## FROST & SULLIVAN

# **EMO RECEIVES THE 2023** ENABLING TECHNOLOGY LEADERSHIP AWARD

Identified as best in class in the Global MQTT platforms industry

## **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. EMQ excels in many of the criteria in the MQTT platform space.

AWARD CRITERIA	
Technology Leverage	Customer Impact
Commitment to Innovation	Price/Performance Value
Commitment to Creativity	Customer Purchase Experience
Stage Gate Efficiency	Customer Ownership Experience
Commercialization Success	Customer Service Experience
Application Diversity	Brand Equity

## High-performing, Scalable, and Seamless MQTT Solution

As consumers continue to adopt and integrate more Internet of Things (IoT) and connected devices into their daily lives, enterprises must provide seamless Message Queuing Telemetry Transport (MQTT) connectivity and services to end-users. As enterprises grow and scale their business, they add more devices and require greater connectivity support for millions of devices. With many companies reaching

"EMQ's EMQX platform scales to fit enterprise MQTT needs. It offers flexibility, agility, and configurability to support seamless connectivity, delivering the necessary tools and technology infrastructure for customers to succeed. Unlike most competitors' vertical point solutions, the company's broad approach to the market uniquely leverages its technology with a highperforming, scalable, low latency, and stable solution."

#### - Sebastián Trolli

Senior Industry Analyst, Industrial Technologies

a global market, solutions that connect, move, process, and integrate IoT data from edge to cloud or on-premise are becoming enterprises' default solutions. Thus, a future-proof IoT data infrastructure is necessary to support the growing demand from enterprises for scalable and reliable IoT MQTT support.

Frost & Sullivan estimates the digital industrial platform market will reach \$14.21 billion in 2026, with a compound annual growth rate of about 19.6% from 2021 to 2026.<sup>1</sup> MQTT platforms constitute a significant segment during the

<sup>&</sup>lt;sup>1</sup> Global Digital Industrial Platforms Growth Opportunities: Industrial Mega Trends are Digitally Transforming the Manufacturing Landscape and Creating New Business Paradigms (Frost & Sullivan, March 2022).

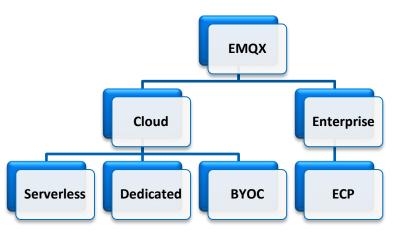
forecast period. Enterprises that provide scalable, responsive, and high-performing MQTT platforms stand to benefit from the industry's growth. EMQ Technologies Inc. (EMQ) uniquely leverages its technologies and solution suite to meet its clients' needs. It is well-positioned to capitalize on new growth opportunities, cementing its leadership in the MQTT platform space.

Founded in 2017 and headquartered in Hangzhou, China, EMQ is a provider of a robust MQTT platform. The company provides its solution suite across various industry verticals, including automotive, manufacturing, energy and utilities, and oil and gas. Its MQTT platform, EMQX (available as open-source, source-available, and closed-source version), also supports IoT, Internet of Vehicle, and Industrial IoT applications.

#### Unmatched Scalability, Enhanced Capabilities

Backed by world-class MQTT experts, EMQ developed its MQTT platform over the years. The company refined its approach to MQTT, continuously building its platform with supported capabilities and functionalities. Its baseline open-source MQTT broker platform enables the real-time connection, movement, and processing of large IoT data from edge to cloud with high reliability, performance, and scalability. The company also continuously supports and invests in the platform, adding new features and capabilities. Thus, as clients' requirements grow and they require support for millions of devices and low latency, EMQ offers an extended product portfolio.

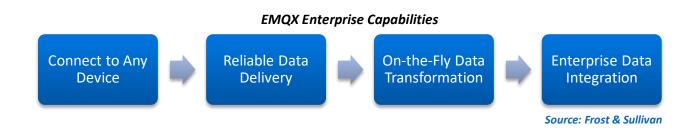
**EMQX Platform Offerings** 



Source: Frost & Sullivan

#### **EMQX** Enterprise

An on-premise solution for large enterprises with strict requirements and specific deployment environments, including private and public cloud and private enterprise computer rooms. EMQX Enterprise is ideal for enterprise clients who can support and self-manage the platform's operation. EMQX Enterprise can scale massive operations, supporting over 20 nodes in a single cluster to enable the ingestion and processing of 100 million MQTT connections per second per cluster.

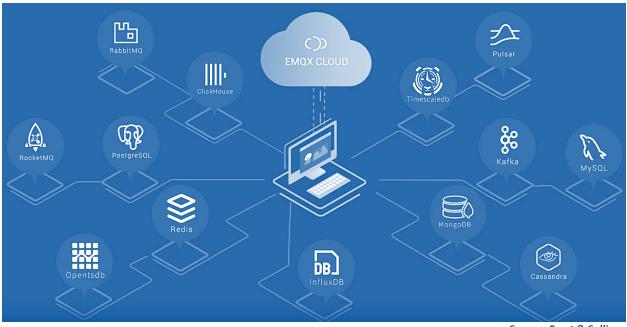


## EMQX Cloud

A fully managed cloud-native service that is hosted on public cloud platforms, providing an out-of-the-box integration with over 40 cloud services, such as Amazon Web Services (AWS), Microsoft Azure, and Google Cloud. It is ideal for small- to medium-sized businesses whose architectures are in the cloud and require full operation, maintenance, and monitoring management. Capabilities and services include the basic features of the EMQX broker, high availability clustering, an EMQX cloud monitoring console, and management of multiple accounts and projects. EMQ offers three flexible EMQX Cloud deployment plans based on clients' needs:

- Serverless Plan: A pay-as-you-go model that offers auto-scaling for small and medium businesses and simultaneously supports up to 1,000 devices and a maximum of 1,000 messages per second.
- **Dedicated Plan:** For customers with independently deployed EMQX Cloud clusters and enterprises that require high-performance, stable, and customizable MQTT cloud services and service integrations with no upper limit connection specifications.
- Bring Your Own Cloud (BYOC) Plan: Ideal for enterprises that have specific data security and compliance requirements, enabling the full utilization of cloud resources and reducing costs through a shared management model.
- Edge-to-Cloud Platform (ECP): A self-managed Industrial IoT data platform for large-scale data collection, processing, storage, and analysis that makes deployment and maintenance of multi-cluster IoT systems easy. ECP eliminates data silos, applies real-time industrial artificial intelligence to the factory floor, supports real-time analysis, facilitates cloud-edge collaboration, and integrates seamlessly with on-site hardware, networks, and infrastructure.

EMQ's EMQX platform scales to fit enterprise MQTT needs. It offers flexibility, agility, and configurability to support seamless connectivity, delivering the necessary tools and technology infrastructure for customers to succeed. Unlike most competitors' vertical point solutions, the company's broad approach to the market uniquely leverages its technology with a high-performing, scalable, low latency, and stable solution.



#### **EMQX Cloud Integrations**

Source: Frost & Sullivan

Frost & Sullivan's research identifies EMQ as a leading partner, leveraging cutting-edge methodologies to advance the MQTT platforms market.

## Roadmap to Success: Customer-centric, Continuous, Proactive

EMQ serves clients across various industry verticals, including automotive, manufacturing, energy and utilities, oil and gas, carrier, transportation and logistics, financial technology and banking, retail, and information and communications technology. The company helps over 400 customers across China, the United States (US), and Europe. Moreover, EMQ provides exceptional 24/7 customer service through its dedicated team of client success experts who support customers with integration, bugs, and configuration, even when not part of its licensing obligations. For example, the company helped a client rebuild its MQTT environment after changing its configuration despite the issue falling outside the scope of EMQ's software license. Furthermore, the company offers clients essential resources, including documentation, electronic books, whitepapers, webinars, and blogs, empowering clients with their MQTT adoption.

Client feedback from product managers, customer success teams, account managers, and its community channels (e.g., GitHub, Slack, and Discord), combined with industry trend monitoring, guides EMQ's product roadmap. This insight allows the company to evolve its platform continuously to maintain its innovative edge. Furthermore, EMQ regularly holds innovation days, where team members can present their ideas and vote on new products prioritized for development.

EMQ goes to great lengths to ensure seamless platform integration. The company's account management team meets with clients first to assess their unique needs. At this stage, the company offers a proof-of-concept (POC), and its account managers and systems engineers work together to evaluate clients' networks holistically and determine the right functionality and features to implement to best support their requirements. Post-deployment, EMQ continuously engages clients, gathering feedback and informing them of upcoming releases and their product roadmap.

EMQ has regular feature releases to ensure optimal performance and overcome clients' challenges, adding higher value to their enterprises. For example, the company has enhanced its dashboard,

"[EMQ] has enhanced its dashboard, improving the user experience; it also streamlined deployment with an easy start guide, enabling clients to leverage its solutions for a quick return on investment. As a flexible, open-source solution provider, EMQ offers over a dozen various integrations with databases and streaming platforms, enhancing customer value, satisfaction, and differentiating itself from competitors."

- Elizabeth Whynott Best Practices Research Analyst improving the user experience; it also streamlined deployment with an easy start guide, enabling clients to leverage its solutions for a quick return on investment. As a flexible, open-source solution provider, EMQ offers over a dozen various integrations with databases and streaming platforms, enhancing customer value, satisfaction, and differentiating itself from competitors.

Over the past 18 months, EMQ has also developed its clustering architecture, enabling it to achieve 100 million concurrent connections. It is also developing the MQTT over QUIC protocol and is in the process of running POCs with clients. Additionally, its dynamic cluster rebalancing feature helps large enterprise clients rebalance their clustering load without service

disruption. Furthermore, the company follows a stringent quality assurance process to align with its clients' compliance requirements and augment its solutions' reputation and credibility.

## A Promising Outlook for 2023 and Beyond

Since its founding, EMQ has grown to about 200 employees and over ten branches and offices in the US, Europe, and Asia-Pacific regions. In 2022, the company established its US presence and a global research and development center in Stockholm, Sweden.<sup>2</sup>

EMQ raised tens of millions of dollars throughout its entire Series B funding round, which it plans to use to accelerate its global expansion and technology development. The company's latest funding enables its developers to continuously improve the system's performance, stability, and scalability, delivering a high-performing and flexible MQTT platform. This focus is necessary for the company as the market experiences hyper-growth, and the industry faces integration and scaling challenges.

EMQ maintains a strong partner network. Partnerships with globally recognized enterprises, including SAP and Oracle, allow the company to integrate its MQTT platform into larger IoT solution implementations. Collaborating with large technology companies broadens EMQ's market reach and makes it easier for customers to access the EMQX platform through Google Cloud, Microsoft Azure, and AWS marketplaces. Additionally, the company is part of SAP's Strategic Alliance for Sustainable Development and Practice

<sup>&</sup>lt;sup>2</sup> <u>https://www.emqx.com/en/about</u>

with IBM, Deloitte, and other global partners, advancing its mission to deliver sustainable mission-critical IoT solutions.

EMQ has a proven track record. The company's flexible and scalable platform makes it the go-to solution as enterprises begin their MQTT journey. It is quickly gaining recognition from globally recognized companies, including HPE, VMware, Verifone, SAIC Volkswagen, and Ericsson. With over 20,000 global enterprise users, EMQ connects 100 million IoT devices at one million messages per second with sub-millisecond latency for mission-critical support. EMQ's widespread adoption and innovative platform have earned it more than 12,000 GitHub stars and over one million downloads across marketplaces.<sup>3</sup>

EMQ is experiencing rapid growth as more industries undergo digital transformation. The company's impressive growth momentum and trajectory are a testament to its customer-centric approach, revolutionary MQTT platform, and exceptional strategic partnerships, earning its clients' trust and loyalty and enabling it to capture more market share. Frost & Sullivan anticipates rapid, widespread technology adoption. The company's first-mover status strengthens its position on emerging opportunities.

## Conclusion

Technology integration is a critical success factor for the Message Queuing Telemetry Transport (MQTT) industry. Yet, with many options available, market stakeholders need to leverage the most appropriate and best technology-based solutions to optimize their market impact. With its open-source MQTT platform, EMQ Technologies Inc. (EMQ) delivers high-performing, scalable, and flexible solutions for the real-time connection, movement, and processing of large Internet of Things data from edge to cloud. The company builds on its foundational open-source MQTT platform to provide a fully supported solution suite that addresses various industries' demands. Its EMQX Enterprise platform is an ideal on-premise solution for large enterprises, including private and public cloud and private enterprise computer rooms. The EMQX Cloud solution is a fully managed cloud-native service hosted on public cloud platforms, ideal for small- to medium-sized businesses whose architectures are in the cloud and require full operation, maintenance, and monitoring management.

EMQ stands out from competitors based on its commitment to innovation, creativity, and ability to launch new solutions with far-reaching impact and application. It offers flexibility, scalability, and configurability to support seamless connectivity across various industry verticals. The company pairs its technology focus with customer-centric values, thus earning a solid reputation in the MQTT platform market.

With its strong overall performance, EMQ earns Frost & Sullivan's 2023 Global Enabling Technology Leadership Award in the MQTT platforms industry.

<sup>&</sup>lt;sup>3</sup> <u>https://www.emqx.com/en/about</u>

## What You Need to Know about the Enabling Technology Leadership Recognition

Frost & Sullivan's Enabling Technology Leadership Award recognizes the company that applies its technology in new ways to improve existing products and services and elevate the customer experience.

## **Best Practices Award Analysis**

For the Enabling Technology Leadership Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

## Technology Leverage

**Commitment to Innovation**: Continuous emerging technology adoption and creation enables new product development and enhances product performance

**Commitment to Creativity**: Company leverages technology advancements to push the limits of form and function in the pursuit of white space innovation

**Stage Gate Efficiency**: Technology adoption enhances the stage gate process for launching new products and solutions

**Commercialization Success**: Company displays a proven track record of taking new technologies to market with a high success rate

**Application Diversity**: Company develops and/or integrates technology that serves multiple applications and multiple environments

## **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

## **About Frost & Sullivan**

Frost & Sullivan is the Growth Pipeline Company<sup>™</sup>. We power our clients to a future shaped by growth. Our Growth Pipeline as a Service<sup>™</sup> provides the CEO and the CEO's growth team with a continuous and rigorous platform of growth opportunities, ensuring long-term success. To achieve positive outcomes, our team leverages over 60 years of experience, coaching organizations of all types and sizes across 6 continents with our proven best practices. To power your Growth Pipeline future, visit Frost & Sullivan at http://www.frost.com.

## The Growth Pipeline Engine™

Frost & Sullivan's proprietary model to systematically create ongoing growth opportunities and strategies for our clients is fuelled by the Innovation Generator<sup>™</sup>. Learn more.

## Key Impacts:

- **Growth Pipeline:** Continuous Flow of Growth Opportunities
- **Growth Strategies:** Proven Best Practices
- Innovation Culture: Optimized Customer Experience
- **ROI & Margin:** Implementation Excellence
- Transformational Growth: Industry Leadership

## The Innovation Generator™

Our 6 analytical perspectives are crucial in capturing the broadest range of innovative growth opportunities, most of which occur at the points of these perspectives.

## Analytical Perspectives:

- Mega Trend (MT)
- Business Model (BM)
- Technology (TE)
- Industries (IN)
- Customer (CU)
- Geographies (GE)



