***Lee O'Sullivan – T00195739***

***Virtual Reality***

Virtual Reality also referred to as VR, is the latest form of computer technology in the gaming industry which uses computer software to create a three-dimensional augmented view for players in which users can explore and interact with an artificial world. Virtual reality is new for gamers but the concept of VR isn’t a new theory, people have been trying to create a sense of virtual reality since the mid-nineteenth century, “The Sensorama Machine was invented in 1957…It is a simulator for one to four people that provides the illusion of reality using a 3-D motion picture with smell, stereo sound, vibrations of the seat, and wind in the hair to create the illusion” (Anon., 2016). For the avid gamer, they don’t have to sit down in front of a television connected to a console. With head-mounted displays and virtual reality goggles which the user can use move freely around in their own environment while allowing the users to become entranced in a new experience and a completely different environment all at over ninety frames per second, which is a huge upgrade from sixty frames per second in most of the newest generation of consoles such as the playstation four and xbox one. Virtual reality games allow the user to enter a world and enjoy an experience you cannot from a regular game on a console, once you begin to indulge in a VR game you forget about your surroundings, as you have a vast new world to explore. With virtual reality, still a relatively new idea, companies are making huge strides in the creation of new VR displays and games to indulge their user. The generations of children of late being more interested in technology, books are becoming less and less popular which gives virtual reality games and virtual worlds a chance to develop further into education games, teachers have begun using virtual worlds and environments to set their students assignments and can engage with their students via creating their own avatars and engaging with their students in games with educational values.

While virtual reality provides the avid gamer with a new and mind-blowing experience. Virtual reality also has many other uses for instance, the army have begun using virtual reality to train their military personnel. Virtual reality can simulate dangerous situations with an enemy ‘tango’ or a life-threatening situation which regular military training cannot provide. VR can train soldiers with situations like a battlefield without the risk of death. VR is beneficial for the army because it saves resources, time and money. For retired veterans who suffer from post-traumatic stress disorder, virtual reality creates an environment which can be used to help veterans overcome their fears by inducing a traumatic event or moment in their lives in a controlled environment where therapists can control and aid the veterans, as the more the patient can learn to confront these memories, the events become less traumatic.

Virtual reality has also been adopted in the medical field, VR is now being used to train medical students. VR allows medical students to step into a virtual world and obtain knowledge about the human anatomy and body by interacting with patients without endangering lives. Medical students also benefit from the use of virtual reality as they can perform medical procedures and surgeries without putting people at risk. Doctors can create the simulations for their students by inputting old test results into the virtual reality systems to create patients for which the students can practice to prepare for real patients. Due to the risks involved in their line of work, VR is the best form of practice a medical student can receive as the simulation is as close as possible to a real-life situation.

“Virtual reality is not just a cool gaming device. It is a medium that has been scientifically proven to help individuals improve” (Anon., 2016), STriVR Labs stated VR can help people grow and they have used this concept to help sports professionals, “Belch and Bailenson spent two years designing, developing, and perfecting a way to film practice in 360-degree, immersive video, then allowing players to ‘re-live’ that practice film from inside a virtual reality headset” (Anon., 2016). For professional NFL quarterbacks, the possibility to play through a practice without being hurt is true. By inputting previous practice footage into the virtual reality software, the quarterbacks can now practice without the risk of injury. A major part of preparing for a game in the national football league or in college football, is studying the opponent’s tendencies and plays. The coaches can input the play data and run the software and allow their players to play through the opponent’s game plan and gain knowledge instead of staring hours at endless screenshots from opponent’s previous games. This concept of stepping into the shoes of a professional athlete can be said of many sports as virtual reality is now being used for televised events such as the opening fixture of the national basketball association(NBA) season between Golden State Warriors and New Orleans Pelicans was covered in VR, although they broadcast seemed flawed, as the commentator’s presence was missed by all those who watched and for those who care for statistics, these statistics were missed also, usually in an national basketball game you would find statistics backing up the commentators speech and between individual plays. But as technology grows, “The NBA is partnering with NextVR, a leading broadcaster of live events in virtual reality, to bring NBA league pass subscribers one game every week of the 2016-17 regular NBA season live, and on-demand, in virtual reality” (Anon., 2016), with one game a week being covered with VR, NBA have stated that the VR version of broadcast “will be fully produced with dedicated announcers” (Anon., 2016). It is not just basketball that has begun broadcasting their games with virtual reality.

Virtual reality is technology which holds great significance for the future as VR has endless possibilities. VR has the potential to be developed to have a positive influence and to help people in many different fields in a world which technology is the future.

# References

Anon., 2016. *About: STriVR Labs.* [Online]   
Available at: http://www.strivrlabs.com/about/  
[Accessed 25 October 2016].

Anon., 2016. *Inventor in the Field of Virtual Reality: The father of Virtual Reality.* [Online]   
Available at: http://www.mortonheilig.com/InventorVR.html  
[Accessed 25 October 2016].

Anon., 2016. *VR: NBA.* [Online]   
Available at: http://www.nba.com/vr  
[Accessed 25 October 2016].