

INGREDIENTS OF AN AUGMENTED REALITY EXPERIENCE

There are many applications in the manufacturing sector waiting to be explored by augmented reality. These include predictive maintenance, streamlined logistics, more efficient product design and development, optimized assembly schedule and processes, and expert support with data management.

The hardware components of AR include:

- **Sensors/tracking:** Digital cameras and other optical sensors, accelerometers, GPS, gyroscopes, solid-state compasses, RFID, and wireless sensors
- **Input devices from users:** Microphones, touch screens, gesture devices, stylus, pointers, and gloves or other body wear
- **CPU and display/output devices:** Smart glasses, lenses, laptops, smartphones, and tablets

The AR process:

The complete AR process comprises of majorly four steps. Let's have a sneak peek into the AR process and understand what are the key checkpoints:

3D Concept of App:

The very first thing which comes in the process is the core concept of the application. What are the main functionalities of the application, how the application will look, and how the user will interact with the interface are decided in this phase? 3d prototypes and blueprints are prepared based on the idea which will be used in the designing phase.

3D Designing phase:

By leveraging the 2d blueprints and 3d prototypes as a reference, the engineer can design the complete flow of the application. The application screens, colour combinations, animation effects are implemented in this step. Once this step is complete, it gives a pretty clear idea of the app's functionalities.

Integration into AR APP:

Once the complete design is ready, it's time for integrating the whole concept into an AR app. The development phase of the app begins here, and the functionalities are integrated into the AR application. This process gives a powerful backend to the beautiful frontend of the app.

Augmented Reality Product Design:

This is an advanced process in which the app can be made compatible with the available AR and VR devices to enhance user interaction. Once the app is integrated with the product, you can offer an unforgettable viewing experience.