

# INTERNETING IN THE FUTURE – WEB 3.0

Internet started as a military exercise to link offices across the USA, has become ubiquitous in every sphere of human lives whether living in rural, urban or semi-urban habitats. The information flow from top to bottom and vice versa has made the people more knowledgeable not only about their rights but also about their social, cultural and historical backgrounds.



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Internet has made people in developed and under-developed world to be on same footing in their knowledge. From Web 1.0 to Web 2.0 and now moving to Web 3.0 to Web 4.0 in future are effects which this technological revolution has made in the lives of humans of its kind unparalleled in human history.

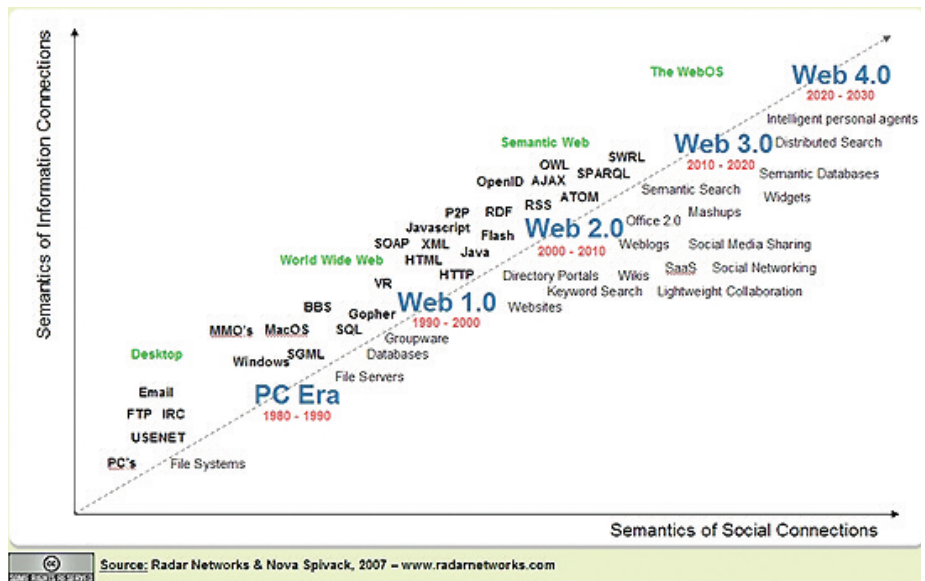
During the period of Web 1.0 (ranging during years 1989 to 1999), the efforts of the web developers and architectures was to standardize the infrastructure, protocols, web languages like HTML, Java, JavaScript etc. It was mainly one way communication where the people were reading what the writer was saying. The Paradigm shift from Web 1.0 to Web 2.0 which we are witnessing till now started in 2000 and has turned the people from mere readers to contributors. It has become a channel for two way communication, where people participate in the discussion, socially collaborate through Social Networking sites; share their knowledge through videos and photographs. The efforts of web architectures during this period are concentrated on writing the software/protocols to share the information among the web-sites developed on numerous platforms on various topics. If Web 1.0 was from Writer to Readers (WTR) then Web

2.0 can be acronymed as Writer to Readers to Writers (WTRW). Virtual world of formation on the internet has not only resulted into sharing of information, ideas but also as a common platform for the people to grow in terms of knowledge.

However with the plentiful of information available at its helm contained in varied and numerous websites a new thought is emerging where in the internet is considered as a BIG computer which may take the command from the people in an English like language and process the ocean of information available into its repositories to present information in a meaningful response to the people. To make things clear, imagine going to a trip to a North India Hill station at present, you may search the maps for the location and route, browse weather sites to search the information related to the weather during the specific month and yet number of other websites for the availability of hotels suiting to your budget. With this much information available, still you are at a loss to understand and collate the information in a meaningful way so that your trip for pleasure is actually a pleasurable one. Now think of a scenario where you simply give/write a command 'A Trip to North India Hill Station with budget of Rs 10000' Lo and behold the Internet searches the information available with it and checks various sites related to the

query itself and brings out the information related to route, length of route, best period to visit and hotels available at Hill station with Restaurants on the way in a lucid and succinct way. So what Web3.0 is doing is simply processing the vast amount of data available on various websites and replying in a manner for taking decision in rapid manner. With these features in built into, the web will turn into Semantic Web which the inventor of Internet Tim Berners-Lee contemplated in year 2006. Internet experts think Web 3.0 is going to be like having a personal assistant who knows practically everything about you and can access all the information on the Internet to answer any question. Many compare Web 3.0 to a giant database. While Web 2.0 uses the Internet to make connections between people, Web 3.0 will use the Internet to make connections with information. Some experts see Web 3.0 replacing the current Web while others believe it will exist as a separate network.

According to technology expert Nova Spivack, the development of the Web moves in 10-year cycles. In the Web's first decade, most of the development focused on the back end, or infrastructure, of the Web. Programmers created the protocols and code languages we use to make Web pages. In the second decade, focus shifted to the front end and the era of Web 2.0 began. Now people use Web pages as platforms for other applications. They also create mashups and experiment with ways to make Web experiences more interactive. We're at the end of the Web 2.0 cycle now. The next cycle will be Web 3.0, and the focus will



shift back to the back end. Programmers will refine the Internet's infrastructure to support the advanced capabilities of Web 3.0 browsers. Once that phase ends, we'll enter the era of Web 4.0. Focus will return to the front end, and we'll see thousands of new programs that use Web 3.0 as a foundation. The Web will evolve into a three-dimensional environment. Rather than a Web 3.0, we'll see a Web 3D.

The Web will build on developments in distributed computing and lead to true artificial intelligence. In distributed computing, several computers tackle a large processing job. Each computer handles a small part of the overall task. Some people believe the Web will be able to think by distributing the workload across thousands of computers and referencing deep ontologies. The Web will become a giant brain capable of analyzing data and extrapolating new ideas based off of that information.

The Web will extend far beyond

computers and cell phones. Everything from watches to television sets to clothing will connect to the Internet. Users will have a constant connection to the Web, and vice versa. Each user's software agent will learn more about its respective user by electronically observing his or her activities. This might lead to debates about the balance between individual privacy and the benefit of having a personalized Web browsing experience.

The Web will merge with other forms of entertainment until all distinctions between the forms of media are lost. Radio programs, television shows and feature films will rely on the Web as a delivery system.

It's too early to tell which (if any) of these future versions of the Web will come true. It may be that the real future of the Web is even more extravagant than the most extreme predictions. We can only hope that by the time the future of the Web gets here, we can all agree on what to call it.