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BEST PRACTICES

AWARDS

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2020 BEST PRACTICES AWARD



**2020 GLOBAL
NETWORK FORENSICS
CUSTOMER VALUE LEADERSHIP AWARD**

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Background and Company Performance

Industry Challenges

For roughly a decade, cybersecurity vendors struggled with an interesting dynamic. To provide in-depth defense, cybersecurity vendors chose integration partners and built application programming interfaces (APIs) to supplement security operations centers (SOC) with additional visibility and control. This spirit of cooperation is necessary. Yet simultaneously, cybersecurity vendors compete for static security dollars; network security forensics providers are not immune to this dynamic. No matter the size of the SOC, the end goal is the same — to provide a best-in-class cyber defense solution that a company can afford - including technologies, facilities, and personnel.

However, Frost & Sullivan notes that one of the current challenges facing network forensics is the accompanying hefty price tag. The total financial expenditures associated with network security forensics includes the cost of personnel with formal security training, architecture and approach that are separate from information technology (IT), and a unified architecture involving security tools. Pricing depends on two components: hardware costs, which include devices that have embedded analytics and onboard storage, and capacity in the form of events per second (EPS) processed. A network security forensics provider bears the cost of virtual collectors and archivers to provide more advanced EPS. The bottom line is that the least expensive solutions for 5,000 end-users or more begin at \$100,000 and can range into millions of dollars. Service providers, particularly in network operator communities, possess tighter margins, while expectations from their customers, in terms of service quality and end-user experience, increase. Frost & Sullivan understands that this scenario proves quite difficult for providers, especially when digital data flowing across the network increases exponentially as well.

For enterprises, their application performance is vital, as any downtime adversely affects service quality for end-users. Critical reasons for the quality-of-service degradation include the heterogeneous network over which the application is a carrier and the multi-component structure of enterprises' IT environments. These two factors compounded can substantially reduce network infrastructure security. Frost & Sullivan points out that properly monitoring the heterogeneous network infrastructure and the drive to provide differentiated services to customers is also difficult for network operators, even those well-established in the industry. Additionally, network operators should not overcharge or undercharge their customers to avoid bad publicity, which impacts their revenue, performance, and profitability. Moreover, network operators must audit their infrastructure periodically to ensure swift issue resolution.

Frost & Sullivan finds enterprises require lightweight, yet robust network forensics that conducts periodic network infrastructure audits, finding and rectifying faults quickly - all without affecting throughput and latency. Frost & Sullivan further notes that such solutions require key metric analysis to identify weaknesses proactively, thereby strengthening network infrastructure security.

Customer Impact and Business Impact

New Jersey-based NIKSUN, Inc. (NIKSUN) emerged in 1997 from a small group working in Bellcore/Bell Labs. Since its inception, the company continues to engineer robust network forensics solutions that enhance network security and application performance from rich data gathered through passive monitoring of data packets. By leveraging its proprietary zero-loss full-packet capture technology, NIKSUN offers real-time network monitoring and security solutions to clients, which include enterprises, governments, and service providers. The company possesses substantial visibility in the market through its certifications and industry accolades stemming from its robust portfolio of best-in-class solutions: NetDetector[®] Suite, NetVCR[®] Suite, Virtual Cloud solutions, NetOmni[™], NetTradeWatch[™], NetMobility[®], Puma[™], and PhoneSweep[®].

Best-in-class Technology

According to Frost & Sullivan, NIKSUN truly demonstrates its thought-leadership through its unique prioritization of purpose-built, holistic cybersecurity, and network performance monitoring solutions, which drives exceptional business value for its customers. NIKSUN's flagship Network Knowledge Warehouse (NKW), which the company engineered from the ground up for high-performance and real-time analytics, combined with raw data storage, uniquely enables it to offer best-in-class instant data forensics. The savings realized on capital and operational expenditures are quite significant when comparing NIKSUN's technology with other competing network monitoring and security products in the industry. Moreover, the company properly expands the value as it continues to innovate and build on its technology to create robust, end-to-end solutions that up the ante on malicious attack defense.

For example, NIKSUN identified a need regarding network security and performance analytics, as these technologies only identify the device or system (server, router, etc.) where the problem resides without delivering specifics. To answer this challenge, the company developed its NIKSUN[®] LogWave (LogWave), a security information and event management (SIEM) engine that delivers real-time security alert analysis generated by applications and services. SIEM supports the continuous collection, standardization, correlation, analysis, and reporting of security and operational information. In this regard, LogWave ingests any log and event into the NKW to determine root cause analytics. This ingest scales to hundreds of thousands of events per second, and even further to millions of events per second using NIKSUN's clustering technology. Meanwhile, the system simultaneously satisfies compliance requirements for log retention. Furthermore, the SIEM's recording, aggregation, and indexing correlate the logs and events with network information in the NKW, enabling it to detect the root-cause of any security or performance incident quickly.

A cost-effective solution, LogWave achieves maximum network visibility by monitoring and analyzing network endpoints. NIKSUN is notable in that it does not charge by EPS or daily ingested data. Customers are free to use their storage however quickly meet their needs, offering significant value and performance in the SIEM market. NIKSUN's solution is also unique in that the entire platform can be deployed on one appliance. Indexing, analysis,

and real-time alerting are all done from a single NIKSUN unit. NIKSUN nicely builds additional value, as it designed LogWave to operate seamlessly with its NetOmni™ Suite. The technology also leverages the NKW for a contextual perspective of application performance, service delivery impediments, network integrity, and security breaches. Furthermore, Frost & Sullivan finds that NIKSUN's ability to correlate packets and logs, as well as generate reports combining intelligence from all data types, provides the company with a significant edge over other tools in the market.

LogWave bolsters NIKSUN's already iron-clad value proposition through best-in-class benefits such as real-time and historical analyses, string search support, seamless interoperability with existing NIKSUN solutions, flexibility as a standalone solution or add-on for NIKSUN appliances, reduced incident time-to-resolution, scalable on-demand and scheduled reporting for real-time operations and strategic decision-making, and plug-and-play functionality. NIKSUN reports that its solution requires minimal training, and clients experience no downtime, clearly supporting its position as a leader in the network forensics market.

Comprehensive Services

NIKSUN engineered LogWave to offer high scalability to meet any end-user demand, large or small. LogWave offers significant storage capabilities, as it contains hundreds of gigabytes to petabytes of log and event data. Scalable to fit customer needs, it can aggregate, correlate, and search hundreds of petabytes per day, while seamlessly ingesting logs for immediate actionable insights from generated metadata. Moreover, by leveraging NIKSUN NetOmni, multiple LogWave units are easily accessible for actionable data and reporting across the entire network, which includes physical-cloud hybrid environments. NIKSUN's LogWave equips IT and business users to correlate events across data sources, including flow, packets, logs, and events.

Moreover, NIKSUN's LogWave features an intuitive graphic user interface and an easily accessible training module library, meaning end-users learn how to operate the platform in a shorter period of time, depending on their level of technical expertise. NIKSUN also offers community forums for users to interact with experts and fellow users, offering optimal results.

Versatile Support

NIKSUN offers comprehensive support and service through its SupportNet online helpdesk tool. The system responds to questions and issues while also offering value-added services to customers, including regular software updates and information on new releases and datasheets. SupportNet and the NIKSUN community forum work together, serving as a critical juncture for feedback used to resolve issues and enrich them with enhanced functionalities. Moreover, Frost & Sullivan notes that the end-user community offers significant diversity in terms of both size and industrial background. Ensuring that its end-user comments or complaints receive a swift resolution, NIKSUN offers comprehensive customer support through two tiers: standard and platinum.

The standard support is the most basic support tier. In this model, the support team is only available during business hours; therefore, this type of support is relevant for end-users that operate in a slower-paced or small business environment. Conversely, the platinum support is a significant upgrade to the standard support. End-users that subscribe to the platinum support receive round-the-clock access to NIKSUN's support services, as well as a faster response time of no more than 20 minutes (in most cases). Furthermore, on average, NIKSUN demonstrates consistency in configuration change completion in one hour and updates its software code within two days.

Frost & Sullivan commends the versatility of NIKSUN's customer service, its robust feedback mechanism, and average response and resolution time for end-user complaints, all of which are simply the best in the industry.

Fostering an Innovative Ecosystem

NIKSUN understands that its customers may not fully understand what they need to combat cyber threats successfully. Considering this, the company fosters and maintains an entrepreneurial, think-outside-the-box environment, which means avoiding the constraints of customer requirements. This environment delivers best-in-class creative thinking and empowers engineers with the freedom to develop solutions that defend data from potential unexploited threats. This approach is quite instrumental in NIKSUN's breakthrough innovation that was not on the market's radar, but is now paving the way for a paradigm shift in the marketplace. NIKSUN believes that engineering curiosity and a can-do attitude properly enable it to construct solutions for traditional, as well as virtual, hybrid, and mobile networks. The outcome is high-fidelity instrumentation and security in the modern Internet of Things (IoT) space, in which NIKSUN holds a dominant position.

NIKSUN's creative and open thinking environment empowers its engineers to develop solutions to match IoT's extreme availability, speeds, connectivity, and exposure to unknown vulnerabilities, such as zero-day attacks. The company's growth in brand strength and recognition stems from its deep dive forensics that began as purely hardware-based appliances. Furthermore, NIKSUN continues to operate in service of a critical cornerstone belief: a solution should never inhibit or "get in the way," but rather grow and scale as needed. The company continues to harness new technology to operate in the cloud and virtual settings, maintaining industry-leading machine-to-machine transaction security and performance.

Practical for complex enterprise applications, NIKSUN's virtual solutions maximize security and performance while minimizing manual intervention requirements. In this regard, the company enables its customers to focus primarily on their business strategies - instead of ongoing background assets, transactions, services, and applications. Moreover, the company continues to use its resources strategically, expanding its virtual solutions' flexibility and enabling agnostic compatibility with varying IoT services or functions. By expanding its portfolio to address new and emerging challenges, NIKSUN strengthens its market foothold and opens the door for more customers.

Planning for the Future

Early on, NIKSUN strategically avoided becoming the “flavor of the day” by refusing to introduce a diluted one-use solution into the market.¹ The company’s chief executive officer, Dr. Parag Pruthi, identified early on that cybersecurity issues were a significant concern and would remain as such for the foreseeable future, which means chasing the “problem of the day” would not result in a reliable security infrastructure; NIKSUN’s success required long-term investment. Considering this epiphany, the company has invested heavily in building a scalable infrastructure that operates in varying networks, from small to enormous.

Furthermore, as society moves toward a “no secrets” future, NIKSUN plans to strengthen its cybersecurity technology for the long-term, becoming almost universally present on the Internet. For the medium-term, NIKSUN’s leadership aims to discourage the mass adoption of “bolt-on” technologies that claim to be a “tool for everything.” NIKSUN realizes that most people lack the comprehensive skill set required to see through the cloud of “solutions” and flock to the companies that make the most noise. To combat this, NIKSUN plans to implement its vision of “Build One—Use Many” and disperse more relevant information with tools that do not require rip-and-replace techniques, further positioning the company as the optimal partner.

Conclusion

Monitoring heterogeneous network infrastructure and providing differentiated services are critical to enterprises. However, high costs, a lack of qualified technicians, as well as quality-of-service degradation, inhibit its full adoption. More importantly, vendors must seek a long-term solution, rather than implementing technology to solve the “flavor of the week.”

Since its inception, NIKSUN continues to up the ante on its network forensics solutions, building on its foundation to create next-generation technology. One of its recent releases, the NIKSUN® LogWave, leverages the company’s technology to deliver a best-in-class security information and event management engine that goes a step further and achieves maximum visibility into the network by monitoring and analyzing network endpoints. The company’s innovative culture motivates itself to continue to move forward, anticipating and meeting the needs of its customers and the industry.

With its experienced and committed leadership, creative company culture, continued innovative success, and strong overall performance, NIKSUN earns the 2020 Frost & Sullivan Global Customer Value Leadership Award.

¹ Pruthi, Parag. “Upholding a Secure Future.” *Silicon India*. Article. Accessed February 2020.

Significance of Customer Value Leadership

Ultimately, growth in any organization depends on customers purchasing from a company and then making the decision to return time and again. Satisfying customers is the cornerstone of any successful growth strategy. To achieve this, an organization must be best in class in 3 key areas: understanding demand, nurturing the brand, and differentiating from the competition.



Understanding Customer Value Leadership

Customer Value Leadership is defined and measured by 2 macro-level categories: Customer Impact and Business Impact. These two sides work together to make customers feel both valued and confident in their products' quality and performance. This dual satisfaction translates into repeat purchases and a lifetime of customer value.

Key Benchmarking Criteria

For the Global Customer Value Leadership Award, Frost & Sullivan analysts independently evaluated Customer Impact and Business Impact according to the criteria identified below.

Customer Impact

- Criterion 1: Price/Performance Value
- Criterion 2: Customer Purchase Experience
- Criterion 3: Customer Ownership Experience
- Criterion 4: Customer Service Experience
- Criterion 5: Brand Equity

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 practice 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 globe	<ul style="list-style-type: none"> • Conduct in-depth industry research • Identify emerging sectors • Scan multiple geographies 	Pipeline of candidates who potentially meet all best-practice criteria
2 Perform 360-degree research	Perform comprehensive, 360-degree research on all candidates in the pipeline	<ul style="list-style-type: none"> • Interview thought leaders and industry practitioners • Assess candidates' fit with best-practice 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	<ul style="list-style-type: none"> • Confirm best-practice 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	<ul style="list-style-type: none"> • Brainstorm ranking options • Invite multiple perspectives on candidates' performance • Update candidate profiles 	Final prioritization of all eligible candidates and companion best-practice positioning paper
5 Assemble panel of industry experts	Present findings to an expert panel of industry thought leaders	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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-practice Award recipient	<ul style="list-style-type: none"> • Review analysis with panel • Build consensus • Select recipient 	Decision on which company performs best against all best-practice criteria
9 Communicate recognition	Inform Award recipient of Award recognition	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Coordinate media outreach • Design a marketing plan • Assess Award's role in future 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 our 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, leading to 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 participants 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, enables clients to 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 more than 50 years of experience in partnering with Global 1000 companies, emerging businesses, and the investment community from 45 offices on six continents. To join our Growth Partnership, please visit <http://www.frost.com>.