

Virtual Reality & Augmented Reality is the future business reality – Priyal Kakaye

We are changing our world with our advanced technology. Today augmented reality overlays digital content on top of the real world and Virtual reality is going to influence the future of the manufacturing industry. Virtual reality refers to a computer-generated process in which a person can interact within an artificial three-dimensional surrounding using electronic devices, special glasses with a screen, or gloves fitted with sensors. In these artificial surroundings, the user can have a realistic experience around them. Virtual reality creates an immersive artificial world that you will feel quite real. And has many uses includes entertainment and gaming, or acting as a sales, educational, or training tool.

Using special 3D glasses, one gets the immersive experience of being a part of the movie with a live presentation. For example, the leaf falling from a tree and you see it float right in front of you. And even the light and sound effects of a 3D movie make your vision and hearing senses believe that it's all happening right in front of you, even if nothing exists in physical reality.

Virtual reality technology involves training and simulation for business. For example, those wanting to get a driver's license can get a first-hand experience of road driving using a virtual reality technology set that involves handling car parts like the steering wheel, brake, and accelerator. It gives the benefit of experience without the possibility of causing an accident, so students can develop a certain level of expertise in driving before actually being on the road.

Whereas virtual reality put back your vision, augmented reality adds to it. Augmented reality devices like the Microsoft HoloLens and various enterprise-level “smart glasses” are transparent, letting us see everything in front of us, as if you are wearing a delicate pair of sunglasses. The Augmented reality technology is designed for completely free movement while projecting images over any way you look at them.

This idea extends to smartphones with Augmented reality apps and games for example Pokemon Go or the filter we use in applications that use your phone’s camera to track your surroundings and overlay more information on the screen. Augmented reality displays can give you something clear as a data cover that shows the time, to something as complicated as holograms floating in between a room.

Current Scenario of Augmented and Virtual Reality in the Business World

Augmented reality and virtual reality have been around the world now. There are many companies worldwide and other businesses have been investing in these technologies now. 2019 was the year when AR/VR finally delivered on all that. Worldwide spending on Augmented reality and Virtual Reality can expect to rise in 2021.

Doctors have been wearing the Microsoft HoloLens headsets while working as a hero in the COVID-19 pandemic, in their care for suffering patients.

The use of this technology during this crisis let other clinicians sit in the next room, and by using Microsoft Teams, see a live video feed of the doctor who is treating the COVID-19 patients. By using these advanced technology devices, staff service time was reduced and the amount of time they must spend in a high-risk area by 85%.

COVID-19 has put the highlight on this hands-free, interactive technology. There will be a requirement for this technology, in the future which previously was not acknowledged widely.

As we are growing in technology, networks are also developing and even manufacturing of several smartphones increased and their extending functionality and increasing Internet speed promote augmented reality that will help to grow our economy.

Now when we see Augmented Reality apps can reach 3.5 billion installed bases by 2022 more companies are peeking towards using augmented reality in business.

A Virtual Reality experience takes place in a completely artificial remote reality, which makes it an amazing medium for gaming or 3D films. Virtual reality business ideas are not limited to those things only. With new powerful and affordable headsets entering the market, Virtual reality technologies are edging towards more global consumers.

Augmented reality / Virtual reality development is getting easier and cheaper. When 5G networks will in reality facilitate super-fast downloads and streaming, energizing Virtual reality, and Augmented reality devices will be easier to access.

How Virtual & Augmented Reality will create future opportunities in the business world

• E-commerce

Online shopping has become a major trend among people from the time we came across the digital world and we do purchase products anytime from any place. And after going through this pandemic we are still scared to step out of our house and don't know when it will come to an end.

Augmented reality technology businesses can bring potential customers to online shopping. Using this, customers can view their products in a highly realistic method in an easy and comfortable environment. And sellers can share the details about their particular products. And this can change the overall shopping experience of their customers. This is how Augmented Reality is changing the way people shop will in the upcoming period.

• Healthcare

In COVID-19 pandemic Virtual reality healthcare application is used for both mental and physical therapy services. It is most effective for patients suffering from physical & mental pain. Augmented reality so far being used in the healthcare industry to save people. In previous times, surgeries needed different types of monitors that would show the vital statistics of the patient via cameras. Doctors can use Augmented Reality smart glasses that will display all the up to point information while they are performing the surgery and help them stay focused on the task at hand and perform effectively.

• Educational Industry

The educational industry had a great impact on Augmented reality and will also welcome many game-changing devices in the future. Augmented reality apps provide students with immersive content to help them understand the concepts and with the help of attractive 3D models, students can get complex information more easily and simply by providing a complete explanation of the topics.

In previous times, historical sites and museums have included various Augmented Reality features into their exhibits to keep in step with technology. This is the best way for people to explore and gain extra information knowledge in the coming

years.

• **Manufacturing Industry**

Virtual reality is going to influence the future of the manufacturing industry in 2024. As per a survey study, about 70.5% of manufacturers saw both Augmented Reality / Virtual Reality technologies to be extremely important for U.S. manufacturing world competitiveness. This will allow engineers and workers to understand, test & validate their products. And this will help them to process early in the program development and keep track of other things like cost, time & risk.

And it is a great tool of innovation and can create various applications for Virtual Reality beyond its current use in the future. It can significantly increase the manufacturing industry's productivity without replacing human workers.

• **Journalism World**

In virtual reality, we can create better storytelling as it provides new and innovative methods. And it is going to play a very major role in the future of the journalism industry. Virtual reality provides 3D content that will become new normal for news consumers in coming years. This technology is going to be surprising through 360-degree video creation and quickly lets its users access virtual reality journalistic content on their mobile phones and it will revolutionize the journalism industry in the future.

• **Tourism Industry**

Augmented reality is going to revolutionize the travel industry and will bring a vast change to it. It will help Travelers and tourists in finding nearby tourist attractive

places and help them translate boards & signs according to their native language. Travelers can have amazing trips with the Ar application as this will help them display 3-D models of their destinations. This will aid them to increase their knowledge about a particular spot.

• Real Estate

Buying a house is a difficult task, to make it easy we can use Augmented Reality apps that can give you the same experience at home. This is because Augmented Reality uses computer-generated home videos that make buyers envision the complete building when it is under construction. And the users can even modify the furniture, color of the rooms, size of the room, and more things as per their requirements so it is an effective tool for sellers and builders in the future.

Virtual Reality /Augmented Reality is the Future of the business world

Virtual Reality /Augmented Reality is expected to be an important technology in the coming future. There are numerous Virtual Reality /Augmented Reality devices in our present market, including headsets, tablets, smartphones, wearables, and consoles. Each AR/VR device provides a different level of experience over reality but also has specific limitations.

Increasing preferences towards advanced devices in medical training, health care industry and education, rising usages in online shopping, retail, and in the e-commerce industry, AR/VR applications is expected to increase the growth of the augmented reality & virtual reality market for the retail industry in the forecast period of 2020-2025. On the other hand, rising trends of smart manufacturing along with the growing travel and tourism industry will further hit high and will create various opportunities that will lead to the growth of the augmented reality & virtual reality market for the

retail industry.

In the coming two years we can expect that these technologies are going to be the future of business, new Augmented reality glasses with LTE potentiality that will become an alternative to our smartphone. With improved immersive technology and augmented reality potentiality, the form factor of our favorite consumer electronics will change. In the next few years, we might be using augmented reality or virtual reality technology to check our text messages and smart glasses to scroll through Instagram.