

Telkomsel Recognized for

2021

Product Leadership

Indonesia IoT Industry

Excellence in Best Practices

Telkomsel

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. Telkomsel excels in many of the criteria in the Indonesian internet of things (IoT) space.

AWARD CRITERIA	
<i>Product Portfolio Attributes</i>	<i>Business Impact</i>
Match to Needs	Financial Performance
Reliability and Quality	Customer Acquisition
Product/Service Value	Operational Efficiency
Positioning	Growth Potential
Design	Human Capital

Reliability and Quality

“Telkomsel has proven to be the most reliable digital business partner for enterprises in Indonesia, with its strong reach across all islands of the Indonesian archipelago, committed engineering workforce, and strong innovation culture to adopt and build new technologies. For its IoT business, the company has a large clientele across banking and finance, manufacturing, agriculture, retail, and transportation in Indonesia, which speaks volumes about its customer acquisition strategies and innovative product offerings.”

– Vinay Biradar, Principal Consultant

Telkomsel’s IoT use cases go beyond connectivity. Telkomsel, a telecommunications company established in 1995, has become Indonesia’s leading IoT platform provider through its efficient and reliable technology deployment. Some of the largest companies in Indonesia deploy and operate Telkomsel’s solutions, such as IoT Managed SD-WAN, advanced telematics, computer vision, and real-time monitoring system.

Large mining companies and retail chains that operate in remote parts of Indonesia use Telkomsel’s IoT FleetSight solution. For its large mining customers, Telkomsel has implemented FleetSight in 750 vehicles across 13 operation sites in Kalimantan and Sumatera islands. With FleetSight, customers

benefit from improved visibility on driving speed, traveled routes of each vehicle, operating hours, and idle time. Drivers also receive real-time alerts to avoid accidents and casualties.

The reliability and quality of the Telkomsel IoT platform are assured even when the company delivers the overall solution to clients through a subcontractor. The platform's real-time monitoring dashboard offers a single pane of glass view of all actions taken by the subcontractor. The Telkomsel IoT Control Center has the capability of remediation with predictive fault maintenance.

Through this unique approach, Telkomsel enables itself to excel in product quality and ensure high customer loyalty with its fast and responsive monitoring system. Telkomsel aims to be agile and proactive to deliver product quality excellence. While developing reliable systems, Telkomsel consistently trains its employees and hires professionals from other industries to be well-equipped with emerging challenges.

Product/Service Value

As one of the largest retailers in Indonesia, Telkomsel implemented the SD-WAN technology in 1,200 stores within 6 months of 2020. The product improved stores' cost efficiencies by 30%, expediting campaigns and deployment of the stores' information technology (IT). With FleetSight, Telkomsel provides improved safety and security compliance through better visibility on assets-fuel trucks. Telkomsel's IoT products have the ability to integrate seamlessly with existing order management systems and accelerate overall project implementation, creating quicker value realization through synergy for the end customer.

Telkomsel is the only telecommunications participant in Indonesia that offers end-to-end IoT solutions to customers, from design to implementation. The company has differentiated itself in the market with its unique ability to be a one-stop solution provider for various industry verticals in Indonesia.

Telkomsel understands that businesses in different sectors have their own unique operating models. The company's default IoT offering is based on OPEX since it gives customers control over their finances. For industries preferring a CAPEX-based model, Telkomsel can customize and implement the solution accordingly. Frost & Sullivan commends Telkomsel's ability to scale rapidly in the Indonesian market with its flexible and robust IoT solutions.

Positioning

Indonesian enterprises encounter challenges in connectivity, real-time data gathering, and operating in various islands and geographic conditions. With its market leadership in consumer and enterprise connectivity solutions, Telkomsel steps up to address the enterprise demand for real-time data gathering and monitoring in a cybersecure environment. Telkomsel positions itself as a reliable digital business partner to enterprises in Indonesia, with an unrivalled reach that covers all islands on the Indonesian archipelago. Its IoT products are categorized across three broad segments: IoT Smart Connectivity, IoT Fleet Management, and IoT Industrial.

The IoT Smart Connectivity segment is well-established with a growing customer base in Indonesia. Telkomsel's latest offerings in this segment include IoT Managed CCTV, IoT Sphere, and IoT NTrance, all of which help end customers to reliably outsource asset tracking and monitoring so that they can focus on their core business.

In IoT Fleet Management, Telkomsel’s new products include IoT FleetSense and IoT Control Tower. They cater to manufacturing customers and oil and gas customers in Indonesia, allowing customers to track their fleet from a single control center. Under IoT Industrial, Telkomsel introduces IoT DeSight, IoT Envion, IoT Smart Agriculture, and IoT Smart Factory for industrial and agriculture customers in Indonesia.

Telkomsel’s solutions’ breadth and depth are unmatched by other major telecommunication competitors in Indonesia. Telkomsel IoT leads the market in providing, implementing, and supporting customers with its robust end-to-end IoT solutions.

Accelerating Digital Transformation & Excelling Business with Telkomsel IoT

Telkomsel IoT is Indonesia's leading IoT Platform that can fuel, drive, transform and elevate your business' future growth and stature in all business field

Telkomsel ENTERPRISE

Telkomsel IoT Smart Connectivity

- Telkomsel IoT Control Center** (NB-IoT, 5G): Reliable and secure cloud-based solution that automates IoT device management, 2G/3G/4G/NB-IoT/5G connection, location info enabled, real time dashboard, and alert system.
- Telkomsel IoT Managed Service Connectivity**: Manage connected business assets with high-reliability managed connectivity services, provided with guarantee SLAs.
- Telkomsel IoT Managed SD-WAN**: Simultaneously manage all business locations with Zero Touch Provisioning.
- Telkomsel IoT Managed CCTV**: Safeguard business locations from financially-devastating burglary and break-ins with reliable, secure, and cost-effective Managed CCTVs at all times, anywhere.
- Telkomsel IoT Sphere**: The act of securing IoT devices and the networks. Includes industrial machines, building automation, plus whatever IoT devices.
- Telkomsel IoT NTrance**: Integrated smart lock solution, safeguard your business assets everywhere with peace of mind, without worry

Telkomsel IoT Fleet Management

- Telkomsel IoT FleetSight**: Fleet management solution that provides insight and professional services to help Enterprise in improving safety, reducing costs and increasing productivity
- Telkomsel IoT TOMS**: Powerful online platform complete with dashboard and mobile apps, designed to optimizing your dispatches, deliveries and workforce activities.
- Telkomsel IoT FleetSense**: AI-based telematics and fleet management solution enables fleet owners to gain visibility on vehicles, improving overall safety and security.
- Telkomsel IoT Control Tower**: Collaboration of order dispatch and fleet management solution, leveraging Artificial Intelligent and Advance Geo-Location Engine to deliver an intelligent supply chain management platform to improve operational performance

Telkomsel IoT Industrial

- Telkomsel IoT INTANK**: Industrial IoT enabled tank monitoring solution to monitor asset inventory and productivity at site level, visible 24/7.
- Telkomsel IoT Asset Performance Management**: Industrial IoT asset monitoring solution that provides in control of real-time conditions of assets indoors, outdoors & in-transit
- Telkomsel IoT DeSight**: All-seeing visual technology, combined computer vision with AI technology that accurately identify and classify objects
- Telkomsel IoT Envion**: Industrial IoT solution to monitor real time energy consumption and machine utilities to predict the upcoming maintenance.
- Telkomsel IoT Smart Agriculture**: IoT solution with a precision farming solution for plantations ; smart agriculture, Automatic Weather Solution (AWS).
- Telkomsel IoT Smart Factory**: fully integrated, collaborative manufacturing systems that respond in real time to meet changing demands and conditions in the factory, in the supply network and in customer needs

Source: Telkomsel

Financial Performance

Telkomsel’s IoT witnessed a double-digit growth in business over the last five years, with 2020 being a stellar year as its gross revenue increased by more than 50%. The rising demand for remote monitoring fueled by the COVID-19 pandemic resulted in the company’s significant financial growth in 2019 and 2020. Telkomsel’s revenue growth in 2020 increased by 90% compared to the year-on-year growth of Q3 2019. The IoT segment currently contributes only 5% to Telkomsel’s overall revenue but as the IoT market continues to expand, Telkomsel expects the segment’s revenue contribution to grow as well. As such, the company continues to focus on enhancing its customer acquisition strategies in new segments, fully realizing the potential of its IoT solutions. Frost & Sullivan applauds Telkomsel for its strong performance and anticipates the company to continue reaching new heights and sustained growth in the IoT space.

Customer Acquisition

Telkomsel connected one million devices across more than 250 enterprises in 2019 with its IoT solutions. The company aims to develop comprehensive and enhanced automation capabilities to cater to customer demand. In addition to producing the best quality products/services, Telkomsel prioritizes its relationships with customers by being open-minded and engaging and working closely with customers. Telkomsel has a large customer base across various industries in Indonesia, including Alfamart (large retail chain), Pertamina (the country's largest oil and gas producer), and PT Pamapersada Nusantara (large mining manufacturer). The company has a dedicated customer acquisition team supported by large research and development (R&D) and engineering teams.

By prioritizing customer relationships, Telkomsel engages with customers to gain a variety of problem-specific insights. It proactively attempts to address specific problems or challenges with innovative solutions to be ahead of the curve. The company collaborates constantly with strategic partners to maximize the quality and time efficiency of its solutions, providing only the best to customers.

Growth Potential

In the last five years, Telkomsel has consistently experienced a double-digit growth, with more than 50% year-on-year in 2020. Among its different product/service offerings, Telkomsel sees significant growth in its smart connectivity segment catering to customers from financial, banking, and retail industries. With the Indonesian government promoting Industry 4.0, Telkomsel sees big opportunities to expand the IoT market by providing agile and ready-to-deploy digitalization and connectivity systems that meet customer needs.

Frost & Sullivan strongly believes Telkomsel is poised to lead the IoT and IoT security market in Indonesia over the next five years with its strong R&D capability, nationwide telecommunications reach, solid customer relationships across industry segments, and organizational culture of innovation to adopt and build new technologies.

Conclusion

Telkomsel's business approach of becoming a digital business partner to enterprises in Indonesia has helped it to excel in building innovative products. Telkomsel's IoT is now the leading IoT platform fueling the country's IoT revolution and Industry 4.0 growth. With its comprehensive IoT product offerings such as IoT Smart Connectivity, IoT Fleet Management, and IoT Industrial, Telkomsel distinguishes itself in the market as a state-of-the-art IoT technology provider.

With its strong overall performance, Telkomsel earns Frost & Sullivan's 2021 Product Leadership Award in the Indonesian IoT Industry.

What You Need to Know about the Product Leadership Recognition

Frost & Sullivan's Product Leadership Award recognizes the company that offers a product or solution with attributes that deliver the best quality, reliability, and performance in the industry.

Best Practices Award Analysis

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

Product Portfolio Attributes

Match to Needs: Customer needs directly influence and inspire the product portfolio's design and positioning

Reliability and Quality: Products consistently meet or exceed customer expectations for performance and length of service

Product/Service Value: Products or services offer the best value for the price compared to similar market offerings

Positioning: Products serve a unique, unmet need that competitors cannot easily replicate

Design: Products feature innovative designs, enhancing both visual appeal and ease of use

Business Impact

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

Customer Acquisition: Customer-facing processes support efficient and consistent new customer acquisition while enhancing customer retention

Operational Efficiency: Company staff performs assigned tasks productively, quickly, and to a high-quality standard

Growth Potential: Growth is fostered by a strong customer focus that strengthens the brand and reinforces customer loyalty

Human Capital: Commitment to quality and to customers characterize the company culture, which in turn enhances employee morale and retention

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 on-going growth opportunities and strategies for our clients is fuelled by the Innovation Generator™.

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 six 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)

