



The Advanced Approach of Internet: 3D Internet

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ABSTRACT: 3D Internet seems like a fantasy, a whole new world. The world is eagerly waiting for the most advanced technology which is 3D Internet. Other than the passive experience of flat screen televisions and 2D web which contains only documents and pictures, the 3D internet will be a highly interactive and better experience with respect to business, communications, entertainment and other platforms. 3D is the combination virtual worlds. 3D experience provided by these virtual worlds will replicate the real-life experience or in some cases it might be even better. 3D Internet might seem like a fantasy now, but soon it can become necessary for our daily activities and it might be a part our daily routine. 3D Internet will be full of opportunities and a whole new world. This can change lives and the whole system of how things work. On the other hand, this should be used in a proficient way to save time and money and other resources.[2]

I.INTRODUCTION

We do our daily activities in 3D form but when it comes to internet, its 2D. 3D internet comes into picture where we can do activities like socialising, communicating and business in 3D using virtual reality. It will be a combination of television and the web together, and the strength of relationship-building of social networking sites. Internet is used by more than a billion users worldwide at present and is poised to spread its infrastructure providing anywhere, anytime connectivity. With the further use of wireless technologies, the number of users of the Internet is expected to jump to some 4 billion few years ("The future of Internet," 2008). The Internet is a huge network made up of many networks. It helps a computer to communicate with another computer globally, as long as it is connected through internet. Internet helps people connect, across the world. People share information, information sharing is made easy by internet. Information is used for various purposes like, business, communications, entertainment and much more. These tasks can be effectively performed through 3D internet. 3D internet makes it look like it's almost real which is actually virtual.[3]

II.3D INTERNET HISTORY

The Virtual Reality Markup language (VRML) was developed in 1995, but there was least interest for 3D. Everyone was interested in HTML the general Internet. The VRML allowed objects to have 3D vertices and edges and colours. Transparency and different textures could be added. This allowed web to have animations, sounds, lighting and other interesting features. The VRML files have an extension *.wrl. The Standard X3D superseded the VRML, formed by the Web3D consortium. The X3D was accepted internationally. The first version of VRML was ready in 1994.[5] The complete version is VRML97, the latest version of it. VRML was not much used on Internet, may be because of the lack of the bandwidth for users at time. In the 2000s, many of them tried to improve the level of virtual reality. We have also seen the level of DirectX 9.0c, but it was using proprietary solutions. We have a new 3D on Internet standard. X3D is the file format for 3D computer graphics. The X3D has the extension *.x3d, *.x3db, *.x3dv. The X3D support multi stage / texture render. It supports shader with normal map and lightmap as well. Real-time environment and reflection is allowed in the latest version of X3D. Content can be used from open source standards like XML, DOM and XPath in X3D. The 3D objects can be displayed with X3D using OpenGL 3D technology. The X3D works with various browsers like Internet Explorer, safari, Firefox, etc. and as well as with various operating systems like MS Windows, OS X and Linux, which gives us the 3D Internet. Due to the integration with the new Internet language HTML5 and other XML versions like Matlab, SVG, the X3D is most likely to become the new standard for 3d Internet.

III.WHY 3D INTERNET?

There are billions of Internet users worldwide and it can increase as the Internet provides anytime connectivity and its anywhere and everywhere. It also has wireless connectivity which attracts even more users (around 4 billion users) [4]. The Internet is a made up of massive network of no. of networks. It connects millions of people and helps them



communicate. With the added flavour of 3D, it will be more fun and easier and highly interactive. 3D internet can change lives completely as it will provide nearly real-life experience. In 3D Internet objects can also be used in our real-space through cameras, which is already implemented in many mobile-phone applications and as well as in the Google browser. The 3D internet can be helpful in many fields like education, entertainment, business, socialising, etc. So, the 3d Internet will be a big change of how we see things and how we work things out. It can be a great change to the advanced world.

IV.FEATURES

The features of 3D internet are 3D objects that are supported outside the browser, in the real space through cameras. This feature can be used for fun and entertainment. This feature can also help in education sector as it will improve the quality of online sessions conducted. It increases the effect of grasping and understandability of the users. Talking about entertainment, it also supports 3D Internet TV. People cannot always go to the multiplex to watch a 3D movie, sometimes they want a 3D movie in their own comfortable space. 3D Internet can boost the TV up as it supports 3d movies. Many of the electronic brands have launched this feature in the TVs. The Internet connection in these types of TVs will be built-in through Wi-Fi. The picture and graphics quality will be highly improved along with a lot of entertainment channels. 3D Internet also supports 3D image viewing in the web applications that can help users see the objects like they actually are. This will help online shoppers and other necessities of viewing an image in 3D.[4]



Fig.1 Using the 3D objects outside the web

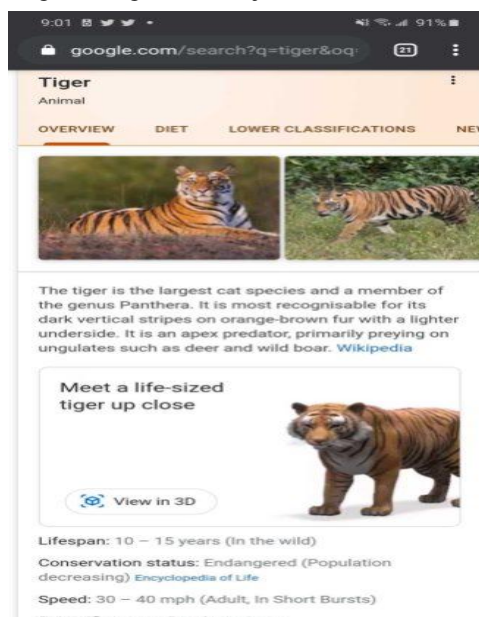


Fig.2 Google’s view in 3D option

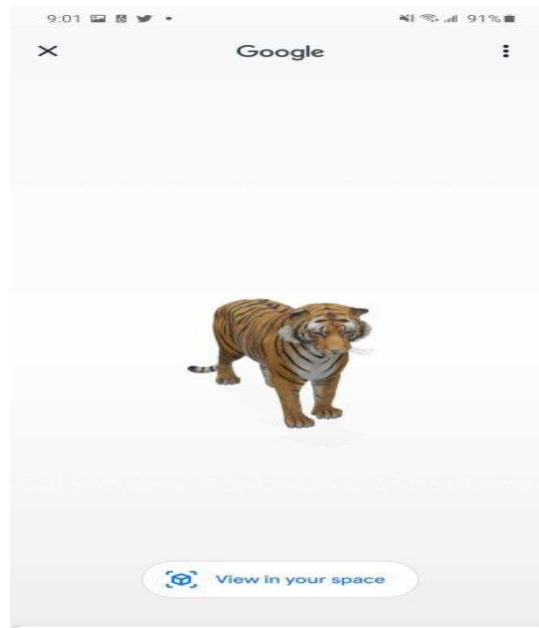


Fig.3 View in your space option



Fig.4 How view in your space option works

ADVANTAGES

- 3D movies industry will not be in much loss as they 3D movies cannot be pirated and cannot be downloaded illegally.
- 3D image viewing helps users to see the objects like they actually are, which helps online shoppers to say what exactly are they buying and how it looks when it arrives.
- 3D Internet TVs will be highly useful in watching 3D movies comfortably, anywhere, anytime.
- The electronic brands can gain profit through these 3D supported TVs and other electronic gadgets.
- The movies sold in 3D on Internet will be gain profit, if they are allowed to be downloaded legally.



- Online sessions or classes can be really effective using 3D internet and can be highly interactive as well. This helps the users to understand better and also profits the educational institutes

DISADVANTAGES

- The multiplex business will face a loss as the movies can be watched online or downloaded legally or watched on 3D Internet supported TVs.
- It also might affect the identity of the people if they use 3D avatars that are developed for users in prior
- The education institutes will face a huge loss if they cannot go online with the flow of 3D. Actual interaction between the teachers and students or people can reduce due to online session.
- 3D internet also shut down the actual entertainment places like auditorium and theatres as everything will be available in virtually real form.

V.CONCLUSION

3D Internet might seem like a fantasy now, but soon it can become necessary for our daily activities and it might be a part our daily routine. 3D Internet will be full of opportunities and a whole new world. This can change lives and the whole system of how things work. On the other hand, this should be used in a proficient way to save time and money and other resources.

REFERENCES

- [1]. Sushmitha K N, Shruthi, Shwetha, "SURVEY PAPER ON 3D INTERNET", International Journal of Engineering Trends and Technology (IJETT) - Volume 35 Number 4 - May 2016
- [2]. Shalini Gupta, Arushi Garg, Kaveri Parashar, "3D INTERNET: TOWARDS A NEW DIMENSION", Vol. no.5, Issue no.02, February 2016
- [3]. Tansu Alpcan, Christian Bauckhage, Evangelos Kotsovinos, "Towards 3D Internet: Why, What, and How?", Deutsche Telekom Laboratories, Ernst-Reuter-Platz 7, 10587 Berlin, Germany
- [4]. Dilsha M. D., Bisny Thomas, "An Introduction to 3D Internet" International Journal of Engineering Research & Technology (IJERT), Published by: www.ijert.org, NSRCL-2015 Conference Proceedings
- [5]. Agbaje, M.O, Awodele, O., and Joshua, J.V, "The Challenges of Migration from 2D to 3D Internet (3DI)", Proceedings of Informing Science & IT Education Conference (InSITE) 2013