# 20 COMPANY OF THE YEAR Driving impact across the customer value chain

RECOGNIZED FOR BEST PRACTICES IN THE GLOBAL MOBILE IOT PLATFORMS INDUSTRY

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## **Best Practices Criteria for World-class Performance**

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each recognition category before determining the final recognition recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. Cisco excels in many of the criteria in the global mobile IoT platforms space.

RECOGNITION CRITERIA				
Visionary Innovation & Performance Customer Impact				
Addressing Unmet Needs	Price/Performance Value			
Visionary Scenarios Through Megatrends	Customer Purchase Experience			
Leadership Focus	Customer Ownership Experience			
Best Practices Implementation	Customer Service Experience			
Financial Performance	Brand Equity			

## The Transformation of the Mobile IoT Industry

The mobile Internet of Things (IoT) market is undergoing significant transformation as global operators phase out legacy second generation and third generation (3G) networks in favor of more advanced cellular technologies like fourth generation (4G), Narrowband IoT (NB-IoT), Long Term Evolution for Machines (LTE-M), and fifth generation (5G). This shift is accelerating the migration of IoT connections to next-generation infrastructure, particularly in regions like Asia-Pacific (APAC), where NB-IoT has seen explosive growth, and in North America and parts of Europe, where LTE-M adoption is gaining ground. The global rollout of 5G, commercially available in advanced markets across these regions, also contributes to this evolution. Large telecommunications companies offer connectivity services and build ecosystems with cloud providers and hardware partners to support innovations such as 5G Reduced Capability (RedCap) and non-terrestrial networks (NTN).

Frost & Sullivan anticipates 5G RedCap to scale in public and private networks in the next five years, leveraging its capabilities to balance performance and cost efficiency for massive IoT applications. Reduced bandwidth, lower latency, high data rates, and improved power consumption support this expansion. In 2025, the trend toward hybrid terrestrial and NTNs combining cellular and satellite integration is gaining momentum, driven by the rise of direct-to-cell communication services and partnerships between satellite and mobile network operators (MNO). With the Third-Generation Partnership Project initiatives to integrate 5G New Radio technology, NB-IoT, and LTE-M for NTNs, technology convergence and large-scale IoT deployments will grow. The support of major partners is critical in enabling satellite operators and telecommunication companies to integrate their networks. For

example, Cisco's Mobility Services Platform for NTN enables integration with an open ecosystem and provides value-added services. It supports NB-IoT, 5G New Radio (NR), voice and messaging, and offers satellite-specific vertical integration across use cases, including ports and connected vehicles, service activation, and subscriber identity module (SIM) management.

"Cisco's sustained growth in recent years reflects its ability to address unmet customer needs through high-quality, scalable solutions that drive loyalty and increased consumption. The company maintains a remarkably low attrition rate, underscoring strong customer retention and expanding usage across its platform."

## - Silvana Rulet Best Practices Research Analyst

Several factors are driving the market's rapid expansion. The rise of low-power wide-area networks (LPWAN) like NB-IoT and LTE-M enables the cost-efficient deployment of massive IoT solutions for applications such as smart metering, asset tracking, and fleet management. Enterprise investment in IoT, particularly within the automotive, logistics, and industrial sectors, is also pushing demand for reliable 4G and emerging 5G connectivity. In the medium term, multi-access edge computing and electronic SIM technologies will enable ultra-low latency use cases in

telehealth, industrial automation, and augmented reality. Strong growth projections reflect these trends. Frost & Sullivan expects cellular IoT connections to grow from 3.82 billion in 2024 to 7.27 billion in 2030, driven by significant enterprise investment in IoT, particularly in the automotive, transportation, and logistics verticals. Additionally, the expansion of big markets such as the United States (US), China, and India, and the growth of global IoT hyperscalers, including MNOs and mobile virtual network operators, influences this evolution.

Despite this positive outlook, several challenges threaten to restrain growth. As the number of IoT devices increases, connectivity and management become more complex. In addition, companies are requiring cloud-native platforms for the visualization of IoT data and infrastructure to facilitate optimized decision making. Furthermore, large-scale IoT deployments are becoming more vulnerable to security risks and cyberattacks. Thus, companies require security features in IoT platforms and managed cybersecurity services to monitor threats in real-time, respond, remediate, and ensure network security.

The commoditization of connectivity services puts downward pressure on average revenue per unit, even as adoption rises. Underdeveloped vertical ecosystems, lingering post-pandemic supply chain disruptions, and competition from low-cost alternatives such as Wi-Fi and Bluetooth represent additional obstacles. Moreover, economic uncertainty in key markets, including the US, England, and China, may slow investment in IoT infrastructure. Although 5G adoption for IoT use cases has lagged in certain regions like the European Union, activity is accelerating worldwide. For instance, Cisco has played a leading role in launching 5G Standalone (SA) capabilities for connected car original equipment manufacturers (OEMs) in North America and has demonstrated its 5G SA capabilities in APAC, signaling growing momentum in select verticals.

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 $<sup>^{1}</sup>$  "Mobile World Congress, 2025, Seven Key Takeaways", Frost & Sullivan, May 2025

Frost & Sullivan estimates continuous growth in the mobile IoT market, albeit unevenly across regions and verticals. The dominance of NB-IoT in APAC and LTE-M in Western markets suggests a bifurcated global landscape. At the same time, 4G and cellular LPWANs continue to bridge the gap in less developed regions. As 5G matures and technologies like RedCap and MEC become more accessible, the market will shift toward more data-intensive and latency-sensitive applications. The coming years are critical in determining how industry players navigate ecosystem fragmentation effectively and monetize the evolving IoT landscape.

#### Cisco: A Trailblazer's Path

Amid the ongoing challenges and rapid shifts in the mobile IoT landscape, Cisco maintains its position as a clear leader. The company combines deep networking expertise with a flexible, cloud-native platform that enables operators and enterprises to navigate market fragmentation, accelerate time-to-market, and deliver reliable IoT services at scale.

With decades of demonstrated leadership in networking and connectivity, Cisco distinguishes itself through its strategic approach to managing complexity, enabling scalable, secure, and adaptable IoT deployments across a fragmented ecosystem. Rather than attempting to eliminate fragmentation, the company embraces it, offering an agnostic, modular architecture that supports diverse device ecosystems, robust security, and seamless integration.

## **Demonstrated Leadership through Continuous Innovation**

Cisco leads the evolving telecommunications and IoT landscape with a future-focused strategy grounded in software-defined architecture, generation-resilient design, and full-stack evolution. These principles enable the company to adapt quickly and stay competitive as digitization accelerates across industries, resulting in a strong financial performance. For example, Cisco grew its managed IoT devices from 197 million as of January 2022 to 284 million as of July 2025.

Cisco aligns its strategy with broader industry megatrends, especially the need for seamless integration across fragmented ecosystems and geographies. Rather than building siloed technologies, the company delivers adaptable, replicable, and scalable solutions that fit various use cases and regional requirements. For instance, Cisco leads the automotive vertical with over 100 million connected vehicles<sup>2</sup> and pioneered 5G standalone support for ultra-low latency and complete end-to-end management. Beyond automotive, the company's technology supports large-scale deployments in smart metering, fleet telematics, security, Fixed Wireless Access and retail. Across all verticals, Cisco supports over 32,000 enterprise customers<sup>3</sup> and continues to drive growth by meeting real-world demands with high-performance, scalable solutions.

Cisco's leadership also recognizes the complex and prolonged transition phases in technology adoption, such as the move toward RedCap NR and private 5G networks. These evolving technology stacks contribute to a slower-moving but inevitable transformation. For the company, leadership involves proactively identifying key verticals with repeatable business models and focusing resources on working

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<sup>&</sup>lt;sup>2</sup> https://www.cisco.com/c/en/us/solutions/collateral/internet-of-things/iot-control-center/iot-connect-vehicle-uc.html#CiscoloTControlCenter

<sup>&</sup>lt;sup>3</sup> Ibid.

collaboratively with ecosystem partners to co-create integrated, end-to-end solutions that are robust and agile.

## Building a Vertically Integrated and Flexible Stack

A significant element of Cisco's best practice and innovation is its vertically integrated technology stack, spanning from packet core infrastructure up to application programming interface (API) layers and enterprise dashboards. Unlike rigid end-to-end solutions, the company's stack is decomposable and highly modular, allowing customers and partners to pick and choose layers that fit their existing infrastructure and specific use cases. This flexibility reduces implementation hurdles and fosters innovation by enabling integration with third-party systems or customer-specific architectures.

While many competitors rely on proprietary standards or closed frameworks that limit integration paths, Cisco's agnostic and interoperable design empowers customers to evolve at their own pace and avoid vendor lock-in. Each component of the stack is independently scalable and capable, reflecting the company's understanding that various industries and geographies have diverse requirements. This modular approach future-proofs the system by allowing teams to incorporate new technologies without requiring a redesign of the entire stack.

Cisco's leadership also places a strong emphasis on reducing operational friction, especially for Mobile Network Operators and service providers. A critical insight from the company's experience is that even the best capabilities in the world will fail to gain traction if integration into legacy systems (like BSS, OSS, and networks) is overly complex or time-consuming. Cisco invests heavily in modernizing integration capabilities, adopting industry standards such as TM Forum APIs, which service providers are increasingly standardizing.

This friction reduction includes offering pre-integrated, fulfillable services that bundle connectivity and security natively, allowing customers to activate secure connections instantly and then add granular capabilities on top as needed. Such pre-integration accelerates time-to-market and lowers the operational burden for service providers.

#### Future-Ready Design for Scalability and Security

Cisco engineers its architecture to ensure flexibility and ease of integration and to support secure, large-scale operations. The system enables seamless operation, whether actions originate from human users or automated API calls, due to its machine-friendly design. This choice supports the explosive growth of IoT devices, which can range from millions of low-cost, low-intelligence sensors to complex, high-data devices, such as connected vehicles.

Cisco is an industry leader in supporting TM Forum (TMF) based APIs, empowering a service catalog-driven approach that enables scalable and flexible monetization of value-added mobility services across diverse vertical markets and geographies.

By addressing security concerns at the cloud and platform level, Cisco mitigates inherent risks to less intelligent devices, ensuring a secure footprint across the IoT ecosystem. The architecture also caters to the increasing complexity and volume of data generated by intelligent devices, offering enterprises tools to manage various device types and communication pathways efficiently.

Moreover, Cisco strengthens its leadership advantage through an extensive global network footprint and a well-established partner ecosystem. This network effect enables Cisco to deliver scalable services rapidly in multiple countries and verticals. It also facilitates collaboration with pre-integrated partners and vertical specialists who help extend Cisco's reach and solution depth.

Cisco's sustained growth in recent years reflects its ability to address unmet customer needs through high-quality, scalable solutions that drive loyalty and increased consumption. The company maintains a remarkably low attrition rate, underscoring strong customer retention and expanding usage across its platform. Growth metrics reveal a dual surge, not only in the number of connected endpoints but also in consumption volume, including bandwidth and API usage, with some categories experiencing growth rates exceeding 25% and even up to 80%. Cisco's diversified market approach, spanning high-scale segments like connected cars alongside more fragmented markets, fuels this momentum. This robust

"Unlike rigid end-to-end solutions, the company's stack is decomposable and highly modular, allowing customers and partners to pick and choose layers that fit their existing infrastructure and specific use cases. This flexibility reduces implementation hurdles and fosters innovation by enabling integration with third-party systems or customer-specific architectures."

- Renato Pasquini Vice-President of Research, IoT & Edge performance contributes positively to the company's overall profitability, providing the financial strength to continuously invest in innovation.

Together, these leadership principles represent a holistic approach that combines technological innovation, ecosystem collaboration, customer-centric design, and strategic vertical focus. This model enables Cisco to stay ahead of industry fragmentation, evolving standards, and market transitions, sustaining its competitive edge in a fast-moving digital economy.

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

Cisco's approach to customer engagement and co-innovation reflects a deep understanding of the complexity and fragmentation inherent in today's IoT and telecommunications ecosystems. Recognizing that market fragmentation persists, the company does not seek to control or eliminate it but rather to embrace and abstract from it through a highly agnostic and flexible platform design.

The IoT device ecosystem is broad, diverse, and fractured. This fragmentation ranges from millions of inexpensive, less intelligent sensors to highly advanced devices, such as connected cars, which produce vast amounts of data. Cisco acknowledges this fragmentation as a long-term reality and focuses on enabling its platform to cater to various devices, manufacturers, and use cases without bias.

By building a platform that operates as an abstracted layer, Cisco ensures that customers and service providers can easily manage disparate devices and networks. This abstraction enables customers to adopt solutions from multiple vendors while enjoying a unified management experience through Cisco's platform. It also protects customers' investments by facilitating incremental adoption rather than forcing wholesale platform replacements.

<sup>&</sup>lt;sup>4</sup> Interview with Frost & Sullivan, May 2025

#### Developer Ecosystem as a Catalyst for Co-Innovation

A cornerstone of Cisco's customer engagement strategy is its robust developer ecosystem. The company provides a developer portal, a rich set of APIs, and a consent framework that allows third-party developers to build value-added services on top of its core connectivity and security capabilities. This open innovation model enables a broad range of ecosystem players (e.g., device manufacturers, software vendors, and service providers) to contribute innovative solutions that extend the platform's functionality.

By empowering third parties to participate, Cisco accelerates solution development across verticals, including connected cars, energy management, healthcare, and education. The developer ecosystem lowers entry barriers for innovation, drives diverse solution offerings, and helps service providers expand their value chains by delivering enhanced, customized services to end customers.

Cisco's platform reduces friction in multiple dimensions for service providers. It offers pre-integrated, fulfillable services that bundle connectivity and security, allowing providers to launch offerings quickly without having to build everything from scratch. The platform also supports policy federation across multiple network types (wired, Wi-Fi, cellular), enabling enterprises to apply consistent management policies across their entire device ecosystem.

This flexibility streamlines operations for enterprises managing hundreds of millions of devices with varying levels of intelligence and security requirements. For service providers, it means they can focus on creating differentiated services tailored to their customers' unique needs rather than wrestling with complex infrastructure integration challenges.

#### Security as a Core Differentiator in Customer Solutions

Given the rise of cheap, less intelligent devices that present security vulnerabilities, Cisco places a premium on embedding security at the cloud and platform levels. This approach ensures that robust security measures are extended to even the most resource-constrained devices, thereby reducing risk for enterprises and service providers alike.

For more complex devices generating large volumes of data, such as connected cars, Cisco's platform provides sophisticated data management and communication pathways, allowing customers to harness data value securely and efficiently. This dual focus on security across the spectrum of device complexity is a key differentiator in the company's customer engagement.

Additionally, Cisco's strategy is aligned tightly with a vertical market focus, working closely with partners who bring deep industry expertise and pre-integrated solutions. This focus enables the company to address industry-specific pain points and regulatory requirements effectively, creating tailored offerings in healthcare, energy, education, connected vehicles, and more.

By adopting a partner-centric approach, Cisco fosters a collaborative ecosystem where fragmentation becomes an asset rather than a liability. Customers benefit from a rich portfolio of interoperable solutions that reduce deployment risks and accelerate innovation cycles.

Frost & Sullivan applauds Cisco's pragmatic response to market challenges and its commitment to coinnovation. The company prioritizes interoperability, developer enablement, and vertical alignment, which allows it to deliver meaningful value to customers navigating complex, fast-evolving IoT environments.

## Conclusion

Cisco's sustained leadership in the evolving Internet of Things (IoT) and telecommunications space stems from its future-ready, software-defined, and modular platform designed to integrate flexibly across fragmented ecosystems while addressing the evolving needs of global customers. Overall, the company addresses these unmet needs with a strong leadership focus that incorporates customer-centric strategies and exemplifies best practice implementation. Unlike many competitors that rely on proprietary standards, Cisco's open, interoperable architecture, strong partner ecosystem, and vertical market focus enable scalable, secure, and rapidly deployable solutions that drive customer loyalty and high-consumption growth across industries. The company remains a trusted partner, earning a reputation for offering the overall best in the mobile IoT platforms industry.

With its strong overall performance, Cisco earns Frost & Sullivan's 2025 global Company of the Year award in the mobile IoT platforms industry.

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

Frost & Sullivan's Company of the Year Recognition is its top honor and recognizes the market participant that exemplifies visionary innovation, market-leading performance, and unmatched customer care.

## **Best Practices Recognition Analysis**

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

## **Visionary Innovation & Performance**

Addressing Unmet Needs: Customers' unmet or under-served needs are unearthed and addressed to create growth opportunities across the entire value chain

## **Visionary Scenarios Through Megatrends:**

Long-range scenarios are incorporated into the innovation strategy by leveraging mega trends and cutting-edge technologies, thereby accelerating the transformational growth journey

**Leadership Focus**: The company focuses on building a leadership position in core markets to create stiff barriers to entry for new competitors and enhance its future growth potential

**Best Practices Implementation**: Best-in-class implementation is characterized by processes, tools, or activities that generate consistent, repeatable, and scalable success

**Financial Performance**: Strong overall business performance is achieved by striking the optimal balance between investing in revenue growth and maximizing operating margin

## **Customer Impact**

**Price/Performance Value**: Products or services offer the best ROI and superior value compared to similar market offerings

**Customer Purchase Experience**: Purchase experience with minimal friction and high transparency assures customers that they are buying the optimal solution to address both their needs and constraints

**Customer Ownership Excellence**: Products and solutions evolve continuously in sync with the customers' own growth journeys, engendering pride of ownership and enhanced customer experience

**Customer Service Experience**: Customer service is readily accessible and stress-free, and delivered with high quality, high availability, and fast response time

**Brand Equity**: Customers perceive the brand positively and exhibit high brand loyalty, which is regularly measured and confirmed through a high Net Promoter Score®

## **Best Practices Recognition Analytics Methodology**

## **Inspire the World to Support True Leaders**

This long-term process spans 12 months, beginning with the prioritization of the sector. It involves a rigorous approach that includes comprehensive scanning and analytics to identify key best practice trends. A dedicated team of analysts, advisors, coaches, and experts collaborates closely, ensuring thorough review and input. The goal is to maximize the company's long-term value by leveraging unique perspectives to support each Best Practice Recognition and identify meaningful transformation and impact.

#### VALUE IMPACT

STEP		WHAT	WHY
1	Opportunity Universe	Identify Sectors with the Greatest Impact on the Global Economy	Value to Economic Development
2	Transformational Model	Analyze Strategic Imperatives That Drive Transformation	Understand and Create a Winning Strategy
3	Ecosystem	Map Critical Value Chains	Comprehensive Community that Shapes the Sector
4	Growth Generator	Data Foundation That Provides Decision Support System	Spark Opportunities and Accelerate Decision-making
5	Growth Opportunities	Identify Opportunities Generated by Companies	Drive the Transformation of the Industry
6	Frost Radar	Benchmark Companies on Future Growth Potential	Identify Most Powerful Companies to Action
7	Best Practices	Identify Companies Achieving Best Practices in All Critical Perspectives	Inspire the World
8	Companies to Action	Tell Your Story to the World (BICEP*)	Ecosystem Community Supporting Future Success

\*Board of Directors, Investors, Customers, Employees, Partners

## **About Frost & Sullivan**

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## The Growth Pipeline Generator™

Frost & Sullivan's proprietary model to systematically create ongoing growth opportunities and strategies for our clients is fuelled by the Innovation Generator $^{\text{TM}}$ .

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#### **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:**

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

