfy the critical multidimensional information needs of their users. The following most important tools for LIS professionals.

6.3.1 Library Automation: Library automation refers to the use of computer to automate the typical procedures of libraries such as cataloging and circulation. Automation is a process of using the machinery for easily working and saving the human power and time. The main purpose of library automation is to free the librarians and library staff and to allow them to contribute more meaningfully to spread of knowledge and Information



Barcode: Barcode: A barcode is an optical, machine-readable, representation of data; the data usually describes something about the object that carries the barcode.

Radio Frequency Identification (RFID): RFID uses electromagnetic fields to automatically identify and track tags attached to objects. The tags contain electronically stored information. Passive tags collect energy from a nearby RFID reader's interrogating radio waves. Active tags have a local power source such as a battery and may operate at hundreds of meters from the RFID reader. Unlike a barcode, the tag need not be within the line of sight of the reader, so it may be embedded in the tracked object. RFID is one method for Automatic Identification and Data Capture (AIDC).

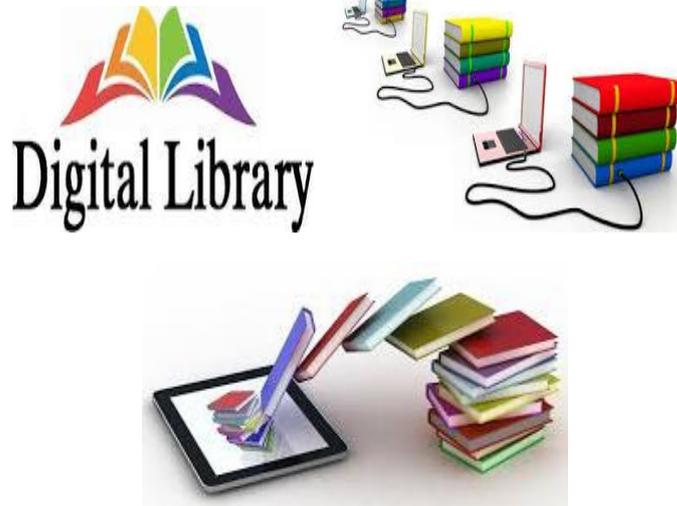
ISO 2709: ISO 2709 is an ISO standard for bibliographic descriptions, titled Information and documentation-Format for information exchange.

6.3.2 MARC 21: MARC (Machine-Readable Cataloging) 21 standards are a set of digital formats for the description of items catalogued by libraries, such as books.

6.3.3 Metadata: Metadata is data about other data. The different types of metadata are structural metadata, descriptive metadata, and administrative metadata.

6.3.4 Retrospective Conversion: Retrospective conversion is the process of turning a library's existing paper catalog record into a machine readable form.

6.3.5 Digital Library: A digital library is a special library with a focused collection of digital objects that can include text, visual material, audio material, video material, stored as electronic media formats (as opposed to print, microform, or other media), along with means for organizing, storing, and retrieving the files and media contained in the library collection.



6.3.6 Institutional Repository: An IR is an online archive for collecting, preserving, and disseminating digital copies of the intellectual output of an institution, particularly a research institution.

6.3.7 Network: A computer network or data network is a telecommunications network which allows nodes to share resources. In computer networks, networked computing devices exchange data with each other using a data link.

Types of Network: There are five types of networks namely;

Personal Area Network (PAN)	Local Area Network (LAN)
Campus Area Network (CAN)	Metropolitan Area Network (MAN)
Wide Area Networks (WAN)	

Network Models: There are two types of network models (i) The Transmission Control Protocol / Internet Protocol (TCP/IP) Model and (ii) Open Systems Interconnection (OSI) Network Model

6.3.8 Internet: The Internet is the global system of interconnected computer networks that use the Internet protocol suite (TCP/IP) to link devices worldwide.

Internet Tools and Services: The popular internet tools and services are;

- | | |
|--------------------------------|---|
| - Bulletin Board Services | - Semantic Web |
| - Cloud Computing | - Social Media |
| - Discussion Groups/Newsgroup | - Social Network |
| - E-commerce | - Subject Gateways |
| - Electronic Mail (E-mail) | - Voice over IP (VOIP) |
| - File Transfer Protocol (FTP) | - Web 1.0, 2.0, 3.0 / Lib 1.0, 2.0, 3.0 |

6.3.13 Open Access Initiatives: As the public access to internet started spreading to wider communities, the ability to upload, download, print, and distribute digital data at no cost, has offered an alternative to paper publishing and significantly benefitted the Open Access initiative.

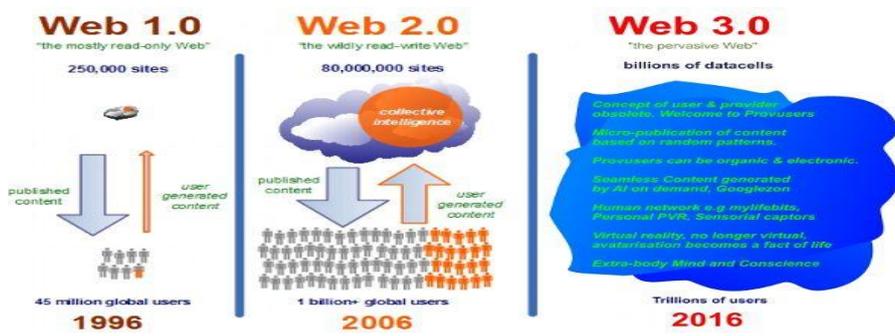
6.3.14. Big Data: Big data is a term for data sets that are so large or complex that traditional data processing applications are inadequate to deal with them.

6.3.15 RSS Reader: Rich Site Summary originally Resource Description Framework (RDF) Site Summary; often called Really Simple Syndication) uses a family of standard web feed formats to publish frequently updated information: blog entries, news headlines, audio, video.

6.3.16 Library 2.0: Library 2.0 is a loosely defined model for a modernized form of library service that reflects a transition within the library world in the way that services are delivered to users.



6.3.17 Web 1.0, Web 2.0, Web 3.0: The World Wide Web (Web) is an information space where documents and other web resources are identified by Uniform Resource Locators (URLs), interlinked by hypertext links, and can be accessed via the Internet.



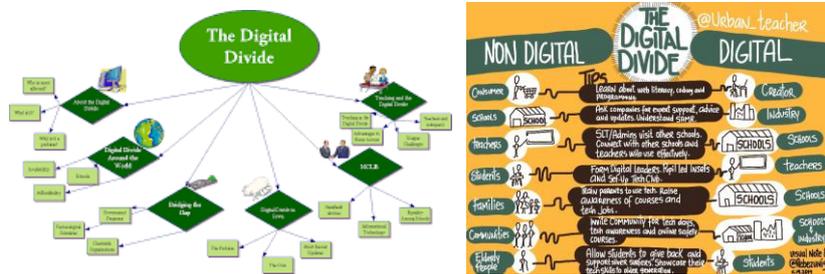
6.3.18 Knowledge Management: Knowledge Management is the strategies and processes designed to identify, capture, structure, value, leverage, and share an organization's intellectual assets to enhance its performance and competitiveness. It is the collection of processes that govern the creation, dissemination, and utilization of knowledge



6.3.19 ICT Literacy: ICT literacy is using digital technology, communications tools, and/or networks to access, manage, integrate, evaluate and create information in order to function in a knowledge society.

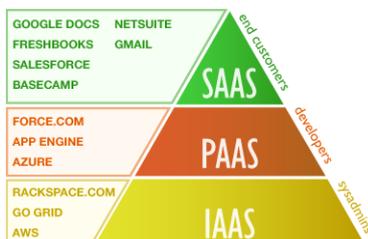


6.3.23 Digital Divide: A digital divide is an economic and social inequality with regard to access to, use of, or impact of information and communication technologies (ICT). It was traditionally considered to be a question of having or not having access, but with a global mobile phone penetration of over 95%, it is becoming a relative inequality between those who have more and less bandwidth and more or less skills.



6.3.24 Cloud Computing: It is a type of Internet based computing that provides shared computer processing resources and data to computers and other devices on demand. It is a model for enabling ubiquitous, on-demand access to a shared pool of configurable computing resources which can be rapidly provisioned and released with minimal management effort. Cloud computing and storage solutions provide users and enterprises with various capabilities to store and process their data in third-party data centers that may be located far from the user—ranging in distance from across a city to across the world





6.4 Miscellaneous

6.4.1 Listening skills: The library professionals must have good listening skills as he/she has to interact with different types of users all the time.

6.4.2 Communications skills: Command on language especially English and also regional one will improve the communication.

6.4.3 Interpersonal skills: Librarians have to deal with all levels of people like Management, users, colleagues in library, vendors etc.

6.4.4 Public relations: One needs to use PR very effectively to attract users in libraries through various ways.

6.4.5 Customer service: Customer is library user and to satisfy his information needs is customer service.

6.4.6 Leadership skills and Teamwork: Library management especially the big library is team exercise.

6.4.7 Negotiating skills: These skills are required on special occasions such as handling bulk purchases, specialized databases subscription with vendors etc.

6.4.8 Writing skills: The librarians are sometimes asked to submit/help in writing research proposal/ business proposal/project report, which requires good writing skills.

6.4.9 Project management skills: In corporate sector many times, librarians are part of some project team and assigned specialized jobs such as knowledge management or digital institutional repository.

6.4.10 Presentation skills: The presentation skills are required in report writing, library committee meetings and even in daily work which represents the library management overall for users.

6.4.11 Teaching skills: This is essential for new user orientations or in case new service is introduced such as online database searching.

6.4.12 Administrative / Management Skill: Administrative skills are needed for a variety of works, ranging from designation and responsible from stage to stage.

7. Conclusion

In a changing environment when most of the library services are ICT based, it is important for library professionals to be well informed and updated regarding developments in ICT. This paper deals with different areas regarding the use of ICT based applications by library professionals, their attitudes towards ICT, skills in handling new technologies, need for training in the new technologies etc. Libraries have great role in dissemination of information to the users, due to

emergence of information technology and management techniques, the librarianship also facing challenge to cope up with the situation. To manage the situation, librarian professionals should have some of the important competencies and soft skills which are very much required to satisfy the user's community are discussed in the paper. Soft skill professional has been identified as a key factor to enhance professionalism among library professionals.

Reference

- Ahmad, P., & Yaseen, M. (2009). The Role of the Library and Information Science Professionals As Managers: A Comparative Analysis. *Electronic Journal of Academic and Special Librarianship*, 10(3).
- AMA. (2017). Management Skills for Administrative Professionals. Retrieved 10-2-2017, from <http://www.amanet.org/training/seminars/Management-Skills-for-Administrative-Professionals.aspx>
- Gole, B. (2008). Soft skills for librarians Retrieved 10-10-2016, from <http://library-profession.blogspot.in/2008/12/soft-skills-for-librarians.html>
- Goswami, P. R. (2009). Academic librarianship in india: exploring strategic intent and core competencies in the present era. Retrieved 10-10-2016, from http://crl.du.ac.in/ical09/papers/index_files/ical-57_148_324_2_RV.pdf
- Kadzielawski, T. (2016). How do you develop Administrative Leadership skills? Retrieved 12-1-2017, from <http://mccormickcenter.nl.edu/how-do-you-develop-administrative-leadership-skills/>
- Kamba, M. A. (2011). ICT competency framework for library and information science schools in Nigeria: The need for model curriculum. *International Journal of Library and Information Science*, 3(4), 68-80.
- Kolle, S. R., & Parmeshwar, S. (2014). Competencies and Soft Skills For Library Professionals in Information Era *International Journal of Library and Information Studies*, 4(4), 1-4.
- Loganathan, G., Sekar, K., & Kasirao, V. (2015). Technological Skills for LIS Professional in the Digital Era. *International Journal of Library & Information Science (IJLIS)*, 4(3), 65-69.
- Machendranath, S., & Naik, U. (2012). *Social Networking Tools, Technologies and Services for Library Professionals*. Paper presented at the nternational Conference on Content Management in Networked Environment (CMINE-2012), Tumkur.
- Mathew, K. S. (2011). *Impact of Information Communication Technology (ICT) on Professional Development and Educational Needs of Library Professionals in the Universities of Kerala*. Unpublished Ph.D, Cochin University of Science and Technology, Cochin.
- Mazumdar, N. R. (2007). *Skills for Library and Information Professionals Working in Borderless Library*. Paper presented at the PLANNER-2007, Gauhati University, Guwahati.

Naik, U., & Shivalingaiah, D. (2008). *Comparative Study of Web 1.0, Web 2.0 and Web 3.0*. Paper presented at the International CALIBER-2008, University of Allahabad, Allahabad

Narasappa, K. C., & Kuma, P. D. (2016). ICT Skills for LIS Professional in the Digital Environment *International Journal of Research in Library Science*, 2(2), 55-58.

Satpathy, S. K., & Maharana, R. K. (2011). ICT Skills of LIS Professionals in Engineering Institutions of Orissa, India: A Case Study. *Published in Library Philosophy and Practice*, 10.

Singh, S. P., & Pinki. (2009). *New Skills for LIS Professionals in Technology-Intensive Environment*. Paper presented at the CAL 2009 University of Delhi

Wikipedia. (2017). Computer network. Retrieved 1-1-2017, from https://en.wikipedia.org/wiki/Computer_network