Role of Library in Addressing Users' Discovery Need in Google Generation

Svetal H. Shukla[1], Virendrakumar S. Goswami[2],
Jayshree D. Pandya[3]
[1,3]Institute of Science, Nirma University
Ahmedabad, India
{svetal.shukla, jayshree.pandya}@nirmauni.ac.in

[2]Institute of Pharmacy, Nirma University
Ahmedabad, India
virendra.goswami@nirmauni.ac.in

Abstract. *The information technology (IT) has brought great changes to the information world. In this paper we are just trying to focus on the Library's role in this Internet generation, which is otherwise termed as Google generation. With the wide use of Internet, Library professional's role is not just to act as an information gatekeeper but as a facilitator armed with advancing technologies to help researchers. With the expanded use of Google, Library Professional role do not limit to serve the need but to help users' in their discovery need beyond search engines also to teach and even work as a contributor to the Knowledge Society.. Here we have highlighted Library professional role in this g – generation.*

Keywords: Google Generation, G – Generation, Next Generation Information Specialist

1. Introduction

Effectiveness of a library in the present digital age depends largely upon the application of information and communication technology, and integration in to global information infrastructure. With the very enormous advancement of human intelligence, there is a major change in information need. The vast storage of information on Internet is highly affecting the traditional Librarian role. Technology has brought many changes to education in the past ten years and technological literacy is listed as one of the goals of the Common Essential Learning's which is a component of the Core Curriculum. Now Library becomes the gateway of information where one can access Variety of Information in print or electronic formats.

2. Paradigm Shift

The shift introduced almost 15 yrs ago with the resulting introduction of www and internet into work places, academics and home. The shift initially wasn't much change in philosophy of Library and Information Science, but now it is changing the delivery of Library services in different ways. With the advancement and acceptance of technology in the Library, it extends the role of Library Professional from Librarian to Information Manager.

During this paradigm shift, librarians and library designers need to join the faculty and need to understand that the success of the academic library is best measured not by the frequency and ease of library use but by the learning that results from that use. Our purpose is not only to circulate books, but also to ensure that the circulation of knowledge produces learning. Reconceiving our purposes involve a fundamental shift for librarians trained in a service culture— one that is comparable to the shift that faculty are making as they move from a teaching to a learning culture. Academic librarians need to make a paradigm shift from a service to a learning culture. (Scott Bennett, 2005)

"Google can bring you back 100,000 answers a Librarian can bring you back the right one" - **by Neil Gaiman**.

This is the message that greets you (imprinted on the carpet) when you step in the door at the Gungahlin Public Library in Canberra, Australia.

3. Role of Library

Enormous changes taking place in the information world that transforms the education pattern due to the advancement of Information Technology with its unique advantages of access**.** (Kumar, Manish 2009) Information technology has changed the face of the Library Profession due to the application of ICT in Library. The library professionals' role is confined not only to provide access to resources but more beyond that. There is a drastic change with the adoption of new technologies like computerized acquisition and circulation that displaces the manual work. Introduction of electronic databases, Virtual Reference Services to the users, accessibility by 24/7 are few to quote. The changes can be discussed with respect to pre and post digitization.

3.1 Pre-digitization

Manuscripts form a significant resource material for the study and research, Digital preservation of old rare documents and manuscripts is essential because they contain valuable information about society and culture. By digitizing them we should try to preserve and make available to all through the network. Theses and dissertations are other important components of any library collection which needs to be digitized on the priority basis, as these may not be available to other library users. Digitization of these will be proved fruitful for users.

Before digitization, libraries focus for long on the management of content in physical forms. By making '*access*' as our top priority, librarians and archivists can fulfill user requests in a more expeditious manner. Conservative, sometimes justifiable assumptions about copying rare and unique materials often result in time-consuming, overly-cautious procedures. These labor-intensive processes and outdated policies can be streamlined to fit both the circumstances of requests and institutional resources. (Schaffner, Jennifer, 2011)

3.2 Post digitization

Efficient & qualitative services by collecting, organizing, storing, disseminating, retrieving and preserving the information. Preservation benefits besides making information retrieval & delivery more comfortable. Online access to historical and cultural documents whose existence is endangered due to physical decay and Digital libraries necessarily includes a strong focus on the management of digital content. With digitization, we beneficial with accessing data anywhere, reducing delays, distributed storage – central access., better cataloguing, cross references to other documents, full text search, protected information source, wide exploration and exploitation of the information have become possible.

4. Google Generation

 "*Google generation*" refers to young people born since 1993. A number of other expressions are used to name this segment of the population, such as "*digital natives*" or "*Z generation*" (which seems to imply that they will limit their reproductive behavior to the virtual world). The study undertaken by the Centre for Information Behavior and the Evaluation of Research (CIBER) research group at University College London was focused on information behavior within an academic context *(Centre for Information Behavior and the Evaluation of Research, 2008a)*. The broad objectives of the study were to gather and assess the available evidence:

- Establish whether or not, as a result of the digital transition and the vast range of information resources being digitally created, young people, the "*Google generation*", are searching for and researching content in new ways and whether this is likely to shape their future behavior as mature researchers;
- Establish whether or not new ways of researching content will prove to be any different from the ways that existing researchers and scholars carry out their work; and

- Inform and stimulate discussion about the future of libraries in the internet era (Centre for Information Behavior and the Evaluation of Research, 2008b, p. 5 adapted from Menou, Michel J., 2010)

4.1 Generation X

Generation X is the generation generally defined as those born after baby boom ended in the late 1950s. Demographers, historians and commentators use beginning birth dates from the early 1960s to the early 1980s. The term generally includes people born during all or part of the 1960s.

4.2 Generation Y

Millennials, also known as Generation Y, Generation Next, Net Generation and Echo Boomers, describes the generation following Generation X who were born from 1982 to the early 2000s (decade). There are no precise dates for when the millennial generation starts and ends.

4.3 Generation Z

A variety of terms are being used to describe Generation Z, including *iGeneration,* Generation@, Net Generation, Homeland Generation, or in the United States Generation 9/11 due to their post-9/11 childhoods., the Pluralist Generation, Generation AO (always on) Generation Text, and the "*Digital Natives*" by Marc Prensky. Beginning birth dates are from the early 2000s. http://en.wikipedia.org/wiki/Generation Dated 10th Jan, 2013).

5. Google a competitor or Collaborator to the Library?

A lot of discussions have taken place in myth and reality of Google versus Libraries. And the most probable conclusion is Google is good and Libraries are better as there is a concern about the currency, accuracy, reliability and authenticity with the Google information.

 "*Of course, there is a difference between the hype about Google and the reality, but both of these now affect library resource sharing. In many people's minds, "Google" and "the web" are synonymous, and some believe that Google's book digitization project will soon be a universal library online; meanwhile, others believe that Google will sooner be litigated out of existence. The more realistic point of view, of course, is that neither Google nor libraries can provide universal access to all information. For instance, there will always be rare materials that can neither be digitized by Google nor circulated by libraries*". (Posner 2007)

With the introduction of World Wide Web and Internet, Search engines become the information hub where one can find lots of information about anything. "*The personal computer revolution of the 1980s and the development of the web in the 1990s combined to make online searching increasingly easy and popular*" (Straw, 2003).While Preservation became the burning issue with the Library resources, Internet helps out this with the digitization solution. Google introduced Google books Library project, in which books are out of Copyright and in the Public domain, are fully available to read or download and many of universities are participating in this project. (http://en.wikipedia.org/wiki/Google_Books_Library_Project in Dated 10th Jan, 2013)

6. Next Generation Technical Services

6.1 Social Networking sites

Academics as well as Industries are attending attraction of Social Network Sites (SNS). There are many Social Sites where million of people and different communities can share, access, and post lots of information. The rise of SNSs use indicates generation shift towards online communities. Facebook, Twitter and other social networking sites are often mentioned as possible services that might be useful in learning and teaching. However as they have been designed for social recreational and not social-educational purposes their structure can result in the personal and educational interacting in unexpected and unwanted ways. Some of the examples are given below.

- Facebook: General: Photos, Videos, Blogs And Apps.
- Flicker: Photo sharing, commenting,

- Blogs: Individual with specific subjects' also personal blogs
- Google+: General
- LinkedIn: Business and professional networking
- Twitter: General. Micro-blogging, RSS, updates
- Podcasting, publishing on demand service
- Social Community: LIS Forum, LIS Links

6.2 Web 2.0 and Web 3.0 (Semantic Web)

Nowadays, bulks of Information are stored on the Internet which is very hard to manage.   The semantic web is the next generation web infrastructure which helps in content management. It makes searching more pin pointed and potential than the present one. In the words of Tim Berners-Lee "*the day-to-day mechanisms of trade, bureaucracy and our daily lives will be handled by machines talking to machines*". Semantic Web aims at converting the current web dominated by unstructured and semi-structured documents into a "*web of data*". Web.3.0 helps in transforming the web into a database. According to the W3C, "The Semantic Web provides a common framework that allows data to be shared   and   reused   across   application,   enterprise,   and   community   boundaries (http://en.wikipedia.org/wiki/Semantic_Web on dated 12th Jan, 2013).

The Semantic Web will not be restricted to corporate intranets or singular islands of knowledge. Rather, it will incorporate large portions of the Web, displaying heavy reuse of URIs (Universal Resource Locator) and high interconnection. (Ankolekar, Anupriya, 2008)

7. E - Learning

E -Learning is generally referred to as "*Computer mediated delivery of scholarly information, education, and training to remote users*". E-learning and its synonyms have been subject to extensive studies since the emergence of E - Learning technologies in early 1990s. A web search conducted on Google Scholar (27 Aug.2005) has returned a considerable amount of scholarly research works on ITC based educational systems and related synonyms such as online learning (17200), e-learning (16920), virtual learning (6700), Tele learning (1770), and course website (1280). So, it would be a tedious work to review such huge accumulated literature in this text. E-learning is suitable to fulfill the requirements of education. Moodle is the best support OSS for e-learning program in education. E-learning has become very popular because of the various benefits it offers to the institutions, academic staff and students, which include its potential to assist the university in preparing its students for effective participation in the wider information society to support student- directed learning, The Web based Information and technologies (ICT) have greatly catalyzed the emergence of online or electronic education as a new genre of delivering innovative bundle of the ICT-based learning materials, which has been developed in response of the growing needs for talented personnel to live up to knowledge-oriented society.

8. Virtual Networked Environment

The second Life, the best known Virtual Networked Environment (NVE) launched in 2003. Gartner [Filho, 2007] predicts that by the end of 2012: '50% *of large enterprises will establish an NVE business presence*'. It is ease in sharing and managing information on a network, the best example of Cloud Computing. Filho has given below three reasons of utilization of it.

- Increased attention and engagement

- Improved understanding, practice and experience through contextualized activities

- Provide a rich environment for learning, teaching, testing, simulation, and collaboration [*Filho,* 2006] (Kent, Philip G., 2008)

Some of examples are; CVRS (Collaborative Virtual Reference Service), Institutional BLOG, SMS (Short Message Service), Online Institute Repository, Wikis, Online streaming, Virtual Library / E –library etc…

9. Role of Next generation information Manager/Specialist

New rules require different attitudes, skills and knowledge. A concern for detail and organized approach will not be enough. To fill the gap between the present and future role, Library Professionals' are in real need of training that helps to develop skills as mentioned for below services.

- Provide Space where People can share, discuss and exchanges their ideas knowledge.
- Value added access to web resources
- Content Management
- Assist Users in finding resources beyond Google
- Virtual Reference Services
- Search beyond the search engine
- Library as Training & Learning centre
- Library at Publication Centre
- Library for collaborative environment

10. Conclusion

Libraries are operating in a rapidly changing environment. New strategies are required to ensure that libraries continue to reach their users and maintain the relevance of their service offerings. Librarians/Library Professionals themselves must also change to gain new skills, attitudes and knowledge to operate effectively in this changing environment so that user needs are understood and met. Learning has been fundamentally changed by the digital revolution. We, now have more information than ever before due to the Internet. Quick, easy and convenient access to information in many ways makes our lives easier, but it also presents us with challenges. Massive digital choice in particular has created a paradigm shift in information seeking and using behavior which in turn, has an impact on teaching and learning. The influences of those in higher education are far reaching.

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