FROST & SULLIVAN

2024 COMPANY OF THE YEAR

IN THE AUSTRALIAN DATA CENTER SERVICES INDUSTRY

NEXTDC

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. NEXTDC excels in many of the criteria in the data center services space.

Market Agility and Customer-centricity Bolster Value and Leadership in Building Critical Digital Infrastructure for AI-enabled Business Processes

Established in 2010 and headquartered in Brisbane, Australia, NEXTDC (ASX100 listed) is a technology provider empowering business transformation with cutting-edge data center outsourcing. NEXTDC has 13 operational data centers, all tailored to the world's highest safety, security, energy efficiency, and fault tolerance standards. A further nine data centers have been announced as being either “In Development” or “In Planning.” Harnessing this nationwide network of Tier III and Tier IV facilities (Uptime Institute [UI]-certified), the company facilitates colocation services to enterprise and government customers. Its Tier IV facilities create value through high uptime, and sustainability-centric best practices precipitate operational efficiency through renewable energy sources.

Through its partner ecosystem of over 750 (cloud, networks, and information technology [IT]) service providers, NEXTDC helps customers build integrated hybrid cloud installations, expand their IT infrastructure, and realize the revolutionary opportunities afforded by digital megatrends such as artificial intelligence (AI).

As one of Australia's largest locally owned and operated data center services providers, NEXTDC sustains its strong market positioning by aligning with the industry’s shifting landscape, growth drivers, and technology megatrends. NEXTDC has rapidly synched with the industry's AI revolution, enabling

customers to use AI for optimized efficiency and risk management as well as sustainable practices, innovation, and magnified growth.

NEXTDC is investing enthusiastically and strategically to play a pivotal part in AI's implementation across Australia and the Asia-Pacific markets. For example, in March 2024, the company announced it is building a new S6 Sydney facility, which will operate exclusively as an AI factory. According to NEXTDC's website, it is Australia's first data center designed solely to support emerging "AI Factory" standards designed around NVIDIA's DGX data center program. NEXTDC's strong in-house engineering capability, national interconnected footprint, and thriving ecosystem position the company perfectly to build AI factories and "sovereign AI" support for Australian customer data. Exemplifying its dedication to refining the digital infrastructure market, the company has designed S6 to be a powerhouse that supports next-generation AI architectures and ensures essential resilience for the high-density power (up to 130 kilowatts [kW] per rack), liquid cooling solutions, matchless physical security, and ultra-low latency interconnection required for AI to process and analyze a vast amount of data for higher production.[1]

> *"NEXTDC's pursuit of superior customer value and experience is evident in its transformational initiatives. Capitalizing on AI-powered engineering and ultra-high-density computing, the company has created strategic differentiation in data center services."*
>
> ***- Iqra Azam***
> ***Best Practices Research Analyst***

As a future-driven service provider, NEXTDC understands the need for an interconnected ecosystem to address customers' unique, shifting requirements in the AI era. The company's robust ecosystem aims to ensure that partnerships and collaborations empower customers to adopt preferred AI solutions that advance their organizational objectives.

With the accelerating high-density computing landscape, NEXTDC positions itself to meet present and future infrastructure power and cooling needs. The accelerated adoption of AI advances the demand for considerably higher power delivery to individual racks. Understanding this trend's significance, NEXTDC shows flexibility in power delivery and liquid cooling technologies to tackle customers' shifting requirements. The company has already catered to diverse power densities ranging from 8kW to 30kW per rack in traditional air-cooled solutions and has delivered multiple liquid-cooled solutions for power densities up to 80kW as bespoke customer solutions. S6 and all subsequent AI Factory-ready environments are being engineered to flexibly support liquid cooling and rack-power densities up to 150KW.

However, the high-density computing needed for AI applications amplifies power usage, leading to carbon footprint-related concerns and higher operational expenses. Liquid cooling technologies surpass traditional air cooling by minimizing high-density computing's carbon impact. Liquid cooling also leads to tangible cost savings for businesses struggling with mounting power expenses, optimizes energy use, and lowers the adoption of an expensive cooling infrastructure. NEXTDC's adoption of these technologies has geared up its data center services to resolve omnipresent industry challenges and spearhead sustainable and cost-effective best practices in the new age of AI-powered innovation.

[1] Frost & Sullivan's Call with NEXTDC (April 2024)

NEXTDC has shown market foresight, engineering innovation, and investment commitment to ensure it plays a key role in the rollout of the critical infrastructure that meets the new power density, resilience, energy efficiency, physical security, and interconnection demands of accelerating AI adoption.

NEXTDC's facilities adjust operational frameworks to fulfill expectations. For example, the company's S3 data center (completed in June 2023 and UI Tier IV-certified) integrates a liquid heat rejection system for a client with racks rated at 30kW (or higher). Additionally, the S2 facility has a dedicated space for full immersion cooling, magnifying load capability with a smaller footprint than air cooling solutions. In its Melbourne Data Center, M1, NEXTDC utilizes liquid cooling for a client's supercomputer. All these are now proven concepts and capabilities of NEXTDC, and it has the commitment and engineering support to facilitate customized services meeting the unique requirements of hyperscale, government, and enterprise customers. In the future, it expects stronger demands for power delivery and liquid cooling as customers deploy higher megawatt (MW) workloads using NVIDIA graphics processing units. NEXTDC's continued commitment to investing in building data center facilities (with a focus on transforming industry trends and changing customer needs) has enabled it to gain trust and a competitive advantage in the Australian market.

NEXTDC augments its value proposition with onsite support throughout the customers' lifecycle. Its Remote Hands service provides specialist data center technicians conducting daily infrastructure and interconnection tasks 24x7 across all facilities for streamlined operations. The company also works closely with customers pre- and post-deployment, actively collecting feedback to evaluate and enhance its capabilities and innovate new technologies. Moreover, NEXTDC provides comprehensive pre-sales engineering support and allocates each customer a Customer Success Manager to ensure deployment and operational outcomes are optimized.

Forward-looking Strategies Propel Continuous Success

NEXTDC leverages 14 years of industry experience to continuously improve its state-of-the-art mechanical and electrical infrastructure and upgrade its equipment and operating processes. In 2023, the company undertook several growth-focused initiatives, including developing its Generation 4 (Gen 4) Electrical and Mechanical systems to boost its data center services, enhancing reliability, scalability, and efficiency.

The Gen 4 Electrical setup incorporates technologies (e.g., static uninterruptible power supply [UPS] with lithium-ion batteries) to support conventional diesel generators with lower-carbon options. With static UPS, the company has an uncompromised power supply, increased energy efficiency, and minimized maintenance costs, supporting its complete fault tolerance certification and 100% uptime guarantee value proposition. NEXTDC's battery arrays are distinctive due to their standardized capacity allocation of UPS/generator units, allowing efficient, repeated installation across multiple sites.[2]

NEXTDC's Gen 4 Mechanical includes water-cooled chillers, boosting cooling efficiency while decreasing the environmental footprint. These systems are adaptable and have been employed in design across data center buildings, including NEXTDC's smaller regional facilities, including A1 (5MW), B2 Stage 2 (6MW), and the 300MW S4 Sydney technology hub (currently in building approval process). Furthermore,

[2] Ibid.

NEXTDC's smart chiller selection, indirect water-side economy function, and direct airside free cooling elevate energy efficiency while sustaining 100% uptime.[3]

Supporting liquid cooling systems for AI and other high-density workloads, NEXTDC's Gen 4 systems integrate flexible mechanical lineup reticulation/distribution design, requiring minimal initial investment, supporting configuration according to customers' future requirements, and mitigating outage risks. The company's trailblazing and progressively prefabricated (for safer and swifter installation) Gen 4 systems epitomize its commitment to uninterrupted innovation and reliability within the data center sector. NEXTDC's Gen 4 data centers house the latest and most configurable capabilities in energy efficiency, power delivery, interconnectivity, and security solutions. These capabilities exemplify NEXTDC's future readiness for the AI tsunami and the ability to empower frictionless digital transformation, delivering differentiated customer value.

Growth-driven Initiatives Driving Success

In 2023, NEXTDC realized notable advancements through capital works projects including new facilities, expansions and critical plant and equipment upgrades. These capital works projects included A1 Adelaide Stage 1, B2 Brisbane Stage 2, D1 Darwin Stage 1, M2 Melbourne [Stage 3 Innovation Center, Stage 5 Phase 2, Stage 6 Phase 1, Stage 8 substation works, and Stages 9 to 11 scope of works], S3 Sydney, S4 Sydney, S5 Sydney, and S6 Sydney). These expansions signify NEXTDC's emphasis on continuous advancement and commitment to a tech-infused market landscape.

In 2023, NEXTDC completed the design and building approval processes and started the first stages of construction of its A1 Adelaide data center. This facility will be South Australia's first UI Tier IV data center, offering the future-oriented infrastructure platform required to expedite digital transformation in the state of South Australia. Post-completion, A1 will offer 5MW of Tier IV-certified capacity. The company has also commenced operations to establish a first-of-its-kind data center in the Northern Territory (Australia), D1 Darwin, to cover all mainland capital cities. In 2023, NEXTDC finalized Stage 1's design and started other processes. Leveraging a hybrid Edge configuration, D1 Stage 1 delivers a 210kW deployment, and D1 Stage 2 includes design activities and an additional 8MW of Tier IV-certified capacity. Both A1 and D1 integrate NEXTDC's Gen 4 engineering, ultra-high-density computing, cloud connectivity up to 100 gigabits per second (Gbps) and maturing 'AI Factory' standards.[4]

NEXTDC's pursuit of superior customer value and experience is evident in its transformational initiatives. Capitalizing on AI-powered engineering and ultra-high-density computing, the company has created strategic differentiation in data center services. The company's robust business administrative function reflects its consistent growth and success, topping 1,820 customers and 17,816 interconnections in 2023. In fiscal year 2023 (FY23), the Australian Government's Digital Transformation Agency appointed NEXTDC as a panelist on the Data Centre Facilities Supply Panel Contract. As part of this collaboration, the company is now certified to provide direct services to all federal, state, and local government agencies.

In FY23 (the 12 months to 30 June 2023), NEXTDC contracted 39.2MW of new capacity and realized $362.4 million in total revenue (a 25% increase from FY22) at a compound annual revenue growth rate of 21%.

[3] Ibid.
[4] Ibid.

The company also experienced a 40% increase in customer uptake of its NEXTneutral program.[5] Its S3, M2, and M3 facilities are among the primary growth drivers. Frost & Sullivan opines that NEXTDC's accelerated growth affirms its customer-first approach, innovative services, and operational strategies are ripe for riding the forecast AI-driven industry growth, yielding a strategic advantage in the Australian market.

Tech-fueled, Scalable Solutions Redefining Standards of Excellence

NEXTDC empowers users with real-time data center intelligence, self-service, and automation through its scalable ONEDC customer experience and service delivery portal. With a customizable 360° view of data center utilization, the platform facilitates partners and customers with all-encompassing telemetry management for their national data center footprint. This platform combines the tools necessary to monitor and manage infrastructure environments, centralizing real-time data on temperature, humidity monitoring, and reporting in one place. ONEDC also helps manage service requests (e.g., technical support, booking a car park, a tour, and meeting rooms). NEXTDC continuously upgrades its telemetry platform according to user feedback and future requirements. ONEDC facilitates a centralized, real-time view, helping users to track and report on their critical IT assets anytime. Some of the platform's notable customer benefits are remote management and monitoring of data center access, remotely unlocking rack doors, tracking, and managing power utilization, and viewing and managing data center services.

Data center infrastructure management tools become even more critical to customer success in the AI era and ONEDC's many features testify to NEXTDC's advanced technological capabilities. The platform enables users to set alerts and receive real-time notifications when user-defined critical levels on circuit breakers and power and whenever customers' racks are accessed. Furthermore, ONEDC integrates infrastructure visualization and management, helping customers identify precise device locations across multiple data centers (including hall, row, and rack). Leveraging this feature, users can track single points of failure and manage power supply for a streamlined solution experience. ONEDC also supports customers with intelligent report generation, revealing power utilization and their equipment's operational and environmental state. Through the predictable planning feature, the platform gives access to real-time dashboards and scenario testing tools, allowing users to simulate power outages and distribution and conduct planned maintenance.

In 2023, NEXTDC introduced mandatory multi-factor authentication (MFA) for ONEDC, enabling tenant administrators to turn on the MFA option from ONCEDC Portal's Access Management. Users can choose their preferred authentication protocols or NEXTDC's. The company has also incorporated multiple methods to authenticate and verify users' identity through the ONEDC Portal. Additionally, ONEDC allows customers to magnify automation value and carbon neutrality using NEXTDC's NEXTneutral, a Climate Active certified program yielding 100% carbon-neutral colocation.[6]

Another distinguishing offering that fortifies NEXTDC's industry leadership and AI readiness is AXON, an interconnectivity solution incorporating multi-cloud connectivity and software-defined Network-as-a-Service (NaaS) principles. It tackles traditional networking constraints and addresses businesses' current

[5] NEXTDC FY23 Annual Report
[6] Frost & Sullivan's Call with NEXTDC (April 2024)

and future distributed and digitalized needs. AXON helps customers re-evaluate the location of their digital edge and position it nearer to the people, places, clouds, data, and applications that drive progression.

With AXON, customers can install and optimize digital services and accelerate digital transformation. Crafted as a Layer 2 software-defined virtual interconnection platform, it ensures lower latency and jitter, exemplifying NEXTDC's dedication to robust and versatile data center services. Following a network-as-a-service approach, AXON facilitates customers with self-provisioning, on-demand bandwidth, and utility-based billing models. With an easy-to-use interface and single-pane visibility, AXON enables customers to refine operations and minimize operational costs. AXON's security protocols, real-time monitoring, and incident response plans protect against cyber threats. Moreover, it features interconnection to over 70 networks and 17 public cloud on-ramps to AWS, Google, and Microsoft, as well as over 750 digital services providers in the NEXTDC ecosystem.[7]

> *"NEXTDC's continued commitment to investing in building data center facilities (with a focus on transforming industry trends and changing customer needs) has enabled it to gain trust and a competitive advantage in the Australian market."*
>
> ***- Nishchal Khorana***
> ***Global Vice President and Program Leader, ICT***

NEXTDC continuously upgrades and improves AXON. In 2023, the company expanded its Network Operations team to develop novel AI and machine learning expertise to elevate AXON's durability, performance, and user experience. The same year, NEXTDC performed a hardware upgrade, resulting in customers leveraging cloud connectivity services up to 100Gbps. Additionally, the company enriches user interface with augmented data dashboards, seamless navigation, and innovative visualization tools. AXON represents NEXTDC's passion for quality and ingenuity in data center interconnection.

NEXTDC's technological prowess is evident in the solutions mentioned above. These innovations and their constant enhancement underscore the company's ability to engineer offerings that meet evolving customer and market demands. Integrating multiple large data sources is a key requirement of AI Factories, and AXON provides the flexibility, scalability, and agility required to meet evolving data center connectivity requirements.

Environmental Responsibility-centered Best Practices

With environmental stewardship at the core of NEXTDC's organizational framework, the company leads the industry with its sustainable data center infrastructure. It harnesses data analytics, cooling technologies, renewable energy, circular economy principles, and power-saving hardware for increased efficiency and lowered power use and costs. The company's data centers align with internationally accepted environmental standards. Moreover, NEXTDC's power usage effectiveness (PUE) metrics attest to its focus on constant operational betterment. Its documented PUE benchmarking reflects the national portfolio average of 1.39 achieved until June 30 (FY23).

According to NEXTDC, it is the only Australian data center provider with NABERS 5-Star certification and TRUE waste management certification. Throughout FY23, M1 and S1 facilities retained NABERS 5-Star

[7] Ibid.

ratings for energy efficiency, with P1 achieving 4.5-Star in 2023. In addition, the company has the Australian Federal Government's official Climate Active endorsement of its internal and customer carbon-neutral programs, testifying to NEXTDC's firm commitment to carbon neutrality.[8]

In 2023, NEXTDC also engaged in recycling and landfill diversion waste management programs across its facilities, with S1 Sydney securing the TRUE waste management certification. This is a notable achievement for the company, as acquiring the certification requires an uninterrupted 90% waste diversion rate for 12 months. NEXTDC is actively working towards obtaining TRUE accreditation for its other facilities.

Furthermore, the company performs sustainability-centered benchmarking assessments and upholds memberships with major industry bodies, tracking performance against applicable standards and other market players.

In FY23, NEXTDC performed its first scenario analysis exercise to determine how climate risks and opportunities may shift (in the future) and updated the metrics it uses to monitor its environmental footprint. Lastly, all company facilities comply with the ISO 14001 (environmental management systems) standard. Frost & Sullivan acknowledges that NEXTDC's green initiatives empower it to set higher sustainability standards. This is a critical success factor in the face of expanded AI adoption, where high-density computing makes energy efficiency even more significant under pressure from power cost and carbon footprint management perspectives. The company showcases solid alignment with the market's transforming landscape by attaining prominent accreditations and practicing environmental governance, emerging as a vanguard in sustainable business practices.

Conclusion

Harnessing 14 years of industry expertise, technology-driven offerings, and customer-value-driven business infrastructure, NEXTDC is a pioneer in Australia's data center services market. Its scalable and customer-focused innovations, built with a commitment to environmental stewardship, demonstrate the company's dedication to digital infrastructure transformation. It has made significant strides in preparation for the growth forecasts around artificial intelligence (AI) adoption and is ideally positioned to scale its infrastructure platform with the agility and flexibility that will be necessary to meet the requirements of hyperscale, government, and enterprise customers. Harmonizing with the industry's shifting trends, NEXTDC has equipped itself with powerful AI technologies, showcasing market-readiness and an ability to serve customers with premium solutions despite changes or challenges. With 13 future-oriented, operational data centers (and nine more either in construction or planning), a robust customer base, and continuous developments, the company has established a solid presence across Australia. NEXTDC's focus on carbon neutrality, circular economy, environmental, social, and governance practices, waste management, and energy efficiency fortifies its competitive edge.

With its strong overall performance, NEXTDC earns Frost & Sullivan's 2024 Australia Company of the Year Award in the data center services industry.

[8] Ibid.

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

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™

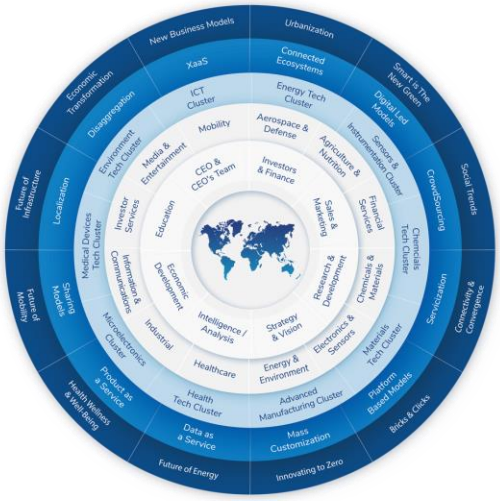
Frost & Sullivan's proprietary model to systematically create ongoing growth opportunities and strategies for our clients is fuelled by the Innovation Generator™.
Learn more.

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)