



Eurotech Recognized for

2021

Competitive Strategy Leadership

European Rail Vehicle IoT Solutions Industry

Excellence in Best Practices

Best Practices Criteria for World-Class Performance

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each award category before determining the final award recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. Eurotech excels in many of the criteria in the rail vehicle IoT solutions space.

AWARD CRITERIA	
Strategy Innovation	Customer Impact
Strategy Effectiveness	Price/Performance Value
Strategy Execution	Customer Purchase Experience
Competitive Differentiation	Customer Ownership Experience
Executive Team Alignment	Customer Service Experience
Stakeholder Integration	Brand Equity

Highly Advanced Integration of Hardware and Software Solutions Strengthens Competitive Differentiation

The growing and changing demand for creating an intelligent railway solution have revolutionized the rail infrastructure and rolling stock market. With the Internet of Things (IoT) sensors and highly advanced analytics, the rail industry offers a superior commute experience to customers by providing

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passenger connectivity and passenger infotainment systems such as navigation and ticketing details. Additionally, the rail industry helps operators, including cargo, a new level of operational excellence and situational awareness through its advancement. Considered the largest railway market, Europe moves relentlessly towards smart railway adoption, especially with government initiatives of urbanization and smart cities development, adoption of IoT, and technologies automation that offer a seamless experience. Likewise, with the increasing automation and enhanced security requirements, original

equipment manufacturers provide IoT solutions to address customers’ changing needs, and strengthen their market presence. However, these companies are limited to providing their scope of expertise, either hardware or software services.

Founded in 1992 and headquartered in Italy, Eurotech, a leading technology solution provider, offers creative and innovative products and solutions, presenting its expertise in embedded computers, pervasive computing, IoT, and cloud infrastructure. In 1992, where the industrial market was slowly flourishing, Eurotech transformed the market by designing, developing, and delivering sound modular computer systems for industries such as manufacturing, utilities, and transportation, and pioneered standardized operating ruggedized hardware systems offered to run standard operating systems. Currently, the company is expanding its expertise and business sectors, offering besides a solid hardware offering, a strong software proposition through its IoT cloud platform and IoT gateway. The integration capabilities of different technical aspects, both hardware and software, and the capability to provide mid to high performance edge computing with robust thermal management uniquely position the company in the market.

Vendor lock-in (a situation where a customer/vendor is forced to depend on continuing using a product or service without substantial switching costs) is a significant problem in rolling stock production.

Additionally, manufacturers often offer certain asset monitoring capabilities specifically and exclusively for their portfolio of assets or just a subset of it. That might prevent the operators to build solutions that effectively integrate for example different types of locomotives of different vendors. Eurotech solves this issue by offering a very flexible combination of application optimized hardware and open software building blocks. Eurotech's two main IoT products, Everyware Software Framework (ESF), an edge device middleware, and Everyware Cloud, an IT/OT integration platform, work with rail / rolling stock certified hardware components to improve both complexities of the solution and offer customers a complete package, thereby helping them to resolve vendor lock-in issue. Also, the company designs its passenger counter system, the DynaPCN branded family of people counter, an intelligent sensor used for a variety of applications in public transport, including fleet management applications.

Additionally, Eurotech is a founding member and a heavy contributor to Eclipse Open Source Working Group. The Eclipse open-source ecosystem, which has more than 275 member organizations, solves issues, including hardware and software complications such as security vulnerabilities or software validation. Being a committed and contributing member of an open-source community & ecosystem that delivers enterprise-ready software building blocks, presents Eurotech with an exciting position in the rolling stock market.

Eurotech offers full end-to-end operational technology (OT) solutions with modular and highly integrated technologies. The company's products range widely, where customers can choose either just one product, i.e., a suitable edge computer, an IoT device middleware, or buy a complete value proposition. For one of the clients, Deutsche Bahn cargo, Eurotech designed and implemented end-to-end architecture to gain a real-time fleet status and insight on their locomotive fleet through on-site and remote device management, predictive diagnosis and maintenance, and on-board rolling stock hardware through its ruggedized IoT gateway and device application framework.

Established nearly 30 years ago, it is in the nature of Eurotech to stay ahead of the rest of the market and create innovations as well as develop and maintain a combination of capabilities. For example, one of the elements that have disrupted the market is Eurotech's thermal management in the context of High -Performance Edge Computing. The company builds systems in a small form factor, having server

or even supercomputing capabilities for edge analytics and artificial intelligence workloads – even in mobile applications that require a high level of ruggedization. The company’s customer-centric approach embeds operational agility into its solutions to address evolving market needs and corresponding customer transformations promptly and effectively. For instance, by providing software and hardware (with the thermal management required) as a single product or product set, the company exceeds customers’ expectations. By leveraging its extensive industry experience and offering a wide array of strategies to ensure consistent quality, compliance, certifications, and total transparency across its entire portfolio, Eurotech is a global leader in the rail IoT space. The company’s focus on ongoing innovation and continuous process to meet customer needs by maintaining operational excellence and enriching work experience is impressive.

Operational Strategies Enhance Customer Experience and Satisfaction

Innovation is embedded in Eurotech’s ability to leverage its industry expertise, skilled and talented workforce pool, and volume-scale benefits to achieve overall customer satisfaction. The company follows two approaches, i.e., systematic and DNA approach, which work simultaneously to achieve and enhance a seamless customer experience. The company starts with the DNA approach, which is getting

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input from the customer. For example, train operators request specific adaption versions of products, solutions, and software to perform effectively in their environment. Eurotech provides standard and customized products/solutions aligning with the evolving needs of its customer base. The company differentiates itself from other market participants by actively integrating and embedding the aggregated best practice and providing supreme hardware, software, and professional services offering, thereby creating a brand as a successful supplier of products to the rail market. Also, it works with market research companies and helps organizations to support customers in achieving their specific goals.

Eurotech enhances operational reliability, consistency, and transparency by helping customers reduce their total cost of ownership pricing. For example, with its gateway solution, where customers get a combination of integrated hardware and software that would otherwise cost them a fortune to build and maintain, comes actually in affordable pricing. Moreover, with its strategic innovation, Eurotech creates and sustains its competitive differentiation and advantage in markets in addition to rolling stock. It is the companies’ deep vertical expertise in rolling stock, its track record in OT software building blocks, hardware (board and system design) with a focus on miniaturisation, ruggedization, and outstanding abilities in the context of thermal management that sets Eurotech apart from other competitors in the classic embedded space. Likewise, Eurotech is one of a few companies that has a long track record as a supplier to the rail/rolling stock industry and the operators. The company’s ongoing

focus on developing new and efficient ways to deliver improved services, procedures, and techniques establishes Eurotech as a thought leader in the rail vehicle IoT solution market.

Eurotech utilizes its vast market expertise and innovative solutions to meet specific customer needs and achieve optimal customer satisfaction consistently. Currently, it operates in three major markets, i.e., Europe, North America, and Japan. Similarly, it delivers the majority of its products on a global scale. For instance, the United States is the central hub for operators and vendors in Latin and South America. Additionally, the company leverages its scale and volume benefits to provide customers with the best possible market price. Eurotech ensures exceptional value for the price by delivering additional services above contract requirements as part of its best practice service processes. The company's holistic, solid strategy, including comprehensive OT and customer-centric policies, ensures the quality, price, reliability, and trust of its service. Furthermore, the stack of complete hardware, and enterprise-ready open, commercially supported software combination, provides a competitive advantage to the company, allowing it to create a strong brand.

Frost & Sullivan lauds Eurotech for delivering its scalable commercial models, best-in-class products, and services to deliver exceptional price/performance value. The company's strong belief in leveraging its highly-skilled workforce and targeted feedback mechanisms allow Eurotech to address customer needs and ensure optimal customer satisfaction.

Conclusion

The complexities of assimilating software and hardware components, vendor lock-in issues, and high total ownership cost continue to restrain the European rail vehicle Internet of things (IoT) solutions market. Eurotech is a leading technology-driven company, offering technology-edge software and hardware integration solutions. The company provides advanced IoT solutions through a comprehensive suite of unique platforms, systems, and procedures. Likewise, Eurotech influences its extensive industry expertise, strategic model, continuous process improvements, and rigorous compliance standards to ensure consistent quality, and best-in-class services. With more than 30 years of experience, competitive differentiation, and delivery of exceptional experience support, such as its rolling stock hardware and IoT platforms for security, the company is an industry leader.

With its strong overall performance and advanced technology products, Eurotech earns Frost & Sullivan's 2021 Europe Competitive Strategy Leadership Award in the rail vehicle IoT solutions market.

What You Need to Know about the Competitive Strategy Leadership Recognition

Frost & Sullivan's Competitive Strategy Leadership Award recognizes the company with a stand-out approach to achieving top-line growth and a superior customer experience.

Best Practices Award Analysis

For the Competitive Strategy Leadership Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

Strategy Innovation

Strategy Effectiveness: Effective strategy balances short-term performance needs with long-term aspirations and overall company vision

Strategy Execution: Company strategy utilizes Best Practices to support consistent and efficient processes

Competitive Differentiation: Solutions or products articulate and display unique competitive advantages

Executive Team Alignment: Executive team focuses on staying ahead of key competitors via a unified execution of its organization's mission, vision, and strategy

Stakeholder Integration: Company strategy reflects the needs or circumstances of all industry stakeholders, including competitors, customers, investors, and employees

Customer Impact

Price/Performance Value: Products or services provide the best value for the price compared to similar market offerings

Customer Purchase Experience: Quality of the purchase experience assures customers that they are buying the optimal solution for addressing their unique needs and constraints

Customer Ownership Experience: Customers proudly own the company's product or service and have a positive experience throughout the life of the product or service

Customer Service Experience: Customer service is accessible, fast, stress-free, and high quality

Brand Equity: Customers perceive the brand positively and exhibit high brand loyalty

