

F R O S T & S U L L I V A N

2024 COMPANY OF THE YEAR

*IN THE SINGAPORE
CYBERSECURITY SERVICES
INDUSTRY*

F R O S T & S U L L I V A N

BEST
2024 PRACTICES
AWARD



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. Singtel excels in many of the criteria in the cybersecurity services space.

AWARD CRITERIA	
<i>Visionary Innovation & Performance</i>	<i>Customer Impact</i>
Addressing Unmet Needs	Price/Performance Value
Visionary Scenarios Through Mega Trends	Customer Purchase Experience
Implementation of Best Practices	Customer Ownership Experience
Leadership Focus	Customer Service Experience
Financial Performance	Brand Equity

Market Outlook

Frost & Sullivan’s independent research indicates that trending technologies (e.g., cloud computing, software-as-a-service applications, and the Internet of Things [IoT]) are integral to organizations’ digital transformation journeys. Their integration empowers businesses to enhance productivity. However, it also creates a broader threat landscape, with companies encountering an overwhelming number of cyberattacks. With security breaches escalating, many organizations’ in-house security teams constantly focus on improving cybersecurity. Furthermore, they face difficulty managing and monitoring their cybersecurity operations independently, necessitating external help to minimize workloads. The teams must also ensure their security posture complies with the latest regulatory requirements. Managed security services (MSS) and professional security services (PSS) have surfaced as applicable solutions to address unmet needs and industry roadblocks. MSS providers give organizations access to a diverse pool of cybersecurity experts and a comprehensive cybersecurity services portfolio, enabling them to monitor, manage, and mitigate security weaknesses. Moreover, Frost & Sullivan believes that Singapore will propel the demand for MSS and PSS in the Association of Southeast Asian Nations (ASEAN) because it has higher cybersecurity awareness than other countries in the region.¹

¹ Asia-Pacific (APAC) Managed and Professional Security Services (Frost & Sullivan, December 2023)

Singtel: Sustaining a Legacy of Innovation Under Proven Leadership

Established in 1879 and headquartered in Singapore, Singtel is a leading telecommunications technology company, revolutionizing the industry with game-changing products and services. Its expansive portfolio entails many offerings (e.g., Business 5G, connectivity, IoT, satellite services, cybersecurity, mobility, cloud, data center services, and next-generation managed services), demonstrating technological versatility and wide applicability. With over 14 decades of industry expertise, business success, and commitment to continuous advancement, Singtel has become an industry leader, delivering faster, simpler, more reliable solutions that prioritize stakeholder value. Singtel employs a growth-driven business approach, incorporating integrity, customer-centricity, teamwork, innovation, and community ownership as the core of its operations. The company's pioneering strategies generate high value and impact, sustaining a massive base of 4.6 million mobile and 700,000 broadband customers in Singapore.²

Singtel is a sustainability-driven company that aligns its operations with its net-zero goals, adopting green best practices, improving its infrastructure, and leveraging novel technologies to minimize its carbon footprint. The company proves its dedication to environmental wellness by broadly deploying solar photovoltaic panels across its facilities in Singapore. Moreover, Singtel plans to electrify its vehicle fleet by 2028, aiming to reduce Scope 1 emissions by 450 tons annually.

With customer challenges and demands constantly evolving, service providers must stay aligned and

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- Iqra Azam
Best Practices Research Analyst

scalable to magnify customer bases with more value and return on investment. Therefore, Singtel invests in new capabilities (e.g., generative artificial intelligence [GenAI], digitalization, and quantum-safe solutions) across its operations and networks. By doing so, the company helps customers, including small and medium-sized enterprises (SMEs), to enhance their digital and analytics capabilities while expanding business securely. Furthermore, with its services’ automation and digitalization increasing, Singtel empowers over 100,000 enterprise customers to explore new products, monitor performance, and supervise their networks. The company also seeks opportunities to enhance customer experience

through GenAI, augmenting its digital assistants’ capabilities and delivering real-time and tailored support. This approach and other user-centric measures have resulted in over 400,000 fewer calls, WhatsApp messages, and emails to Singtel’s contact centers. GenAI integration allows the company’s frontline staff to focus on more complicated customer pain points.³

With Singtel’s business framework expanding and data sharing with partners increasing, the company anticipates stricter regulatory obligations and fines (in case of a data breach). Considering this, Singtel adheres to the highest data privacy protection and cybersecurity standards in every step towards broader

² Full Annual Report 2024 (Singtel, 2024)

³ Ibid.

business digitalization and automation. Additionally, the company follows rigorous internal controls, governance processes, and routine audits while enriching employee awareness.⁴

In 2022 and 2023, Frost & Sullivan recognized Singtel for its cybersecurity services leadership, propelled by its visionary strategies, well-rounded service portfolio, and unmatched customer benefits. Frost & Sullivan remains impressed with the company's persistent advancement and enduring leadership.

Integrated Cybersecurity Capabilities: Closing Critical Gaps

Singtel recognizes that cybersecurity becomes more sophisticated with 5G, IoT, and multi-cloud technologies integrating with spaces, devices, and people. These developments also make systems more vulnerable to attacks. This shift pushes companies to quickly adjust to the evolving threat landscape and implement advanced cybersecurity measures and approaches for uninterrupted business development. Singtel believes that reactive measures are insufficient for handling dynamic threats. Seamless and constant data protection and business operations necessitate steadfast vulnerability assessment and precautionary actions. Furthermore, effective security mandates an adaptable and synchronized

approach for protection against emerging threats. The company also points out that multi-tiered defense and increased user education help safeguard critical information and systems.⁵

Singtel addresses the critical need for a proactive security posture and integrated cybersecurity (for the whole organization) through its holistic, cohesive, and well-outlined cyber strategy. It involves operationalizing digital business resiliency and driving growth by adopting a zero-trust architecture design and a development, security, and operations approach. The company's standardized security technology stack supports steady security controls across different environments (based on the risk

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appetite). Furthermore, the company helps users emphasize threat analysis and response with enhanced security technology controls. Customers benefit from big data for predictive threat detection through AI and machine learning (ML) models.

Singtel also overcomes the lack of highly skilled cybersecurity talent, a major industry challenge. It conducts in-depth aptitude assessments while hiring new employees. This approach allows the company to identify the staff's strengths and weaknesses and implement the right strategies to upskill them. Moreover, Singtel optimizes processes through cross-functional workflows, with different teams working together to improve resource and delivery platforms. The company continues its ascent as an industry leader by cultivating robust talent (through its internship and apprentice program), retaining employees (through roles and skills progression and project and role rotation), and fostering efficient knowledge

⁴ Ibid.

⁵ Frost & Sullivan's Interview with Singtel (September 2024)

management. Singtel also offers various professional certifications (e.g., Certified Ethical Hacker, Certified Information Systems Security Professional, and Certified Information Systems Auditor) for its cybersecurity personnel.⁶

Additionally, the company has a Cyber Security Institute (CSI) functioning as its center of excellence, fostering enterprise cyber resiliency and operational best practices. Implementing in-depth thought leadership and broad cyber strategy and policy knowledge, Singtel's CSI helps organizations resolve sophisticated cybersecurity limitations through digital threat situational awareness. It also conducts training programs to enrich employees' expertise. Singtel focuses on cyber resilience preparedness by helping customers establish a cyber risk culture and automated playbooks for critical incidents and crisis management. It also offers a Risk-based Incident and Crisis Management Readiness Program.⁷

Singtel's comprehensive portfolio encompasses consulting and professional services, network-based security, cloud security, MSS, and cyber education. The company spotlights that customers' digital transformation depends on prompt and suitable threat detection and mitigation. Its all-inclusive MSS and managed detection and response (MDR) incorporate the tools and proficiency for quick threat identification and response time. Singtel's unparalleled, customized threat detection and response services feature a highly accessible extended detection and response platform, providing next-level visibility by merging multiple endpoints, on-premises devices, and clouds for better defense. Moreover, leveraging the skills of its best-in-class cyber experts, the company offers cloud-native security. Advanced automation allows Singtel's specialists to provide real-time customer responses. Its flexible security services support hybrid working models and operations. Additionally, the company ensures agile onboarding and guarantees value from day one, delivering superior customer convenience and benefits.

Singtel alleviates users' burdens by handling most of the heavy lifting with its MSS, a global security operations center (SOC), and intel-led SOC architecture for proactive threat hunting, yielding unmatched customer facilitation. The company delivers a 360-degree view of the threat landscape and reduces attacks rapidly with Advanced SOC, fueled by its proprietary threat intelligence and big data analytics. Singtel's highly skilled threat intelligence partners and diligent security operations (SecOps) team enable it to strengthen customers' business infrastructures without friction. Combating cybercrimes is an ongoing process, and Singtel has the optimum security, network, and compliance expertise to handle and resolve complex issues.

The company's cybersecurity professionals conduct 24/7/365 monitoring at its state-of-the-art SOC, one of the Asia-Pacific region's most innovative facilities. As an end-to-end platform, the SOC offers extensive telecommunications and security services, ensuring complete security (from primary monitoring to identification and remediation) throughout the incident lifecycle. Additionally, executive and operations dashboard features and threat intel feeds boost customer outcomes, further cementing Singtel's leading position.

Frost & Sullivan acknowledges that Singtel's cybersecurity excellence is rooted in its action-oriented, holistic approach to rising threats and evolving customer needs. The company capitalizes on automation

⁶ Ibid.

⁷ Ibid.

and technology integration to offer a top-notch experience. Singtel's relentless focus on talent development and retention through purposeful initiatives and collaborations further strengthens its competitive differentiation. Its ability to persistently facilitate outstanding customer value despite the transitioning trends and demands demonstrates strategic foresight and agility.

Unparalleled Customer Benefits Fortify Competitive Edge

The company further bolsters its unique value proposition with customer benefits that other market players cannot easily duplicate. Its outstanding managed threat detection (driven by AI and automation) amalgamates deep learning and tailored behavioral analytics into one service, giving a holistic customer experience. Singtel's cybersecurity team comprises top-notch specialists in new security research, incident readiness, penetration testing, and data breach forensic investigations. A rich knowledge pool contributes to Singtel's unique market advantage, giving users confidence that they will receive exceptional service and outcomes from its offerings. Moreover, swift and transparent threat detection safeguards against intricate threats, narrows attack surfaces, detects new vulnerabilities and risks, and supports incident management.

Furthermore, Singtel's game-changing MDR expertise integrates its SecOps platform and cyber experts to identify and tackle threats meticulously. Adding to these advantages, the company offers incident triage and containment through security analysts, who oversee threat detection, containment, and eliminating false positives. Singtel takes its distinctiveness to another level with its managed security platform, which incorporates secure configuration and device management and maintenance, ensuring compliance and protection against attacks, such as distributed denial-of-service (DDoS). Moreover, the company's platform includes customer-premises equipment-based and virtual machine-based security, SSE, web application firewall, and application programming interface (API) protection.⁸

Singtel's matchless cloud security and consultation services and solutions empower a safe and successful cloud transformation strategy for customers, providing greater visibility, control, and confidence. Realizing that robust cloud security mandates resources, expertise, and time, Singtel integrates network and security into one solution, delivering comprehensive, cloud-native security services. Additionally, its trailblazing network-based security encompasses managed DDoS protection, Managed Secure Access Service Edge (SASE), managed web defacement, and managed web application and API.

Singtel actively invests in 5G network slicing technology and offers 5G security-as-a-slice services. In October 2024, the company launched an enhanced Singtel CUBE to empower businesses with intelligent security and network services and help them agilely tackle an intricate digital landscape. This holistic network solutions and services suite now includes SASE services from various industry leaders (e.g., Fortinet, Palo Alto, and Zscaler). It also integrates cutting-edge AI-driven Algo-Routing services, augmenting path selection for business workloads and internet performance by up to 30%. Additionally, the improved Singtel CUBE incorporates Singtel's Enterprise Mobile Protect (EMP), a security-as-a-slice feature that uses AI and ML to detect and block cyber threats in real time, stopping them from reaching users' mobile devices.⁹

⁸ <https://www.singtel.com/business/products-services/cybersecurity/mssp>

⁹ <https://www.singtel.com/business/articles/announcement-cube-expands-suite-of-solutions>

Beyond technological benefits, the company's value proposition includes Cyber Intel-as-a-Service (ClaaS), which entails dark-web monitoring and digital risk protection. By maximizing real-time cyber threat insights, customers better comprehend their security posture and proactively secure their systems while staying ahead of criminals. Singtel's ClaaS also supports applicable and exhaustive content customized to customers' requirements, and its all-inclusive services suite includes different types of intelligence (credential, malware, vulnerability, and adversary) with brand protection and attack surface management.¹⁰

Use Cases Proving Service and Solution Excellence¹¹

A transport operator needed a new cloud-based security information and event management (SIEM) platform to support analogous functionality on legacy on-premises solutions. The client also required centralized monitoring and supervision of various operating environments under one SOC platform and process. To this end, Singtel implemented a co-managed SOC and cyber delivery manager, resulting in streamlined monitoring, escalation, and response of the client's hybrid environment.

A utility company faced the challenges of a legacy security platform and needed help modernizing it. Singtel responded with SSE and SIEM transformation, co-managed SOC, and cyber delivery. As a result, the client accomplished improved ongoing security advisory, better response efficiency, and alert accuracy alongside an upgraded SIEM platform.

Singtel showcases solid versatility by accommodating customers from diverse sectors with solutions tailored to their unique pain points. Beyond mobility and utility, the company secured a cybersecurity use case with a property development client, addressing their lack of security resources, non-centralized security management, and outdated security platforms. Singtel tackled these gaps by deploying its MDR capabilities, Systems, Applications, and Products in Data Processing compliance monitoring, cyber delivery manager, security platforms consolidated management, and managed SD-WAN with internet connectivity augmented with DDoS protection. With the company's distinguished cybersecurity services, the client revolutionized their security management with a centralized model and accelerated digital transformation through a strengthened security posture.

Frost & Sullivan's in-depth analysis of Singtel's business framework highlights that the company outpaces other market players with its exceptional service excellence and customer benefits (e.g., cost optimization). The company's network advantage, proficiency in environment-friendly solutions, and rich partner ecosystem enable it to support customers' sustainability initiatives through cloud-powered security and a zero-carbon footprint. Beyond being a service provider, Singtel integrates operationally into its customers' systems, helping them achieve desired results through a synergistic approach.

A Progressive Outlook Galvanizes Growth Opportunities

Singtel implements new strategies as a forward-looking company, ensuring an upward business trajectory. For example, in 2023, the company merged its consumer and enterprise segments in Singapore into a single operating company and pioneered a roadmap, Prime 26, for sustained development in a thriving economy. Capitalizing on Prime 26, Singtel envisions forging new growth engines, boosting efficiency,

¹⁰ <https://www.singtel.com/business/products-services/cybersecurity/mssp>

¹¹ Frost & Sullivan's Interview with Singtel (September 2024)

streamlining cost structures, improving customer experiences, and transforming its culture to achieve its goals. In 2024, the company observed early indications of savings contributing to the bottom line, preparing for higher gains in fiscal year 2025.

The company understands the significance of having a cohesive and agile business framework that adapts to the industry's shifting landscape. Therefore, it embarked on Singtel28 in 2024, an innovative, two-pronged strategy to enrich customer experiences and ensure magnified stakeholder value. Singtel initiated working on Singtel28 in 2021, and it took three years to redefine its growth plan, prioritizing better connectivity and digital infrastructure and services. Moreover, the new strategy will enable the company to amplify business performance and smart capital management.

Singtel constantly observes the market ecosystem to stay on top of the trends. With technological advancement accelerating, consumers and organizations face more threats. To this end, the company accentuates procedures that maximize customers' security from the network to device levels, helping them avoid scams and fraud with its application, SingVerify (introduced in March 2024). It is a safe authentication method to verify users' identities in real time against phone numbers registered with Singtel and other service providers. The authentication process runs behind the curtain, considerably decreasing the chances for scammers to overtake the multi-factor authentication process.¹²

Furthermore, Singtel proactively centers on increasing businesses' cyber resilience in Singapore. Therefore, the company introduced its Cyber Elevate (2023) and Defence Against Cyber Scams (2024) programs, offering essential knowledge and support. For Cyber Elevate, Singtel partnered with SkillsFuture Singapore. This affordable and unique training and cyber incident management program enables SMEs to fortify their security posture and bolster their resilience through comprehensive workshops, educating customers on detecting and addressing incidents. For Defence Against Cyber Scams, Singtel CSI collaborated with SIM Academy to upskill and reskill the workforce of large enterprises – with UOB being the first in the financial sector to join in co-developing a program specifically for its employees.

Singtel also pursues consistent nation-building and future-ready initiatives in Singapore. As part of Singapore's Digital Connectivity Blueprint, one priority is achieving quantum safety within the next 10 years. Singtel was appointed by the Infocomm Media Development Authority (IMDA) to develop the nation's first National Quantum-Safe Network Plus (NQSN+) for enterprises in partnership with global industry leader ID Quantique (IDQ).¹³

Beyond continuous developments and initiatives, the company enriches its brand recognition through social media channels, public relations, and advertising, attracting business-to-business target audience with useful content that expands visibility. Singtel also engages in thought leadership by discussing information technology and security topics while offering actionable insights. Moreover, the company leverages content marketing and creates focused, updated content and multi-channel campaigns to build awareness, engage customers, and sustain relationships. With search engine optimization, Singtel improves its website and content's visibility in search engines, increasing ranking with regular web updates. The company also networks with customers through industry associations, trade shows, and

¹² <https://www.singtel.com/about-us/media-centre/news-releases/singtel-launches-authentication-solution--singverify--to-curb-ri>

¹³ Full Annual Report 2024 (Singtel, 2024)

events (e.g., GovWare), elevating brand equity. Lastly, it partners with top-tier organizations to expand its reach and reliability.¹⁴

Frost & Sullivan opines that Singtel's strategic initiatives (e.g., Prime 26 and Singtel28) help it progress steadily. Additionally, its talent-centric partnerships that promote employee upskilling exemplify its commitment to industry success. Harnessing various brand recognition-driven approaches, the company sustains its upward trajectory, securing impressive business advancement with new growth opportunities.

Conclusion

Building on 145 years of industry knowledge, steadfast innovation, and customer-centric strategies, Singtel has become an acclaimed name in Singapore's cybersecurity services market. The company employs strategic initiatives and roadmaps to align with the industry's ever-shifting landscape and address unmet customer needs. By offering a fully integrated service portfolio for numerous use cases, Singtel helps customers achieve desired outcomes and value with a strong focus on cost optimization, operational efficiency, and cyber resilience. As a future-driven company, Singtel actively invests in technologies (like artificial intelligence and machine learning) that accelerate digital transformation. Its network advantage, proficiency in eco-friendly solutions, and rich partner ecosystem enable it to support customers' sustainability initiatives through cloud-enabled security and a zero-carbon footprint.

Singtel's cybersecurity team entails top-notch specialists, adding to its unique value proposition. Its unsurpassed cloud security and consultation services and solutions enable a safe and successful cloud transformation strategy for customers. Furthermore, the company's game-changing network-based security services include many solutions, demonstrating versatility and broad applicability.

With its strong overall performance, Singtel earns Frost & Sullivan's 2024 Singapore Company of the Year Award in the cybersecurity services industry.

¹⁴ Frost & Sullivan's Interview with Singtel (September 2024)

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

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

Best Practices Award Analysis

For the Company of the Year Award, 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 by a robust solution development process

Visionary Scenarios Through Mega Trends:

Long-range, macro-level scenarios are incorporated into the innovation strategy through the use of Mega Trends, thereby enabling first-to-market solutions and new growth opportunities

Leadership Focus: Company focuses on building a leadership position in core markets and on creating stiff barriers to entry for new competitors

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

Financial Performance: Strong overall business performance is achieved in terms of revenue, revenue growth, operating margin, and other key financial metrics

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

