



USE CASE /

Product Design

In AR-assisted product design use cases, AR permits designers or architects to see (preview) a product or project while in development, proof-of-concept, and prototyping, in context and at low cost. The AR system renders digital data (finite element method data, technical annotations & comments, CAD models, and other technical content) from engineering data management repositories as spatially referenced 3D models. The Augmented Reality experience can be a valuable way to solicit feedback from users or other stakeholders.

AR Technologies

AR-assisted product design uses any technology for authoring, detection, recognition and rendering. The display options for AR-assisted product design can be a mobile platform or a stationary (e.g., desktop or projection) display technology. The user interface for AR-assisted product design is usually enabled with a touchscreen to permit rapid exploration at low cost.

Advanced AR-assisted product design systems can support remote user interaction and feedback with integrated video conferencing and collaboration tools.

Organizations

Product design and prototyping organizations operating in industries such as automotive & heavy equipment, electronics, architecture, civil engineering, power & automation, construction, defense, aerospace, energy & resource, naval engineering.

Users

Designers who research new products, architects exploring public and private spaces by using AR visualization overlays in collaborative design processes.

Example Scenarios

- A prototyping workshop among designers in the toy industry
- Visualization of architectural plans for a building project
- New features in automobile, commercial vehicle or aerospace/aviation products