FROST & SULLIVAN







GLOBAL MANUFACTURING MQTT CONNECTIVITY 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. HiveMQ excels in many of the criteria in the manufacturing MQTT connectivity platforms space.

AWARD CRITERIA	
Entrepreneurial Innovation	Customer Impact
Market Disruption	Price/Performance Value
Competitive Differentiation	Customer Purchase Experience
Market Gaps	Customer Ownership Experience
Leadership Focus	Customer Service Experience
Passionate Persistence	Brand Equity

A Market Snapshot

Digital industrial platforms apply current technology advancements in an industrial environment to improve business operations. Knowledge and expertise in communication protocols like Message Queuing Telemetry Transport (MQTT), data-related activities, and application programming are necessary for an

"HiveMQ's platform empowers its customers with high-performance applications and almost infinite scalability, allowing up to 10,000,000 concurrent connections with impressively high-speed throughput and minimal latency."

- Samantha Fisher, Best Practices Research Analyst industrial organization to transform. Since 2020, the industrial sector saw a rapid acceleration in digital transformation stemming from the emergence and spread of COVID-19 and the associated fallout. Despite this surge, existing challenges such as connectivity and interoperability issues, siloed data, a plethora of different industrial protocols (some of them very industry-specific), project complexity, deployment time, scalability, rigid architectures, and budget constraints continue to impact the market.

Frost & Sullivan estimates the digital industrial platforms market will reach \$14.21 billion in 2026, with a compound annual growth rate of about 19.6% from 2021 to 2026.¹

¹ Global Digital Industrial Platforms Growth Opportunities (Frost & Sullivan March 2022)

Shifting the Paradigm through an Innovative Solution

Founded in 2012 and headquartered in Landshut, Germany, HiveMQ developed its flagship MQTT-based messaging platform for the fast, efficient, and reliable bi-directional movement of data between devices and the cloud. The company leveraged its management team's subject matter expertise, technological

know-how, and innovation excellence to deliver a central nervous system between devices, machines, and humans. The marketdisruptive platform alleviates challenges related to industrial applications, such as predictive maintenance, manufacturing process efficiency, and remote asset management.

HiveMQ first went to market under the name dc-square, targeting the growing need for connected factories in Germany's industrial space. The company achieved significant traction as its platform, HiveMQ, was used in more than 120 companies six years after its 2013 launch. However, in 2019, the company



redefined its approach and elected to focus 100% on its platform, and thus dc-square became HiveMQ. Since then, the company has dominated the connected car industry in Germany, with most German vehicles possessing HiveMQ's technology and processes inside. On the manufacturing front, HiveMQ is currently working with many OEMs to help modernize their factories and improve manufacturing efficiency. Unlike many traditional startups, the company has seen success with large enterprises, such as BMW and Audi, both of which the company has worked with since 2015. Thus, as of 2022, HiveMQ has over 130 industrial customers worldwide. More importantly, the company leverages six key engineering principles to deliver best-in-class solutions to the market: reliability, scalability, security, observability, flexibility, and simplicity.

HiveMQ leverages its management team's strategic vision and innovation excellence to create its marketdisruptive solutions. The company differentiated early with its flagship MQTT broker and client-based messaging platform, enabling quick bidirectional data sharing between systems and devices. HiveMQ's platform empowers its customers with high-performance applications and almost infinite scalability, allowing up to 10,000,000 concurrent connections with impressively high-speed throughput and minimal latency. Thus, the company enables its platform to grow with the customer.

More importantly, since the initial 2013 launch, the company has continued building out its technology to address new industry challenges and customer needs. For example, HiveMQ released two products (HiveMQ Cloud and HiveMQ Swarm) in 2021 that further demonstrate its technological finesse compared to other vendors.

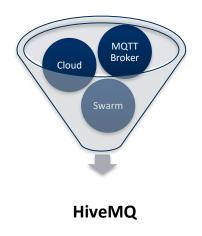
- **HiveMQ Cloud** is a complimentary, fully-managed, production-ready MQTT cloud service that allows up to 100 devices to connect to managed MQTT services. The cloud product also supports the entire MQTT specification, which many competing platforms do not offer.
- **HiveMQ Swarm** is a capacity and stress testing solution designed to improve resiliency in Internet of Things (IoT)-based systems. The solution discovers bottlenecks via end-to-end testing and provides a clustered test environment to distribute workloads to worker nodes appropriately.

Additionally, HiveMQ is active in the Sparkplug industry initiative process, which is a new MQTT-built specification that overcomes challenges associated with data interoperability in industrial automation and smart manufacturing. The company expects to make current solutions obsolete and shake up the competition by delivering a best-of-breed MQTT broker to the market. Frost & Sullivan commends HiveMQ for its ongoing innovation and customer commitment and recognizes these attributes as strong catalysts for future growth and increased market share.

A Customer-centric Approach Driving Unmatched Client Experience

With its customer-centric corporate philosophy, HiveMQ operates on the central tenet that its success depends on customer satisfaction. This philosophy permeates the company's daily practices. The company-built customer value into its DNA and, as such, maintains close contact with customers

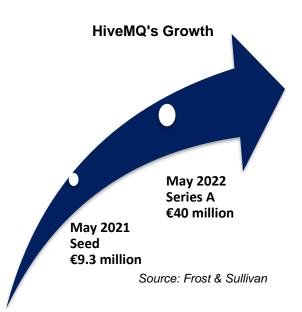
throughout the product lifecycle. Building and maintaining these close relationships provide HiveMQ a lifeline to current and emerging customer needs and market trends. On the customer interaction front, HiveMQ relies on teams "in the field," such as customer success and sales, to report on growing needs. It also provides a "Feature Request" through its advanced support, which directly feeds into HiveMQ's research and development (R&D) pipeline. For example, HiveMQ Swarm is a feedback-driven product now available in the company's portfolio. Additionally, the company has regular, bi-weekly or monthly, customer check-ins, with added emphasis when a customer first starts leveraging HiveMQ's product. HiveMQ offers around-the-clock global support with a service-level agreement of less than one hour and has



internal processes designed to address any production issue in a timely and efficient manner. The company employs various feedback mechanisms to gauge customer satisfaction with its products and services, such as the Net Promoter Score and an internal scoring system. A support portal enables customers to provide feedback on HiveMQ's products, service, and support with one-to-five stars; the company currently sits between 4.3 and 5.0 stars, demonstrating strong customer satisfaction.

Positioned for Growth

In May 2022, HiveMQ announced it raised €40 million in a Series A funding round, which it plans to use to accelerate its R&D in HiveMQ Cloud and its ecosystem while also expanding its go-to-market teams. Combined with its previous 2021 seed round, HiveMQ's total positions the company to surge forward in the market. Serving as a testament to the company's high client satisfaction rate, HiveMQ acquires many of its customers through word-ofmouth accolades, fueled by its exceptional customercentric design, technological performance, and technical expertise. The company's go-to-market strategy involves focusing on key industries with business and technical value propositions that are relevant to the industrial sector. It also leverages a



content marketing strategy that enables it to rank high for key Google search terms and invests in creating content for its target markets. This approach helps build brand awareness and affinity at the start of the customer journey. Over the past ten years, the company has experienced high customer acquisitions, with large enterprises like Daimler, Honeywell, and Siemens leveraging HiveMQ's technology. In 2021, the company established significant partnerships and collaborations with leading technology communications firms, such as Vodafone. As a result, HiveMQ generated the fastest revenue growth in the manufacturing MQTT connectivity platforms market.

Moreover, HiveMQ leverages strategic partnerships to provide a solid end-to-end product. The company forms strategic and robust connections with system integrators, resellers, component manufacturers, database providers, and cloud-based application and software application infrastructure providers. Additionally, the company offers flexible power extensions to its product that enables external

"The company's impressive growth momentum and trajectory are a testament to its customer-centric approach, revolutionary technology, and exceptional operational strategies, earning its clients' trust and loyalty and enabling it to capture more market share."

- Sebastián Trolli, Senior Industry Analyst applications to connect to HiveMQ. The company continues to invest resources in key standards organizations to propel key enablement specifications, like Sparkplug, that solve real challenges and require an MQTT broker. HiveMQ achieved its prominent status as an industry leader through the relentless pursuit of excellence. Its laser-like focus on becoming the industry standard for industrial IoT platforms through continuous innovation has led to strong institutional investors, a robust portfolio, and significant growth overall. The company's impressive

growth momentum and trajectory are a testament to its customer-centric approach, revolutionary technology, and exceptional operational strategies, earning its clients' trust and loyalty and enabling it to capture more market share.

Conclusion

Despite the accelerated digital transformation brought on by the COVID-19 pandemic, industrial verticals continue to encounter challenges such as technology gaps, interoperability issues, siloed data, and budget constraints. Overall, HiveMQ bridges these market gaps while disrupting entrenched market players. The company based its flagship platform on the full Message Queuing Telemetry Transport (MQTT) standard, enabling it to achieve fast, efficient, and reliable bidirectional movement of data between devices and the cloud. Moreover, HiveMQ streamlines growth as its platform offers near-infinite scalability, allowing up to 10,000,000 concurrent connections with impressively high-speed throughput and minimal latency. The company's innovation prowess continues to deliver best-in-class products, such as HiveMQ Cloud and Swarm, geared toward end-to-end customer success. Furthermore, HiveMQ incorporates customer-centric strategies, building strong brand equity and elevating its leadership status in the MQTT connectivity platforms market.

For its strong overall performance, HiveMQ earns Frost & Sullivan's 2022 Global Entrepreneurial Company of the Year Award in the manufacturing MQTT connectivity platforms industry.

What You Need to Know about the Entrepreneurial Company of the Year Recognition

Frost & Sullivan's Entrepreneurial Company of the Year Award recognizes the best up-and-coming, potentially disruptive market participant.

Best Practices Award Analysis

For the Entrepreneurial Company of the Year Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

Entrepreneurial Innovation

Market Disruption: Innovative new solutions have a genuine potential to disrupt the market, render current solutions obsolete, and shake up competition

Competitive Differentiation: Strong competitive market differentiators created through a deep understanding of current and emerging competition

Market Gaps: Solution satisfies the needs and opportunities that exist between customers' desired outcomes and their current market solutions

Leadership Focus: Company focuses on building a leadership position in core markets and on creating stiff barriers to entry for new competitors

Passionate Persistence: Tenacity enables the pursuit and achievement of seemingly insurmountable industry obstacles

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

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- **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. Learn more.

Analytical Perspectives:

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



