

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



SINGTEL RECEIVES THE 2023 COMPANY OF THE YEAR AWARD

*Identified as best in class in the Asia-Pacific 5G
enterprise 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. Singtel excels in many of the criteria in the Asia-Pacific 5G enterprise 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 |

Address Unmet Needs

The telecom industry is facing declining average revenue per user (ARPU), with the need for mobile operators to stay relevant and competitive amidst the increasing competition from technology

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companies, such as over-the-top (OTT) participants offering software-based applications that do not require heavy infrastructure investments. Against this backdrop, innovative solutions are needed to drive new revenue streams and revenue growth. Mobile operators, such as Singtel Telecommunications, are looking to 5G as a technology that can enable industry innovation; however, 5G capability does not come cheap because it is costly to build out a full-fledged 5G standalone (SA) network. Moreover, customer expectations for more data at faster speeds for the same price make achieving incremental revenue to offset higher 5G costs tough. Increasing customer expectations at the same cost economics is a challenge that mobile operators need to overcome by

doing things differently, such as serving enterprise needs better, getting higher profitability from infrastructure, and offering more value with infrastructure.

With 5G, Singtel can provide enterprises with new capabilities, such as edge infrastructure and network slicing, that can simultaneously bring new monetization opportunities, such as quality of service (QoS) as a value add. Additionally, 5G can offer better network yield, which can improve Singtel's profitability as well.

By working with partners including IT providers, compute providers and system integrators, Singtel can provide enterprises with the means to build and deploy end-to-end 5G solutions affordably, with a platform and access to ready basic solutions and skillsets to customize basic solutions into customized solutions to suit requirements. This offering can overcome the gap in the market for affordable customizable solutions because competitors are selling and scaling a focused set of use case solutions that are in demand, such as drones, automated guided vehicles (AGVs), immersive mixed reality (XR), and cloud gaming. With Singtel, these use case solutions can run from basic to more advanced and are easily upgradable to the latest technology.

Beyond this, the company ensures connectivity bandwidth and QoS to meet the needs of enterprise applications and ensures that the compute power is as close as possible to enterprises so they can reap the benefits of 5G, with real-time analysis and decision making.

To offer more value with infrastructure, the company has undertaken a corporate restructure in 2023 to separate its infrastructure business into the Digital InfraCo infrastructure unit, repositioning itself in the market and driving growth, synergy, and productivity. The infrastructure unit will run Singtel's Paragon platform, in addition to its regional data center business, subsea cable, and satellite operations.

Frost & Sullivan views this move as positive for Singtel because it provides better visibility to the platform; creates the opportunity to cross-sell or bundle the difference services; and, above all, positions Singtel as a champion that can push for infrastructure to achieve better profitability.

Visionary Scenarios through Mega Trends

Over time, technology is expected to play a big role in enabling and maintaining the future of societies and industries. Countries in the Asia-Pacific (APAC) region, such as Singapore, are pioneers in advocating the use of technology-based solutions, such as Internet of Things (IoT) and artificial intelligence (AI), enabled by emerging technologies, such as 5G, edge computing, and cloud, to transform their countries into smart nations.

At the forefront of innovation, enterprises and government agencies in Singapore are increasingly embracing new technologies, such as 5G, AI, and security, to build a better and brighter future. With local governments backing the use of technology, especially in Singapore, markets are currently experiencing a significant upside to the early progress with 5G.

Another upside of 5G is the additional angle that is driving the market. Regionally, 5G has become a technology, whereby local pride is now a factor in driving 5G solution adoption, and local sentiment is driving home-grown technology.

Global partners see the value of partnering with Singtel in Singapore to push regional innovation to local enterprises. Partnering with Singtel brings immediate access to a deeply intertwined network in

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Singapore, which may already have the connections that could benefit global partners, such as Microsoft, Intel, Hyundai Motor Group, and Micron Technology. From this angle, large local mobile operators in the region can play a critical role in the innovation strategy of enterprises in the region.

With Singtel selling its comprehensive suite of solutions and offerings to other mobile operators, especially its regional associates, such as AIS in Thailand, Globe in the Philippines, Telkomsel in Indonesia, and Airtel in India, other mobile operators in the region can leverage local sentiment and

Singtel’s local network to grow 5G adoption in their markets.

Leadership Focus

Singtel is clearly leading the 5G space in Singapore and regionally because it brings together a pool of capabilities that all enterprises can readily leverage. The Singtel Paragon platform, a key capability, is beneficial to enterprises and a key differentiator for Singtel because the market lacks a similarly strong platform solution in Singapore, regionally, and potentially even globally. While a credit to Singtel, the platform and its associated 5G-ready solutions and skillsets from partner ecosystems are not the only aspects of Singtel’s 5G solution for enterprises. The team serving enterprises is a key success factor for the company. For example, this team has gained valuable insights and experience from marketing 5G and commercializing new use case solutions. The expert marketing team at Singtel has done an excellent job at creating awareness on 5G capabilities and benefits. Recognition for a job well done in marketing has come in the form of a string of multiple awards, including the Excellence in Brand Awareness at Singapore Marketing Excellence Awards 2022 for “Power Up with Singtel 5G” and the Best B2B Brand Experience (Gold) and the Best B2B Event Conferences/Meetings/Seminars (Gold) for “Singtel 5G SA.”

The team at Singtel that is leading the commercialization of new use case solutions with enterprises has gained a considerable amount of knowledge and experience that can be useful to commercialize other similar or more advanced use cases. Singtel’s customer-facing processes thoroughly map the customer journey, from identifying business challenges and pain points to building and managing a sustainable solution that can scale as required, and this experience can be priceless when solving an insurmountable problem using the know-how to solve similar problems. The team is constantly assessing the comprehensive suite of services and solutions for gaps and how it can constantly provide enterprises with what they need. The team takes a proactive approach when helping customers overcome their business challenges, meeting and even exceeding enterprises’ customer experience expectations. Furthermore, with some of the innovations being developed involving leading-edge solutions, such as digital twins and hyper-personalization, the team at Singtel is becoming the go-to experts in the commercialization of advanced use case solutions.

5G is quickly transforming the manufacturing and healthcare industries in the region. With commercial deployments already in the market in these areas, Singtel is set to make a bigger business impact in manufacturing and healthcare, both locally and regionally.

Customer Purchase and Ownership Experience

In Singapore, Singtel is positioned as a premium 5G service provider with its own 5G SA network, whereas the company's closest competitors are working together as a joint venture, , to build, deploy, and share a 5G SA network. To meet the cost to build out a 5G SA network and offer 100% nationwide coverage, Singtel had clarity from day one that to achieve a return on investment (ROI) within the required timeline, it had to satisfy the needs of a new breed of customers with varying requirements and constraints. To achieve this, the company first set out to complete the 5G SA network in the shortest timeframe possible because the mobile network is the prerequisite for service trials and testing. With the live 5G SA network in place starting in 2021, enterprises could commence early trials with new ideas.

With the 5G SA network out of the way, the company needed to help enterprises overcome the challenges of new technology adoption because even though enterprises may see the need for 5G, incorporating new technology can be a setback for most organizations. With this in mind, Singtel brought all the necessary elements together to enable enterprises with a one-stop shop solution that is easy to use and manage. This approach reduces the need to start from scratch and the associated friction in bringing everything together, both of which are not easy points to overcome when justifying a business case. Without Singtel, the enabling capabilities to facilitate new use cases would need to come from multiple providers. Moreover, without knowledge, skillset, and experience, this task would be impossible for most companies. With Singtel, everything comes together through a single pane of glass, offering an end-to-end, overarching view to help enterprises manage the solution operationally.

From infrastructure to services, Singtel positions all the necessary elements and then ensures everything works seamlessly end to end, thus making the customer purchase and ownership experience frictionless. By making the experience easy, from idea concept to deployment, the company puts enterprises in the driver's seat to achieve their objectives. As a result, the number of Singtel's 5G solutions reaching the commercial deployment stage is on the rise. For example, from the 30 live trials undertaken over the last 2 years at Singtel's 5G@Sentosa public-private sector collaboration project, there are already 4 commercial deployments, with more in the pipeline for launch until 2024.

Moreover, the company has other successful commercial deployments with brand names, such as Hyundai Motor Group, Micron Technology, and National University Health System (NUHS), indicating the positive experience that customers have with Singtel.

Brand Equity

Singtel is Singapore's largest telecommunications company by subscriptions and thus has a strong brand identity with an immense following among enterprises, after garnering a high level of brand loyalty among government agencies and enterprises of all sizes in Singapore. With Singapore as a stronghold, Singtel is viewed positively as an agile, innovative, and technologically advanced company regionally. In 2023, Brand Finance recognized Singtel as the world's 6th strongest brand in the telecoms sector. Factors that contributed to this ranking include service quality and a positive perception of technology leadership, such as seamless mobile network coverage, consistent customer experience, and products and services value.

In 2022, Singtel won multiple awards at both the local and global level for its Singtel Paragon platform and for its 5G SA network that was launched three years ahead of schedule, which currently offers 100%

nationwide coverage in 2023. Other technical areas that were acknowledged by industry veterans and observers include Singtel's 5G@Sentosa public-private sector collaboration project and its world-first portable 5G-in-a-box platform called GENIE.

Furthermore, the company is recognized¹ as one of Singapore's most valuable brands and for its efforts in the area of sustainability, specifically in community impact, diversity, and climate reporting. A strong brand goes a long way in driving customer lifetime value, and Frost & Sullivan commends Singtel for its exceptional performance in driving 5G adoption and for building and maintaining a formidable brand that competitors in Singapore and in the region will find hard to challenge.

Conclusion

Singtel has addressed the gap in the market for affordable customizable 5G use case solutions and is working tirelessly to make 5G available to all enterprises. While the Singtel Paragon platform is a known credit to the company, the value of the Singtel staff working on marketing and commercializing 5G solutions deserves commendation. With a string of commercial deployments as a proven track record, the human factor behind the technological innovation and approach is clearly a key success factor for Singtel. With its unique overall combination, Singtel is set to enable even more innovation for enterprises in the region.

With its strong overall performance, Singtel earns Frost & Sullivan's 2023 APAC Company of the Year Award in the 5G enterprise industry.

¹ Singtel; 2023; "[Awards](#)"

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

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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™.

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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)**

