



Application of Web 3.0 Technology in Modern Medical College Libraries

Mr.R.N.Sridhara
Research Scholar,
Dept Library and information science,
Bangalore University Bangalore -560056
E-mail: shridhar750@gmail.com

Dr. M Raghunandana
Dep't of Library and Information Science
Bangalore University, Bangalore-560056
E-mail:mraghunandana@rediffmail.com

Abstract

This paper depicts about the Application of web 3.0 utilized as a part of Medical college Library condition. It likewise plots the historical backdrop of Web minute and points of interest of Internet. We have just observed our administrations and accumulations change drastically with the ascent of the web and everything that it has carried with it, from the coordinations of offering open web access, to e-assets, Web 2.0 and the utilization of the semantic web. Change is a steady piece of being a bookkeeper as we endeavor to be pioneers, instead of adherents, in giving access to and exhibiting the utilization of new innovations in our work environments. The earth in which custodians offer administrations has changed radically, as much as the groups we serve. Due to a limited extent to fast changes in innovations and their eager take-up by numerous areas of the group, libraries are in a steady condition of transition with regards to drawing in with and using new advancements in ways that are pertinent to clients and our key objectives as associations. We can't stand to fall behind, and scarcely keeping up isn't a tasteful result either. Or maybe, libraries must have the capacity to focus on up and coming patterns enough that we appear to future-cast, learning about coming changes and dealing with the waste of what is probably not going to happen as intended, or what is probably not going to be significant to our objectives and exercises. The present paper features on Introduction, meaning of web 3.0, Evolution from Web1.0 to Web3.0, Some Advance Feature of Web 3.0, and Benefits for clients and Opportunities Offered by Better Information Access.

Key words: web 1.0, Web 2.0, Web 3.0, Federated Search, Data Sources



1. Introduction

Intelligence with the web will achieve new levels because of hyper availability between individuals, PCs, and associated gadgets made conceivable by unavoidable broadband administrations and the developing "Web of things." Already, individuals are progressively following up on data made accessible by a wide assortment of associated gadgets that are getting to be plainly inescapable in the public eye, from journal PCs to tablets, from advanced mobile phones to remotely inserted buyer hardware gadgets, for example, cameras. Before long the assemblage of associated gadgets will incorporate an extensive variety of sensor-prepared and organized items, from vitality utilizing machines in the home, for example, iceboxes, to routine office gear, for example, web-empowered printers. The expanding movement on the web will keep on growing by requests of greatness, which thus will assist manufacture the data it contain and its aggregate insight. The larger amount of commitment with the web will be invigorated, also, by the expanding comforts of mechanized administrations offered over these gadgets by the insightful web.

Web 3.0 has officially coordinated itself into our online lives, through new age web-based social networking applications, the semantic web, and less demanding data finding and sharing. Medical college Library 3.0 is still being worked on, yet library benefits all through the world are creating approaches to incorporate it into their administrations through strategies, for example, RDA labels, metadata and other semantic web improvements. The semantic web has changed the substance of the web, and will proceed to change and build up the way libraries direct their online business and convey administrations, for example, OPACs and combined seeking.

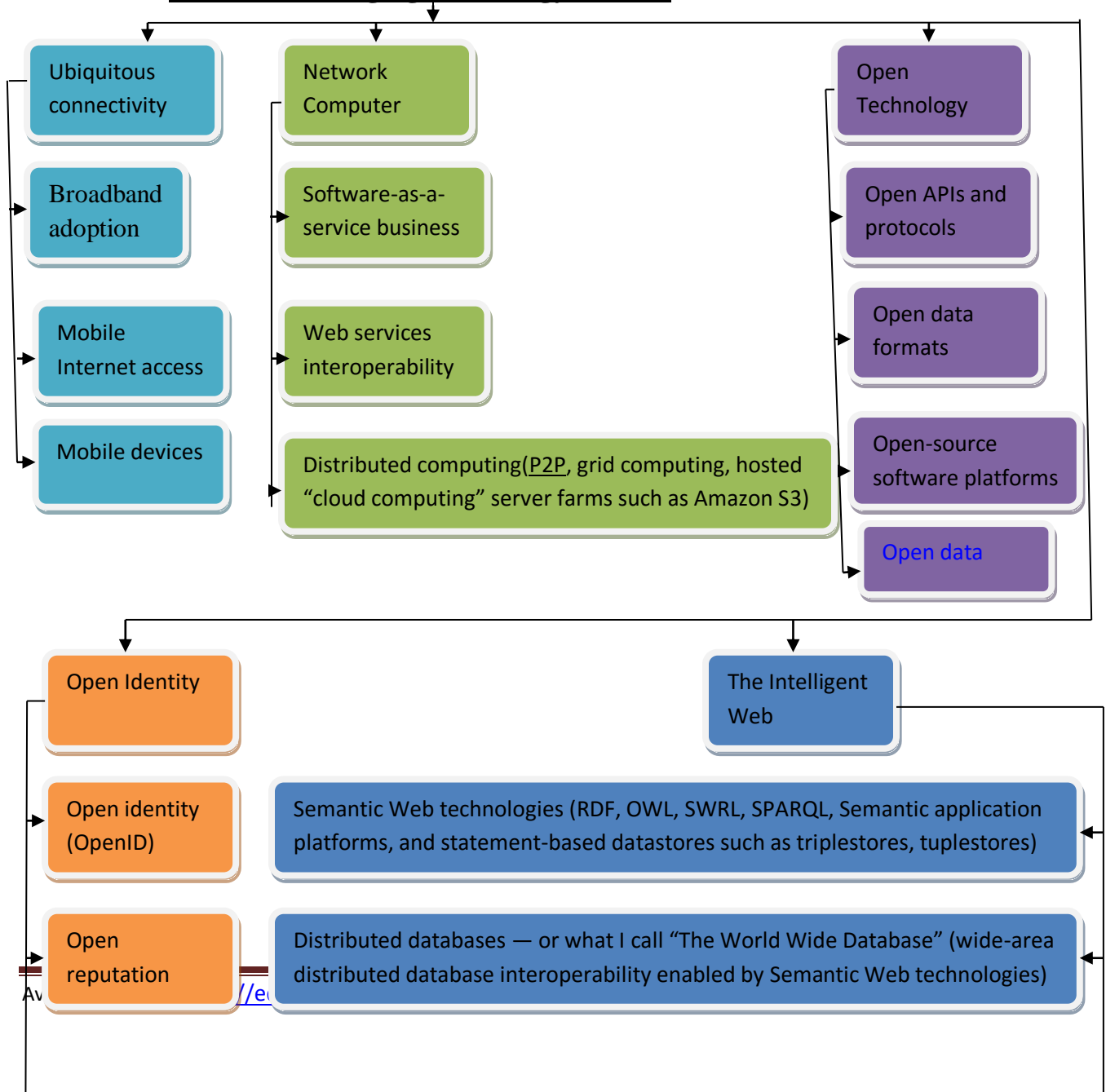
2. Defining Web 3.0

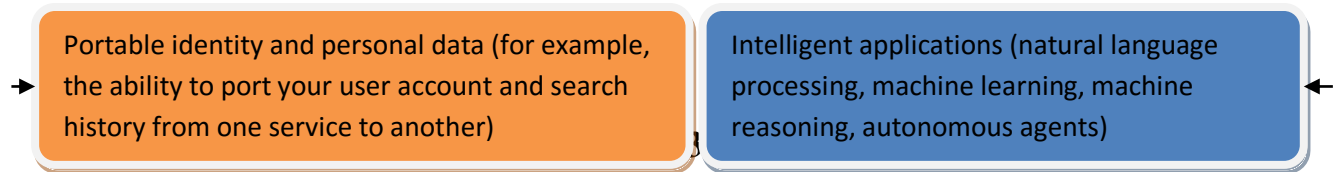
Web 3.0 is expected to advance out of updates and expansions to existing web functionalities, not through the reengineering or substitution of substance and frameworks. While it is silent ahead of schedule in the advancement to Web 3.0, a few executions that are accessible today outline its potential utilize. Tiptop Search, for instance, which utilizes semantic innovations to seek Twitter messages, sorts comes about in view of clients' feelings and encounters about the subject of intrigue. Microsoft's Bing web index utilizes semantic advances to propose related web journals, tweets, and extra, related inquiries that a client should need to consider as they search for data on a specific theme.

The term Web 3.0 is best used to clarify the following time of web processing and the new data age it will present, as opposed to an arrangement of particular innovations or specialized traits. For the most part, the idea of Web 3.0 underlines three fundamental highlights:

- The capacity to acquire data drawn from an assortment of beforehand inconsistent or walled applications or sources
- The engagement of a wide range of gadgets and machines in the information creation, information utilize, and correspondence process that advises our day by day lives, our work, and our organizations.

3. WEB 3.0 Emerging technology trends:





The establishment for the present data administrations blast was laid with **Web 1.0**, the read-just web. The underlying framework made an always developing Medical college library of data distributed on static sites, that clients could get to specifically by means of programs or find by means of web indexes. Web 2.0, frequently called the read-compose web or the "social web," made the Internet simple for customers to comprehend and utilize and enabled them to partake in making and distributing content. Clients could impart their plans to others by means of online journals, wikis, and person to person communication destinations, add connects to data distributed by different groups and applications, and associate with content distributed by others.

Web 2.0 bridles general society's aggregate insight to give extra an incentive to distributed data. Google's Page Rank calculation, for instance, considers the quantity of client made connects to a specific website page, amongst different components, to decide the significance of that page when positioning indexed lists. Proposal motors, for example, Digg.com and last.fm, which urge individuals to share and talk about web substance or music, utilize their members' conclusions to set up the esteem and prominence of substance that is distributed on the web.

Web 2.0 has turned into a vital piece of life and business. Organizations, government offices, and different associations have utilized the innovation's distributing and participatory ascribes to make new applications and plans of action for both inner and outward-confronting needs. Be that as it may, the data controlled on the web today has little structure, which constrains its potential utilize. Web 2.0 is likewise obliged by the uncommon volume of data accessible, the raising charge at which contented is distributed, and the powerlessness of the current framework to coordinate information that starts from various source or in various organizations.

Web 3.0 is the assignment by and large connected with the development to a "clever web." It's expected that the shrewd web will address the absence of structure and association in Web 2.0 by connecting data from divergent sources and frameworks to make the web much less demanding to utilize, further effective, and more profitable to its clients. Web 3.0 is additionally alluded to as the "semantic web" since it will utilize semantics—the investigation of implications behind terms and data—to translate accessible substance and in this way convey more fitting and pertinent substance to end-clients. Web 3.0 will present new strategies for sorting out substance and new apparatuses that resolve make it feasible for programming and application to gather, decipher, and utilize information in ways that can add importance and structure to data anywhere it didn't exist some time recently. The web will wind up noticeably more astute, as it were. In idea, Web 3.0 will have the capacity to release benefits that can slice from side to side high volumes of data from unique advanced source—from web substance to email or records dwelling on a PC.

4. Features of Web 1.0, Web 2.0 and Web 3.0

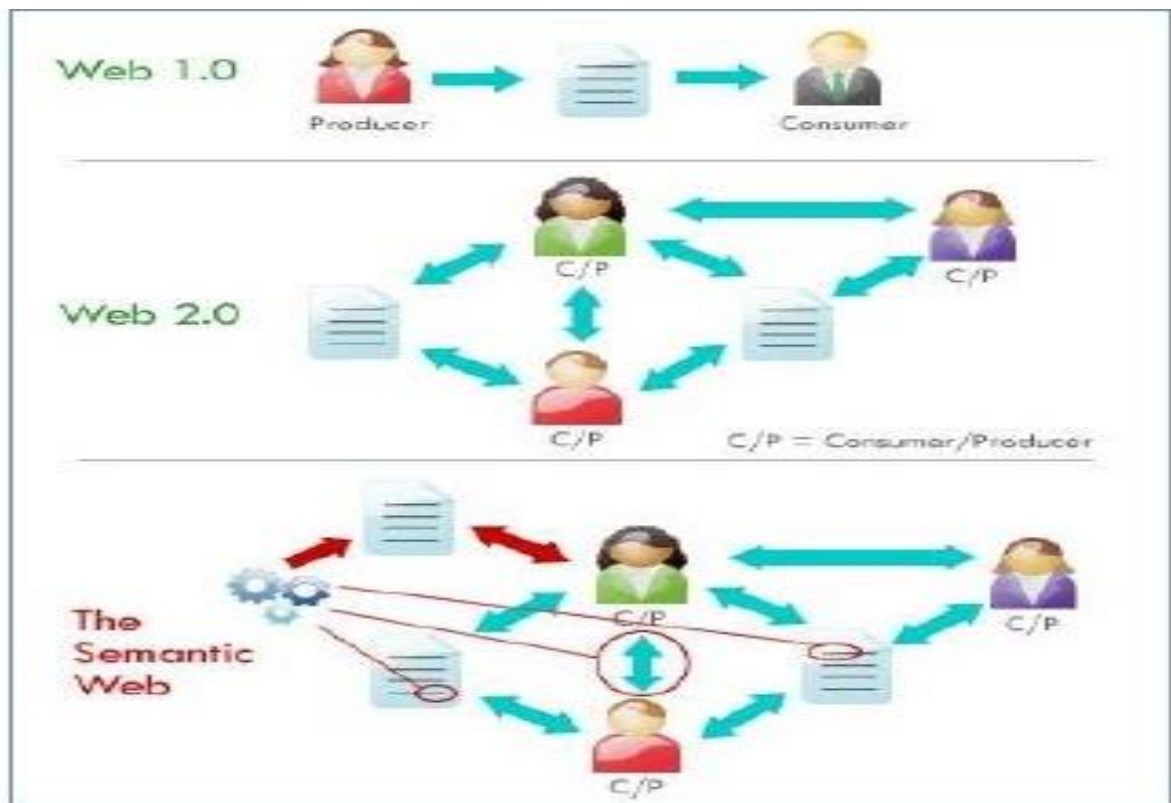


Figure-1

This figure demonstrates that one may state that we are right now encountering the crescendo of web 2.0 long range interpersonal communication capacities, structures, destinations and administrations have unrests both library administrations and coordinated effort on the web. It is certain that there are unmistakable contrasts between web 2.0 and web 3.0 both in objective and execution of their characterizing properties. As bloggers have been nothing for a considerable length of time, web 3.0 is undoubtedly not the same as web 2.0 in spite of the fact that those distinctions may be excessively unpretentious for whatever is left of us to see for a long while

| Sl. no. | Web 1.0 | Web 2.0 | Web 3.0 |
|---------|-----------------------|-------------------------|-----------------------------|
| 1 | 1996 | 2006 | 2016 |
| 2 | The Web | The Social Web | The Semantic Web |
| 3 | Tim Burners Lee | Tim O'Reilly | Sir Tim Berners Lee |
| 4 | Read Only Web | Read and right Web | Read, right and execute Web |
| 5 | Information Sharing | Information Interaction | Information Immersion |
| 6 | Millions of user | Billions of users | Trillion of users |
| 7 | Ecosystem | Participation | Understanding itself |
| 8 | Connect Information | Connect People | Connect knowledge |
| 9 | The Hypertext/CGI Web | The Community Web | The Semantic Web |
| 10 | Focused on companies | Focused on communities | Focused on the individuals |



| | | | |
|----|----------------|-----------------|-------------------------------|
| 11 | Home pages | Blogs | Life stream |
| 12 | Owning content | Sharing content | consolidating dynamic content |
| 13 | HTML, Portals | XML, RSS | The semantic web |
| 14 | Page views | Cost per click | User engagement |
| 15 | Netscape | Google | iGoogle, Net Vibes |

5. Some Advance Feature of Web 3.0

a. User- generated content

The semantic web, or Web 3.0, has just had a genuine and enduring impact in transit that individuals utilize numerous web administrations. The term 'semantic web' alludes to the universe of connected information. Semantic web advances empower individuals to make information stores. Administrations, for example, Face book's network with different sites, mean clients are generally expecting extraordinary, more incorporated encounters. Web 3.0 will build the simplicity of directing data looks by making more information machine-comprehensible, which significantly diminishes seek times. Through Web 3.0 applications, the utilization of the web will turn out to be more unavoidable in the customary, everyday exercises of the populace.

There are numerous focal points of client created content. The innovation is normally shoddy; it can be incorporated as an extra in numerous LMS and will likely turn into a programmed consideration inside ten years. An advantage of MCI is that it is a simple path for Medical college library clients to have their say on a theme and to have an online nearness in their nearby group. Numerous clients are enthusiastic about books and perusing, however may do not have the occasion or readiness to join a book gathering. MCI is a simple (and unknown) approach to contribute. Web-based social networking likewise gives an online group that reaches out past the objective space of the Medical college library. MCI is likewise a path for individuals to have responsibility for Medical college library – by enabling them to set aside the



opportunity to compose substance, as they would with other online networking instruments, for example, Twitter.

A downside of MCI is that it might involve more employees time to direct. Balance is fundamental to guarantee that the Medical college library's essence is dynamic, through consistent updates and remarks or inquiries are reacted to. Staff will likewise require preparing in how to utilize applications, and furthermore, conceivably, more extensive IT aptitudes for investigating circumstances. There ought to likewise be obvious limits among what is Medical college Medical college library substance and what is client produced – this will help clients in recognizing capable wellsprings of data. Be that as it may, there is an open door for libraries to build up their borrower's data education abilities both in helping them to include content yet in addition in helping them choose which online sources to utilize.

7. Federated Search and Beyond

Web based looking is the essential means by which individuals get to our accumulations and discover the assets that they look for. Past the Medical college library, seeking is currently a piece of regular day to day existence as individuals invest expanding measures of energy on the web and utilize cell phones to interface with individuals and data. As Tony Russell-Rose notes: "When a great many people discuss seek, they normally conceive a website page with a pursuit box and an outcomes list. Be that as it may, seek is progressively getting to be a[n] pervasive piece of our day by day lives, helping us understand our general surroundings. Hunt is the methods by which we can adapt to our flooding email inboxes, to produce bits of knowledge from masses of corporate information, and to find new eateries in a new city furnished just with a Smartphone and an Internet association. Pursuit will be all over, yet imperceptible, contextualized, and customized.

8. Context is its Differentiator

One of the essential highlights of Web 3.0 will be its capacity to utilize unstructured data on the web all the more insightfully by defining importance from the setting in which the data is distributed. Particular data assets on the web will be sorted out, connected, and connected to



different assets of normal enthusiasm by the utilization of regular dialect preparing and semantic innovations that can list information, and after that discover it, decipher it, and set up connections between unique information components in reckoning of a client's inquiry needs.

A client, for instance, will have the capacity to procedure content based data in ways that are like the techniques utilized these days to procedure organized or numeric information from spreadsheets and databases. A web crawler will have the capacity to comprehend inquiries introduced as full inquiries and serve up exact and significant outcomes, regardless of whether the outcomes don't really contain the particular hunt terms utilized. Advancements will likewise have the capacity to better channel information to enhance query output quality and pertinence to convey the substance that best serves the client's expectations. Savvy channels will be utilized amid a client's web seek, for instance, to bar comes about that speak to a specific brand, item, subject, or data the client isn't keen on. By concentrating on content quality as opposed to amount, such channels will likewise help address the issue of data over-burden, which can regularly overpower or superfluously occupy clients amid a hunt.

A portion of the semantic advances that will be utilized to make Web 3.0 conceivable incorporate the Resource Description structure (RDF), which portrays data with the goal that it can be perused and comprehended by PC applications. RDF is utilized to interface information from various sites or databases, as supported by Sir Tim Berners-Lee's thought of "connected information," which broadens the utilization of URLs past website pages to convey web availability to a wide range of gadgets and data source. an additional semantic innovation is the Web Ontology Language (OWL), which could likewise assume a key part. OWL will empower an application to process or translate data limited in archives as opposed to just showing the data or records to the client.

These innovations, among others, can be utilized to state connections between information got from human being or various appliance or resource and union data from beforehand disconnected source. The methodologies likewise empower a Web 3.0 internet searcher's capacity to convey significant outcomes in view of the setting of finish expressions or inquiries instead of watchwords.



9. Openness between Data Sources

The ability to cross-reference, interconnect, process, and remix information, applications, and data from the numerous differing sources on the web presents another level of receptiveness in the data innovation area. Interoperability between data or application storehouses makes it conceivable to join information from singular assets in new courses and to make examine comes about that have more an incentive than their unique source materials may have had separately. "With everything taken into account, Web3.0 innovations will make more quick witted, progressively effective web programs that could radically lessen the occasion it takes to incorporate and present data on the Internet and the time it takes clients to scan for it once it's there. The key for Web 3.0 is proficiency."

10. Benefits for clients

One of the principle advantages of the Web 3.0 for buyers is that their cooperations with their gadgets and applications will be customized. Libraries will have the capacity to exploit the numerous fascinating highlights and abilities Web3.0 conveys to assemble better administrations and associations with their clients.

Sooner rather than later, administrations influenced conceivable by the smart web to will start making new and imaginative connections between clients, their gadgets, and their applications. The effect will be felt in the long range interpersonal communication circle, where applications will have a superior capacity to make utilization of client produced substance and feelings; in the versatile web, which will end up being the dominating methods for getting to substance and benefits; and even in the excitement division, where TVs and gaming gadgets will include astute administrations, for example, the capacity to prescribe media to clients in view of past use and inclinations or intuitive highlights that enable clients to make their own particular substance.

The capacity to compose data relevantly in view of common dialect handling and semantic advances, joined with client characterized criteria, will make looks much more intense than is conceivable with the present calculations. Information yield will be more customized and basic assignments and exercises will be more instinctive and less demanding. Conduct and area



mindful applications will be upgraded by the improved setting made accessible to the application and via mechanized collaborations with and between more sorts of gadgets. Represented Semantic innovation " gives an expanding chance to application improvement experts to better adventure data, incorporate frameworks, and convey applications that give the clients new and all the more capable approaches to utilize data.

11. Opportunities Offered by Better Information Access

In spite of these zones of concern, Web 3.0 will introduce another period for business and more open doors in which the Internet assumes an undeniably essential part. It will present a novel data age for business as semantic advancements add importance to connected information and make more noteworthy receptiveness among information sources. The new data age will be encouraged by hyper associated clients and the "Web of things," which will make the web and administrations that work on it more insightful. The expanding commitments of data from cloud-based assets and interpersonal organizations will help encourage it. Another empowering agent will be IPv6, which will make it conceivable to keep up steady interchanges with gadgets and machines. Since it will have the capacity to open up access to data and join data from different sources and associations, Web 3.0 will prompt the arrangement of new consortia and organizations to drive new chances important to organizations, businesses, and shoppers. Numerous inward and outer business procedures will turn out to be more open and straightforward. Machine-to-machine data trades will turn out to be more significant and interoperable with corporate data frameworks. The pace of advancement will accelerate essentially, and new open doors for disturbance will develop. Rivalry will increment as organizations seek after inventive administrations with Web 3.0 capacities and as cloud-based administrations and long-tail applications make it workable for little or already unrepresented gatherings to contend with bigger firm on more equivalent balance.

12. Conclusion

The web offers such a significant number of chances to individuals with incapacities that are inaccessible through some other medium. It offers autonomy and flexibility. In any case, if a



site isn't made considering web availability, it might bar a portion of the populace that stands to pick up the most from the web. A great many people don't expect to avoid individuals with disabilities. As associations and fashioners wind up plainly mindful of and execute availability, they will guarantee that their substance can be gotten to by a more extensive populace. Conventional libraries have taken the state of an intelligent, available and productive stage which is available for the client whenever of the day. The new types of computerized libraries, i.e. semantic Web, have demonstrated to create more significant outcomes for the client. Promote improvements in semantic web advanced the idea of commitment of data and social intuitiveness between the benefactors. In this way, the future holds considerably more encouraging and productive systems for dealing with data.

The Semantic (Web 3.0) guarantees to "arrange the world's data" in a significantly more intelligent path than Google can ever accomplish with their present motor plan. This is particularly valid from the perspective of machine appreciation rather than human ognizance. The Semantic Web requires the utilization of a revelatory ontological dialect like OWL to deliver space particular metaphysics that machines can use to reason about data and make new conclusions, not just match watchwords.

References

1. Mohd Uwesh, ICMR Library Bulletin Use of Web 3.0 Technology in Modern Libraries (July-December 2013), Volume 10, 3&4, Indian Council of Medical Research, P-4-11.
2. Web 3.0: Its Promise and Implications for Consumers and Business 08/04/2017.
3. UNDERSTANDING ADVANCES IN WEB TECHNOLOGIES: EVOLUTION FROM WEB 2.0 TO WEB 3.0 aisel.aisnet.org > ... > ECIS Proceedings > ECIS2011 > 257(Accessed on 08/04/2017).
4. www.libraries.vic.gov.au/downloads/.../_exploring_library_3.pdf(Accessed on 08/04/2017)
5. Semantic Web Technologies for Digital Libraries: From Libraries to Social Semantic Digital Libraries (SSDL), Over Semantic Digital Libraries (SDL) eprints.soton.ac.uk/271459/(Accessed on 08/04/2017)



6. Comparative Study of Web 1.0, Web 2.0 and Web 3.0
www.ftsm.ukm.my/ss/Book/Comparative%20Study.pdf (Accessed on 10/12/2013).
7. UTILIZE THE DIGITAL LIBRARY TOOLS, ORGANIZING RESOURCES USING GANESHA DIGITAL LIBRARY
www.consaxv.org/.../ID_Djembar_L_Utilize_the_Digital_Library_Tools(Accessed on08/04/2017)
8. Technological March from Web 1.0 to Web 3.0:A Comparative Study
www.indianjournals.com/ijor.aspx?target=ijor:lh&volume=49. (Accessed on08/04/2017)
9. WEB 2.0 AND WEB 3.0 ENVIRONMENTS: POSSIBILITIES FOR AUTHORIZING ANDKNOWLEDGE REPRESENTATION www.ris.uvt.ro/wp-content/uploads/2010/01/mivanova.pdf(Accessed on08/04/2017).
10. UNDERSTANDING ADVANCES IN WEB TECHNOLOGIES: EVOLUTION FROM WEB 2.0 TO WEB 3.0 aisel.aisnet.org > ... > ECIS Proceedings > ECIS2011 > 257(Accessed on08/04/2017)