Application of Web 3.0 Technology for Library

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ABSTRACT
The WWW is more and more useful application for application communication. Most people today cannot conceive of life without the internet. Web 3.0 known as a third generation of the web. It refers to a third generation of internet-based services that collectively comprise what might be called the intelligent web such as those using semantic web, micro formats, natural language search, data-mining, machine learning, recommendation agents and artificial intelligence technologies. Purpose of the study is to understand web 3.0 technologies, and how it applicable for to increase to library services.

Keywords: Web 3.0, Web 3.0 features, semantic web, Resource Description Framework (RFD), Artificial Intelligence, Technologies.

INTRODUCTION
Web 3.0 is a word coin by John Markoff of the New York Times in 2006. Basically it is development part of second generation of information technology based on Internet. As called as artificial intelligence, those using semantic web, micro formats, natural language search, data mining, machine learning, cloud computing and artificial technologies which put stress on machine-facilitated understanding of information with a view to providing a more productive and intuitive user experience. (Bhattacharya, 2016).

Web 3.0 and its applications is a qualitative leap in the web world. It is new emergence in web for providing better service and facilities in every field. In this situation library needs to develop its services and applications for user’s satisfactions. Web 3.0 is about developing services that have the capacity to merge separated uploads into more elaborated pieces of contents. In Library 3.0, library professionals need to adopt themselves according to latest innovations provided by Web 3.0.

WEB 3.0
Web 3.0 refers to a invented third generation of Internet-based services that jointly consist of what might be called ‘intelligent Web’, such as those using semantic Web, micro formats, natural language search, data-mining, machine learning, recommendation agents and artificial intelligence technologies. (Bhattacharya, 2016).

WEB 3.0 FEATURES:
The main features on web 3.0 these are following

- Convergence of the virtual and physical world- Metaverse
- Access to information anywhere, anytime
- It is mainly driven by the heavy use of smart phones and cloud applications
- It is a web development layer that includes T.V quality open video,
- 3D simulations, augmented reality, human constructed semantic standards and pervasive broad-band, wireless and sensors.

Web 3.0 is modern technologies and it can help to the beneficiaries to reach their goals and development.

LIBRARY 3.0
It is a model for modern technology for library automation. It reflect on over all library services. It refers to libraries using technologies such as the semantic web, cloud computing, mobile devices and re-envisioning our use of established technologies such as federated search to facilitate user-generated content and association to support and make library collections accessible. With Library 3.0, library services are frequently updated and evaluated to meet the emerging needs of library users. Library 3.0 is the borderless library; user can access their library collection without going to library physical location. It is a virtual library to physical library spaces and ideally will work seamlessly within established library services and collections.
FEATURE OF LIBRARY 3.0

1. Web OPAC
Web OPAC is most important module for public access to find the sources location in the library. It is a library catalogue using internet. And Users can search the required document by internet like URL of Web OPAC user search location of document anytime during the day and from anywhere in the world. It is programmed to facilitate the library’s members to access the OPAC through their own search for the ease of borrowing instead of searching through the card catalogue. library 3.0 is become a part of WEB OPAC of various libraries in visible or invisible web. Metadata of contents (contents in any format) would be seamlessly accessible and searchable from single user interface.

2. Ontologies:
Ontologies are used for annotating information to the web content and expressing its semantics in a machine-readable manner. These are the techniques to give richer semantic relationships between terms and thoughts of knowledge. These give more standardization in managing web contents instead of merely indexing the terms. Ontology aims at how the information is organized rather than organizing the information. These will be able to give more flexibility in providing semantic description to the content in learning object repositories and at the same time these facilitate automated functions and task delegation to intelligent agents. Ontology deals with questions concerning what entities exist or can be said to exist and how such entities can be grouped, related within a hierarchy and subdivided according to similarities and differences. (Bhattacharya, 2016).

3. Ubiquitous Contents
The ubiquitous computing offers various contents which can be used or reused frequently. The contents of this generation need to be created in various formats and can also be easily shared, transferred and accessible through all modes of communication. Ubiquitous contents are the personal contents of the people persistently stored on the web in the form of movies, blog spots, RSS feeds, wikis, stories, articles, music, games etc. These are always there on the web and it can also available from everywhere over the internet through all mobile and internet accessible devices.

4. Geo Tagging:
This helps users to find specific information located at specific location. It is simply a marking of various media or digital contents like images, photographs, videos, websites or RSS feeds etc. Most of the cell phones and mobile devices have GPS (Global Positioning System) facilities

5. Virtual Reference Service:
Technology is developing very fast in all domains; librarians are more determined to serve the users who are away from the libraries. Libraries are new developed transferable and readable access to the users for collections search as a assistance. Like mobile devices or apps.

6. Semantic Web
The semantic web improves web technologies in order to generate, share and connect content through search and analysis based on the ability to understand the meaning of words. Sharing and organizing information available in every corner of the web which is the main aim of this generation and expected to be achieved with the help of semantic web technologies. It can help to provide effective services to the user. It as tools for accessing and discovering information, collaboration and cooperation with the users.

7. Cloud Computing
Cloud computing is a central remote library which help to maintain data of resources of library which is available on internet. New days it becomes popular because it helps to become repositories, online union catalogue, and access anywhere and anytime without any type of special software and hardware, networks among the library professionals and library users, communicate with each other using social networking sites, also help for library automation.

8. Unique search
Unique search is important advantages of web 3.0. So many databases are available for searching data; these databases want different logins for searching and output. It would be easy for users to find a search result which is displayed in one place and in one way, as a Google Search. New days unique searching is become widespread for libraries because Information technology has intense effect on development and progress of libraries. The advances in science and technology has made a tremendous improvement and changed all activities of library administration.
Much library management software is developed in world and unique searching facilities already in management software, open source software’s.

9. Mobile library Catalogues
New day’s science and technology has made a tremendous improvement and changed in technology and it’s become very small in size using nanotechnology. Mobile is a small size device it uses very far. Like communication, searching, storages, camera etc. Library has own management software for manage all type sources and they have WEB OPAC. It can be provide facilities to their users to access through their phones of other mobile devices.
CONCLUSION

Information technology has intense effect on development and progress of libraries. The advances in science and technology has made a tremendous improvement and changed all activities of library administration. Presently, there is a great influx of the electronic media and the information is available in a variety of formats, which require specialized equipments to read the information inscribed in it. In this era the librarian are very much pertinent in the electronic environment. It became necessary for the librarians to equip and update themselves with the current technologies for providing the appropriate and upto-date information. It is very important for librarian using various technologies these are introduced by the developer for library it can use for to develop their services in the libraries.

REFERENCES


