

FROST & SULLIVAN

BEST PRACTICES

AWARDS

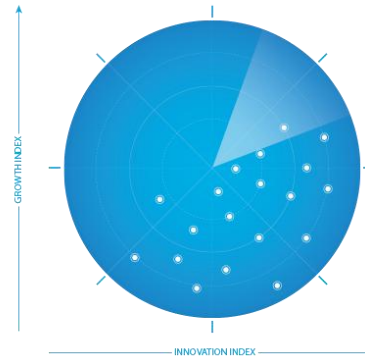
FROST & SULLIVAN

2020 BEST PRACTICES AWARD

AVEVA

**2020 GLOBAL ASSET PERFORMANCE MANAGEMENT
GROWTH, INNOVATION & LEADERSHIP
FROST RADAR AWARD**

FROST RADAR™



CONGRATULATIONS!

Frost & Sullivan is proud to present AVEVA with this year's Frost Radar™ Best Practices Award for Growth, Innovation & Leadership Excellence in Asset Performance Management Market.

Frost & Sullivan's global team of analysts and consultants continuously research a wide range of markets across multiple industries and locations. As part of this ongoing research, we identify companies that consistently develop new growth strategies based on a visionary understanding of the future, and thus more effectively address new challenges and opportunities. This involves extensive primary and secondary research across the entire value chain of specific products and services. Against the backdrop of this research, Frost & Sullivan recognizes AVEVA for these valuable achievements.

This recognition is strictly reserved for companies that are market leaders and are at the forefront of innovation. These companies consolidate or grow their leadership position by continuously innovating and creating new products and solutions that serve ever-evolving customer needs. These companies are also best positioned to expand the market by strategically broadening their product portfolio. Achieving Growth, Innovation & Leadership (GIL) is never an easy task, but it is one made even more difficult considering today's intensely competitive environment, customer volatility, economic uncertainty, and rapid technology evolution. In this context, AVEVA's receipt of this Award signifies an even greater accomplishment.

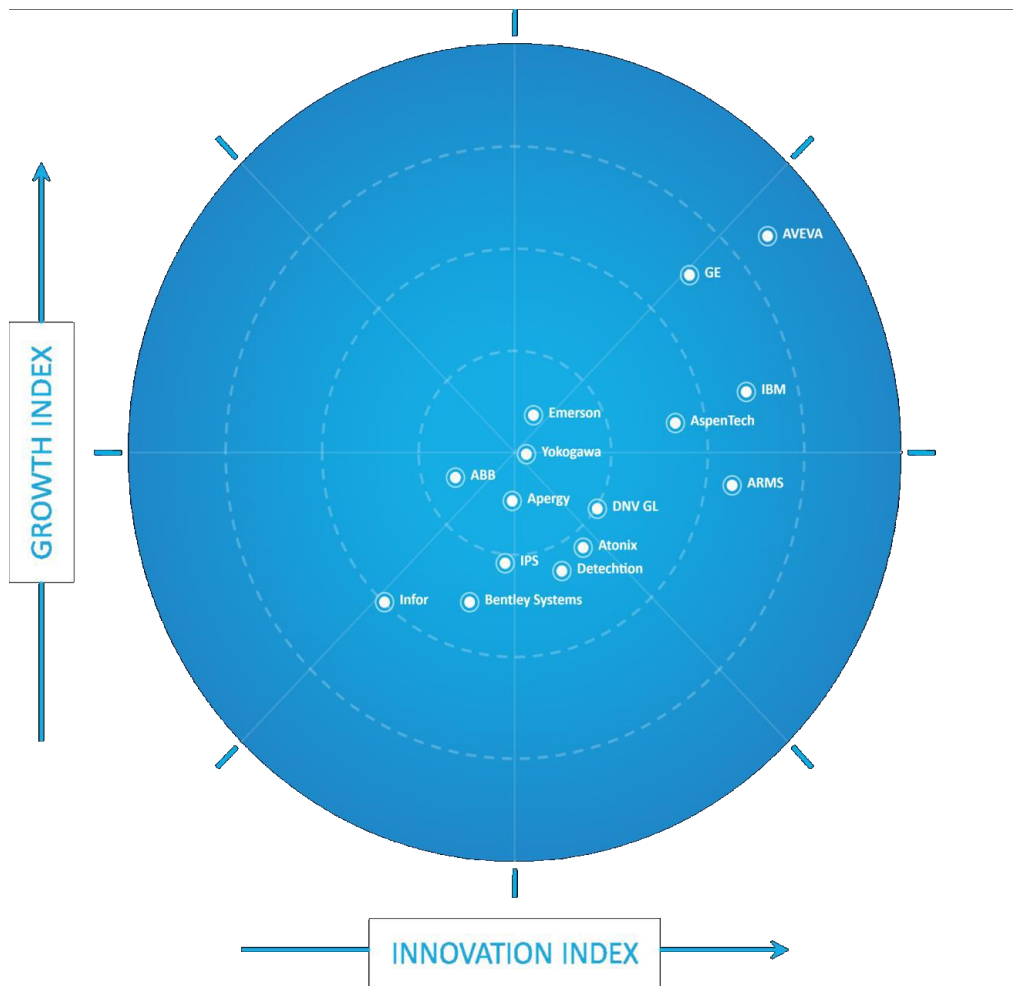
Moreover, this recognition is the result of many individuals (employees, customers, and investors) making daily choices to support the organization and meaningfully contribute to its future. Frost & Sullivan enthusiastically acknowledges and celebrates these achievements. Once again, congratulations on your accomplishments and we wish you great success in the future.

Sincerely yours,

Darrell Huntsman
Chief Executive Officer
darrell@frost.com

The Frost Radar™

ASSET PERFORMANCE MANAGEMENT (APM) MARKET



Source: Frost & Sullivan

In a field of 20+ global industry participants, Frost & Sullivan has independently ranked the top 15+ companies in the above Frost Radar™ analysis.

The key parameters independently analyzed by Frost & Sullivan include:

- Innovation Scalability
- R&D
- Product Portfolio
- Mega Trends Leverage
- Customer Alignment
- Growth Pipeline
- Vision and Strategy
- Sales and Marketing
- Revenue Growth
- Market Share Growth

Frost & Sullivan studies related to this independent analysis:

- Global Outlook of Enterprise Asset Management.
- Global Outlook of Asset Performance Management.

The Growth Environment

Asset performance management (APM) focuses on plant assets and delivers actionable insights to the unmet needs of asset-intensive industries in areas such as unplanned failures and associated downtime. Leveraging the capabilities of machine learning (ML), artificial intelligence (AI), and cloud, APM supports extending the remaining life of an asset and increasing its availability. APM caters to the demand for applications such as health monitoring, predictive maintenance, risk analysis, investment planning, and asset availability.

APM is on a growth trajectory. It is expected to generate revenue of \$2498.6 million by 2024. The ability to have a converged view of asset data, process data, design parameters on a single platform drives the adoption of APM solutions. Further, the end-user propensity to shift from site-functional monitoring to fleet-wide enterprise performance optimization drives adoption. Customers' accelerated journeys towards digital transformation as part of operations and maintenance (O&M) strategies will continue to drive the growth of APM.

Next-generation features that are important to deliver effective APM include:

- Prescriptive analytics, ML, and AI-based analytics focused on the criticality of the assets
- End-to-end end-user support with out-of-pattern/anomaly detection
- Ability to retrofit to the aging and old assets in the plant
- Ability to configure, scale up and integrate with existing maintenance softwares.
- Breadth of applicability across the enterprise level
- Support for cloud connectivity and edge computing
- Closed-loop digital twin integration for shift from automation to autonomy
- Integration of design data with asset operations and process data will drive proactive performance management.
- Investment planning and ROI analysis

Frost Radar™ Growth, Innovation & Leadership Award

AVEVA

Growth

- With, a proven, at-scale leadership position in APM, AVEVA witnessed growth rate greater than the industry average on APM solutions.
- AVEVA continues to expand its contracts and license agreements, specifically with end users in process industries.
- AVEVA's recent acquisition of Maxgrip, a pioneer in reliability-centered maintenance (RCM)-based asset performance solutions has further strengthened AVEVA's market position as a key leader.
- The APM industry is evolving continuously, as customers are looking to blend the aspects of design with operations and lifecycle maintenance. AVEVA's core capabilities in design, operations and analytics differentiate it from its peers. While peers are focused exclusively on asset performance and reliability solutions, AVEVA's integrated solution breathes fresh air to emerging and future market challenges.

Innovation

- AVEVA has strong digital and innovative initiatives and features as part of its APM 4.0 framework. For instance, AVEVA Insight, which is both vendor and system agnostic (all operational and production data from IIoT and edge devices), is an AVEVA cloud offering that provides end users with actionable insights from anywhere, anytime, and any device.
- AVEVA's AI and ML capabilities (predictive and prescriptive maintenance) have helped many customers to increase equipment reliability and operational performance. The solutions strength lies in its ability to drive clear outcomes: 30% reduction in maintenance cost and 25% reduction in unplanned downtime.
- AVEVA's APM 4.0 framework (connecting engineering, operations, and performance) enables customers to predict unplanned failures. Also, AVEVA's APM 4.0 balances four key value drivers namely asset performance, safety & compliance, cost control, and resource management in the business context dimension to drive greatest monetary and business value for customers.
- AVEVA Asset Information Management, a cloud-based information management solution, extracts tag and document data for efficient digital asset navigation. AVEVA's ability to steer customers' digital transformation journeys and navigate through complexities sets it apart from its peers.

Next Steps

- AVEVA is a one-of-its-kind APM solutions offering company. Frost & Sullivan's research indicates that AVEVA has an ambitious APM solution roadmap to support the growing focus on asset management initiatives and to support the critical role of asset management across process, discrete, and hybrid industries.
- Frost & Sullivan expects that AVEVA has a greater opportunity in non-oil and gas end markets with aging assets and infrastructure. This further strengthens AVEVA's technology growth in 2020 and beyond.

What is the Frost Radar™?

Companies to Action – Benchmarking Future Growth Potential

What is it?

A robust analytical tool that benchmarks companies' innovation focus and growth performance in a given market.

How is it built?

Through in-depth analysis built on Frost & Sullivan's 360-degree research methodology (primary and secondary research) and objective rating of companies in a given market.

Why do you need it?

To understand how companies benchmark against each other in their ability to innovate and grow against a backdrop of industry transformation.

What will it accomplish?

Companies can gain an objective, independent perspective of their innovation and growth strategies, including their robustness, effectiveness, relative competitive strength, and implications for their long-term success.

How to use it?

The Frost Radar™ is a dynamic tracking tool that offers frequent rating and positioning of companies that are leading the industry in growth, innovation, or both. Because of changes in the operating environment and internal organizational changes, their positioning in the Frost Radar™ will change over time. It is important to leverage the Frost Radar™ to ensure that companies are aware of changes to their ecosystem and their relative positions to it.

What does it mean to be on the Frost Radar™?

Companies have been chosen to be in the Frost Radar™ because they have proven themselves to be worthy by demonstrating excellence in growth, innovation, or both, and are able to translate that into proven solutions that benefit their clients. At times, companies with high market share may not place on the Radar. Companies are chosen because they are already doing great things or are poised to do great things.

All companies on the Frost Radar™ could be Companies to Action. Best Practice recipients are the companies that Frost & Sullivan considers the **Companies to Act On Now**.

Growth, Innovation & Leadership Award

The Growth Innovation Leadership (GIL) best practice award is bestowed on companies that are market leaders at the forefront of innovation. These companies consolidate or grow their leadership position by continuously innovating and creating new products and solutions that serve the evolving needs of the customer base. These companies are also best positioned to expand the market by strategically broadening their product portfolio.

Frost Radar™ – Benchmarking Future Growth Potential

2 Major Indices, 10 Analytical Ingredients, 1 Platform

Vertical Axis – The Growth Index

Growth index is a measure of a company's growth performance and track record, along with its ability to develop and execute a fully aligned growth strategy and vision; a robust growth pipeline system; and effective market, competitor, and end-user focused sales and marketing strategies. The elements of this index include:

- **GI1: Market Share (previous 3 years):** This is a comparison of a company's market share relative to its competitors in a given market space for the previous 3 years.
- **GI2: Revenue Growth (previous 3 years):** This is a look at a company's revenue growth rate for the previous 3 years in the market/ industry/category that forms the context for the given Frost Radar.
- **GI3: Growth Pipeline:** This is an evaluation of the strength and leverage of a company's growth pipeline system to continuously capture, analyze and prioritize its universe of growth opportunities.
- **GI4: Vision and Strategy:** This is an assessment of how well a company's growth strategy is aligned with its vision. Are the investments the company is making in new products and markets consistent with the stated vision?
- **GI5: Sales and Marketing:** This is a measure of the effectiveness of a company's sales and marketing efforts in helping it drive demand and achieve its growth objectives.

Horizontal Axis – The Innovation Index

Innovation index is a measure of a company's ability to innovate products/services/solutions (with a clear understanding of disruptive Mega Trends) that are globally applicable, are able to evolve and expand to serve multiple markets, and are aligned to customers' changing needs. The elements of this index include:

- **I11: Innovation Scalability:** This determines whether an organization's innovations are globally scalable and applicable in both developing and mature markets, and also in adjacent and non-adjacent industry verticals.
- **I12: Research and Development:** This is a measure of the efficacy of a company's R&D strategy, as determined by the size of its R&D investment and how it feeds the innovation pipeline.
- **I13: Product Portfolio:** This is a measure of a company's product portfolio, focusing on the relative contribution of new products to its annual revenue.
- **I14: Mega Trends Leverage:** This is an assessment of a company's proactive leverage of evolving, long-term opportunities and new business models, as the foundation of its innovation pipeline.
- **I15: Customer Alignment:** This evaluates the applicability of a company's products/ services/ solutions to current and potential customers, as well as how its innovation strategy is influenced by evolving customer needs.