

FROST & SULLIVAN

SEPIO

2022
ENABLING
TECHNOLOGY
LEADER

NORTH AMERICAN
HARDWARE RISK
MANAGEMENT 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. Sepio excels in many of the criteria in the hardware risk management space.

AWARD CRITERIA	
<i>Technology Leverage</i>	<i>Customer Impact</i>
Commitment to Innovation	Price/Performance Value
Commitment to Creativity	Customer Purchase Experience
Stage Gate Efficiency	Customer Ownership Experience
Commercialization Success	Customer Service Experience
Application Diversity	Brand Equity

Hardware Risk Management Solutions

Frost & Sullivan estimates the network access control (NAC) market will reach \$2,214.8 million in 2024, with a compound annual growth rate of about 10.4% from 2019 to 2024.¹ Sepio uniquely leverages its Hardware Access Control (HAC-1) solution and Hardware Access Control Index (HACx) to meet its customer’s needs. It is well-positioned to capitalize on new growth opportunities, cementing its leadership in the asset visibility and hardware security space.

Founded in 2016 and headquartered in Rockville, Maryland, Sepio is a developer and provider of hardware-based security. The company’s HAC-1 platform provides enterprises with ultimate asset visibility, made possible through the use of a new data source, the Physical Layer (L1), to enable comprehensive hardware risk management, while the HACx gives an objective assessment of enterprises’ hardware security posture at no extra cost. Sepio’s innovative approach, which does not require traffic monitoring, thus avoiding cumbersome deployments and privacy issues, is utilized across industry verticals, including financial institutions, government agencies, critical infrastructure, managed security service providers, healthcare, manufacturing, and retail.

In 2019, Frost & Sullivan recognized Sepio for its commitment to creativity and customer impact and remains impressed with the company’s continuing innovation and sustained leadership.

¹ Global Network Access Control Market, Forecast to 2024 (Frost & Sullivan March 2020)

HACx and HAC-1: Hardware Risk Management Disruptors

Over the past six years, Sepio has built and refined the HAC-1 platform, extending its application across various use cases in various industry segments. For example, healthcare systems consisting of multiple hospitals, thousands of employees, and an extensive network of medical devices, Internet of Things (IoT), and informational technology (IT) equipment, face a critical need to improve their cybersecurity posture. Government agencies face threats from state actors implanting unwanted devices during manufacturing or along the supply chain. Additionally, the rise in work-from-home situations due to the COVID-19 global pandemic also brings a surge in employees connecting new, unknown, and vulnerable devices, increasing their company's vulnerability to hardware-based risks. Current cybersecurity solutions cannot differentiate between legitimate hardware and unwanted devices. Based on its patented HAC-1 platform and the HACx, the company empowers stakeholders throughout the value chain to effectively manage hardware-based risks.

Sepio understands the various client types' unique needs and has taken steps to equip them with a cutting-edge hardware risk management solution. This orderly and systematic product development journey begins with gathering client feedback and extensive research into cybersecurity hardware trends conducted by industry and cybersecurity experts. Sepio's solution identifies the three hardware-based threats: unknown assets, insider threats, and supply chain manipulation. Threats from these assets are often unknown as they bypass traditional detection and mitigation solutions. The company aims to provide visibility of all hardware assets, including peripherals, IT, IoT, and operational technology, with its solution.

"The company's HAC-1 platform provides enterprises with ultimate asset visibility, made possible through the use of a new data source, the Physical Layer (L1), to enable comprehensive hardware risk management, while the HACx gives an objective assessment of enterprises' hardware security posture."

**- Elizabeth Whynott,
Best Practices Research Analyst**

Sepio developed the HACx, which uses objective indicators, to assess enterprises' hardware security posture at no extra cost to the customer. Through aggregated indicators, sub-indicators, and micro-indicators, the HACx provides a security score with detailed risk insights and personalized recommendations for a granular assessment. Indicators account for external and internal threats and include the external landscape, organization, governance, security, asset infrastructure, policy enforcement, and asset risk scores. The index shows enterprises their strengths and weaknesses, and offers actionable steps to improve their hardware-based

cybersecurity infrastructure. HACx also provides a comparison score between industry peers and for specific territories of interest. The HACx scorecard, which concisely presents the assessment findings, enables enterprises to improve their cybersecurity infrastructure.

Sepio's HACx Dashboard



Source: Sepio

The HAC-1 platform is one of the only hardware-based security platforms. The platform analyzes L1 data, providing enterprises with greater visibility of all connected hardware assets, managed, unmanaged, or hidden. Leveraging machine learning (ML)-based algorithms, the HAC-1 creates and analyzes the physical layer fingerprint of every connected device, empowering stakeholders with greater visibility.

Previously known devices are identified by their physical layer fingerprint that contains a digital quantization of their physical layer analog information. However, because unknown manufactured devices do not have previously recorded physical layer fingerprints, the HAC-1's ML algorithm generates one and identifies device anomalies, highlighting those that may pose a threat. The HAC-1 alerts administrators to identified **unwanted devices**, and the policy enforcement mechanism provides best practice policy recommendations, including strict or granular system enforcement rules. Using a zero-trust hardware access approach, the HAC-1 automatically mitigates and blocks **unwanted** hardware if a device breaches a pre-set policy. Additionally, devices do not need to be accessing data for identification, only plugged into the infrastructure, further differentiating the platform from competitors.

A Customer-centric Approach Driving Unmatched Client Experience

Both of Sepio's HAC solutions go beyond its extensive expertise and best-in-class capabilities, with customer value as a strategic imperative. Through the years, the company has earned a sterling reputation supporting customers' path towards hardware risk management and cybersecurity. Sepio is committed to maintaining strong and continuous customer relationships, benefiting the company and the customer.

“To ensure a holistic cybersecurity system, Sepio collaborates with global technology partners. These partnerships enable system integration for more automated processes, greater threat visibility, and additional mitigation tools. The company’s business partners allow easy integration with clients’ existing solutions.”

**- Elizabeth Whynott,
Best Practices Research Analyst**

When an attack occurs, the company has access to new threats and can act on them quickly, warning other clients of possible similar attacks. On the customer side, they gain valuable insights and new developments occurring in the NAC space.

Sepio builds its platform collaborating closely with a range of partners and integrators to evolve alongside market needs and trends. To ensure a holistic cybersecurity system, Sepio collaborates with global technology partners. These partnerships enable system integration for more automated processes, greater asset visibility, and additional mitigation tools. The

company’s business partners allow easy integration with clients’ existing solutions. With over 35 technology and business partners, including Microsoft, Cisco, Forescout, Booz Allen, and General Dynamics, the HAC-1 platform strengthens clients’ security architecture.

The company provides access to 24/7 customer support and valuable resources for clients to leverage HAC-1’s full capabilities. The Sepio website and Youtube channel contain various tutorials, training, and informational videos, including Sepio Academy and resources to learn more about hardware asset management. Additionally, the company conducts hands-on attack tool seminars for customers, allowing them to gain attack-side insights and understand how best to utilize the platform.

Sepio’s seamless and integrative approach and close relationships position it as a preferred vendor for hardware risk management solutions.

Positioned for Growth

Since its inception, Sepio’s sterling reputation and customer-centric framework led to its coveted preferred partner status. Over the years, it added a range of new customers to its established base. Sepio’s clients include globally recognized enterprises, including Baptist Health, Munich RE, EDP Group, and US government agencies (e.g., Department of Homeland Security, Defense Information Systems Agency, US Department of Defense). To date, the company has raised \$22.4 million from investors, including Munich Re Ventures and Hanaco Venture Capital and continues its growth in the US, United Kingdom, Germany, Singapore, Portugal, and Israel.

Frost & Sullivan believes the company is well-positioned to drive the hardware risk management space into its next growth phase, capturing market share and sustaining its leadership in the coming years.

End-to-end Purchase Experience

Sepio works closely with clients throughout the entire purchase process, including conducting demos and real-time risk analysis. The company performs lab demos first as a proof of concept, setting up attack tools and allowing customers to try their own attacks. Sepio then conducts an additional demo in a partial or full production environment to show the customer’s current asset risks; deployments take less than 24 hours to implement and conduct analysis. Once deployed, clients gain immediate benefits from the

platform as no baseline is required. The HACx's assessment provides customers with a hardware risk score, an in-depth risk analysis, actionable recommendations, and a comparative analysis between the customer and its competitors' risk score. This analysis serves as a proof of value of Sepio's solution and gives customers valuable insight into their security's strengths and weaknesses from a hardware perspective.

The HAC-1 platform is an annual subscription and consists of two models, one for network infrastructure and another for peripheral security. Clients can purchase one or both models, based on their unique risk analysis needs and security focus. The HAC-1's powerful capabilities, quick deployment, and comprehensive insights ensure clients have a responsive hardware risk management solution.

Conclusion

Technology integration is a critical success factor for the hardware risk management industry. Yet, with many options available, market stakeholders need to leverage the most appropriate and best technology-based solutions to optimize their market impact. With its HACx solution, Sepio provides an objective assessment score of enterprises' hardware security posture. This aggregated score covers seven external and internal indicators, while individual indicator scores allow for more granular analysis. Additionally, the company's HAC-1 platform delivers Level 1 visibility of hardware assets, enabling comprehensive hardware risk management. Sepio stands out from competitors based on its commitment to innovation, creativity, and ability to launch new solutions with far-reaching impact and application. Sepio's solution is vital for government agencies, financial institutions, critical infrastructure, managed security service providers, healthcare, manufacturing, and retail. The company pairs its technology focus with customer-centric values, thus earning a solid reputation in the NAC market.

For its strong overall performance, Sepio earns Frost & Sullivan's 2022 North America Enabling Technology Leadership Award in the hardware risk management industry.

What You Need to Know about the Enabling Technology Leadership Recognition

Frost & Sullivan's Enabling Technology Leadership Award recognizes the company that applies its technology in new ways to improve existing products and services and elevate the customer experience.

Best Practices Award Analysis

For the Enabling Technology Leadership Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

Technology Leverage

Commitment to Innovation: Continuous emerging technology adoption and creation enables new product development and enhances product performance

Commitment to Creativity: Company leverages technology advancements to push the limits of form and function in the pursuit of white space innovation

Stage Gate Efficiency: Technology adoption enhances the stage gate process for launching new products and solutions

Commercialization Success: Company displays a proven track record of taking new technologies to market with a high success rate

Application Diversity: Company develops and/or integrates technology that serves multiple applications and multiple environments

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 <http://www.frost.com>.

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™.

[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



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)**

