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BEST PRACTICES

AWARDS

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2020 BEST PRACTICES AWARD

SAGUNA

**2020 EUROPEAN
EDGE CLOUD COMPUTING
TECHNOLOGY INNOVATION LEADERSHIP AWARD**

Contents

Background and Company Performance

Industry Challenges

The edge cloud computing market continues to experience steady growth due to the Internet of Things' (IoT) proliferation, rise of edge artificial intelligence (AI), and other smart applications. Specifically, IoT development witnessed significant growth in the amount of data stored, as many companies increasingly rely on centralized cloud computing and storage solutions. Many companies apply IoT sensors and devices, often requiring edge computing solutions, such as edge devices, nodes, and hyper-localized data centers, to ensure swift data processing to speed up their decision-making processes. At the same time, an increasing number of interconnected devices drive active edge AI development, which enables companies to operate in real time and lower data communications costs. In this regard, companies also actively leverage smart applications to process and evaluate data, which is also one of the key factors driving market demand.

Notwithstanding, Frost & Sullivan's own research reveals that several significant hurdles preclude industry players from increasing market share in the edge cloud computing market.

Internal skills shortage and integration requirements

End-users express concerns regarding edge solutions' ability to support remote equipment and IoT integration with legacy systems. Many companies simply do not want to allocate funds for an entire system rebuild that many modern solutions require.

Security and costs

Ensuring data privacy and secure communications from the datacenter to the edge presents another challenge to market growth. Namely, high level anonymization for sensitive customer data stored at the edge while also ensuring ongoing compliance is a challenge. Moreover, cloud migration pricing includes several variables, as many end-users pay cloud providers inward-flowing and outflowing IoT data transmitted in real time to the cloud. In addition, as many edge implementations occur without IT experts on site, companies are worried about the possible support costs of edge application.

Absence of sufficient maintenance support

Many companies traditionally conduct their own information technology (IT) infrastructure maintenance. With edge datacenters increasing worldwide, Frost & Sullivan notes that in-house maintenance of IT infrastructure has grown problematic for many companies.

Technology Leverage and Business Impact

Excelling in the Edge Cloud Computing Industry

Existing needs for mobile operators and enterprises to embrace new technologies drive the increasing IoT and AI application and digitalization demand. Customers require

effective and interactive tools to ensure enhanced broadband, large volume transfers, and enhanced data privacy and oversight of their most critical assets.

Saguna Networks is at the forefront of providing edge cloud computing solutions that enable customers to gain actionable insights and real-time visibility into network conditions, while simultaneously equipping them with tools to ensure high security and functionality unmatched by competitors.

Established in 2008 in Yokneam, Israel, Saguna Networks possesses a stellar reputation as a multi-access edge cloud computing pioneer through its industry-leading edge cloud computing solutions that optimize and accelerate network infrastructures. By leveraging its hands-on experience and industry-leading technology, which provides a high-level of security, functionality, and reliability, Frost & Sullivan's own analysis confirms that Saguna Networks clearly outpaces its competitors and maintains an excellent reputation among its customers.

Saguna Networks enters in strategic partnerships with different technology companies worldwide. For instance, in March 2018, the company partnered with Wind River, a global leader in delivering software for intelligent connected systems, to validate Saguna Networks' Open-RAN product (a radio access network mobile edge computing solution) operating on the Wind River Titanium Server as the carrier-grade platform. By validating and pre-integrating its hardware and software offerings, users can deliver optimized solutions for service providers and telecommunications equipment manufacturers relying on infrastructure based on network function virtualization.

In 2018, Saguna Networks partnered with Vimmi, a mobile video delivery innovator, to develop a content delivery solution for mobile operators based on the Multi-access Edge Computing (MEC) standard. By deploying video services at the radio edge, in close vicinity to mobile users, the MEC solution provides the deployment of a high-quality video delivery infrastructure for mobile network streaming.

Frost & Sullivan firmly believes that Saguna Networks' in-depth knowledge of the edge cloud computing industry truly meets and exceeds customer expectations. By offering clients game-changing solutions that provide unparalleled security, functionality, and reliability, Saguna Neworks is well-poised to increase its market share in the edge cloud computing industry.

The Cornerstone of Saguna Networks' Success: vEdge Computing Platform

At the heart of Saguna Networks' success is its vEdge Computing Platform, a best-in-class platform that provides a cloud services environment and virtualized resources to enable real-time visibility into network conditions.

Specifically, Frost & Sullivan notes that Saguna Networks' vEdge Computing Platform has several competitive advantages over its competitors:

- **Highly secured environment and implementation:** The ability to ensure full separation between edge cloud and network domains while also ensuring full

protection from Internet access. The platform provides a secure shell (SSH) protection and fire-wall implementation between edge applications.

- **Simple network integration:** Configures the network domain as a router or switch while providing static or dynamic router configuration and a high-performance internal load balancer. The platform also offers redundancy support for both virtual router redundancy protocols and link aggregation control protocols.

- **Easy to use application programming interface for software-defined network management:** The ability to provide a simple to use application programming interface for software-defined network management.

- **Full automation and flexibility:** Enables any third-party virtualization, such as Amazon Web Services, and automatic lifecycle management and monitoring of network conditions.

- **High compatibility:** Supports all radio access network types and vendors.

Commitment to Meet and Exceed Customers' Needs

Saguna Networks further demonstrates a strong commitment to supporting customers in transforming broadband and other networks into powerful cloud computing platforms. For instance, in 2019, Saguna Networks launched its MEC Cloud Starter kit to support communications service providers and application developers to acquire valuable hands-on experience and accelerate the development and integration of their MEC ecosystem and edge applications.

Saguna Networks' MEC Cloud Starter kit includes a complete, virtualized MEC environment, sample edge applications, and support package, providing several critical benefits to users:

- **Functionality:** The ability to receive hands-on experience operating the MEC environment and evaluate the performance, functionality, and mobility of edge applications.

- **Delivery:** The kit provides swift delivery and IoT applications to help speed up development, integration, and testing of edge applications and the MEC environment.

- **Support:** Customers can receive around-the-clock support and training (if needed) from Saguna's team of MEC specialists.

Conclusion

A lack of internal skills, coupled with concerns for security, costs, and the absence of sufficient maintenance support, pose pressing challenges for the edge cloud computing industry. In spite of economic and technical hurdles that impede many other industry participants from increasing market share, Saguna Networks maintains its stellar reputation for its industry-leading vEdge Cloud Computing Platform for mobile operators and enterprises worldwide.

Saguna Networks' vEdge Cloud Computing Platform, which ensures ease-of-use, high security, and reliability, is an exciting testament to the company's willingness and determination to meet and exceed the needs of enterprises across different sectors.

With its unrivaled expertise, innovation-driven solutions, and customer-centric approach, Saguna Networks earns the 2020 Frost & Sullivan Technology Innovation Leadership Award.

Significance of Technology Innovation Leadership

Technology-rich companies with strong commercialization strategies benefit from the demand for high-quality, technologically innovative products that help shape the brand, resulting in a strong, differentiated market position.

- Acquire competitors' customers
- Generate awareness
- Increase market penetration
- Build a larger customer base
- Balance pricing with profitability

- Establish a strong brand identity
- Align the brand to the company's vision
- Inspire customers
- Push the envelope
- Build a reputation for innovation

DEMAND

BRAND

Technology Leadership

COMPETITIVE POSITIONING

- Establish a clear value proposition
- Deliver superior value to customers
- Be a leader in innovation
- Be a leader in technology development
- Stake out a clear market position

Understanding Technology Innovation Leadership

Technology innovation leadership recognizes companies that lead the development and successful introduction of high-tech solutions to customers' most pressing needs, altering the industry or business landscape in the process. These companies shape the future of technology and its uses. Ultimately, success is measured by the degree to which a technology is leveraged and the impact it has on growing the business.

Key Benchmarking Criteria

For the Technology Innovation Leadership Award, Frost & Sullivan analysts independently evaluated 2 key factors—Technology Leverage and Business Impact—according to the criteria identified below.

Technology Leverage

Criterion 1: Commitment to Innovation
Criterion 2: Commitment to Creativity
Criterion 3: Technology Incubation
Criterion 4: Commercialization Success
Criterion 5: Application Diversity

Business Impact

Criterion 1: Financial Performance
Criterion 2: Customer Acquisition
Criterion 3: Operational Efficiency
Criterion 4: Growth Potential
Criterion 5: Human Capital

Best Practices Recognition: 10 Steps to Researching, Identifying, and Recognizing Best Practices

Frost & Sullivan analysts follow a 10-step process to evaluate Award candidates and assess their fit with select best practices criteria. The reputation and integrity of the Awards are based on close adherence to this process.
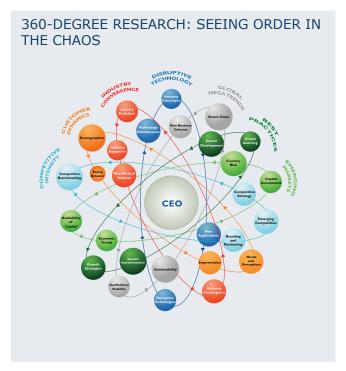
STEP		OBJECTIVE	KEY ACTIVITIES	OUTPUT
1	**Monitor, target, and screen**	Identify Award recipient candidates from around the world	• Conduct in-depth industry research • Identify emerging industries • Scan multiple regions	Pipeline of candidates that potentially meet all best practices criteria
2	**Perform 360-degree research**	Perform comprehensive, 360-degree research on all candidates in the pipeline	• Interview thought leaders and industry practitioners • Assess candidates' fit with best practices criteria • Rank all candidates	Matrix positioning of all candidates' performance relative to one another
3	**Invite thought leadership in best practices**	Perform in-depth examination of all candidates	• Confirm best practices criteria • Examine eligibility of all candidates • Identify any information gaps	Detailed profiles of all ranked candidates
4	**Initiate research director review**	Conduct an unbiased evaluation of all candidate profiles	• Brainstorm ranking options • Invite multiple perspectives on candidates' performance • Update candidate profiles	Final prioritization of all eligible candidates and companion best practices positioning paper
5	**Assemble panel of industry experts**	Present findings to an expert panel of industry thought leaders	• Share findings • Strengthen cases for candidate eligibility • Prioritize candidates	Refined list of prioritized Award candidates
6	**Conduct global industry review**	Build consensus on Award candidates' eligibility	• Hold global team meeting to review all candidates • Pressure-test fit with criteria • Confirm inclusion of all eligible candidates	Final list of eligible Award candidates, representing success stories worldwide
7	**Perform quality check**	Develop official Award consideration materials	• Perform final performance benchmarking activities • Write nominations • Perform quality review	High-quality, accurate, and creative presentation of nominees' successes
8	**Reconnect with panel of industry experts**	Finalize the selection of the best practices Award recipient	• Review analysis with panel • Build consensus • Select recipient	Decision on which company performs best against all best practices criteria
9	**Communicate recognition**	Inform Award recipient of recognition	• Present Award to the CEO • Inspire the organization for continued success • Celebrate the recipient's performance	Announcement of Award and plan for how recipient can use the Award to enhance the brand
10	**Take strategic action**	Upon licensing, company is able to share Award news with stakeholders and customers	• Coordinate media outreach • Design a marketing plan • Assess Award's role in strategic planning	Widespread awareness of recipient's Award status among investors, media personnel, and employees

The Intersection between 360-Degree Research and Best Practices Awards

Research Methodology

Frost & Sullivan's 360-degree research methodology represents the analytical rigor of the research process. It offers a 360-degree view of industry challenges, trends, and issues by integrating all 7 of Frost & Sullivan's research methodologies. Too often companies make important growth decisions based on a narrow understanding of their environment, resulting in errors of both omission and commission. Successful growth strategies are founded on a thorough understanding of market, technical, economic, financial, customer, best practices, and demographic analyses. The integration of these research disciplines into the 360-degree research methodology provides an evaluation platform for benchmarking industry players and for identifying those performing at best-in-class levels.

360-DEGREE RESEARCH: SEEING ORDER IN THE CHAOS

About Frost & Sullivan

Frost & Sullivan, the Growth Partnership Company, helps clients accelerate growth and achieve best-in-class positions in growth, innovation, and leadership. The company's Growth Partnership Service provides the CEO and the CEO's growth team with disciplined research and best practice models to drive the generation, evaluation and implementation of powerful growth strategies. Frost & Sullivan leverages nearly 60 years of experience in partnering with Global 1000 companies, emerging businesses, and the investment community from 45 offices on 6 continents. To join Frost & Sullivan's Growth Partnership, visit http://www.frost.com.