

# ENTERPRISE AUGMENTED REALITY PLATFORMS

COMPETITIVE RANKING

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# ENTERPRISE AUGMENTED REALITY PLATFORMS

This competitive assessment compares a number of enterprise Augmented Reality (AR) platforms as a representative selection of prominent competitors in the space. ABI Research selected prominent platform operators offering an end-to-end Augmented Reality enablement portfolio—this primarily looks at capability in remote assistance, training, and guided workflow use cases for both smart glasses and mobile devices. Differentiators outside of this core features set include Artificial Intelligence (AI)/Machine Learning (ML) support, machine vision, cloud components, enabling technologies usage (such as 5G), customers and partnerships, devices supported, pricing and business models, integration potential, and time to value. This report identifies the market positioning of each included company across these criteria and groups companies into leaders, mainstream, and followers, and provides strategic recommendations accordingly.

Enterprise AR platforms deliver value to customers by enabling Return on Investment (ROI)-favorable use cases. Remote assistance, training, and guided workflow are specifically examined in this report, as most use cases related to enterprise AR are represented by one or more of these use cases. An end-to-end AR platform acts as both a partner and product offering, often including professional services and integration potential to ease complexity for customers working across environments, use cases, and end usage types.

# ENTERPRISE AUGMENTED REALITY PLATFORMS

PTC, TeamViewer, Librestream, and CareAR make up the leaders with overall strong innovation and implementation scores. TeamViewer's rapid acquisition and investment in the enterprise AR space let the company hit the ground running and score strongly across all criteria. PTC, previously a winner of this assessment, ranks first again overall, although the gap between other competitors is smaller. Librestream and CareAR are competitive across criteria despite a smaller overall footprint than TeamViewer and PTC. Librestream's excellent AI/ML efforts differentiate and lead to a 2<sup>nd</sup> place ranking in innovation, while CareAR's recent reorganization under Xerox led to decent Implementation rankings but no standout weaknesses in Innovation surmise a strong overall offering.

ABI Research developed this Competitive Assessment (CA) to offer a comparative assessment and ranking of the following enterprise AR platforms: OTC, TeamViewer, Librestream, CareAR, OverIT, AMA, RE'FLEKT, Taqtile, Atheer, and ScopeAR.

This is not meant as an exhaustive list of competitors, rather a representative selection of impactful and interesting companies operating in the space.

# OVERALL COMPETITIVE RANKINGS

LEADERS



MAINSTREAM

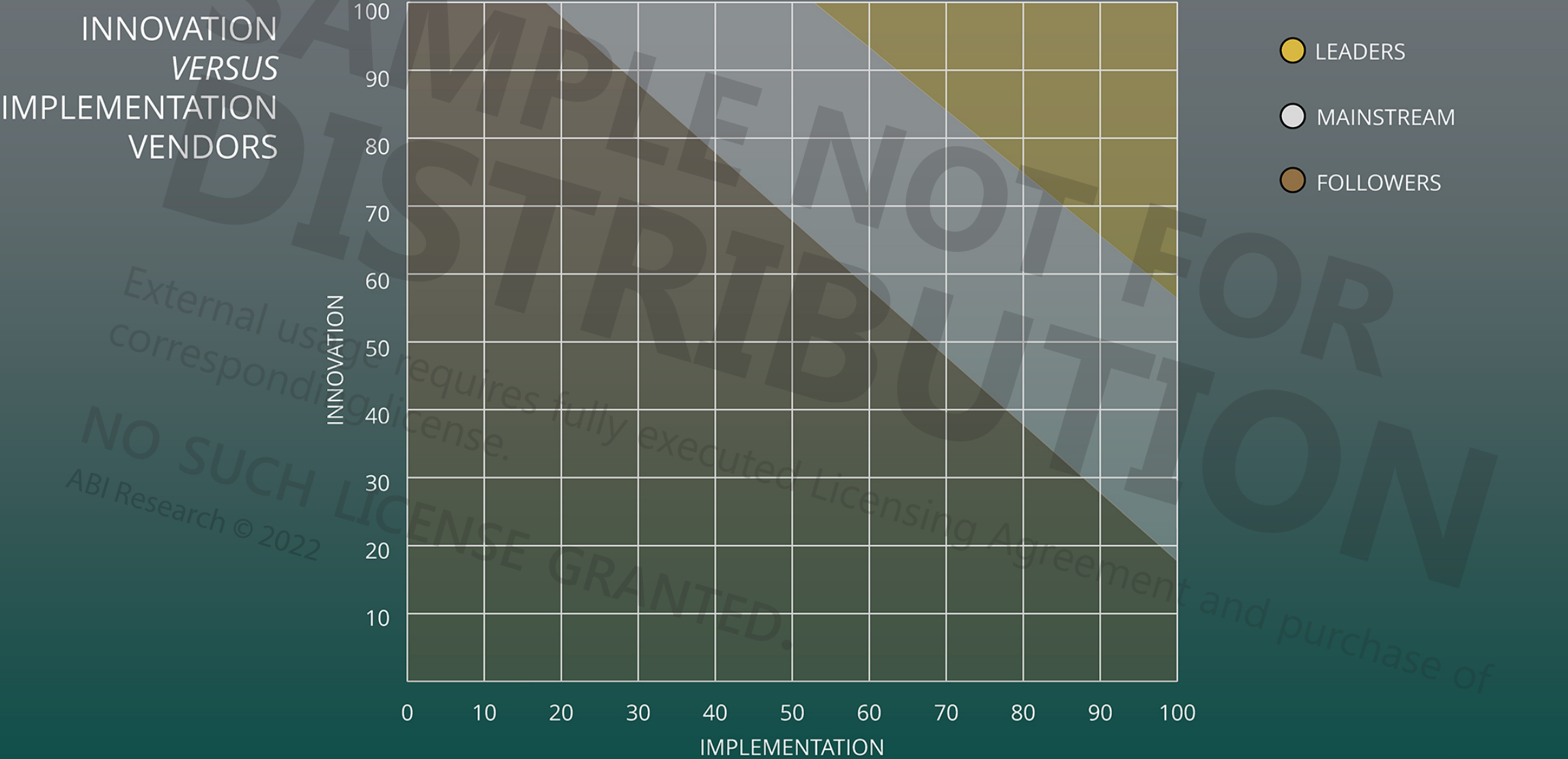


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# OVERALL RANKING MATRIX



# MARKET TRENDS

Enterprise Augmented Reality has been a fast-moving market for years, with companies realizing potential of deeper visualization and then pursuing at varying paces. Some of the most instrumental trends in the market over the past couple of years include:

- **Worker Enablement and COVID:** Enabling workers with data to suit their use case has been the primary value add for Augmented Reality for years. Remote assistance has been a leading use case across markets and implementations. COVID did not create the need and value for worker enablement, but it exacerbated it significantly. Today, enabling hybrid workforces that are contending with fully remote workers and hybrid work environments remains a challenge and a priority. Platforms that cater to this, through ease of use, platform wide content persistence, and overall streamlined user experience are best positioned for the new normal of work location and needs.
- **Increasing Mobile Device Capability:** Apple's ARKit and Google's ARCore have been in the market for a few years now and have significantly improved the capabilities of mobile devices for Augmented Reality, and as a result have increased the role played by those devices. Operating system level support for AR enables developers to create content more easily and maintains a broad potential user base for that content. For AR use cases that do not require hands-free (which would default to using smart glasses), mobile AR presents a powerful, spatially aware alternative for visualization.
- **Enterprise Digitization:** Companies have been strengthening their digital backbone and quickening movement towards digital toolsets across the board. Industry 4.0 efforts, for example, see IoT, AI, and autonomy as key facets; Augmented Reality has seen an increasing role here, as a visualization tool for those technologies and as a worker-facing input and interaction paradigm—something often forgotten when examining digital workflows.
- **Movement from Vertical to Horizontal:** Many Augmented Reality platforms focused on a single vertical, single use case, or single device type early in the market. Low maturity across hardware, software, services, and end customers was a root cause. Today, as those elements mature quickly, companies are increasingly multi-use capable; universal applicability is a common portfolio goal, with integrations and usability of paramount importance. Allowing a customer to scale from single use case to multi-use case, or one-use environment (e.g., factory floor) to multiple environments (e.g., offices) creates a stronger entry point and pathway to scale for potential customers.

# MARKET TRENDS

- **Consumer Market Momentum:** While the enterprise and consumer AR markets have mostly been separate entities, the significant momentum seen around consumer AR means there will be increasing overlap into the enterprise over the next few years. This will bring consumer-oriented devices as viable enterprise hardware options (think of the role iPhones and iPads have as enterprise mobility devices today) that will present lower upfront hardware costs compared to enterprise smart glasses today and will introduce millions of users to AR that otherwise may not have been introduced.

The rate of mergers and acquisitions have been increasing steadily since the last version of this competitive assessment. Two companies included in prior versions, Upskill and Ubimax, were acquired by TeamViewer. HelpLighting acquired Fieldbit, another company competitive in end-to-end AR—combined, HelpLighting would have been a competitive company in this assessment, however, the acquisition was too fresh to accurately assess capability of the combined companies. A future assessment will likely include HelpLighting and update others who have seen acquisition and consolidation.

At the time of publishing for this report, metaverse is the hottest of buzzwords in AR. While it could be included as another impactful trend, the enterprise focus of this report combined with metaverse's nascent and tumultuous state makes it a more forward-looking discussion point than appropriate today. Some examples of persistent collaboration environments and digital thread ideas can be seen as early, small scale metaverse deployments, but the intrinsically broad and market-spanning nature of the metaverse has not yet had meaningful impact in enterprise.

# CRITERIA AND METHODOLOGY

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## VENDOR MATRIX

[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
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## RANKING CRITERIA

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