# INFORMATICS PRACTICES

AR(AUGMENTED REALITY)



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# What is AR?

Augmented reality is an interactive experience that combines the real world and computer-generated content. The content can span multiple sensory modalities, including visual, auditory, haptic, somatosensory and olfactory.

an enhanced, interactive version of a real-world environment achieved through digital visual elements, sounds, and other sensory stimuli via holographic technology.



# AR can be used in the following ways:

- Retail. Consumers can use a store's online app to see how products, such as furniture, will look in their own homes before buying.
- Entertainment and gaming. AR can be used to overlay a virtual game in the real world or enable users to animate their faces in different and creative ways on social media.
- Navigation. AR can be used to overlay a route to the user's destination over a live view of a road. AR used for navigation can also display information about local businesses in the user's immediate surroundings.
- Tools and measurement. Mobile devices can use AR to measure different 3D points in the user's environment.
- Architecture. AR can help architects visualize a building project.
- Military. Data can be displayed on a vehicle's windshield that indicates destination directions, distances, weather and road conditions.

### **Examples of AR include the following:**

- Target app. The Target retail app feature called see it in your space enables users to take a photo of a space in their home and digitally view an object, like a picture on the wall or a chair, to see how it will look there.
- Apple Measure app. The
  Measure app on Apple iOS acts
  like a tape measure by enabling
  users to select two or more points
  in their environment and measure
  the distance between them.
- Snapchat. Snapchat filters use AR to overlay a filter or mask over the user's Snap or picture.
- Pokemon Go. Pokemon Go is a popular mobile AR game that uses the player's GPS to detect where Pokemon creatures appear in the user's surrounding environment for them to catch.
- Google Glass. Google Glass is Google's first commercial attempt at a glasses-based AR system. This small wearable computer enables users to work hands-free. Companies such as DHL and DB Schenker use Google Glass.

# **Future of AR technology**

AR technology continues to grow as the popularity and familiarisation of apps and games like Pokemon Go or retail store AR apps increase. The expansion of 5G networks may make it easier to support cloud-based augmented reality experiences, for example, by providing AR applications with higher data speeds and lower latency.

Apple continues to develop and update its open source mobile augmented reality development tool set, ARKit. Companies, including Target and Ikea, use ARKit in their flagship AR shopping apps for iPhone and iPad. ARKit 6 enables users to render AR in 4K high-dynamic range, or HDR, and improves image and video capture. ARKit 6 also provides a Depth API, which uses per-pixel depth information to enable a device's camera to understand the size and shape of an object and includes scene geometry that creates a topological map of a space along with other improvements.

# AR e-learning

- It's highly interactive. Instead of moving through the course one screen at a time, an AR eLearning app allows your staff to learn by interacting with the AR environment. This includes looking up information and reading it, manipulating virtual objects, listening to audio clips, or watching videos.
- It's highly realistic. This means virtual objects seem real and respond realistically when learners interact with them. It also means that the AR developer rendered those objects at a high frame rate that's still high-performing.
- It delivers a strategic learning experience. The AR eLearning app's success doesn't depend solely on the technology and the devices. The learning experience designer must still determine the best strategy to reach the learning outcomes.
- It was customised. A successful AR
  eLearning app fits your training needs,
  business, company, and staff's learning
  style and skill level.

### Conclusion

In conclusion, augmented reality has the potential to revolutionise digital marketing by creating immersive and interactive experiences for customers. By embracing this transformative technology, businesses can differentiate themselves from competitors, enhance engagement rates, and elevate the overall customer experience. However, it is crucial to conduct thorough research, set clear objectives, and collaborate with experienced AR developers to ensure a successful implementation. By leveraging augmented reality effectively, businesses can forge stronger connections with their target audience, cultivate brand loyalty, and navigate the dynamic digital landscape with confidence.