AN OVERVIEW OF ROLE OF WEB 2.0 IN MODERN LIBRARIES

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Abstract: Web 2.0 is a way of putting us online. Web 2.0 is the progression to a more social, collaborative, interactive and inclusive web. Changes in the philosophy of web companies and web developers; Web 2.0 is a paradigm shift in society. This paper defines web 2.0, Library 2.0, and Librarian 2.0 as the application of interactive, interactive, and multimedia web-based technologies for library services and web-based collections, and recommends the adoption of these definitions by libraries. The paper describes the skills and attributes of Librarian 2.0. Librarians discuss how 2.0 is all about changing attitudes and ways of thinking. The challenge facing the profession today is trying to articulate the nature and scope of this new professional perspective. Librarian 2.0 "requires a different mindset or attitude." This "challenging our mental model" is what librarians growing up in the world of Web 2.0 need to know and understand a little about emerging technology. they are available and know what they can do and how to do what is needed, but they are not necessarily IT experts like them. This article recommends Blogging that is suitable for library use for education or information transfer. Blogging is very useful for librarians in providing the latest and useful information and knowledge for library users.

Keywords: Web 2.0, Web libraries, Information Technology, Internet, Web 2.0 Library, Librarian 2.0

1.0 Introduction

Web 2.0 is a step forward in the evolution of the Internet to include users as active agents in their work, not just as customers or recipients of information. This happens through a dynamic website where users are allowed to interact, create content or become part of a virtual community. Online tools and resources have made it easier for teachers to teach students and students to collaborate with other teachers and students and parents. These "Web 2.0" learning tools aren't magical, but they probably defy definition because they save time, help you stay organized, and often take up very little space on your computer. Some of these programs are web-based, meaning they can be accessed from any computer. Librarian 2.0 must have complex personality traits. Personality traits are more important than skills. Librarian 2.0 is passionate and inspiring. He can communicate clearly with one thought and passion. This library has vision, interest and creativity. They know how to lead and motivate. Librarian 2.0 is convenient, flexible, sustainable and durable. In short, there is no interest in them. Librarian 2.0 is fearless and willing to step outside of their comfort zone. He is proactive and willing to take risks.

Library 2.0 aims for excellence rather than perfection. It is observed that LIS professionals need to "get rid of ourselves". We need to understand that there are no patients on the table and are ready to go out in beta mode. Librarians in the 2.0 world are open-minded and willing to try new things and learn from their failures - their mantra is "just do it". They know it's okay to feel like a newcomer. They are willing to lay down the rules and deal with doubt. Must have good project management skills. Must be results oriented and have good interpersonal and time management skills.

Librarian 2.0 "knows how to do things." This librarian is a lateral thinker who can prioritize and solve problems. They understand how organizations work and know how to influence, inform and enable strategic decision-making. They "understand the value proposition" specific to the organization and its specialty. Not only enabling and managing change, but also a change in library services, management organizations and professions. They understand that "the ability to change is important" and are willing to "leave the status quo." Innovators who understand how to do business: "go out and get a job" Librarian 2.0 is at the forefront. Librarian 2.0 likes to work with people, values different user experiences, sees from the user's perspective, and strives to actively use emerging technologies to give users a voice. "Web 2.0 allows us to interact with our users in a completely different way, so there will no longer be an authority figure to provide information." Interestingly, Library 2.0 develops different expectations for the role of

users: "They now have the ability and responsibility to contribute content." Librarian 2.0 is no longer the gatekeeper: "The gate now opens both ways." Old habits die hard, it seems.

Librarians 2.0 have inquisitive minds, love to play and experiment, and love to learn. He is also willing to share his knowledge with colleagues and mentor and train others. As one of the participants noted, "Openness and willingness to learn is the heart of web 2.0." Libraries in the world 2.0 are involved in reflective practice, "know their own strengths." Willing to grow with work. Librarian 2.0 is a non-professional.The importance of formal education for LIS professionals in serving the needs of clients is also recognized. Web 2.0 requires librarians to take on the role of teacher, coach, or guide. Explain the complexity and help individual users and communities make the best use of the technology available in their workplace or everyday life. Librarian 2.0 understands how people learn. You must have a website, you must be "out there" and you must be "seen on the internet". Librarians should be in the 2.0 model; must have "educated reliability".

2.0 Applications of Web 2.0 in Libraries

Librarians not only provide user-centered services, but also create a collaborative and participatory environment by using web 2.0 technology to create new resources and build on existing resources using the collective intelligence of users. The application of Web 2.0 concepts and technologies to library services and collections is called Library 2.0. The new generation of library services and operations can be designed or built with the active participation and input of the user community in the library 2.0 environment to meet the needs and desires of today's library users. The term Library 2.0, first coined by Michael Casey in his blog "Library Shrinkage" in 2006, refers to a number of social and technological changes affecting libraries, staff, and patrons and how they interact.

2.1. Synchronous Communication

a) Virtual Meetings – VM and Instant Messaging - IM

IM, or instant messaging, is a type of communication that allows people to interact in real-time. It enables users to share various types of media, such as images, audio, and video files. Some popular IM client software includes Paltalk, Google Talk, Windows Live Messenger, and Yahoo Messenger. Libraries utilize instant messaging to offer "real-time assistance" to their patrons. This means that they can engage in audio and video conferences, as well as textual conversations, with hundreds of individuals simultaneously. To create an interactive social environment for e-learning, libraries can also employ A-View, which is a virtual interactive e-learning platform developed by Amrita University. It's worth noting that the software used for "live reference services" in libraries is typically more advanced than basic IM applications.

2.2. Content Distribution

2.2.1 RSS Feeds RSS : Which stands for Real Simple Syndication or Rich Site Summary, is a collection of XML-based protocols used for distributing and syndicating web content. It allows websites to announce new additions or updates, such as articles, blog entries, news, audio, video, and more. This technology enables seamless content flow between applications and websites. With RSS, websites can list their latest updates using XML, while users can easily keep track of new updates from their favorite websites. Users can receive timely updates from specific websites or aggregate data from multiple sources. RSS feed readers automatically fetch updated information from pre-defined websites and display it on the user's desktop. Popular web-based RSS aggregators include NewsGator, Feedster, and the latest versions of Windows Internet Explorer and Mozilla Firefox.

2.2.2 Streaming Media: Streaming media refers to the sequential delivery of multimedia content over a computer network. It allows the end-user to view or listen to the content as it is being delivered by the provider. This method of delivering video and audio media has been around since before Web 1.0 and continues to be an important application in Web 2.0. It involves the delivery of medium in real-time. In the realm of tutorials, there has been a shift from static, text-based tutorials to interactive multimedia-based tutorials. Many tutorials now incorporate Flash programming, screen-cast software, or streaming audio and video. These tutorials also include interactive quizzing, where users can respond to questions and receive responses from the system. Tutorials were among the first library applications to embrace the socially rich environment of Web 2.0.

2.2.3 Podcasting: The term "podcasting" is a combination of "broadcasting" and "iPod," which is a popular MP3 player from Apple Computer. Podcasting involves capturing audio digital-media files that can be distributed over the Internet using RSS feeds. These files can be played back on portable media players as well as computers. According to the Merriam Webster Dictionary, a podcast is a program that is made available in digital format for automatic download over the Internet. It is a time and location independent digital file. Users can subscribe to podcast feeds and automatically download the files into an audio management program on their PCs. What sets podcasts apart from other digital media formats is their ability to be syndicated, subscribed to, and automatically downloaded when new content is added. This is made possible through aggregators or feed readers that can read feed formats like RSS or Atom. Many libraries utilize podcasts to support their library orientation programs. By embracing podcasting and other consumer technologies like PDAs, iPods, and MP3 players, libraries are taking a significant step forward in delivering their content and services to their patrons.

2.2.4.Vodcasting: Vodcasting, short for "video-on-demand casting", is similar to podcasting but focuses on delivering video content instead of audio files. Vodcasts can be viewed on a laptop or personal media assistant (PMA) just like podcasts.

2.2.5 SMS Enquiry Service: SMS, or Short Message Service, enables the delivery of short messages over mobile networks. In a library setting, SMS enquiry services allow patrons to send inquiries via text message. Reference staff can promptly respond with answers or provide links to more detailed information.

2.3 Tools for Collaborative Publishing

2.3.1 Weblogs A weblog: Commonly known as a blog, is a type of website that features regular entries of commentary, descriptions of events, or other material such as graphics or video. Blogs are typically displayed in reverse chronological order, with the most recent post appearing first. They are easily updatable diaries or online journals. Blogs are considered lightweight publishing tools that provide individuals or groups with the ability to publish content or provide commentary. From a technological standpoint, blogs are user-friendly, platform-independent, and accessible online. In essence, blogs can be seen as online diaries, but they are also utilized by experts in various fields to share their knowledge, insights, and opinions with a wider audience. Multi-author blogs have become increasingly popular, with contributions from numerous writers. The emergence of microblogging platforms like Twitter has further integrated multi-author and single-author blogs into the social media landscape. Library Crunch, a blog on Library 2.0, is maintained by Michal Casey. Peter Suber oversees a blog on Open Access. Creating a blog is simple with free services such as LiveJournal and Google Blogger. Platforms like NETCIPIA even offer blog creation with wiki support, known as blikis. The founder of Wikipedia has launched Openserving, a service that provides free tools for building community sites. One of the primary uses of blogs for libraries is for promotional and outreach purposes. Libraries can use blogs to communicate information to users, announce new resources and events, and engage in debates and interactions with their audience. Additionally, library staff and users can connect on a more personal level through library blogs.

2.3.2 Wikis: A wiki is a collaborative platform that allows users to contribute, edit, and delete content in collaboration with others. It can be compared to an open web-page where registered users can publish, add, amend, and change information. While wikis may not have the same reliability as traditional resources, they still hold value as an information resource. Libraries can utilize wikis as a communication tool to facilitate social interaction between librarians and patrons. Users can share information, ask and answer questions, and librarians can do the same within the wiki. These interactions can be archived for future reference, serving as a valuable resource for the library. Additionally, wikis, along with blogs, have the potential to evolve into a multimedia environment where both synchronous and asynchronous audio and video collaborations can occur.

2.3.3 Collaborative Service Platforms

i.   **Social based Networks:** A social networking service serves as a platform for individuals to connect and form relationships based on shared interests, activities, backgrounds, or real-life connections. It allows users to establish connections with others through mutual friends or acquaintances, create profiles, and update their contact lists. Social networks are relatively new virtual communities that thrive on the

relationships between their members (Barsky and Purdon, 2006). Most social network services are web-based interfaces that provide users with various tools to interact with each other, such as chat, messaging, email, video, voice chat, file sharing, blogging, and discussion groups. Facebook, Google+, YouTube, LinkedIn, Instagram, Pinterest, Tumblr, and Twitter are some of the popular social networking services. There are also several projects that aim to develop free and open-source software for social networking services, including Anahita Social Networking Engine, Diaspora, Appleseed Project, OneSocialWeb, Kune, Movim, and Friendica. These technologies are often referred to as social engine or social networking engine software. Librarians and patrons can utilize social networking services to not only interact with each other but also to dynamically share and exchange resources in an electronic environment. Users can create accounts with the library network service, discover commonalities in their information needs with other users, and recommend resources to one another. Additionally, libraries can recommend resources to users based on similar profiles, demographics, previously accessed resources, and other data provided by users.

ii.   **Tags:** Tag is a keyword or term that is assigned to a piece of information, such as an Internet bookmark, digital image, or computer file. This metadata helps describe the item and allows it to be easily found again through browsing or searching. Tags are chosen informally and personally by the creator or viewer of the item. They are commonly used for computer files, web pages, digital images, and Internet bookmarks. Users have the ability to define and categorize information based on their own perception and assign keywords to it. In Library 2.0, users have the ability to tag the library's collection and actively participate in the cataloguing process. The great thing about tagging is that it allows everyone to categorize information in their own way. The catalogues in Library 2.0 allow users to follow standardized subjects or user-tagged subjects, depending on what is more convenient or makes more sense to them. Users can also add tags to resources. This tagged catalogue is an open and user-centered catalogue. As an example, the University of Huddersfield in West Yorkshire, UK has incorporated Web 2.0 features into their library catalogue, including options for rating books and dynamic floor plans that show the locations of subject areas. This aims to make the catalogue a more interactive tool.

iii.   **Social Bookmarking Services:** Social bookmarking services are a way to store, organize, search, and manage bookmarks of websites using descriptive metadata. In these systems, users can save links to web pages that they want to remember or share with others. These bookmarks can be public, private, or shared with specific individuals or groups. Visitors to social bookmarking sites can search for resources by keyword, person, or popularity and view the bookmarks, tags, and classification schemes created by registered users. Authorized individuals can view these bookmarks chronologically, by category or tags, or through a search engine. Most social bookmark services encourage the use of informal tags instead of traditional folders, although some offer a combination of folders and tags. These services also provide information on the number of users who have bookmarked a particular resource. Some social bookmarking services even create clusters of tags or bookmarks based on their relationships. Popular bookmarking services include itList, Blinklist, Clip2, ClickMarks, HotLinks, del.icio.us, Furl, Simpy, Citeulike, Connotea, Stumbleupon, Ma.gnolia, Blue Dot, Diigo, and more. Libraries can utilize social bookmarking sites by using RSS feeds for subject disciplines or areas relevant to them.

2.5 Tools Programming Tools and Hybrid Applications:

2.5.1 Social Bookmarking Services: Social bookmarking is a way to store, organize, search, and manage bookmarks of websites using descriptive metadata. Users can save links to web pages they want to remember or share with others in a social bookmarking system. These bookmarks can be public, private, or shared with specific individuals or groups. Visitors to social bookmarking sites can search for resources by keyword, person, or popularity and view the public bookmarks, tags, and folksonomies created by registered users. Authorized users can view bookmarks chronologically, by category or tags, or through a search engine. Most social bookmark services encourage the use of informal tags for organization, although some offer categories or a combination of folders and tags. These services also allow users to view bookmarks associated with a specific tag and provide information on the number of users who have bookmarked them. Some social bookmarking services analyze tag relationships to create tag clusters. Popular bookmarking services include itList, Blinklist, Clip2, ClickMarks, HotLinks, del.icio.us, Furl, Simpy, Citeulike, Connotea, Stumbleupon, Ma.gnolia, Blue Dot, Diigo, and more. Libraries can utilize social bookmarking sites through RSS feeds for subject disciplines or relevant areas of specialization.

2.5.2 Mashups: A Mashup is a web application that uses elements from different sources to create a new service displayed in a single interface. Mashup originally referred to the practice in popular music of creating a new song by combining two or more existing tracks. Content used in mashups often comes from third parties via public interfaces or APIs. Other ways to get content for mashups include websites and screen capture. Many people are experimenting with mashups using Amazon, eBay, Flickr, Google, Microsoft, Yahoo, YouTube, and their APIs, leading to the creation of mashup editors. Mashup is a combination of blogging, wiki, streaming, content aggregation, instant messaging and social networking. Mashup is a practice in which two or more technologies or services are combined into a new, innovative service. For example: WikiBios, a website where users create online biographies of each other, essentially combines blogging with social networking. Hashes in the Library 2.0 environment remind users when they enter. It allows users to edit OPAC files and metadata, save user tags, IM chat with librarians, wiki access with other users, and the user can make all or part of their profile public; users can always see there content from other users, similar products checked, Books and Lenders and the large customer created and integrated with the system. Intel Mash Maker, Google Mashup Editor, LiquidApps, Microsoft Popfly, Serena Mashup Editor, Yahoo Pipes etc. to create mashup. There are many mashup platforms such as.

2.5.3 Ajax: This technology facilitates interaction between web pages and users by exchanging small amounts of data with the server in the background, so that the entire web page does not have to be returned when data is requested from the server. This is to improve the interactivity, speed, functionality and usability of the web page. The term Ajax represents a general Web protocol that allows Web applications to communicate with back-end servers without interfering with the current state of the page. Ajax is a cross-platform engine that can be used on many different operating systems, computer architectures, and web browsers because it is based on open standards such as JavaScript and Document Object Model (DOM). Free and open access to suitable templates and libraries is available.

2.5.4 Application Programming Interface: An application programming interface (API) is a system, library, or service that runs the system, library, or service that provides the source code interface for the application. support requests from computers. Language-specific APIs are only available in certain programming languages. They leverage the syntax and concepts of programming languages to facilitate the use of APIs in specific contexts. Language-independent APIs are written so that they can be called from different programming languages. This is functionality required by a service-style API that is not tied to a specific process or method and can be used in remote calls. Examples of APIs include the Windows API and the Scopus API, which allow users to select a mix of Scopus content.

2.5.5 Library Toolbar: A toolbar is a graphical user interface that contains buttons, icons, menus, or command panels commonly used in applications. Toolbars are used in many applications, such as Microsoft Word, and as add-ons to web browsers such as Internet Explorer and Mozilla Firefox.

3.0 Conclusion
Finally, we will see how Web 2.0, Library 2.0 and Librarian 2.0 can help us exchange information using advanced technologies. In summary, Library 1.0 moved assembly and minor services online, while Library 2.0 moved all library services to medium electric no. Libraries have been online for years, and with Library 2.0, their readers are joining   them.
Librarian 2.0 has less to do with technology and more to do with effective transferable skills and people skills. Librarian 2.0 is more about changing attitudes and thinking. The challenge of the current study is to try to clarify the nature and role of this new character. Librarian 2.0 requires "a different mindset or attitude." It "goes over our heads" and forces us to think and see our work differently. As we move forward, we hope that designers wary of the promises of new technologies will help us focus on their benefits: the subtle but real changes that Web 2.0 brings. Although Library 2.0 is revolutionary, it is inherently close to the culture and mission of libraries. Although this change is in line with the library's history and mission, open access not only to the catalog and collections but also to the administration is still a significant change in library management. Library 2.0 requires libraries to focus less on securing products and more on collaborative innovation. There is a great convergence between library management and Web 2.0, which has revolutionized the industry. Librarian 2.0 is a paradigm shift in the behavior of LIS professionals. Works with IT and other disciplines. Librarian 2.0 has the ability to create relationships, collaborations and partnerships with individuals and groups wherever needed. He is a team player and can cooperate in discipline. Research is a way for Librarians 2.0 to make the best decisions, develop best practices, and establish

benchmarks. Libraries in the information age need to become Librarian 2.0 with all the above-mentioned qualifications and skills by using Web 2.0 and Library 2.0. Librarian 2.0 proposes blogs and wikis (essentially 2.0) as a way for information age librarians to reach their clients as quickly as other media. Blogs are useful for libraries to provide new and useful information and knowledge to library users. If today's librarians can change their minds and become Librarian 2.0, it would be very beneficial. I would like to personally congratulate them on this matter.

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