



Market Insights



Mission

C-suite and organizational leaders are focused on mission-level objectives: Increasing profitability and productivity, improving energy efficiency and sustainability, and raising customer satisfaction. Operations & Maintenance (O&M) professionals and facilities managers align to the mission by improving reliability, controlling costs, and evaluating and implementing new technologies. (FEMP O&M Best Practices Guide, p. 31)



Market size and make up

Target customers include:

- Industrial manufacturing plants (ambient and process applications)
- Health care
- K-12 education
- Higher education
- Commercial real estate
- Data centers
- Hospitality
- Retail and restaurants
- Government



Vibration Analysis & Predictive Maintenance

Vibration analysis is one of Trane's many predictive maintenance offers and a best practice for running an optimal system. Vibration analysis uses measurements to detect the early onset of system degradation. (FEMP O&M Best Practices Guide, p. 52)



What's On Their Minds Here's what's driving end-user actions and decisions.



Improving reliability and uptime (Reducing downtime)

Proactively preventing emerging problems from developing further. Minimizing catastrophic failures, enabling planned downtime for repairs and minimizing repair cost.



Leveraging new technologies

Using cloud based technology and big data to provide our customers predictive insight of equipment condition and provides Trane a competitive edge vs. local independent contractors.



Controlling costs

Using best practices to reduce O&M expenses. Early detection of system wear is considerably less costly to repair vs running to failure.



Trane® Brand Promise

Trane has a proven, measurable track record of maximizing the performance of buildings all over the world. Our service agreements deliver outcomes through technology-driven solutions and unmatched expertise.



Learn More

Augury.com
<https://augury.com>

Leading the Conversation

Make the connection between customer decision drivers and Trane's vibration analysis leveraging Augury®.

	Improving Reliability & Uptime	Leveraging New Technologies	Controlling Costs
<p>Why Change</p> <p>Explain why decision makers should do things differently to help impact their mission-level objectives.</p>	<p>Breakdowns have serious consequences: lost customer loyalty, compromised product quality, losses in talent retention and more. Predictive maintenance maximizes the life of older equipment, and safeguards against downtime and failures.</p>	<p>Advances in technology have made it easier to justify a predictive maintenance approach, providing higher ROI at a lower cost.</p>	<p>Small performance deviations can cause equipment to use more energy, affecting operational costs and sustainability.</p> <p>Preventing breakdowns allows you to be more confident in budget planning by virtually eliminating emergency repair costs.</p>
<p>Why Now</p> <p>Provide justification and motivation to change now rather than later.</p>	<p>Compared to schedule-based service, predictive maintenance gets better results: 70% to 75% reduction of breakdowns and 35% to 45% reduction in downtime. (FEMP guide)</p>	<p>Vibration testing technology has been completely transformed. Previous methods requiring an investment of \$50K in equipment and training has been replaced by Augury's simple cell phone attachment, a cloud-based database, and centralized analysts.</p>	<p>Predictive maintenance reduces costs by basing service on the actual condition of the machine rather than a preset schedule, saving an estimated 8% to 12% over preventive maintenance programs. (FEMP Guide)</p>
<p>Why Trane®</p> <p>Highlight relevant approaches to make the changes—and state why. These are a few examples of our vast capabilities to meet customer needs, but your recommendations should be based on particular customer situations and goals.</p>	<p>“On your mission-critical chillers, compressors, fans and pumps, we can leverage Augury capabilities to predict malfunctions before they happen.”</p> <ul style="list-style-type: none"> • AI-enabled machine diagnostics • Cutting-edge sensing technologies • Built for industry (Augury.com) 	<p>“Our new approach simplifies diagnostics and analytics. A portable diagnostics tool attaches to a technician's smart phone, and connects to Augury through an app.”</p> <ul style="list-style-type: none"> • Technician selects the equipment • Records each vibration point for 30 seconds • Receives immediate results • You receive a full report 	<p>“Knowledge is power. Augury's insights draw from a network of thousands of critical machines across North America.”</p> <ul style="list-style-type: none"> • 50,000+ machines diagnosed • 5,000 facilities covered • 3,000 machines saved (Augury.com)



The one-minute message:

“We're always looking for innovative ways to deliver better results through Trane Service Agreements. Technology is giving us deeper and more immediate insights into system performance. Meanwhile, the IoT for buildings (and its big-data byproducts) are helping us to analyze performance and raise results for building owners everywhere. Our cloud-based vibration analysis brings you the industry's best solution for vibration testing, an industry best practice for predictive maintenance, providing lower repair cost and reduced downtime.”

