

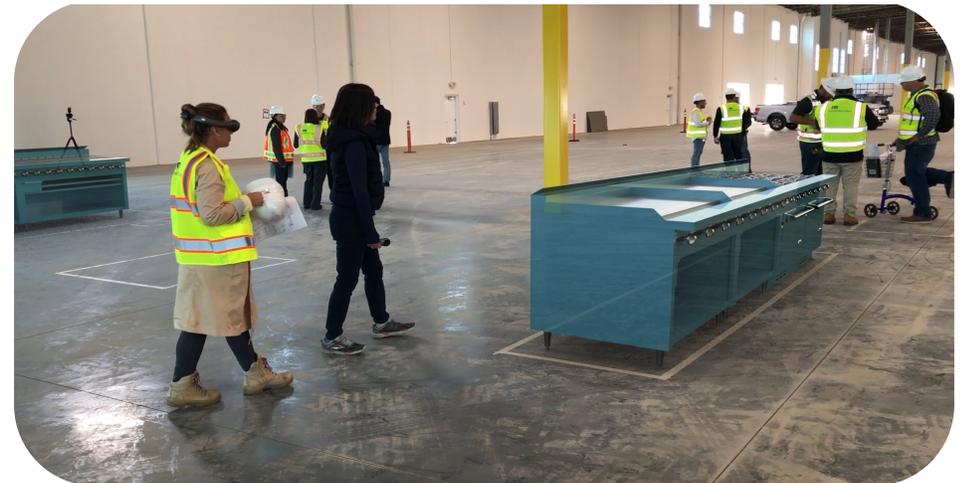
Case Study 1

How Budget Overruns and Schedule Delays can be Avoided with Augmented Reality

Project and Customer
Commissary Facility
Confidential Tech Company
Silicon Valley, CA

Customer Segment
Construction Manager

Value Proposition
Avoiding budget overruns
and schedule delays



“ AR technology will **save you millions** in design and changes as well as the **environmental benefit**”

John Abraham,
Construction Manager,
DeBrine Associates

After approving the drawings for construction, the customer toured their staff through the AR model and discovered necessary design changes for functionality. At a minimal cost to update the drawings, these changes avoided \$250k in rework costs to make corrections during construction, as well as avoiding schedule delays during construction.

Results

- ✓ **Avoided \$250k in rework costs**
- ✓ **Avoided schedule delays during construction**
- ✓ **De-risked construction process**

Case Study 2

Creating Concrete Visions with Augmented Reality: Digital Transformation for Participative Innovation

Project and Customer
Solar Array
The Sea Ranch Association
Sea Ranch, CA

Customer Segment

Project Owner

Value Proposition
Accelerate project approvals



Faced with opposition from nearby homeowners, the Sea Ranch Association used an AR model to obtain an unprecedented on-the-spot approval from neighbors to proceed.



Results

- ✓ **On-the-spot project approval**
- ✓ **All stakeholders made more informed decision**
- ✓ **Customer avoided physical mockup**

“ [AR] is **so useful**.
First response from the client is **amazement** ...
We saved a ton of money.”

Lisa Dundee, Director of Design Review at The Sea Ranch Association

Case Study 3

How Augmented Reality Reduces Design Time and Produces More Satisfied Stakeholders

Project and Customer
Multi-family Residential Projects
Baran Studio
East Bay, CA

Customer Segment

Architecture Firm

Value Proposition

Reduce design time



“ **Cuts design time down** by as much as **33%** because before AR we were **more focused on the design** than on the presentation.”

Cassidy Cheang, Project Architect, Baran Studio

After experimenting with VR, the architecture firm embraced AR models as an ongoing tool to reduce design time by as much as 33% on their projects. Both AR headsets and the App were used to communicate designs in 3D.



Results

- ✓ **Reduced design time by as much as 33%**
- ✓ **Reduced the number of design iterations**
- ✓ **Promoted more reliable decisions by architect's clients**

Case Study 4

How easy-to-use and participatory design tools allow project owners to make informed decisions

Project and Customer
Private Residence
Eduardo Fernandez
Madrid, Spain

Customer Segment

Project Owner

Value Proposition

Make informed decisions



“ Mobile AR onsite was really the **game-changer**. I was able to see the design in context.”

Eduardo Fernandez,
Private Customer

Unable to understand the design for their new home from their architect's drawings, this customer used an AR model to finally understand the design and make informed decisions as needed.



Results

- ✓ **Customer made informed design decisions**
- ✓ **Design changes were identified early to avoid cost overruns and delays**
- ✓ **Customer was able to collaborate more constructively with architect**