Eurotech is Leader in
SPARK Matrix™: Industrial IoT (IIoT) Platforms, 2020

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BY

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Industrial Internet of Things (IIoT) platform includes an integrated software suite that helps industrial organizations to monitor, manage, and control the connected devices via applications built on the platform. IIoT platforms may provide capabilities to support various industrial use cases, including asset tracking & monitoring, predictive maintenance, operational visibility & control, and others to support the complex industrial requirements of the large asset-intensive organizations. The key functionalities of an IIoT platform include connectivity, application enablement & management, device management, data management & processing, analytics & visualization, integration, security, and user interface for users as well as developers.

As part of the research "SPARK Matrix™: Industrial IoT (IIoT) Platforms, 2020" Quadrant Knowledge Solutions conducted an in-depth analysis of major industrial IoT platform vendors by evaluating their products, market presence, and customer value proposition. Based on the analysis, the study provides competition analysis and ranking of the leading vendors in the form of SPARK Matrix. The evaluation is based on the primary research with expert interviews, analysis of use cases, and Quadrant's internal analysis of the overall IIoT platforms market. The SPARK Matrix evaluation examined Eurotech and sixteen other vendors including Actility, Altizon, Atos, Electric Imp, Exosite, Flutura, GE Digital, IBM, Litmus Automation, Microsoft, Oracle, Particle, PTC, SAP, Siemens, and Software AG.

Quadrant Knowledge Solutions research analyzes market dynamics, growth opportunities, emerging technology trends, and the vendor ecosystem of the global market. This research provides strategic information for technology vendors to better understand the market supporting their growth strategies and for users to evaluate different vendor capability, competitive differentiation, and its market position.

Market Dynamics and Trends
Industrial IoT platforms market is expected to grow significantly during 2020-2025

Driven by the impact of Covid-19, the global economy, along with industries, is facing significant challenges and negative growth. While Covid-19 has impacted the market for IIoT platforms, overall growth outlook looks promising. Despite the economic recession and negative impact on technology investments, the IIoT platform's market is expected to continue its growth momentum in 2020, and during the forecasted years of 2020-2025.

Figure: Primary Market Drivers and Technology Trends, 2020-2025

Primary Market Drivers and Technology Trends
Continued emphasis and investments on digital transformation initiatives by industrial, energy, healthcare and infrastructure sectors
Enhanced capabilities to offer deployment flexibility and support for multiple public and private cloud deployment
The growing emphasis on usability to accelerate digital transformation project with low-code application development capabilities
Key technology partnership and continued investments to expand ecosystem strategy
The increasing sophistication of IoT analytics with continued emphasis on machine learning and advanced predictive analytics capabilities
Increasing demand for advanced visibility and visualization through augmented and virtual reality, digital twin, and virtual simulation
IIoT platform architecture and support for a wide range of OOTB integration with best-of-breed IT and industrial systems remains the key differentiator
Growing demand and adoption of edge IoT analytics platforms, especially by mid-sized industrial organizations
Vendors strategy to offer industry-specific and use-case specific solution is driving market adoption and growth
Growing awareness and maturity of cloud security, IoT security, embedded trust, device-centric identity & access management, and such others
Continued investments on improving awareness and demonstration of successful case studies are driving user confidence in investing in IIoT platforms

However, the forecasted growth rate for the year 2020 is significantly lower than our last year forecast for the same year. Quadrant analysts believe that from the year 2021 onwards, the technology investments will rise again mainly driven by the pent-up demand and economic recovery for the key industrial, energy, healthcare and infrastructure market.

The primary drivers for the adoption of industrial IoT platforms remain the digital transformation initiatives across industry verticals and geographies. Some of the primary growth drivers include continued innovation to provide advanced IoT analytics and machine learning capabilities; advanced visibility and visualization through augmented & virtual reality, digital twin and virtual simulation; growing adoption of edge analytics platforms; enhanced support for public and hybrid cloud deployments; continued investments to improve technology partnership and ecosystem strategy; expansion of out-of-the-box integration to ensure interoperability with best-of-breed IT and industrial systems; functionalities for low-code application development; vendors strategy to offer industry-specific and use-case specific solutions; and such others.

The IIoT platform's research by Quadrant Knowledge Solutions highlights that a majority of the vendors often provide core functionalities for device connectivity, management, application enablement and IoT analytics, however, the breadth and depth of the capabilities may differ significantly by different vendors offerings. Users should look for comprehensive IIoT platforms capabilities to provide modern technology architecture based on open source and industry standards, comprehensive device connectivity and support for a wide range of industrial and communication protocols, edge to cloud integration, ability to provide low-code or no-code application development, and robust IoT security framework to improve the overall customer ownership experience. Users should look for their industry-specific, use-case specific and organization-specific requirement to shortlist and evaluate different providers of IIoT platforms and solutions. Users should also look for IIoT solution with a history of successful large- scale deployments and carefully analyze the existing case studies of those deployments. This should form the basis to prepare best-practice for IIoT platform deployments.

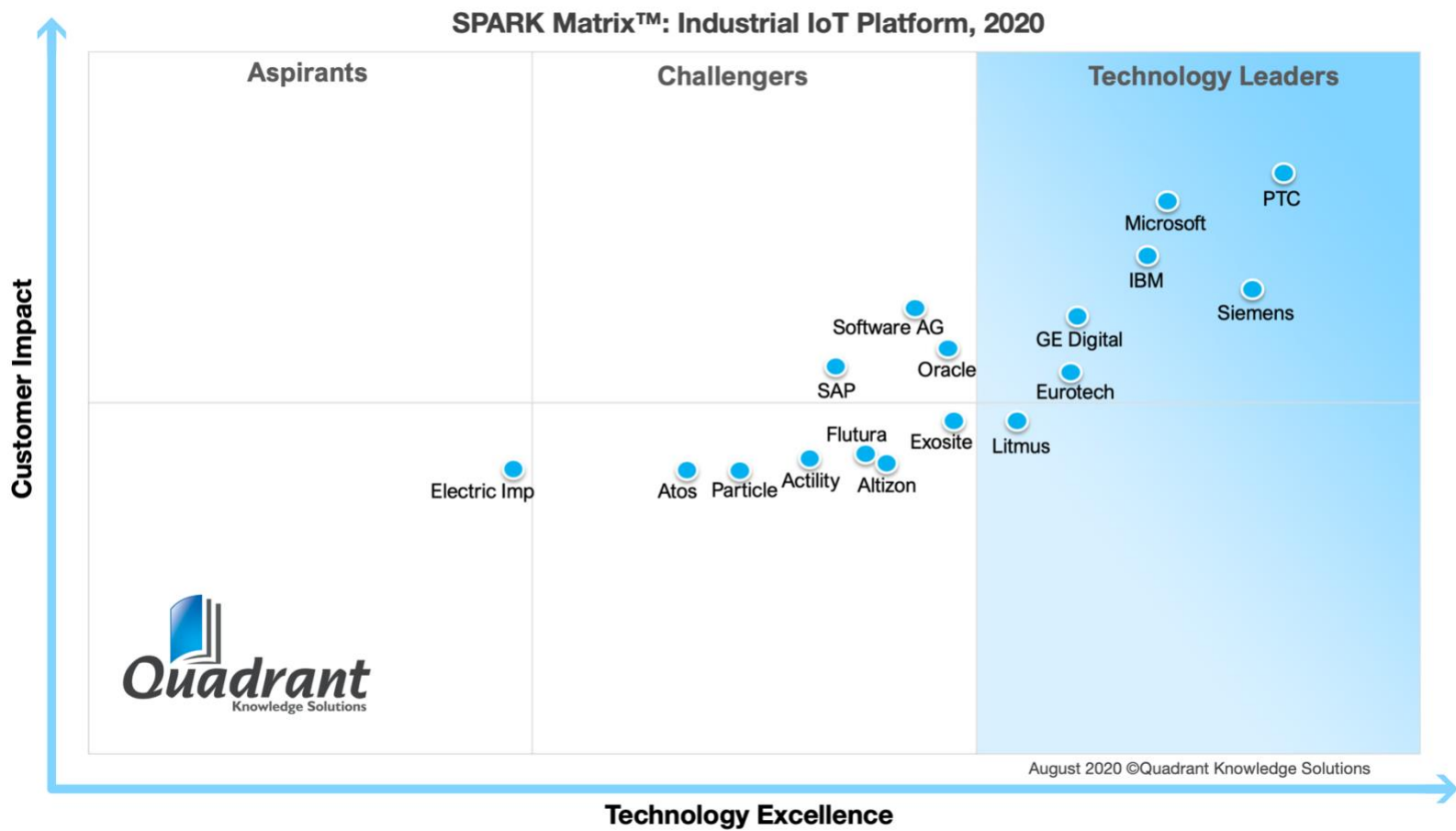# SPARK Matrix™ Analysis of the Industrial IoT Platforms Market

Quadrant Knowledge Solutions conducted an in-depth analysis of the major IIoT platforms vendors by evaluating their product portfolio, market presence, and customer value proposition. The industrial IoT platforms research provide competitive analysis and a ranking of the leading vendors in the form of a proprietary SPARK Matrix™.

SPARK Matrix analysis provides a snapshot of key market participants and a visual representation of market participants. It offers strategic insights on how each vendor ranks related to their competitors, concerning various performance parameters based on the category of technology excellence and customer impact. Quadrant's Competitive Landscape Analysis is a useful planning guide for strategic decision makings, such as finding M&A prospects, partnership, geographical expansion, portfolio expansion, and similar others. The evaluation is based on the primary research with expert interviews, analysis of use cases, and Quadrant's internal analysis of the overall industrial IoT platforms market.

Technology Excellence	Weightage
Sophistication of Technology	20%
Competitive Differentiation Strategy	20%
Application Diversity	15%
Scalability	15%
Integration & Interoperability	15%
Vision & Roadmap	15%

Customer Impact	Weightage
Product Strategy & Performance	20%
Market Presence	20%
Proven Record	15%
Ease of Deployment & Use	15%
Customer Service Excellence	15%
Unique Value Proposition	15%

Figure: 2020 SPARK Matrix
(Strategic Performance Assessment and Ranking)
Industrial IoT (IIoT) Platforms Market

SPARK Matrix™: Industrial IoT Platform, 2020

Eurotech Capabilities in the Global IIoT Platforms Market

Established in 1992, and headquartered in Amaro, UD, Italy, Eurotech is amongst the leading provider of embedded systems and IoT enablement. Eurotech IoT solutions are based on Everyware IoT, the company's integrated edge-to-cloud IoT architecture. Eurotech offers Everyware Software Framework (ESF) for edge computing and Everyware Cloud (EC) as an IoT integration platform at the data center level.

ESF offers flexible app development environment to develop and deploy IoT edge computing applications. ESF provides hardware abstraction, modular software development (including Wires for low code / no-code development) and includes ready-to-use field protocols, such as Modbus, OPC-UA, S7, CAN, MVB, BACnet and others to connect with field devices. ESF provides built-in digital twin modelling and provides remote device management capability. ESF offers easy connection to IoT cloud services with pre-built integration with Eurotech's Everyware Cloud, Eclipse Kapua, Microsoft Azure, AWS, SAP, Software AG (Cumulocity) and other platforms. ESF solution supports building a wide range of IoT edge computing applications, including remote monitoring, maintenance, and control of field devices.

EC IoT integration platform includes comprehensive capabilities for device management, data management, application enablement and integration with an enterprise application. Eurotech enables secure connectivity with IoT devices, such as sensors, actuators, control systems (PLCs, SCADA, & others), IoT gateways, and others through ISO-certified standard MQTT protocol, optimized for IoT applications. Eurotech's Everyware IoT Architecture includes standards-based interfaces that help in reducing integration costs.

EC IoT Integration Platform provides functionalities for secure device connectivity management, device registry, provisioning, remote configuration, OTA software updates, application lifecycle management, remote monitoring, diagnostics, and maintenance through MQTT protocol. It helps to improve operational efficiency and extend the device lifecycle to ensure devices are up-to-date and secure. It also creates a digital twin for field devices and IoT gateways and integrates OT devices with enterprise IT applications. EC's data management function provides advanced data collection, storage, and functions to derive business insights and actionable intelligence. The platform provides access to real-time aggregated data-streams to enable real-time

analytics or provides access to historical data for data aggregation and advanced queries.

For application integration, EC IoT platform uses a variety of methods to enable seamless integration with existing BI, analytics and dashboard tools, mobile and enterprise applications, alerts & notification, cellular connectivity, and SIM management platforms. Besides REST APIs, integrations are provided on a database level, message routing, pre-configured Kafka routes and ready to use integrations provided through Red Hat JBoss Fuse.

The Everyware Cloud platform supports modular and flexible deployment options. The platform supports on-premise and private cloud deployment in a modular offering or as a complete IoT integration package on the public cloud SaaS-based offering.

Analyst Perspectives and Differentiators

Followings are the analysis of the Eurotech capabilities in the industrial IoT platforms market:

- ♦ Eurotech, with its comprehensive OT centric approach, edge-to-cloud IoT architecture, and seamless integration with IT systems, is well-differentiated in a crowded market and is well suited for complex industrial IoT applications.

- ♦ Eurotech differentiation is primarily attributed to its open, integrated, and managed edge-to-cloud Everyware IoT architecture. The company's differentiated value proposition includes deep OT experience and domain knowledge, focus on OT solution and IT-OT integration, based on open architecture and no-vendor lock-in, TCO-focused approach, and complete stack of OT-centric technology for abroad IoT solution portfolio, including IoT gateways, edge computers, IoT middleware, and IoT integration platform.

- ♦ Eurotech's platform is based on open source and industry standards. The company is also a pioneer in open source IoT software with the major contributions for the development of Eclipse Paho, Eclipse Kura, and Eclipse Kapua. Additionally, Eurotech solution is supported by a vast ecosystem of partners to accelerate deployments of multiple IoT solutions.

♦ The primary challenge of Eurotech includes changing market dynamics and growing competition from both well-established and emerging vendors with innovative technology offerings. The company also faces competition from well-established automation vendors that are successfully leveraging their large number of existing customers for targeting IIoT solution deployments. However, Eurotech, with its differentiated technology offering and deep domain experience, is successfully gaining significant market traction and growth across a range of industry verticals.

♦ While a lack of pre-packaged analytics capability is often perceived as a challenge, as part of the product strategy, Eurotech offers easy integration with best-of-breed analytics platforms. The analytics platforms that in this case are selected according to the specific needs and requirements of the application, can leverage historical and real-time streaming data to provide real-time insights and operational intelligence.

♦ From geographical presence perspective, Eurotech has a strong presence in North America, followed by the EU region, and Japan. From vertical industry perspectives, the company has a presence across a wide range of industry verticals. However, the top verticals include process manufacturing, logistics & transportation, automotive, electric power, and healthcare & life sciences.

♦ Eurotech continues to invest in providing further integration in the areas of application integration, improved support for AI and advanced analytics at the edge, extending software management function beyond IoT gateway, and security enhancements and certifications.

♦ Eurotech has received strong ratings across the performance parameters of the technology excellence and customer impact and has been positioned amongst the technology leaders in the 2020 SPARK Matrix of industrial IoT platforms market.