# FROST & SULLIVAN

# 2024 NEW PRODUCT INNOVATOR

IN THE NORTH
AMERICAN ENTERPRISE
WIRELESS NETWORKING
INDUSTRY

FROST & SULLIVAN

2024

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. RUCKUS Networks excels in many of the criteria in the enterprise wireless networking space.

AWARD CRITERIA	
New Product Attributes	Customer Impact
Match to Needs	Price/Performance Value
Reliability	Customer Purchase Experience
Quality	Customer Ownership Experience
Positioning	Customer Service Experience
Design	Brand Equity

# **Industry Overview**

"Successful networking in today's landscape demands a multifaceted approach that caters to the diverse needs of both IT professionals and line-of-business owners. Providing a rich experience for IT involves empowering them with comprehensive insights and analytics that go beyond traditional network performance metrics."

-Vikrant Gandhi Vice President, Research Networking technologies play a fundamental role in assisting contemporary businesses to achieve their productivity, efficiency, and sustainability goals in a forward-looking manner. In today's dynamic work environments, employees are no longer bound to traditional wired connections. Work spans offices, homes, and coffee shops—it even happens on the move. This evolution underscores the critical importance of wireless connectivity, enabling seamless communication, collaboration, and productivity regardless of physical location.

According to Frost & Sullivan analytics, global IoT connections will soar to approximately 75 billion by 2027. These devices are seamlessly integrated into business workflows, serving to support, enhance, or replace traditional operations through data-driven and context-aware decision-making within a rules-based framework. Many of these devices are mission-critical, relying heavily on network-enabled computing to perform functions essential for their operations.

A significant portion of these devices is either mobile or placed in remote or challenging-to-access locations, posing a substantial difficulty for connection using solely wired connectivity options.

Modern advancements, such as AI, virtualization, cloud management, and self-healing capabilities, are poised to revolutionize business performance through next-generation networking.

- Al-driven Intelligence and Operations (AIOps): Networks can leverage AI to optimize traffic flow, predict and prevent outages, and fortify security measures. IT personnel can focus on strategic initiatives rather than mundane maintenance activities.
- Agile Resource Management: Virtualization enables flexible allocation of resources, allowing networks to seamlessly adapt to dynamic business needs.
- **Centralized Command and Control:** Cloud-based network management simplifies operations and boosts scalability by centralizing control and monitoring.
- **Always-on Resilience:** Self-healing capabilities ensure uninterrupted service by automatically detecting and resolving network issues.

Beyond these core functionalities, next-generation networks should excel in the following areas:

- Effortless Evolution: Seamless adaptation to ever-changing business demands is crucial.
- **Deployment Anywhere:** Endpoint deployments should be successful in challenging environments and highly mobile scenarios.
- Security First: Unwavering security posture is paramount for converged networks.
- **Simplified Management:** Ease of management simplifies operations and streamlines network control.
- **Customization is Key:** A tailored approach, designed for a specific industry and operational environment, ensures networking solutions align precisely with business objectives, maximizing efficiency and competitive edge.

Successful networking in today's landscape demands a multifaceted approach that caters to the diverse needs of both IT professionals and line-of-business owners. Providing a rich experience for IT involves empowering it with comprehensive insights and analytics that go beyond traditional network performance metrics. By offering business intelligence rather than just network intelligence, line-of-business owners can make informed decisions that drive positive outcomes for the organization. This shift allows stakeholders to align networking initiatives with overarching business objectives, facilitating innovation, growth, and competitive advantage.

RUCKUS Networks, part of CommScope and its portfolio of networking solutions, is the leading provider of enterprise networking hardware and software products. Every element of RUCKUS's portfolio—wireless access points, switches, network control and management offerings, and cloud services and software—is designed to serve the needs of RUCKUS's nine industry verticals of focus through its purpose-driven networking approach. This approach has established RUCKUS Networks as an industry leader.

# **New Product Attributes**

RUCKUS carefully focuses on nine industry verticals (or segments) that demand top-tier performance from their networking deployments. It delves deep into the nuance of each, understands their use cases, and

ensures that its products and partner solutions address their needs. The company leads in delivering best-of-breed wireless access points (AP) that perform flawlessly in challenging environments characterized by peak periods of extreme endpoint density, high interference levels, dynamic endpoint movement patterns, varied data consumption patterns, and extreme reliability needs. For the past six years, RUCKUS has doubled down on providing purpose-driven networking solutions through the continuous integration of software capabilities and features across the company's diverse offerings, which are available for on-prem and cloud deployments. For RUCKUS being purpose-driven means concentrating on markets exhibiting these characteristics and aligning its solution development and go-to-market strategies accordingly. By addressing the unique challenges that customers face in real-time environments, RUCKUS ensures that its network solutions serve as the platform enabling their desired business outcomes.

RUCKUS firmly believes that achieving the optimal experience in demanding environments necessitates world-class infrastructure complemented by AI. With RUCKUS AI—a product evolved from RUCKUS Analytics—the company delivers service assurance for IT and business intelligence for line-of-business stakeholders. RUCKUS AI also powers the built-in AI engine for the RUCKUS One converged network assurance and business intelligence platform. Users can leverage RUCKUS AI's benefits without necessarily transitioning network management to the cloud, which is very useful because operating at the speed of business is vital for supporting the connectivity requirements of AI-driven enterprises. These organizations demand top-notch coverage, capacity, service reliability, and comprehensive reporting to realize their vision of becoming AI-first organizations—all of which the company excels at providing.

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**Exhibit: RUCKUS AI User Interface** 

Source: RUCKUS Networks

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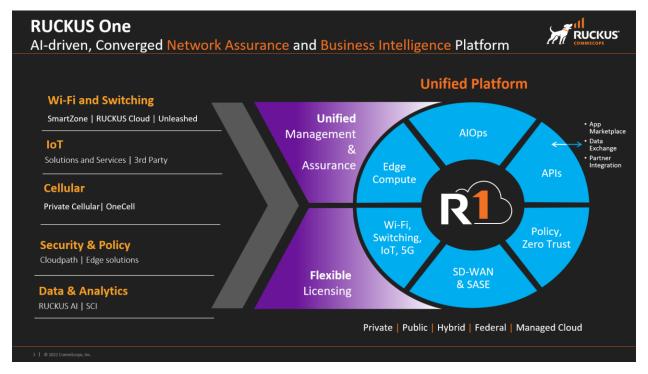
## **Exhibit: RUCKUS One User Interface**

Source: RUCKUS Networks

Frost & Sullivan believes that RUCKUS stands out thanks to its ability to support a diverse range of environments, whether they are legacy setups with private cloud deployments or large enterprises hosting RUCKUS SmartZone clusters in their data centers. Some of the most significant RUCKUS AI implementations are in industries where connectivity is mission-critical, enabling network operations teams to rely on RUCKUS AI to automate anomaly detection, prioritization, and remediation recommendation thereby significantly reducing mean time to resolution and optimization using AI-driven radio resource management. This becomes especially vital amid significant industry shifts, such as the introduction of new spectrum bands and the transition to Wi-Fi 7. By leveraging data science, RUCKUS has successfully mitigated complex issues, such as co-channel interference, maximizing the value of RUCKUS investments even in suboptimal network designs.

Al alone cannot transform poor Wi-Fi into good Wi-Fi: successful deployments must rely on a solid networking foundation, precisely what RUCKUS provides. Competitors have indeed integrated Al into their systems. However, in some instances, Al is deployed to offset deficiencies in networking hardware expertise, leading to performance issues in demanding environments. The RUCKUS One cloud-management platform for multi-access public and private networks has RUCKUS Al at its core, which is one of RUCKUS's main differentiators. Networks undergo constant change due to many factors, such as user behavior, device connectivity, and environmental variables (including interference and noise levels). The company's portfolio offers monitoring, assurance, and intelligence solutions designed to improve the performance, reliability, and security of corporate networking while streamlining operations and resource utilization. These solutions ultimately lead to enhanced end user experiences, superior service delivery, and increased customer satisfaction, and help transform enterprise IT into a service-level agreement driven organization.

# **Exhibit: RUCKUS One Capabilities**



Source: RUCKUS Networks

## **Customer Impact**

RUCKUS excels in meeting the demands for top-tier networking deployments, particularly in large-scale environments where security and proactive network management are paramount. To provide the best possible value, the company has a strategy of providing network management and control architectures (RUCKUS One, RUCKUS SmartZone, RUCKUS Unleashed) tailored to meet the diverse requirements of organizations, regardless of their size or type. By providing industry-leading options for network control and management, RUCKUS enables customers to deploy the ideal solution tailored to their specific requirements, limitations, and technological readiness. The company, along with their channel partners, collaborates closely with its clients to understand their networking requirements and offers diverse resources to guide them in identifying the most suitable solution for managing their connectivity deployments effectively. Moreover, RUCKUS ensures that customers have a clear roadmap for upgrading solutions as their deployments expand in scale and complexity. Several RUCKUS customers—despite serving thousands of users—have been able to manage their entire networks with lean IT teams that can provision, manage, optimize, and troubleshoot the entire network through web dashboards or a native mobile application. This helps them lower the cost of network operations and contributes to improving business margins.

Performance, simplicity, adaptability, and interoperability are the key advantages of RUCKUS's solutions and its main value proposition. The company has maintained a steady pace of innovation to improve the product experience for IT and other stakeholders, such as line-of-business owners and the end user. Al-

"Performance, simplicity, adaptability, and interoperability are the key advantages of RUCKUS's solutions. The company has maintained a steady pace of innovation to improve the product experience for IT and other stakeholders such as line-of-business owners and the end user."

- Vikrant Gandhi Vice President, Research enabled enterprise-wide automation, network assurance, and business intelligence that enable customers to determine networking impact on business KPIs have helped position RUCKUS as a preferred vendor for enterprise wireless networking.

RUCKUS is a channel-driven company that establishes strategic channel partnerships to ensure optimum sales coverage. However, RUCKUS also has a managed service offering. The company's approach to managed services is unique because it prioritizes avoiding conflicts with partners. RUCKUS's managed services are white-labeled solutions, ensuring that its partners' brands take precedence in the

marketplace. These primarily include telcos and cable operators. However, RUCKUS is not competing with its traditional channel because, in that segment, the opportunity lies in leveraging the managed services capability to enhance partners' existing services. For example, while the channel partners excel in IT technology and engage with IT buyers, they may lack the expertise to address the IoT or private networking needs of the facilities or engineering teams. RUCKUS's managed services can complement the channel offerings while partners undergo upskilling initiatives. As a result, RUCKUS enhances the capabilities of its channel partners through a build-and-operate or a build-operate-transfer engagement model.

Continuous improvements in product portfolio and service delivery approaches have helped RUCKUS maintain a competitive edge in the enterprise wireless networking markets. For example, RUCKUS became the first Tier-1, global industry participant to offer Al-driven Wi-Fi 7 AP in 2023, delivering significantly improved throughput, latency, reliability, security, quality of services support, and integrated IoT capabilities. Significant enhancements in AI capabilities, differentiated network-as-a-service approach tailored to help channel partners support innovative pricing models, and converged network management capabilities for wired, wireless, and IoT networks from a single platform have helped customers and partners future-proof their deployments and generate maximum value from their technology investments.

Because enterprise networking needs evolve to encompass operational technology (OT) and IoT devices, the comprehensive portfolio of RUCKUS Networks—as part of CommScope—uniquely positions it to support diverse enterprise deployments. With expertise spanning IT, IoT and OT deployments across wired and wireless networks, RUCKUS offers an integrated approach to networking that seamlessly bridges the gap between traditional corporate computing devices and emerging technologies. This broad portfolio ensures that enterprises can rely on RUCKUS to provide holistic solutions tailored to their evolving networking requirements. All this ties into helping customers drive business outcomes by leveraging RUCKUS's capabilities to onboard the unique devices found in their environments. Additionally, RUCKUS prioritizes delivering the highest quality of service in these environments, especially when faced with applications that place significant demands on the network. The capability to adapt to the constantly evolving demands of enterprises, coupled with the assurance that RUCKUS is readily available to facilitate

connections, manage operations, and scale deployments, ensures a positive and reassuring experience. Continuous customer engagement, empowering customers to become brand ambassadors by offering them opportunities to share their positive experiences, robust community-building initiatives, and showcasing the distinctive product attributes that customers can proudly associate with are the key focal points of RUCKUS's marketing endeavors.

The introduction of IoT devices entails new security concerns for enterprise networks, leading to hesitation among IT departments. Facilities and engineering teams often identify a need for these devices and then approach IT for onboarding. However, IT may be unfamiliar with the underlying technology of these devices, such as Zigbee, causing reluctance. The fear of compromising network security and integrity looms large as a result. With end-to-end protection for IoT devices through the CommScope Sentry PKI infrastructure, including certificate authority, code signing, device certificate provisioning, and in-device certificate provisioning client, RUCKUS helps secure IoT collaborating with IoT device manufacturers, RUCKUS has implemented this technology to ensure a high level of security and integrity as these products integrate into enterprise environments.<sup>1</sup>

Frost & Sullivan's research has determined that RUCKUS possesses a unique combination of strengths. Firstly, it excels in delivering the most robust wireless network performance, ensuring high-speed and reliable connectivity. Secondly, RUCKUS sets itself apart with industry-leading business intelligence capabilities tailored to specific industries to drive informed decision-making and optimize operations. Moreover, RUCKUS leads the way in AI adoption, integrating AI across its entire portfolio to enhance network performance, security, and management. As part of CommScope, RUCKUS offers one of the industry's broadest capabilities set to deliver multi-network support. This unique advantage allows customers to leverage the best wireless access technology for their specific needs, whether it be Wi-Fi, LTE, or emerging technologies like 5G, and manage them consistently and cohesively. A comprehensive approach ensures that customers have access to the most advanced networking solutions while maintaining simplicity and efficiency in network management.

The ongoing industry consolidation has injected a degree of uncertainty into the enterprise networking markets. As portfolios undergo rationalization to meet synergy expectations and technology research priorities are revamped, customers may feel uncertain about the future of their networking solutions. However, RUCKUS provides a reassuring option for customers seeking to design AI-based networking strategies. With RUCKUS, customers can have the confidence that the product sets they have invested in will evolve in alignment with changing business needs, ensuring continued relevance and effectiveness in the ever-evolving landscape of enterprise networking.

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<sup>&</sup>lt;sup>1</sup> CommScope Sentry security services deliver end-to-end protection for IoT devices. A comprehensive PKI infrastructure, it includes Certificate Authority, code signing, device certificate provisioning and in-device certificate provisioning client.

# **Conclusion**

As the enterprise wireless networking landscape rapidly evolves, RUCKUS Networks has distinguished itself by consistently delivering maximum value to customers. By offering high-performance networking solutions, RUCKUS empowers business owners with tools to evaluate their network's impact on meeting business needs, enabling them to make informed decisions regarding network investments and optimizations.

RUCKUS Networks earns Frost & Sullivan's 2024 North American New Product Innovation Award for its strong overall performance in the enterprise wireless networking industry.

# What You Need to Know about the New Product Innovation Recognition

Frost & Sullivan's New Product Innovation Award recognizes the company that offers a new product or solution that uniquely addresses key customer challenges.

# **Best Practices Award Analysis**

For the New Product Innovation Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

# **New Product Attributes**

Match to Needs: Customer needs directly influence and inspire product design and positioning

**Reliability**: Product consistently meets or exceeds customer performance expectations

**Quality**: Product offers best-in-class quality with a full complement of features and functionality

**Positioning**: Product serves a unique, unmet need that competitors cannot easily replicate

**Design**: Product features an innovative design that enhances both visual appeal and ease of use

# **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™. We power our clients to a future shaped by growth. Our Growth Pipeline as a Service™ 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 <a href="http://www.frost.com">http://www.frost.com</a>.

# 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 $^{\text{\tiny TM}}$ .

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

# OPPORTUNITY UNIVERSE Capture full range of growth opportunities and prioritize them based on key criteria OPPORTUNITY EVALUATION Adapt strategy to changing market dynamics and unearth new opportunities OPPORTUNITY EVALUATION Conduct deep, 360-degree analysis opportunities PIPELINE ENGINETM GO-TO-MARKET STRATEGY Translate strategic alternatives into a cogent strategy

# 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)

