

Barriers to Adoption of Real Time AR-assisted Inspection for Quality and Compliance

Category: Market Research

- Most Relevant Research Agenda topic

<https://thearea.org/area-research-agenda/barriers-to-adoption-of-ar-assisted-inspection-for-quality-and-compliance/>

Current Situation

- There are more use cases for AR in enterprise than can be meaningfully compiled in detail, however, there are key requirements, patterns/characteristics of use cases that can be generalized as use case categories
- **AR-assisted inspection is a use case** category that has **great potential** for ROI across all industries but **rarely documented/publicized**
- Inspection use cases are not as widely implemented as step-by-step instruction delivery (task guidance), remote assistance and training
- Companies with AR deployments in the more popular AR use case categories could **increase their ROI on AR** if they were to expand their support for AR-assisted inspections

Problems this research would address

- This project will identify **features, KPIs and requirements** for AR-assisted inspection use cases
- AREA members will have greater insights into the inspections use cases (within the category), the industries that perform inspections before work continues, and/or where there are requirements for inspections to be documented
- Providers can **tailor their offerings** to specifically address inspection use cases
- AR managers in enterprises that are deploying AR for other use cases will have deeper understanding of **opportunities and barriers** to implementation of AR-assisted inspection use cases

Possible questions this research will answer

- What is the state of the art? Where (companies, industries, etc) are AR-assisted inspection use cases currently implemented?
- Based on state of the art, what are the feature patterns, KPIs and requirements for AR-assisted inspection use cases?
- Who are the typical stakeholders that need to be educated and “on-board” for introduction and adoption of AR-assisted inspection?
- What other components need to be in place for the AR-assisted inspection?
- What are the key barriers for adoption of AR-assisted inspection and what are some of the strategies that have been shown to overcome these barriers?

Whose problems will this project address?

- *AR Technology Providers* would
 - Gain insights into AR-assisted inspection use case category requirements and
 - Be able to address stakeholders, provide ROI estimates and other information to reduce barriers to adoption of AR-assisted inspection
- *Enterprise AR customers* would
 - More effectively transfer or adapt existing AR procedures and technologies from existing use cases to AR-assisted inspection
 - Increase use case categories which leverage their infrastructure investments and knowledge about AR implementation (increase AR ROI)
 - Reduce time and costs of existing inspection processes, increase compliance and ability to document compliance

How would this research be conducted?

- Desk research to identify
 - Any products or services designed for technology-assisted (or AR-assisted) inspection
 - Any customers currently implementing these use cases
 - Gaps in knowledge
- Primary research with subject matter experts and inspectors
 - Interviews
 - Surveys
- Analysis of data and compile trends about drivers and barriers
- Prepare a report and set of recommendations to overcome barriers

Deliverables of this project

- The research provider selected for this project will already have a deep familiarity with inspection. The research team will provide:
- Report documenting
 - Features, KPIs and requirements for AR-assisted inspection use cases
 - Barriers to adoption of inspection use cases and how to identify/rank
 - Recommendations for overcoming barriers to adoption
- An interactive tool to assist with
 - Capture of pre-AR metrics (KPIs) to measure
 - Calculating ROI of AR-assisted inspection use cases
- A webinar and executive summary for public audiences