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## USE OF WEB 3.0 TECHNOLOGY FOR LIBRARY



### **Mrs. Nirmala G. Borade**

Librarian

Sant Dnyaneshwar College, Tal. Soegaon  
Dist. Aurangabad

### **ABSTRACT**

*The World Wide Web 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 literacy, recommendation agents and artificial intelligence technologies. Aim of the study is to understand web 3.0 technologies, and how it applicable for to increase to library services.*

### **KEYWORDS**

*Web 3.0, Features of Library 3.0, Use of Web 3.0 in Libraries etc.*

## RESEARCH PAPER

### INTRODUCTION-

The web is entering new phrase of evolution. There has been debate recent about what to call this new phrase. Some would prefer to not name it all while other suggest continuing to end it, 'Web 2.0' however this new phrase evolution has quit at a different focus from web 2.0 has come to mean. John mark off of the New York Times recently suggested naming this third generation of the web, ' web 3.0' This suggestion has led to quit a bit industry.

### OBJECTIVE OF THE RESEARCH-

1. To study Use of Web 3.0 Technology for Library.

### RESEARCH METHODOLOGY-

The current study 'Use of Web 3.0 Technology for Library' is based on secondary data collected from different sources. The secondary sources are concerned they were accumulated from online databases, articles and books. The research method applied to the current study is descriptive research method.

### Meaning of Web 1.0 -

It is the 'readable' phrase of the World Wide Web flat data. In web 1.0 there is only limited interaction between sites and web user's web 1.0 is simply an information portal where users passively receive information without being given the opportunity to post reviews, comments and feedback.

### Meaning of Web 2.0 -

It is the 'writable' phrase of the World Wide Web 2.0 describes worldwide sites that emphasize user generated content usability and interoperability. The term was popularized by Tim O Reilly media web 2.0 conference in late 2004 , through it was first coined by Daruy Dinacci in 1919.A web 2.0 site way allow users to interest and collaborates with each other user generated content in a virtual community.

### Meaning of Web 3.0 -

The term web 3.0 was first coined by John Markoff New York Times in 2006 while it first appeared prominently in early 2006 in a Blog articles written by Jeffrey Zeldman amazing and useful advancement. 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. Web 3.0 refers to a invented third generation of Internet-based services that conjointly correspond of what might be called 'intelligent Web', similar as those using semantic Web, micro formats, natural language search, data-mining, machine literacy, recommendation agents and artificial intelligence technologies.

**Web 3.0 Features -** The main features on web 3.0 these are following:

1. Convergence of the virtual and physical world- Met averse.
2. Access to information anywhere, anytime.
3. It is mainly driven by the heavy use of smart phones and cloud applications.

4. It is a web development layer that includes T.V quality open video,
5. 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.

### **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 users the OPAC through their own search for the ease of borrowing instead of searching through the card catalogue. Library 3.0 is come 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 connections between terms and thoughts of knowledge. These give further 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 suitable to give further elasticity 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 realities exist or can be said to exist and how such realities can be grouped, related within a scale and subdivided according to similarities and differences.

**3. Ubiquitous Contents** -The ubiquitous computing offers various contents which can be used or reused frequently. The content of this generation need to be created in various formats and can also be easy participated, transferred and accessible through all modes of communication. Ubiquitous contents are the particular 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. Utmost of the cell phones and mobile devices have GPS (Global Positioning System) installations.

**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 produce, share and connect content through search and analysis grounded on the capability to understand the meaning of words. Participating and organizing information available in every corner of the web which is the main idea of this generation and anticipated to be achieved with the help of semantic

web technologies. It can help to provide effective services to the user. It as tools for entering 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 numerous 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.

## **USE OF WEB 3.0 IN LIBRARIES -**

Almost as soon as the term web 2.0 was coined the web communicate split into two factions. There were those whole embraced the term and stared debating future iterations and the meaning of Web 3.0, Web 4.0 and even Web 5.0 meanwhile, the other group labeled the 2.0 moniker a hype professionals.

### **1. The 3D web -**

The potential of 3D Web and a far richer Web experience have been enabled by increase in computer processing power and higher world offer the opportunity for 2D virtual representations of users to interact with one another in real time and explore information and virtual objects in new ways. Much of the attention in the library community has for used on second Life, a virtual world modeling tools and a scripting language that enables the creation of a wide variety of objects. The 3D Web will only come a realistic medium for the provision of library and information services when it came flawless with the rest of the web becoming browser friendly.

### **2. The Semantic Web -**

In comparison to the excessive hype surrounding sites like second life there is relatively little wide spread understanding of the semantic web-web of information that is meaningful of computers. The specialist terminology of the semantic web has aerated a barrier of most engaging with topic. Nonetheless, access to API has encouraged an increasing number of users to start thinking about the web of data and there is increased interest just in the possibilities of both linked data and micro for the embedding semantic attributes into web pages through the application of agreed stands CF or example marking up contest information in the heard format.

### **3. Real world web -**

While the incremental changes of the semantic web may not be immediately discernable or beneficial this is not the case with the real world web. Mobile phones with high processing power high-specification cameras and GPS receivers, offers a new way to provide information services. This can be sophisticated augmented reality, overlaying additional information from the web.

### **4. FUTURE LIBRARIES -**

The 3D Web the semantic web and real world web will all have a role to play in the future provision of library and information services. However it is the real world that is most likely to change the way users see the web-thus this is the one most worthy of the web 3.0 moniker Not only will I provide an immediately recognize deference in the way user view the web. But the technologies necessary for a more immersive 3D web experience are not yet established, and it is not clear how much it will affect the way that way that we view the web as a whole.

### **CONCLUSION -**

In 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 time the librarian are truly important materials in the electronic medium. It came necessary for the librarians to equip and modernize themselves with the current technologies for giving the applicable 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. Web 3.0 will be more connected open and intelligent with semantic web technologies distributed databases nature language processing, machine literacy, machines logic and autonomous agents. The three possible vision of the web discussed then aren't mutually exclusive, but rather, but rather are likely to be combined in numerous as yet unthought-of combinations in the future, along with other new technologies.

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