Orange Business Services Recognized as the

2021

Company of the Year

Asia-Pacific IoT Analytics Services Industry
Excellence in Best Practices

orange™ **Business Services**

FROST & SULLIVAN

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. Orange Business Services excels in many of the criteria in the IoT analytics services space.

AWARD CRITERIA

Visionary Innovation & Performance	Customer Impact
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

IoT-AI-based Solutions Drive Businesses' Digital Transformation Journey

The convergence of emerging technologies, particularly the Internet of Things (IoT) and artificial intelligence (AI), enables a sophisticated level of data analysis (i.e., predictive analysis), which has the potential to drive new revenues for vendors and adopters. System integrators have a vital role in the collaboration of these two ecosystems that are fundamental to businesses' digital transformation journeys. Governments are also investing massively in AI and its convergence with IoT. By applying IoT-AI-driven solutions, companies can gain competitive advantages, for example, improved efficiency and cost optimization through process automation. Hence, a proactive approach (i.e., predicting undesired conditions in the environment in which the company deploys the IoT solution) can deliver distinct benefits, specifically in manufacturing, construction, mining, and the energy sector, with high potential in healthcare and smart city applications. Consequently, IoT platform vendors are evolving their services, with AI/machine learning driving this development.

As the pace of IoT-AI adoption accelerates, the vendor landscape features a combination of IoT providers, analytics participants, and a dynamic domain of start-ups offering IoT-AI platforms and solution suites at both cloud and edge levels. However, designing IoT-AI-based solutions requires a small deployment test-scale strategy where AI specialists play a crucial role.

Despite its vast potential, Frost and Sullivan identifies specific restraints that limit the uptake of IoT-AI-driven solutions, such as:

- **Data readiness**: Data management is paramount as data in organizations is not always ready and clean enough for AI deployments

- **Shortage skills**: Companies lack specialists in data science and AI, equipped to work in an AI- and IoT-based environment

- **Cost-benefit analysis**: Organizations need return on investment (ROI) models and best practices to support investment decisions because IoT-AI solutions can be expensive

- **Integration**: The convergence of IoT and AI requires different technological components, and the integration of these parts is a challenge

- **Security**: IoT-AI solutions bring security complexity, adding several attack points at different levels of the architecture.[1]

Visionary Innovation and Business Impact of Orange Business Services

Orange Business Services designs and deploys infrastructure solutions, helping customers transform their businesses by providing end-to-end digital applications through its system integration capabilities. Serving more than 3,000 global customers, this telecommunication company successfully manages a geographically diverse and complex information technology (IT) environment to help businesses build resilience. With a headcount of 3,500 employees in 14 countries across the Asia-Pacific (APAC) region (i.e., the fastest-growing segment globally), its service portfolio covers data intelligence and analytics, IoT, mobile connectivity, and network transformation. Regional headquarters in Singapore ensure that this market leader responds purposefully to ever-evolving customer needs, combining the flexibility of cloud computing with local delivery, supported by superior skills and experience within the region. As the statutory environment is critical in offering connectivity and IT services, Orange Business Services takes care of multi-country regulatory requirements to enable the compliant, consistent rollout and delivery of its digital applications and services.

> *"Orange Business Services develops reliable solutions that address the entire IoT value chain, of which analytics is pivotal in shaping and securing tangible IoT benefits for customers. By redesigning component-based architecture into a complete service model, the company allows customers to choose a particular site, applications, and features that enable them to solve their business challenges automatically and authentically."*
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> *- Riana Barnard, Best Practices Research Analyst*

A One-stop-shop Approach Advances Productized Solution Offerings

With IoT connectivity, Orange Business Services has a SmartEverything portfolio that leverages IoT integration to deliver customized solutions that provide quick wins and ROI for customers in the smart transportation sector (e.g., Toyota, Mazda, and Yanmar). Good traction, specifically in Singapore and Hong Kong, confirms the potential of customized solutions for smart cities, smart buildings, and smart ports. Furthermore, the company's Connected Sites initiative is taking off quickly and already delivering revenue. Its value proposition lies in Orange Business Services' capability to function across the IoT value

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[1] *Convergence of AI and IoT: Market Opportunities and Challenges, 2019* (Frost & Sullivan, February 2020)

chain, from supplying sensors and devices to data management and analytical services, topped with mobile application and application programming interface services. Additionally, it allows Orange Business Services to speed up its implementation process (i.e., typically ranging from four to six weeks) into launching a new site within five to ten business days.

This one-stop-shop strategy combines modular, end-to-end business services with infrastructure, enabling productized solution offerings for every use case. Furthermore, each IoT solution deployment receives support from an experienced IoT development team of experts who work annually on more than 1,000 software and integration projects. Two examples illustrate Orange Business Services' unique value proposition:

- Working with McConnell Dowell to design a customized solution for the construction company, its management team completed an assessment of the ROI received and reported an overwhelmingly positive outcome.

- Within the mining sector, Orange Business Services developed a solution for tailings dam monitoring. It is critical to track the waste (i.e., a thick sludge) that goes into mining dams in real-time to predict dam failures. The IoT-AI-service provider recently rolled out this solution to two other mines in Tasmania based on this project's success.

Pillars of Success: Partnerships and Best Practice Implementation

The Connected Sites initiative is a testimony of Orange Business Services' commitment to best practice, specifically regarding collecting and handling customer data through stringent end-to-end security policies and an intentional design for rapid deployment and scale. Central to this capability is the company's partnership with Microsoft. As a Gold partner with over 100 Microsoft Certified Providers throughout the region, Azure is at the core of the design. Hence, customers have access to Microsoft's significant portfolio of security and data management modules, including embedded Power Business Intelligence and Stream Analytics. Notably, this feature enables customers to gain and activate insights from the IoT data that Orange Business Services liberates and combine it with an infrastructure design that allows flexibility. As a result, Orange Business Service handles local challenges (e.g., data sovereignty) seamlessly and without added deployment complexity. Furthermore, Connected Sites incorporates additional analytics features (such as weather and traffic analysis), which complement customers' own data sources to identify potential impacts on productivity.

"Good traction, specifically in Singapore and Hong Kong, confirms the potential of customized solutions for smart cities, smart buildings, and smart ports. Furthermore, the company's Connected Sites initiative is taking off quickly and already delivering revenue. Its value proposition lies in Orange Business Services' capability to function across the IoT value chain, from supplying sensors and devices to data management and analytical services, topped with mobile application and application programming interface services."

- Hemangi Patel, Senior Industry Analyst

Strengthening its analytics capability, Orange Business Services also partnered with E2C, a domain expert in the building management space specializing in extracting, structuring, and analyzing data from building management systems. This capability can

unlock benefits such as energy use optimization, potential mechanical failure identification, and predictive maintenance triggering across a portfolio of commercial buildings. In 2020, Orange Business Services also incorporated a video analytics capability with various partners, specifically for use cases such as license plate recognition to identify visitation trends or manage and control site access. Moreover, people counting informs demand-based services or maintains COVID-19-related compliance.

Additionally, Orange Business Services onboarded a capability to create digital twins of customer sites, helping businesses embrace model-driven decisions by developing a system that contextualizes and spatially organizes data. Incorporating three-dimensional (3D) models into the solution facilitates site surveying, remote inspection, and monitoring with the ability to embed either pre-loaded or real-time captured information. The capability to navigate facilities with a birds-eye 3D view provides interactive self-training and innovates how customers predict changes to the environment or monitor work progress and communication with teams on the ground. Lastly, Orange Business Services also has an increasing number of projects using its home-grown analytics capability, Flux Vision. APAC-headquartered transport and logistics companies use it for route planning & optimization and traffic analysis for their European-based fleets. Orange Business Services creates substantial value for clients through its highly differentiated offering; it also allows the company to transfer and expand its in-house data science capabilities to other projects.

Conclusion

As the pace of Internet of Things-Artificial Intelligence (IoT-AI) adoption accelerates, the vendor landscape features a combination of IoT providers, analytics participants, and a dynamic domain of start-ups offering IoT-AI platforms and solution suites at both cloud and edge levels. However, designing IoT-AI-based solutions requires a small deployment test-scale strategy where AI specialists play a crucial role. Orange Business Services develops reliable solutions that address the entire IoT value chain, of which analytics is pivotal in shaping and securing tangible IoT benefits for customers. By redesigning component-based architecture into a complete service model, the company allows customers to choose a particular site, applications, and features that enable them to solve their business challenges automatically and authentically. Furthermore, it allows Orange Business Services to move the implementation process (i.e., typically ranging from four to six weeks) into launching a new site within five to ten business days. This speed of delivery, agility, and flexibility helps the company respond rapidly and efficiently to customers' requirements. Building on its firm position in the IoT analytics and connectivity space, Orange Business Services continues to provide numerous turnkey solutions that combine analytics, connectivity, security, and real-time data processing while also offering professional application services to operate its facility across different Asia-Pacific countries and beyond.

With its forward-thinking leadership and customer-centric commitment, advanced through its best practice implementation, Orange Business Services earns Frost & Sullivan's 2021 Asia-Pacific Company of the Year Award in the IoT analytics services space.

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

About Frost & Sullivan

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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™. 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 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)