

Dissertation Report

On

**“WHAT IS SOCIAL GAME? DO VR HOLD ANY FUTURE IN SOCIAL
GAMES?”**

By

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**Final year project undertaken as part of concluding unit for a Three-
year B sc. GAME DEVELOPMENT Degree Course.**



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DECLARATION

This thesis is a presentation of my original research work. Wherever contributions of others are involved, every effort is made to indicate this clearly, with due reference to the literature, and acknowledgement of collaborative research and discussions.

[VIVEK KUMAR GAUR]



BONAFIDE CERTIFICATE

This is to certify that record of course work is a bonafide work done by Vivek Kumar Gaur, ID No.: 15UG03109, in partial fulfillment of requirements for the 3rd year B.Sc. Game Development during the academic year 2017 – 2018 is the original work of the candidate.

Submitted for the **Dissertation** module assessment held on _____.

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ABSTRACT

Social games are structured activity, which has unique rules via which users can engage with other users simultaneously. Social games must be multiplayer and have one or more than one of the following features: turn based, are based on social platforms for providing users with and are casual.

Virtual Reality (VR) is the use of computer technology to create a virtual or artificial simulated environment to inhabit.

The term Virtual Reality is been used in a science fiction context in **The Judas Mandala**, a 1982 novel by Damien Broderick.

Virtual reality theme is been used in some of the famous movies to turn the environment into something that seems very real.

TRON, for example, was one of the first movie to use virtual reality as a plot element. The main character were taken from reality and then transported into a virtual reality world inside a computer. Some of the most popular movies of our time to use the concepts of virtual reality are:

- Tron & Tron legacy
- The Matrix series
- Vanilla Sky

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Vivek Kumar Gaur,

ICAT, Bangalore

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Introduction

Aim:

To understand the concept of Virtual Reality (VR) and future of VR in social media on the internet.

Preview of History:

As I have mentioned earlier about the history of VR games, in 1838, the first stereoscope was invented, using twin mirrors to project a single image, then it eventually developed into the View-master.

By 1965, another inventor, Ivan Sutherland, offered “the ultimate display,” a head mounted device.

Public consciousness to VR:

1935:

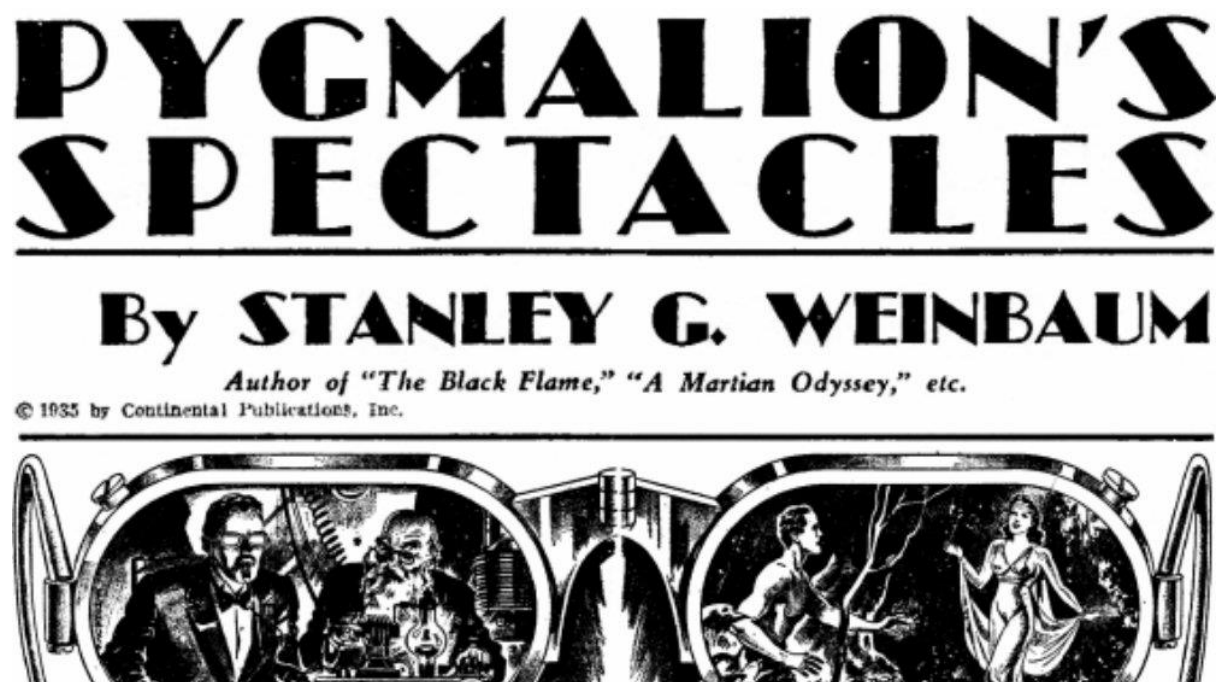


Fig 1: Science fiction, with Stanley G. Weinbaum's 1935 short story 'Pygmalion's Spectacles'.

1957:

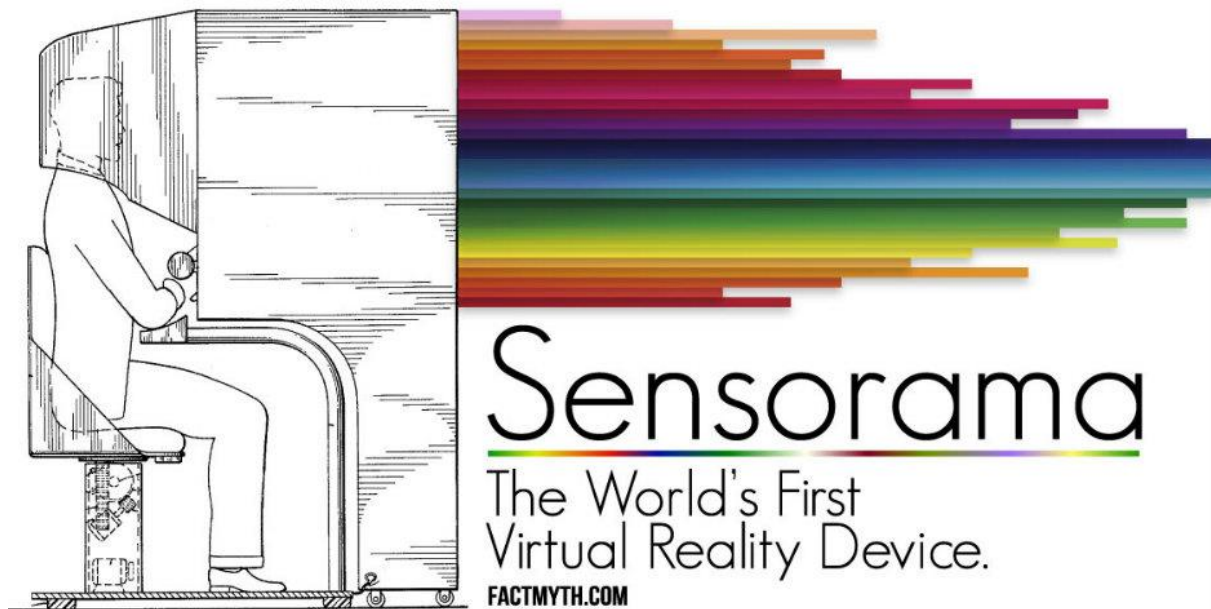


Fig 2: Cinematographer Morton Heilig developed '**Sensorama**' to build a more complete complete cinema experience.

1960:

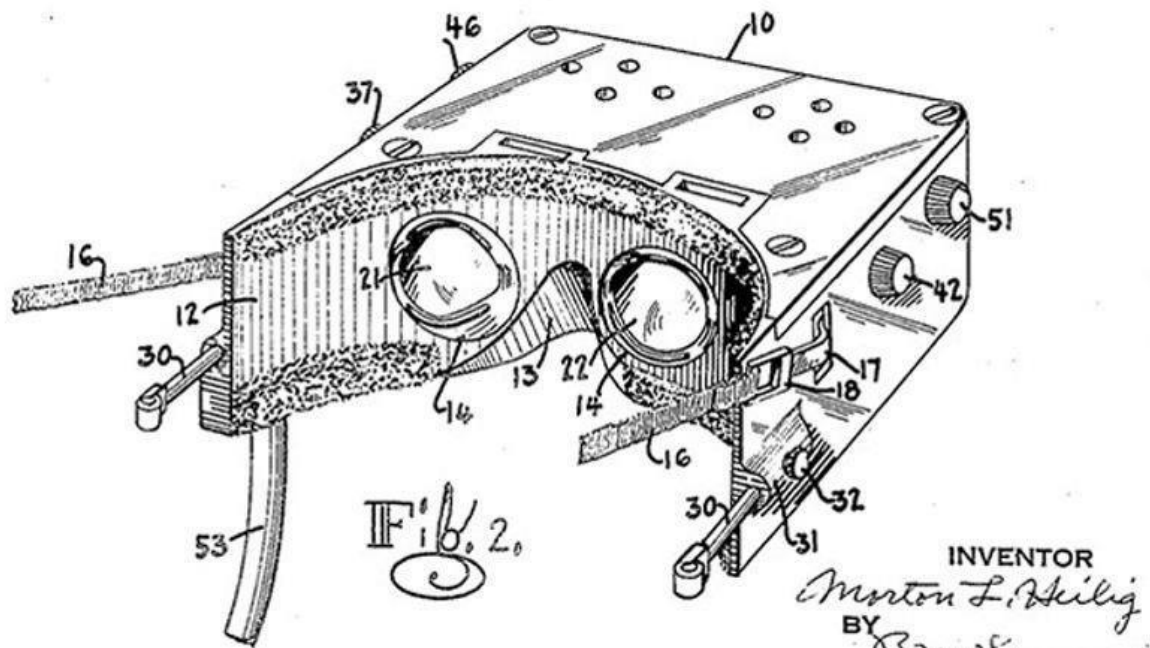


Fig 3: Heilig went on to develop the Telesphere Mask, considered the first VR Head Mounted Display (HMD).

Then it was rapidly followed to **1961:** The development of the first motion-tracking HMD by the Philco Corporation, known as the 'Head Sight'.

Then...

In 1965

American computer scientist Ivan Sutherland presented the notion of '**the absolute display**'.

And so on to present date it has developed more enhanced and are handy tool to be used in various activities like Game, Movies, And Science fictions etc.

Fig 1, Fig 2, Fig 3. Taken from: <https://www.pebblestudios.co.uk/2017/08/17/when-was-virtual-reality-invented/>

Overview:

The main goal of this thesis is to discuss about Virtual Reality and how it has made positive changes to the normal life.

The methodology used in this project is a case study of the social game Pokémon Go information about which is readily available on the internet.

First data about relevant topics is gathered and they are studied and discussed. Then it is seen the how the system works in depth. Data is taken from varying sources to form a full opinion.

CHAPTER-I

LITERATURE REVIEW

VR TECHNOLOGIES:

Twin Motion:



Fig 1

Twin motion is a powerful and simple visualization engine that takes in various AEC models. Twin motion is a simple to use tool powered by Unreal Engine that generates amazing graphics in a short amount of time.

Fig 1: <https://www.viatechnik.com/resources/50-virtual-reality-technologies-in-architecture-engineering-and-construction/>

Oculus Rift:



Fig 2

Oculus Rift's headset is traditionally seen as a tool for gamers, as it becomes a lot easier to move around 3D models and look around corners than using a mouse and keyboard.

Fig 2: <https://www.viatechnik.com/resources/50-virtual-reality-technologies-in-architecture-engineering-and-construction/>

Google Daydream:



Fig 3

With a VR headset and intuitive and expressive controller, Google Daydream uses a specialized smartphone to explore virtual spaces, play games, and watch films.

Fig 3: <https://www.viatechnik.com/resources/50-virtual-reality-technologies-in-architecture-engineering-and-construction/>

Social Networks using VR:

Social media is fun, but it will be better if it felt more real, so VR social networking applications are working to make it more realistic than console and Pc games.

To make this work in real life, VR technology has been gaining around over the last several years. With millions of people today are living on social networks interacting with each other, from multiplayer gaming to getting friends together through texts, competing and having fun, learning etc.

Snapchat and **Spaces**, for an instance also help to introduce a blended world of VR and reality, Snapchat with filters that interact in real-time to a person's face and movement.

CHAPTER- II

ANALYSIS

SWOT analysis on VR with respect to social Games

❖ STRENGTH

VR can allow for precise control of stimulus delivery within a realistic training or rehabilitation or simulation.

- Real-time performance feedback
- Game factors to enhance training environment
- Low-cost environment that can be duplicated and distributed

❖ WEAKNESS

The limited field of view and resolution in a head-mounted display can limit usability and perceptual realism.

- Platform compatibility
- Front-end flexibility
- Back-end data extraction, management, analysis, visualization

❖ OPPORTUNITY

Tremendous growth in the interactive digital gaming area has driven development of the high quality, yet low cost graphics needed to make VR games deliverable on a basic device.

- Processing power and graphics/video integration
- VR rehabilitation and widespread intuitive appeal to public
- Integration of VR social games with physiological monitoring and brain imaging

❖ THREAT

Clinical administrators and financial officers believe that VR equipment is too expensive to incorporate into mainstream practice.

- Limited awareness/unrealistic expectations.
- Ethical challenges
- The perception that VR will destroy the need for Doctors and clinician

CHAPTER- III

DISCUSSIONS

Discussion and debate by various lead Designer, Developers, Artist and CEO of most successful Companies create Social Games.

Heiko Hubertz, CEO (Bigpoint)



Fig 1

A social game doesn't have to be on Facebook. In the future, you will play "social games" at home with your "real" friends, on mobile devices with people who are close by, or on the internet through any portal.

Heiko Hubertz is the founder and CEO of Bigpoint, a provider of free-to-play browser-based games with over 150 million registered users.

Jens Begemann, CEO (Wooga)



Fig 2

Social games take advantage of the social graph to include your real life friends into the game experience. They are easy to get into, challenging over a long period of time and they create a highly competitive atmosphere among our real live friends.

Thereby they are changing the games industry: So far only ca. 10%-20% of the population regularly play digital games (called “gamers”). **Social games are for the other 80%.**

Jens Begemann is the founder and CEO of Wooga, the 7th largest developer of social games worldwide (and the largest in Europe).

Jon Hare, game designer



Fig 3

A social game means a game that relies on wireless or online communication with other remote players in order for one or more of the driving mechanics of that game to be fully experienced.

Social games are generally relatively simple, less directly competitive, more feminized games designed for people to play on their own and then interact with their ‘friends’ by means of keyboard and mouse, without ever leaving their own bubble.

Jon Hare is the creator of Sensible Soccer and Cannon Fodder.

Fig 1, Fig 2, Fig 3 taken from: <http://www.newgamenetwork.com/articles/Reviews/>

CHAPTER- IV

CASE STUDY

Some of the famous social networking applications and websites that provides a platform to play games on the internet.

- **FACEBOOK**

Facebook is an American social media and social networking services that provide a platform to interact with people worldwide, As of now Facebook provides a separate section for social mini-games and now Facebook releases first mini-game for social VR platform 'SPACES', paving the way for more to come like Bait! Arctic Open, the game lets you ice fish while you shoot the breeze with your VR buddies.



Fig 1

Fig 1: <https://www.roadtovr.com/facebook-releases-first-mini-game-social-vr-platform-spaces-paving-way-come/>

- **HIKE**

Hike Messenger is a cross-platform instant messaging service for smartphones that use the internet for communication. Hike is available for all devices like Android, Apple Ios, Blackberry OS, Symbian etc. As Hike is a part of social media, now Hike too have a new Feature to play games with other users simultaneously.



Fig 1

Fig 1: <http://mobilityindia.com/games-on-hike-beta-hits-record-100-million-game-plays-within-26-days-of-launch/>

- **SKYPE**

Skype is a telecommunications application software product that specializes in providing video chat and voice calls between computers, tablets, mobile devices, the Xbox One console, and smartwatches via the Internet and to regular telephones, it's a great tool for video conferencing, now Skype App store has an exciting feature called "PLAY GAMES", here you can play a host of free classic and innovative games with friends and family.



Fig 1

Fig 1: <http://ccm.net/faq/5884-playing-games-on-skype>

CONCLUSION

VR is a conceptual idea, not some products with the specified definition. There are many people who have no idea about what is VR; however, they will understand it very quickly when seeing a famous product. This is so this is VR technology. The concept of VR appeared a long time ago; however, it is until now when it comes into people's sight.

Though VR has a great potential and bright future, it is still uncertain whether VR technology could be popular in our life. VR technologies are touching the sky; VR is already a part of other games, now VR is focusing on mini-games like in Facebook, Skype, and Hike etc.

Even though current technology achieves a very high level, there are still some technical problems and difficulties in current VR.

- Heavy and bulkiness interactive device
- Non-uniform Compatibility in virtual platform
- Easily resulting in visual fatigue
- Lacking application software and content
- Its popularity stopped by high cost of VR
- Space limit
- Less perfect experience of VR

So Yes, VR hold a bright future in social Media and on social Network and will be continued in the future with more interactive features to hide the limitations in a VR device and provide limitless boundaries to the Game Developers.

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