



# AUGMENTED REALITY & THE FUTURE OF FIELD SERVICE

A SERVICEMAX POINT OF VIEW

## What is AR?

Augmented reality (AR) technology blends the real and digital worlds by overlaying digital information or objects within a person's current view, enhancing the viewer's experience. The most familiar examples of AR are consumer-based, such as Nintendo's Pokemon Go and Google Translate. However, the field of "industrial AR"—using the technology to solve industry problems in manufacturing and service—is growing steadily in part due to technology gains and greater understanding of the potential benefits.

## AR for Field Service Management

AR technology can potentially deliver significant value to field service management, particularly for equipment- or asset-centric companies. By combining the physical and digital, AR delivers more contextual information and knowledge about an asset. This enables field workers to process information and execute work more efficiently, improving productivity. AR can be especially valuable in servicing mission-critical, complex assets for which uptime is an important metric. AR also allows industries experiencing a "skills gap" to leverage experienced workers in a remote setting. Early adopters of AR for field service have reported tangible positive impacts on revenue, productivity, and customer satisfaction.

## Field Service Use Cases For AR Fall Into Three Broad Categories:

### #1 REMOTE EXPERT ASSISTANCE

AR can enhance the experience of a technician performing service (such as a complicated inspection task) by leveraging the expertise of a remote expert. Features such as video calls, annotation, digital objects, and hand gestures allow the expert to deliver contextual knowledge about an asset at the point of service. This allows the field worker to perform complex work more efficiently and effectively. Video recordings of the call can be used as a knowledge resource for future work orders.

### #2 AUTOMATED WORK INSTRUCTIONS

For certain complex workflows—including those with safety or regulatory implications—AR-enabled work instructions can augment the field worker experience with critical content specific to an asset. Guided, step-by-step, 3D instructions overlaid in the worker's field of view enable him or her to execute service (such as a complex, multi-step repair and replacement) accurately. Verification that the work was performed properly can serve as a safety or compliance audit record.

### #3 TRAINING

Both remote expert support and automated instructions can be utilized to provide AR-enabled worker training. A field worker (or worker-in-training) can access guided training modules, proceeding at an appropriate pace and requesting a remote instructor as needed. The result is accelerated knowledge sharing within the organization, shorter training time, and a faster path to field readiness.

## Your AR Journey— How ServiceMax Can Help

Experts in AR recommend that organizations considering AR technology identify the appropriate use cases; think through implementation; and evaluate the desired outcomes. How will I apply AR in my organization? How will it be implemented along with other technologies such as IoT, and within the overall tech stack? What KPIs do I seek to improve, and how will I measure the impact of the AR deployment?

ServiceMax can help you address each of these questions as your partner in applying AR to your service challenges. We are differentiated by our experience and expertise in field service, which means that we think about AR not as an isolated technology but as an enabler of asset-centric field service capabilities. To achieve meaningful results for a service organization, AR must be thoughtfully blended with other technologies—mobile collaboration, knowledge curation, AI, IoT—and directed toward high-impact use cases. Your ServiceMax partnership will focus on these outcomes and use cases, and then determine which combination of ServiceMax and partner capabilities is most appropriate for you.

Field service industry watchers believe the next few years will witness rapid AR-related innovation and adoption. By moving now to incorporate AR into their service strategies, asset-centric service organizations can realize major business benefits and cultivate their competitive advantage. ServiceMax look forward to partnering with you on your AR journey.

**“By 2025, over 50% of field service management deployments will include mobile augmented-reality collaboration and knowledge-sharing tools, up from less than 10% in 2019.”**

*Gartner 2020*

### AR-ENABLED SERVICE OUTCOMES

- Productivity
- Revenue
- Asset Uptime
- Customer Satisfaction
- Employee Retention

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