3-D Internet

Nitesh Kumar, Guide: Ms. DeeptiSahu

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING, SCHOOL OF ENGINEERING AND TECHNOLOGY, SHARDA UNIVERSITY. GREATERNOIDA

1. ABSTRACT

Internet today has become an integral part of our lives. The World Wide Web which started as a small dull data repository has now become massive and irreplaceable. Present activities being partially or completely linked with the virtual world can be optimized to a higher level. Every activity associated with our daily life is mapped and related to some entity in the digital world. The world has seen vast advancements in Internet and in 3D stereoscopic displays. Time has come merge the two to deliver a new level of experience to the users. 3D Internet is an idea which is yet to be implemented and requires browsers having the property of depth perception and artificial intelligence. If this property is incorporated then the idea of Internet of things can become a reality which is also discussed in this paper. In this paper we have discussed the features, possible setup methods, applications, and advantages and obstacles faced in the implementation of 3D Internet. Through this paper we intend to provide a clear idea about 3D Internet and the possible benefits associated which clearly are worth the amount of financial investment required for its implementation.

2. INTRODUCTION

3D Internet, also known as virtual worlds, is a powerful new way for you to reach consumers, business customers, co-workers, partners, and

students. It combines the immediacy of television, the versatile content of the Web, and the relationship-building strengths of social networking sites like Facebook.

Yet unlike the passive experience of television, the 3D Internet is inherently interactive and engaging. Virtual worlds provide immersive 3D experiences that replicate (and in some cases exceed) real life.

People who take part in virtual worlds stay online longer with a heightened level of interest. To take advantage of that interest, diverse businesses and organizations have claimed an early stake in this fast-growing market.

They include technology leaders such as IBM, Microsoft, and Cisco, companies such as BMW, Toyota, Circuit City, Coca Cola, and Calvin Klein, and scores of universities, including Harvard, Stanford and Penn State.

3. What is 3-D Internet

3D Internet is the next generation after the current 2d web.3D Internet consists of interconnected services, presented as virtual worlds.

Imagine a set-up of interconnected virtual worlds inhabited by users who can visit and consume services through "teleporting" from one world to another.

3D Internet will rely on the same basic technology and components as that of a

traditional browser, and it will interact with the same search engines and servers. Aside from the use of 3D computer graphics and personalized avatars, the important difference lies in a much more social experience compared to the two-dimensional Internet of today.

3D Internet is incredibly social. If you're reading a document, you can see other people reading the same document. You connect organically with other people that share your interests and consume the same services that you do.

4. 3-D Internet: Why

One of the often heard arguments against the 3D Internet is in the form of the question "why do we need it?" For most of its users the Internet is a familiar, comfortable medium where we communicate with each other, get our news, shop, pay our bills, and more.

We are indeed so much used to and dependent on its existence that we don't think about its nature anymore just like we do not think about Ohm's law when we turn on the lights. From this perspective what we have, i.e. the 2D version, seems "sufficient" and the 3D Internet is yet another fad.

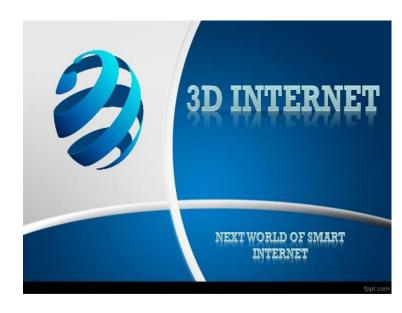
However, if we stop and think about the nature of the Internet for a moment we realize that it is nothing but a virtual environment (cyberspace) where people and organizations interact with each other and exchange information. Once this fact is well understood, the question can be turned on its head and becomes "why do we restrict ourselves to 2D pages and hyperlinks for all these activities?"

Navigating hierarchical data structures is often cumbersome for large data sets. Unfortunately, the Internet as we know is organized as a flat abstract mesh of interconnected hierarchical documents. A typical 2D website is an extremely abstract entity and consists of nothing but a bunch of documents and pictures. Within the website, at

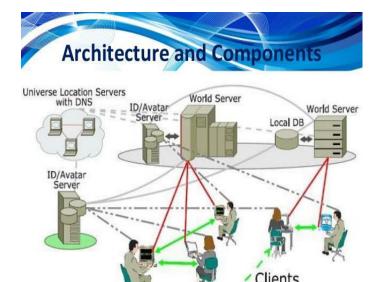
every level of the interaction, the developers have to provide the user immediate navigational help. Otherwise, the user would get lost sooner or later. Since this is a very abstract environment, there is no straightforward way of providing a navigation scheme which would be immediately recognizable to human beings. The situation is not any better when traveling between websites.. It is no surprise that Google is the most powerful Internet Company of our times.

5. How 3-D Internet Works?

- > By using artificial intelligence.
- Using 3d eyewear like Google Glass.
- > Implementing Sixth-Sense technology.
- ➤ Using sensors and holographic image projections.



(Figure i : 3-D Web)



(Figure ii : Architecture Of 3-D Internet)

6. 3D Internet Technology and Components

Though the technology and components used for 3D internet are same as used in traditional internet also it interacts with the same servers and search engines. But being more social 3D internet is different from traditional 2D internet.

The wonderful thing about 3D internet is that participants learn as much from each other as from talking to any official source of information. 3D internet search is also as advanced as it opens a vast array of possibilities when it comes to search and browse data.

Through 3D internet multi users can read the same documents. You connect organically with other people that share your interests and access the same service as other use. People can also

watch online 3D movies via internet with no buffering time.

3D internet also offers other facilities like virtual meetings, support groups, academics, training chats and shopping.

7. 3D Internet Features

One of the best features of 3D internet is that it also supports 3D internet TV. Now Sony is thinking to launch new technology for 3D TV that is 3D internet TV and HDTV 3D internet TV Wi-Fi.

In such TVs internet connectivity will be built up in TV via Wi-Fi. The picture and graphic quality will also be tremendously improved along with a lot of TV channels that is building in internet connectivity with 3D TV, to improve quality and to increase number of channels that user may access.

With Sony internet 3D TV, it will also be possible to enjoy other services on TV such as Skype.

8. Applications of 3D Internet

Education

3D Internet can be used as a platform for education by many institutions, such as colleges, universities, libraries and government entities. There are subjects such as chemistry and English in which Instructors and researchers would favor

3D Internet because it is more personal than traditional distance learning.

> Religion

Religious organizations can make use of the 3D Internet to open virtual meeting places within specified locations.

Embassies

We could create embassies in 3D Internet, where visitors will be able to talk face-to-face with a computer-generated ambassador about visas, trade and other issues.

Live sport entertainment

Popular forms of live entertainment could also be placed into the 3D Internet. Many sports allow the users to watch or participate in many popular activities. Sporting leagues like Cricket, Football, Professional Wrestling, boxing, and auto racing could be placed in the 3D Internet for its users to play in the 3D environment.

> Arts

The modeling in 3D Internet would allow the artists to create new forms of art, that in many ways are not possible in real life due to physical constraints or high associated costs. In 3D Internet artists could display their works to an audience across the world. This has created an entire artistic culture on its own where many residents who buy or build homes can shop for artwork to place there.

9. Technical Implications

> Speed:

Internet speed is one of the most significant implications that are being faced by the 3D Internet. A research shows that not many countries in the world are in a state to fulfill the internet speeds that are required for the implementation of the 3D Internet. Here, in the below chart we can see the average broadband speed in various countries.

> Hardware:

Hardware implications are not quite serious implications to be thought of, because the main Hardware implication that we face to implement the 3D Internet is that the display device used to display the images are 2D in nature, but with the inclusion of the 3D internet there would be great difficulty to view the 3D objects in the 2D devices.

10. PROBLEM STATEMENT

Getting a glimpse of the next generation internet and knowing its seamless power.

WEB 1.0:

- First face of the World Wide Web.
- **.** Edited only by webmasters.
- Similar to a hand-written notebook.
- Threatened to paranoid perception.

WEB 2.0:

- **!** Everyone can contribute to the web.
- * Rich user interface and best in class graphics.
- ❖ 85% majority websites in web 2.0.
- Change is inevitable.

WEB 3.0:

- Use of metaverse in web technology.
- ❖ The rise of intelligent systems.
- **\Delta** Birth of the most awaited future internet.
- Webpages and Web places

11. CONCLUSION

3D Internet, also known as virtual worlds, is a powerful new way for you to reach consumers, business customers, co-workers, partners, and students.

It combines the immediacy of television, the versatile content of the Web, and the relationship-building strengths of social networking sites like Face book.

Yet unlike the passive experience of television, the 3D Internet is inherently interactive and engaging. Virtual worlds provide immersive 3D experiences that replicate (and in some cases exceed) real life.

12. Future Scope Of 3-D Internet

- ➤ In Artificial Intelligence
- For 3-D Screens
- For 3-D Web
- For 3-D Glasses
- To Connect Virtual world with Reality

13. References

- 1. www.google.com
- 2. www.wikipedia.com