IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
Volume 2, Issue 2, June 2022
Impact Factor: 6.252

3D Internet Technology

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Abstract: *In today's ever-shifting media landscape, it can be a more complex task to find effective ways to reach toward your desired audience. In traditional media such as television continue lose their audience share, Solution for its ability to attract highly motivated audiences and for its growth potential is— the 3D Internet. 3D Internet is also known as virtual worlds; it is a powerful new way for us to reach consumer, business customers, partners, co-workers and students. This technology combines the immediacy of television, the versatile content of the web, and social networking sites like Face book. 3D technology worlds provide us immersive 3D experiences that replicate real life. In this review paper we reviewed about 3D internet Technology, will introduce the What is 3D Internet and discuss the topics such as Why now need of this technology, Evolution of Internet, How does it work, Applications of 3D Internet, The Future of 3D Internet. The paper will also discuss the various pros and cons of 3D internet and remarks about 3D internet Technology. This will make 3D internet technology very useful for E-commerce, Product visualization, 3D virtual shops, and workspaces.*

Keywords: 3D Internet

I. INTRODUCTION

3D Internet is a combination of two things: INTERNET and 3D GRAPHICS that results Interactive, real time 3D graphics delivered over the web. It is an interactive virtual environment that provides services, interaction, and communication. The Internet is virtual environment facilities business, entertainment and communication, on global scale over the world. So inter is known as world's largest public information network to share different type of information. Some of applications—such as Web searching, e-commerce, Internet telephony, video conferencing and electronic media discussion boards have been developed at highest speed.

People who have heightened level of interest to stay online in virtual worlds we can take advantage of that interest, and diverse organizations and businesses in fast growing market.

The most well-known of the 40 virtual world platforms today is Second Life. 3D internet's "in-world" resident's number in the millions. As residents, they can:

1. Remotely attend training sessions, educational classes and group meetings.
2. Engage in community or corporate events
3. View and manipulate statistical information and other data such as Chemical processes or biological in 3D
4. Try out new gadgets, electronic devices and products
5. Take part in virtual commerce.

II. NEED OF 3D INTERNET

The main aim to converge physical world and virtual world. It provides ease of use. Need include to get rid of flat, surfing a natural way and messy documents. Get everything at your finger tip. Until recently, there were two problems:

a. Slow computers

b .slow connections

One of the often heard arguments against the 3D Internet is in the form of the question "why do we need it?" For most users the Internet is comfortable medium, a familiar where we communicate with each other, shop, pay our bills, get our news, and more. 3D internet increase need in preaching spirituality of different religions, Virtual classes over internet from universities, Embassies for virtual and tourist guide, E-commerce, Training, Education, Games, entertainment, Social Interaction Collaborative design and live sport stadium experience.

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III. WHAT IS 3D INTERNET

3D Internet shares the time-tested main principles and underlying architecture of the current Internet web technology as well as many semantic web concepts. The operational principles the 3D Internet shares with its predecessor include open protocols, open and flexible architecture, simplicity at the network core, intelligence at the edges, distributed implementation and simplicity at the network core. We adopt here the terms universe, world, and web place as 3D counterparts of website, WWW and sub domain respectively.

IV. CHARACTERISTICS OF 3D INTERNET

3D internet also called as virtual world. It is a blend of television, social networking and web. Second life and it's "in-world" residents. It is Interesting and fascinating. It Integrate of every electronic device OTA
3 D internets have following characteristic.

A. Intelligent

Able to be adapted to the users with respect to their personalization, terminals, devices and access networks. For a good user experience regarding the media content, this content should be adapted to the user.

B. Interactive for all different terminals (PC, Set-Tosp Box, mobile, etc.):

The user should be able to interact with the media objects and render them using multiple perspectives and views. Real-time interaction with other users with the media will be required to achieve the maximum level of collaboration in orderly.

C. Real time or live (live performing, live recording):

The most attractive media types tend to be generated or performed in real-time circumstances. Therefore, FIM should need to facilitate live multimedia models, such as events, video in virtual worlds and live music performances to users and in addition, it enable collaboration in distributed environments.

D. Cross modal:

Future media would need to be intuitively accessible and inter-linked. Therefore, they need to support cross modal approaches to retrieval, consumption and media creation. Just as the humans easily identify a song with a film, or smell with particular environment and FIM, time needs to inherently facilitate cross modality of the content and its tasks

E. Publicly Opened and Controversial

It should open for public participation and it supportive of establishing communities across controversial issues and incorporate their stakeholders with conflicting interests of them.

F. Collaboratively Filtered/ Edited

In order to have media professionals it make maximum use of the internet over the web technology, the media content should be filtered/ edited / manipulated/ written in a collaborative way..

G. Able to Transport 3D Multimodal

The 3DI content networks would able to adapt the content as per need to the user. The device characteristics coping with scalability to real 3D video multimodal media formats and allow for modification, search, creation and sharing of the new media objects

H. Real Time

Currently there is strong demand for real-time quality of Future Media, it will need to deliver media through the whole pipeline of communication in real time: from the source to the user, regardless of the network architecture.

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I. Network Content and User Context-Aware

User context should go through network parameters at user premises. The real content aware-networks can provide real-time adaptation. The user context personalization of 3D Media heterogeneous services ranging from simple 3D IPTV to real 3D multimodal.

V. ARCHITECTURE OF 3D INTERNET

After the philosophies of the 3Dimensional Internet technology shared by its forerunner includes reliable and open architecture, simple to operate at the network core, open properties, scattered application and higher levels of intellect at the edges, and. User surfs the 3Dimension net and uses teleports to move between services and independent worlds. Web place in contradiction of the 2Dimensional Internet we have websites, Sub domains and www. Figure shows 3Dimensinal Internet architecture.

A. World Servers

It provides the user or administrator formed, active contented and fixed which makes unambiguous website and place 3D atmosphere that has physics related machine, avatar's information funding, imagining, and hypermedia providing many other features to the server and client sequencers. The worldwide servers have an imperative task of harmonizing actuality with the users that are starting to communicate within themselves, connected which ensures space in consistency in realistic machines. These are also used to give various other services such as immediate memorandum, mails, downloading fast, uploading and more.

B. Avatar/ID Server

It is mostly used for privacy and security purpose. Computer-generated individuality running systems encompassing identity and avatar material as well as account of employers these all provide an environment in which the information of the world servers and the individual servers are having security and privacy.

C. Universal Location Server

The systems which are used for virtual management that is same as the DNS. These DNS provide the information related virtual geography. The (ULS) can also facilitate as a distributor of id servers and the user.

D .Client

Programs running on the user system like a browser which needs a caching, network and 3D functions to run in current working the system. There are additional software's which are needed to support 3dimensional functions such as placing websites and editing software's in client system. It is expected that discovery of new tool and software development kits will overcome this problem.

VI. EVOLUTION OF 3D INTERNET

A. Web 1.0

It is the "readable" phrase of the WWW (World Wide Web) with flat data(Static web pages). In Web 1.0, there are only limited interaction between web users and Site. Web 1.0 is simply an information portal where users passively receive only information without being given the opportunity to post reviews, feedback and comments.

B. Web 2.0

It is the "writable" phrase of the (WWW) World Wide Web with interactive data. Web 2.0 facilitates interaction between sites and web users, so it allows users to interact freely with each other through dynamic web pages. Web 2.0 encourages collaboration, participation and information sharing. Examples of Web 2.0 applications are YouTube, Flickr, Wiki, Face book, and so on.

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C. Web 3.0

It is the "executable" phrase of WWW (Word Wide Web) with interactive services, "machine-to-machine" interaction and dynamic applications. Web 3.0 is also known as a semantic web which refers to the future. In Web 3.0, computers can interpret information like humans and intelligently generate and distribute useful content tailored to the needs of users. One example of Web 3.0 is Tivo, a digital video recorder.

VII. OBSTACLE

A. Platform Performance

FP is intensively client/server, Low latency and Const. bandwidth. Thus, the link has to be premeditated competently to overwhelm these trials of low dormancy due to high graphic software. The use of PC with 20X GPU and 3XCPU can increase the performance.

B. User Created Contents (UCC)

It Portability over world, is to Realistic rendering, Easy-to-use tools. This is online content that has to be created by an Internet user. Tools are must to be provided to create this content. They must produce tools for content creation and enhancement free.

C. Simulation Services

Diverse client styles, dense avatar measures, Unified graphics or physics. Simulation service can be carried out on client side or server side. Tools and models must be accepted on.

D. Ecosystems

Stimulation standards, such as Identity, 3D browser standards are opposite. Capacity to delivery of unified and intuitive user experience over many devices such as tablets, High Definition TV and more.

E. Monetizing of Virtual Assets

Each virtual world now has their own money system. Second life renders Dollar. In the same way that web application like Amazon and e-Bay net has their own currency system, services.

F. Speed

The connection speed in internet is one of the biggest problems which are often confronted by the 3D net technology. Many republics all around the earth are trying to meet the demand of the net rapidity speed, which are needed for 3Dimensional net.

G. Visualization and Interfaces

First access to 3D net is the problem of visualization and interfacing. Two things are needed to accomplish same one is PET's (cell Phone) and second PARTS'. PET's are able of creating holographic imagery, and permissive the visualization of 3D images, 3D Text contains and videos. PARTS's make up an advanced versions of today's multimedia vision glass, making it to view 3D imagery and even involving them in the practical world.

VIII. APPLICATION

A. Education

3D Internet can be used for education in number of platform such as colleges, institute, universities, libraries and government entities. It help to explain subject such as chemistry and English in which Instructors would favor 3D Internet because it is more personal than traditional distance learning.

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B. Religion

Religious organizations can make use of the 3D Internet technology to conduct virtual meeting places within specified locations. It helps to make society more helpful.

C. Embassies

We could create embassies in 3D Internet, where visitors will be able to interact face-to-face with a computer-generated ambassador about trade, visas and other issues. It helps to increase real world interaction between numbers of people.

D. Live Sport Entertainment

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

E. Arts

The modeling in 3D Internet technology would allow the artists to create new forms of art, which is so difficult and not possible in real life due to physical constraints or high associated costs. In 3D Internet technology artists could show their talent and display their works to an audience overwide the world. This has created an entire artistic culture to buy or build homes can shop for artwork to place there. The Gallery openings even allow art patrons to "meet".

IX. CONCLUSION

3D Internet is also called as virtual world. It is a powerful new way for us to reach business customers, co-workers, partners, and students. This technology combines the immediacy of TV, the versatile content of the Web, and the relationship-maintaining strengths of social networking sites like Twitter, facebook and other. As per experience of television, the 3D Internet technology is inherently interactive and engaging. Virtual worlds provide 3D experiences that replicate real life. Foot.

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