IMPACT OF NEW AGE TECHNOLOGIES IN LEGACY LIBRARY MANAGEMENT: AN OVERVIEW

Dr. Jayapal Packianathan*   Dr. M. Muthu**

* Delivery Module Lead, Mphasis, DLF-SEZ IT Park, Manapakkam, Chennai, Tamil Nadu, India.

**SLIA, Central Library, IIT Madras, Chennai, Tamil Nadu, India.

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Abstract: - *In the digital age, users desire to access information in digital mode and have it delivered in a short span of time, it compels libraries to find innovative ways to deliver its services and satisfy them. As IT Product and Service industries grow exponentially, it is important for IT librarians to understand the current market trends and prepare the library to deploy new services and upgrade the existing services using new technologies. Hence it is inevitable to analyze, identify improvements, and upgrade functionalities and service domains of a typical library. Many IT libraries are facilitating employees to acquire Technical, Management and Soft Skills by providing value-added services with state-of-the-art technologies. This paper discusses on niche skills required for an IT industry librarian to overcome today's challenges – expertise in digital technologies, knowledge on e-learning Platforms, rolling out of extension activities, best practices and value added services to align with the business needs of the IT industry. The best practices listed in this article will help other libraries to drive themselves further for a futuristic tomorrow.*

Keywords: Best Practices, Value-Added Services, Digital, Online Learning Platform, Niche Skills, Librarian 2.0, Strategic thinking, Customer Expectation.

1. Introduction:

Software / IT Industry is a force that uplifts the world economy. The IT professionals work day and night to coordinate with their colleagues/client across the globe. The rapid revolution in information and communication technology impels IT library users to keep themselves up-to-date on new technologies. To compete in today's global economy; IT librarians must be proactive in their approach and equip themselves with new technologies. I am consummating the current practices in corporate library functions especially in IT companies and will suggest best practices for future corporate

librarians. This paper analyses the impact of New Age Technologies in Legacy Library Management and recommends strategies/best practices and some suggestions to be adopted to enhance library resources/services offered by the IT libraries.

2. Information Technology Industry Development:

The innovative Indian entrepreneurs of information technology have changed the nation's image. The IT sector has generated 2.5 million direct employment making India one of the biggest IT capitals of the modern world. The IT companies are in Bangalore, Chennai, Kolkata, Hyderabad, Trivandrum, Noida, Mumbai and Pune. Bangalore is called the silicon valley of India. The Indian IT market provides low cost solution in service business of the Global IT. Only a few Indian companies are engaged in geographical diffusion of IT jobs that were confirmed to Bangalore and are moving into other cities namely Chennai, Hyderabad and Pune.

3. Definition of Best Practice:

Best practice is a method of self-improvisation. A method or technique that has consistently shown results superior to those achieved with other means, and that is used as a benchmark. Benchmarking allows you to compare your business with other successful businesses to highlight areas where your business can improve. A best practice strategy helps to align with

strategy, reduce costs, improve productivity, promote timely execution and enable better decision-making. A best practice is a well-defined method that provides a successful step in IT project development. Some of the more commonly used best practices in the software industry are as follows: an iterative development process, requirement management, quality control and change control.

3.1. Seven Best Practices-(Richard Lester, 1989):

- ➤ Breaking down organizational barriers between departments
- ➤ Closer relationships with customers and suppliers
- ➤ Eliminating layers of management creating flatter organizational hierarchies
- ➤ Global focus
- ➤ Improving human resource skills
- ➤ Intelligent use of new technology
- ➤ Simultaneous continuous improvement in cost, quality, service, and product innovation

4. IT Sector Library:

All the top IT companies have library facilities and are committed to provide required information for the successful execution of IT Projects and facilitate the career growth of their human resources. These libraries in the IT companies function as knowledge resource centres for the research and development projects

providing detailed information as and when they are required. These IT companies provide wide range of facilities like impressive library premises, budget, infrastructure, technology, good salary, professional environment and fast decision making compared to other sector libraries. In some cases, there are excellent opportunities for the IT librarians who are versatile in information technology.

5. Niche Skills for the IT Librarian:

Niche skills are required in every field to shape everyone and make them shine in their field. These skills help to get decent/good paying jobs in various industries. Niche Skills are those skills in IT which are specialized, rare skills. e.g. Niche Skill sets – Interwoven, Ascential Data Stage, Remedy, Cognos, Tandem. Vanilla Skills are general skills and the interviewer expects that as they are mandatory skills for the respected areas. e.g. Vanilla Skill sets – Java, J2EE, .NET, ASP.

Niche skills involve managing, marketing, execution, accounting, billing, financing, recruiting, etc… To find out what your niche skills are simply analyze what you are able to deliver. A task that you can do without taking others help is your own niche skills. In the recent days, IT industry is paying more money to those who have niche skills. The top 10 hottest skills that are most demanded in the IT industry as per the *Computerworld*'s Forecast 2016 survey are IT

architecture, Programming/application development, Project management, Big data, Business intelligence/analytics, Help desk/technical support, Database administration, Security/compliance/governance, Cloud or SaaS and Web Development. Likewise, the IT companies are expecting the below niche skills/competencies from every IT librarian to survive in the IT industry.

- Excellent communication and management skills.
- Familiarity with a variety of Technical Platforms/Methodologies like client server, RDBMS, Project Management etc.
- Ability to troubleshoot in new technologies - Librarians should be able to play with the technologies in the library, to learn what problems commonly come up, and to fix them if necessary, because it *is* often our responsibility to fix them.
- Analytical Skill - ability to collect and analyze information, problem-solving and decision making skills. These strengths can help to solve any issues raised and can be beneficial to increase library productivity/growth.
- Innovative Skill - able to bring in new ideas, problem-solving ideas, processes, products or services into practice on a daily basis for the benefit of the user. These skills or techniques are vital in every work and useful to grow and develop in new situations and to adapt to change more easily.

- Awareness of Emerging Technology Skills likes Internet of Things (IoT), 3D printing, Big Data, Cloud as these are substantial IT uprisings expected in the next few decades.
- As BFSI (Banking, Financial Services and Insurance) is the major driver and consumer of IT services in the world, IT librarian needs to have massive knowledge in these domains.
- Ability to initiate and implement various best practices and value added services to align with the new technologies and company goals.
- Nonstop marketing of Library resources and service competencies.
- Customer relationship skill, global or vertical experience, collection development, copy rights management, ability to accurately assess risk, awareness and understanding of market and regulatory conditions.

5.1. Skills of Librarians 2.0:

- Able to look at new technologies and services with a critical eye
- Are agile
- Aren't afraid of taking risks
- Build their networks
- Create partnership
- Don't give up easily
- Keep up
- Market ideas and communicate effectively
- Question Everything
- Understand their users

5.2. Strategic Thinking:

- Being creative-moving beyond logic
- Dealing with many inputs at once
- Discriminating between events
- Exploring systematically
- Having a conceptual framework
- Integrating data with theory
- Linking process and output
- Responding to an audience/environment
- Scanning widely
- Seeing the big picture
- Selecting the right data
- Transferring learning from one experience to another

5.3. ICT Skills:
- Ability to Adopt New Technologies
- Database Development
- Digital Archiving and Preservation
- Technology-Savvy Librarians
- Troubleshooting New Technologies

5.4. Skills to Manage Social Media:

- Build a contingent of friends
- Community information
- Follow and be followed in return
- Give it time
- Instruction sessions
- Library news and events
- Link wherever possible
- Links to articles, videos, etc

- ➢ Maintain communication
- ➢ New additions to your collection
- ➢ Post pictures
- ➢ Print advertising
- ➢ Respond to people
- ➢ Solicit feedback
- ➢ Talk to people

5.5. Generic Skills of LIS Professionals in Libraries:

- ➢ A commitment to life-long learning
- ➢ Ability to build partnerships and alliances ;(Public Private Partnership)
- ➢ Appropriate information literacy skills
- ➢ Critical, reflective, and creative thinking
- ➢ Effective communication skills
- ➢ Effective team relationship skills
- ➢ Problem-solving skills
- ➢ Professional ethical standards and social responsibility
- ➢ Project management skills
- ➢ Relevant information and communications technology and technology application skills
- ➢ Self management skills

6. Professional Ambitions for developing reader-friendly Library:

User-friendly and flexible policies in any library will help attract users and create a love for reading. Here are a few guidelines for the IT librarian who will help make the library a reader-friendly library and enable to deploy various best practices and value added services to the user community making them happy and content. The IT librarian should be always friendly and approachable, available to help when required and provide accurate answers in time. Also the IT librarian should respond promptly to emails and phone calls, ready to assist readers and respond to queries, capable of resolving problems and adequately trained for the roles. The librarian should organize library programs/events having a good understanding of his/her roles and responsibilities. There should be effective interaction and communication between the library users and the staff. The IT librarian should also possess advanced computer skills, capable of adopting new technologies quickly and be ready to change with new technologies.

7. Extension Activities in the IT Industry:

The IT Library is deploying various extension activities to the users to upgrade their skills in line with advancements in technology, project development and career growth. Some of the extension activities of the IT library to make it reader-friendly are induction programs, library tour, instructor-led training, beneficial testimonials, library newsletter, campaigns or show case, author/subject matter expert talks, organizing library week and learning theme, book exhibition or book review, inter-library loan,

library week contest/celebration, annual project/delivery manager's meet and internal user's survey.

8. Facilitating Career Growth:

All the top IT companies have library facilities, committed to provide required information for the successful execution of IT Projects and supply information towards the career growth of their human resources. These libraries in the IT companies function as knowledge resource centres for the research and development projects providing detailed information as and when they are required and these libraries offer various value added services and best practices to their users that align with their current work. This will enable performance linked learning, access online resources through handheld devices such as mobile and tablet PCs, facilitating learning through digital learning centre, enabling transfer of library resources through tool itself, providing reminders over SMS and email, organizing library connect/author talk programs, marketing library services, promotional show casing, utilizing bench resources for library enhancement, formulating high level market intelligence report, internally telecasting beneficial testimonials, providing auto alert on new arrivals, conducting rewards and recognition programs and assessing information seeking behavior of library users from time to time. The IT librarian needs to get regular feedback from the library users to improve the

library and stay committed to the team's initiative which means creating an atmosphere where conflict is welcomed, not feared because differing perspectives help to shape a clear goal.

9. Deployment of Best Practices and Value Added Services in the IT Industry:

9.1 Instructor-Led Training (Learning Week):

Instructor-Led Training is nothing but learning week. This activity extends learning programmes to the IT professional through Skillport by registering themselves. Once the employee registers on Skillport, they will receive an invite (invitation) from the coordinator 4 hours prior to the session's start time. The employee needs to click on the webinar on the link provided as part of the invite received. If on a desktop computer, the candidate needs to first download the Citrix online launcher file for windows or Mac to launch GOToWebinar and attend these programs offered to the IT professionals. All sessions are divided into four categories. The four categories are Technical for technical sessions, Domain for domain sessions, Leadership for leadership and Behavioral sessions and Leader Talk sessions.

9.2 Learning through Handheld devices:

The IT librarian needs to ensure user's access to online resources even while away from their PC to search and browse capabilities with personal

and IT folders. This will aid the users to bookmark create notes and add titles to their personal folders. Hence they can organize useful and relevant contents. Many IT companies have links with such service providers like Skill port.

9.3 Learning through Digital Learning Centre:

Another best practice of the corporate library is to take an initiative in setting up a digital learning centre to the gateway to information excellence in the digital age. It's the corporate librarian's responsibility to encourage employees to use these resources through the services effectively. The mission of the learning centre is to provide an effective and efficient information infrastructure to the user for providing access to the current and relevant, on-line resources, fostering an environment and culture which is conducive to advancing the usage of e-learning resources.

9.4 Reminders over Phone:

The IT library can introduce reminder mail system on mobile through a library system for return, renewal, new arrivals, reservation and dues to the users. This practice can be entitled "Wherever you go our library will follow."

9.5 Library Connect Programme:

The IT librarian can organize a series of lectures on specific subjects by experts or authors. This will increase the number of visits of users to the library. To implement this, the management needs to allot funds.

9.6 High level Market Research Report:

The IT librarian needs to be aware of the market situation on an everyday basis and assess the market opportunities and the company's market to initiate and support the organization. The IT librarian must keep track of the competitor's market presence, bid/tender announcements, worldwide IT-BPM spend and compile a strategic plan or report for the organization across verticals, geographically. The librarian also needs to collate and analyse the information accurately to assist confident decision-making in determining market opportunities, penetrate strategies and market development metrics, as this is necessary for the organization to enter into a foreign business, as well as, bring more values and wins from onsite or offshore. This in turn will benefit the librarian with incentives.

9.7 Rewards and Recognition Programs:

The IT library can introduce rewards and recognition programs to recognize and encourage the employees' utilization of library resources. This program can be conducted on a quarterly basis. The awards can be given on the basis of the utilization of library resources like borrowing, using of e-resources, utilizing digital learning

centers, book reservations and availing of inter library loan and so on. This can be awarded to individuals, teams, managers and other employee categories. This is applicable to all the resources who are onsite and Offshore. The rewards can be a monetary benefit/travel voucher/gift voucher/purchase from the organization's e-store as decided by the management.

9.8 Performance Linked Learning:

The IT librarian can suggest the management a new policy to encourage the employees to make use of available online resources by emphasizing them to complete stipulated hours of reading/using training materials over this platform. The library can fix the learning target for each year, split into mid and end of year targets. Each employee should be assigned 3 minutes for reading a page of a book and thus 2 hours of learning for 40 pages. The organization can set up a credit system for using these resources which can be linked to individual and group performance systems to rate defaulters accordingly.

9.9 Beneficial Testimonies:

Many IT companies present awards to the employees every year for their various achievements and telecasts the interviews of the award winners at different locations. The IT libraries can also showcase video clippings of the

testimonies of the beneficiaries of the library, who have achieved higher education or certification, deployed projects on time by using the library resources and services. This will serve as a tool to market the library services.

9.10. Campaign – Internal and External:

The IT librarian can suggest organizing marketing campaign program for all the practices and capability heads to showcase their talents, capabilities, practices, solutions and innovations that are available for marketing. Thus the IT librarian can make the project managers aware of the capabilities, innovations and new solutions available in the organization. The librarian can also invite the solution owner to give presentation to the project manager who is marketing to the client who is in direct link with the stakeholders. Thus, new projects can be won by the project managers from the clients by showcasing the talent pool of the organisation leading to increased market value being accredited to the organization.

9.11. Exchange of Library resources through Tool:

The IT library can facilitate renewal/transfer of library resources through a COTS (Commercially of the Shelf) tool or an internally developed library information management system. This service would avoid the inconvenience of visiting the library during busy schedules or when

working from home and will enable the users borrow or renew or reserve the library resources at their desk itself.

10.   Attributes of Service Quality in LIS:

- Aesthetics
- Conformance
- Durability (obsolescence / updateness)
- Features
- Perceived quality
- Performance
- Reliability
- Serviceability (time & cost)

10.1. Ten ways to Encourage Creativity into Your Workplace-(David Kayrouz, 2008):

- Accept diversity and ambiguity
- Allow time to make connections
- Capture ideas
- Encourage curiosity
- Encourage free and open communication
- Engage in artistic pursuits
- Engage in serious play
- Reward effort
- Special place
- Understand the role

10.2. Tips for Creativity & Innovation:

- Be Curious
- Daydream

- Fresh view
- Learn from your mistakes
- SWOT Analysis
- Take a risk
- Visualizing

10.3. Customers Expectations in Libraries at Present:

The Expectations of Users vary from one environment to another environment, Institutional programs, priorities, vision, activities and specialization. Based on the experience and exposure in the area of Libraries, it has been observed that the expectations of Users in Libraries generally are;

- Clear directions and way guides
- Continual improvement
- Continuous interaction
- Disaster Management
- Display and demonstration of information about staff
- Effective & Efficient workflow
- Electronic resources access and delivery
- Information literacy
- Proper communication facilities
- Proper documentation of facilities and services provided
- Quality initiatives and accuracy
- Speedier service delivery mechanism
- Web based initiatives and resources
- Well organized collections
- Well placed users complaints system

➢ Well-designed forms for availing services

10.4. Library Should Be:

➢ Accessible

➢ Comfortable

➢ Compact

➢ Constant in environment

➢ Economic

➢ Extendible

➢ Flexible

➢ Organized

➢ Secure

➢ Varied

10.5. The Future:

➢ Modern day libraries are more concerned with their digital collections

➢ Librarians are trying to redefine their discipline in order to describe, house and access all manners of computer stored information

➢ In future libraries will be judged by their overall relevancy to the people they serve

➢ Librarians need to develop domain knowledge to understand their clients

11. Conclusion:

To summarize the best practices and value added services listed in this article will certainly help any software or IT librarian especially in information technology companies. The corporate librarian needs to initiate and implement these services as the corporate library users expect information to be available in their hand wherever they are. To meet the needs of the users the corporate librarians should enlarge their skills and equip themselves with the knowledge regarding new technologies.

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