EXAMPLES OF AUGMENTED REALITY APPLICATIONS

Numerous examples of augmented reality are already in use in various ways. Here are some examples that may be familiar to you:

1. Photograph filters

Photographic augmented reality applications and some cameras can now project virtual images, known as filters, behind or onto you as you take a picture. First, the application scans your face or environment to measure distance and angles when you open the camera. The application can then project digital information onto your face. For instance, it may add colour to your hair so that the final picture has coloured hair, or it could change the size of your nose to make your image look different.

2. Automotive controls

Automotive controls are displays that the technology can project in front of a windshield. The projection may contain important information regarding controls, such as speed, distance and elevation. This technology, called 'Heads-up', was initially commonly associated with fighter jets. Automotive organisations can now incorporate the technology into vehicles and motorbikes.This type of display allows drivers and pilots to see important details without constantly looking at different sections of the dashboard. For instance, fighter jets may find this technology helpful in remaining well oriented when making crucial and fast decisions without losing sight of their view. In addition, augmented reality can provide a more comfortable experience in vehicles since controls are easy to see.

3. Gaming

Gaming companies can now excite their audiences by blending the virtual world of their games with the real world. This experience can potentially improve regular gaming for users since they can sometimes interact with the game's scenes and graphics and with other players. The game's designers can project the game's digital virtual landscape onto surfaces in the real world using the innovative headgear or cameras that gaming companies manufacture. The gaming equipment usually has software that can take measurements of the natural environment to create well-fitting and accurate projections.

4. Navigation systems

Drivers and other people who regularly travel might rely on in-built GPS or physical maps to track and navigate to their destinations. Automotive organisations and navigation system manufacturers can now implement augmented reality into these navigation systems by using special spectacles with sensors that can project an accurate route onto the screen. The augmented reality system might also utilise artificial intelligence to perform unique functions, such as predicting roads with the least congestion.

5. Healthcare

Some augmented reality spectacles can now help surgeons project images over a patient's body in the theatre. These spectacles can implement X-rays or CAT scan images that the patient has

previously undergone onto the body during surgery. This development can allow surgeons to make better surgical decisions using the real-time measurements from the scans. This type of augmented reality could also enable doctors to recover virtual images of patient records, reducing the requirement of a physical file. In addition, healthcare specialists can now use augmented reality to clearly explain ailments and procedures to patients through visualised 3D images.

6. Marketing

Some organisations can now offer an interactive user experience that connects the brand and viewers through the use of augmented reality. For example, a company can set up 3D billboards, posters and flyers that give people the feeling of an interactive product in real time. Marketing professionals can also use augmented reality to project business analysis results during board meetings or investment pitches.

7. Real estate

Real estate firms can provide potential home buyers and investors with an interactive view of real estate without having visitors on the actual property. They can utilise applications or cameras to create virtual images on their websites or at a physical location, such as an office. Such technology might allow real estate companies to reduce the cost of staging a house and help buyers save time.

8. Education

Educators can utilise augmented reality to help engage learners in the classroom with dynamic 3D models, structures and overlays of fun facts. An augmented reality visualisation tool could significantly benefit visual learners. Students might also remember the content of lessons more easily where schools use augmented reality technology in teaching, making learning a more engaging experience. Additionally, educational institutions can now enable augmented reality in remote learning, helping students receive live mentoring and learning support.

9. Architectural design

Architectural company design teams can use augmented reality to build and conceptualise their ideas in the real world before tackling major projects. They can create models of building concepts and project plans and make real-time changes. The company can also project these plans to clients or investors, making it easier to visualise a project and invest. Augmented reality can also allow remote collaboration, allowing team members to work on the same project in real time.

10. Retail

Buyers can picture items they may want to purchase by projecting products onto sample spaces using augmented reality. For instance, if a customer requires a dining table, the retail outlet could show virtual dining sets to the customer in a sample dining room. This strategy can allow customers to make informed decisions on specific products. Buyers might also choose to use virtual reality to determine the correct dimensions of items, such as beds or sofas, to help them purchase items that fit into their houses perfectly.

11. Travel

Travel companies can use augmented reality to provide potential clients with an immersive destination experience before they travel. For example, they can include tours of the guest rooms, restaurants and meeting facilities that are available to visitors. Travellers could also learn about a destination, including features they can use to find directions. For instance, a travel company might project an island's features to help visitors note the different areas. This practice could help travellers orient themselves even before they embark on a trip.

12. Fashion and beauty

Cosmetic and accessory companies can use augmented reality to help customers buy beauty products before applying them. For example, the customer could sample an accessory to decide if it fits or test a foundation or lipstick with an augmented reality app. Additionally, retailers can project items, such as wigs, for customers to view on their heads in virtual reality. Finally, some businesses can enable customers to sample clothes without wearing them by using a camera that takes measurements and creates an image of the desired clothes.

13. Music

Music instructors can create tutorials for musical instruments and display them to an audience with the help of an augmented reality application. Additionally, the technology can help people watch live performances of their favourite bands and artists without the artists' physical presence. Such technology can make performances more accessible to viewers worldwide since the performer might not require the audience to visit the event's location.