PROMINANCE

UPVC WINDOW SYSTEMS

2025 TECHNOLOGY INNOVATION LEADER

Enhancing Customer Impact Through Powerful Technology Integration

RECOGNIZED FOR BEST PRACTICES IN THE GLOBAL INTELLIGENT INDOOR CLIMATE CONTROL INDUSTRY

FROST & SULLIVAN

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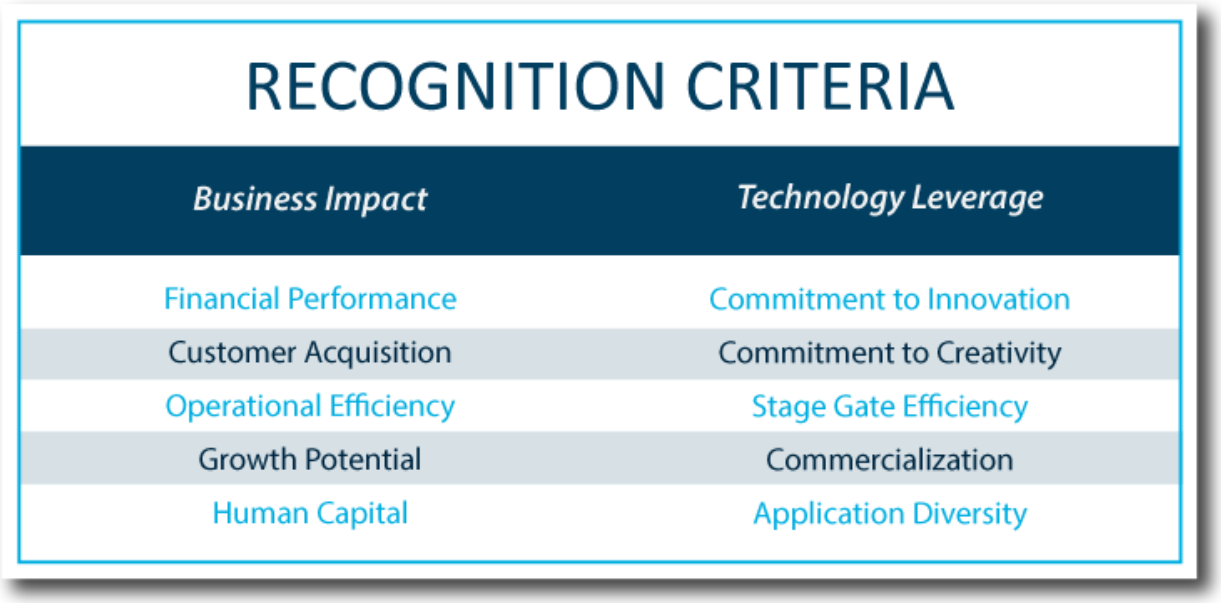
Best Practices Criteria for World-class Performance

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each recognition category before determining the final recognition recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. Prominance excels in many of the criteria in the intelligent indoor climate control space.



The Transformation of the Intelligent Indoor Climate Control Industry

Conventional indoor climate control systems, despite offering automated HVAC management, often fail to address critical issues of energy efficiency and occupant comfort. These systems are characterized by high energy consumption stemming from inefficient operations and the absence of integration with real-time HVAC performance analytics. Additionally, uneven air distribution remains a prevalent challenge, resulting in temperature inconsistencies and occupant discomfort. While radiant cooling systems present a possible alternative, they are frequently overlooked due to their substantial initial costs, intricate installation processes, and demanding maintenance requirements. This creates a significant market opportunity for solutions that effectively balance affordability, efficiency, and dependability. According to Frost & Sullivan, the global HVAC equipment market is projected to reach $345.57 billion by 2029, with a compound annual growth rate (CAGR) of 7.0% between 2023 and 2029.

Prominance's Zonal Air Conditioning (PROZAC) system is engineered to address critical challenges in indoor climate control through an innovative and intelligent solution. It ensures consistent cooling across the entire space, effectively eliminating issues of uneven air distribution. Unlike conventional systems, PROZAC integrates advanced data analytics to monitor HVAC performance metrics, enabling precise energy optimization and a significant reduction in energy consumption. Its streamlined architecture overcomes the limitations of radiant cooling systems, offering a cost-efficient, easily installable, and low-maintenance alternative. By improving indoor air quality, enhancing occupant comfort, and delivering sustainable energy efficiency, PROZAC redefines standards in the intelligent indoor climate control industry, providing unparalleled value where traditional systems fall short.

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Pioneering Sustainable and Intelligent Indoor Climate Control for the Future

The PROZAC system introduces a pioneering approach to air distribution and indoor climate control, blending cutting-edge technology with an efficient design framework. At its core is a free discharge manifold, seamlessly integrated with the Uniceil baffle ceiling system, which serves a dual purpose as both an aesthetically pleasing ceiling solution and an air distribution channel. Each baffle is equipped with actuators capable of dynamically adjusting airflow, guided by advanced sensing technologies such as air quality sensors, cameras, humidity sensors, presence sensors, thermal cameras, temperature sensors, thermostats and a motion sensor. This integration enables real-time zonal detection and precision-controlled airflow distribution, delivering personalized occupant comfort while optimizing energy efficiency.

A key highlight of the PROZAC system is its vendor-neutral architecture, ensuring compatibility with any HVAC or control system, thereby offering versatile installation options. Additionally, Prominance leverages indigenous hardware and software solutions to guarantee system reliability while providing complete control over customization and innovation. The incorporation of thermal or CCTV-based presence detection, combined with temperature sensors, enhances the system's adaptability to fluctuations in occupancy and heat loads. This precision engineering translates into significant energy savings, lower operating costs, and exceptional indoor comfort. By prioritizing advanced technology and universal compatibility, the PROZAC system sets a new standard for intelligent and sustainable indoor climate control, establishing itself as a game-changing solution in the HVAC industry.

PROZAC: Smart, Adaptive, and Energy-efficient Indoor Climate Control Technology

The PROZAC system establishes a new standard in energy-efficient HVAC technology, utilizing advanced innovations to enhance cooling performance while minimizing energy consumption. A key advantage of the system is its capacity to reduce energy waste by up to 30%, achieved through a design that provides cooling exclusively where and when it is required. By implementing optimized zonal control, the system customizes cooling for specific areas, effectively eliminating energy usage in unoccupied zones. Additionally, the integration of smart scheduling automates the cooling process by analyzing occupancy patterns and usage trends, ensuring optimal efficiency during both peak and non-peak periods. Advanced real-time monitoring continuously tracks system performance, identifying opportunities to further enhance efficiency while ensuring optimal comfort.

> *"PROZAC's advanced features go beyond merely achieving energy savings. Its energy-efficient cooling algorithms dynamically regulate airflow and temperature, maintaining optimal comfort while minimizing unnecessary energy consumption. Additionally, the system effectively manages load distribution to reduce peak demand, resulting in lower energy expenses and alleviating pressure on the power grid."*
>
> ***- Anirudh Bhaskaran***
> ***Industry Principal***

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distribution to reduce peak demand, resulting in lower energy expenses and alleviating pressure on the power grid. In addition, extended equipment life is achieved by optimizing performance and reducing runtime, minimizing wear and tear on HVAC components. Combined with lower maintenance costs due to automated scheduling and monitoring, as well as detailed energy reporting and analytics, the PROZAC system empowers users with actionable insights to achieve even greater efficiency.

To substantiate its energy efficiency claims, the PROZAC system has undergone comprehensive testing across both small- and large-scale environments. Preliminary trials conducted in a 600 sq. ft. facility delivered encouraging outcomes, showcasing substantial energy savings alongside enhanced comfort levels. Building on these results, Prominance collaborated with the Indian Institute of Science (IISc), Bengaluru, to evaluate the system in a 4,500 sq. ft. space. Over a period of 50 days, the system underwent 2,500 trials to assess its performance, reliability, and energy optimization potential within a larger setting. The findings from these rigorous trials are anticipated to be released by November 2024, offering critical insights to validate the system's capabilities and solidify its position as a groundbreaking solution for sustainable and adaptive HVAC systems.

Additionally, the Computational Fluid Dynamics (CFD) simulations conducted for the PROZAC system have yielded valuable insights into its operational performance, emphasizing several notable advantages. A primary finding is the significant improvement in temperature uniformity, with the CFD analysis confirming consistent temperature distribution throughout the space and eliminating issues such as uneven cooling and hotspots. Furthermore, the system exhibits optimized airflow patterns, enhancing occupant comfort while addressing inefficiencies. The simulations also verify a notable improvement in energy efficiency, demonstrating that the system's design minimizes energy consumption without compromising on cooling performance.

Frost & Sullivan acknowledges the PROZAC system for its groundbreaking contribution to enhancing energy efficiency and promoting sustainability in climate control. With features such as zone-specific cooling, real-time performance monitoring, and predictive algorithms, the system effectively addresses both comfort and operational challenges with exceptional accuracy and dependability. Its seamless compatibility with a wide range of HVAC systems and automated control capabilities underscores its flexibility and readiness for future advancements. The collaboration with IISc, Bengaluru, to validate energy efficiency claims through extensive real-world trials demonstrates a strong commitment to transparency and excellence in performance. Frost & Sullivan envisions PROZAC shaping the future of intelligent indoor climate control technologies, driving the next generation of sustainable solutions.

Empowering Customers Through AI-driven Personalization and Mobile Integration

The PROZAC system employs AI-powered optimization and an intuitive mobile application to deliver highly customized and efficient climate control solutions. Its AI functionalities include personalized comfort detection, where the system adapts to user preferences and utilizes presence detection to adjust temperature and airflow for optimal comfort. Additionally, it integrates weather-based modulation, dynamically adjusting settings based on external conditions, and time-of-day modulation, aligning operations with occupancy patterns and daily schedules. Predictive analytics further enhance efficiency by forecasting and fine-tuning settings based on energy consumption trends, while continuous learning enables the system to progressively improve both efficiency and comfort over time.

"Through its integration of innovation, sustainability, and a customer-centric approach, Prominance is establishing new standards within the industry. Its groundbreaking solutions are revolutionizing HVAC performance, enhancing energy efficiency, and improving adaptability, thereby cementing its role as a significant contributor to the advancement of intelligent indoor climate control technologies."

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The mobile application enhances user engagement by empowering occupants to manage their indoor environment. Featuring capabilities such as occupancy detection and zone-specific control, it allows users to scan QR codes to activate and tailor cooling or heating settings for designated zones, ensuring a personalized and efficient climate control experience.

The application enables real-time adjustments, allowing users to instantly modify temperature and airflow settings. By integrating AI-driven automation with manual controls, it provides a seamless and adaptive indoor experience, customized to meet both individual and group requirements.

Maximizing Revenue Through a Customer-centric Approach

Prominance's PROZAC leads the way in HVAC innovation by cultivating a dynamic environment that promotes creativity and collaboration. Employees are actively encouraged to contribute ideas, driving the development of cutting-edge solutions and fostering a highly productive atmosphere for technological advancements. PROZAC's approach to indoor climate control is rooted in its vision of the future, where systems are intelligent, adaptive, and personalized.

PROZAC strategically focuses on end-user verticals where its solutions generate significant revenue and deliver substantial impact. In commercial buildings, the system's energy-efficient cold air distribution technology reduces operational costs while enhancing occupant comfort in offices, retail spaces, and shopping malls. For airports and metro stations, PROZAC provides high-traffic cooling capabilities, ensuring consistent performance and enhancing passenger experiences in crowded environments. The hospitality and education sectors benefit from precise temperature control and substantial energy savings. In healthcare, PROZAC's low-velocity cooling technology, combined with pathogen-reduction features, creates safer and more comfortable environments for hospitals, research laboratories, and pharmaceutical facilities. By addressing the specific demands of each vertical, PROZAC delivers tailored solutions that enhance efficiency and ensure customer satisfaction.

Frost & Sullivan commends Prominance for its outstanding customer-focused approach, which has been instrumental in its success within the HVAC industry. By offering highly customized solutions designed to meet the precise requirements of various sectors, PROZAC ensures its systems align seamlessly with customer priorities. The integration of transformative technologies such as IoT, AI, and computer vision enables advanced predictive insights, enhances operational efficiency, and supports seamless automation and intelligent system functionality.

Prominance's financial trajectory further highlights its proven track record of financial performance. The company achieved an impressive revenue of $34.2 million (₹290 crore) in FY 2023-2024 (April 2023 to March 2024) and is projected to surpass $47.2 million (₹400 crore) in FY 2024-2025 and $70.8 million (₹600 crore) in FY 2025-2026. Notably, another remarkable innovation, Prominance's Uniceil baffle ceiling

system, which offers a sustainable, cost-effective, and technologically advanced solution for modern interiors, is expected to grow exponentially, with revenue projected to expand ninefold in FY 2024-2025 compared to the previous year, underscoring the company's proven track record of successfully taking innovative products to the market.

Through its integration of innovation, sustainability, and a customer-centric approach, Prominance is establishing new standards within the industry. Its groundbreaking solutions are revolutionizing HVAC performance, enhancing energy efficiency, and improving adaptability, thereby cementing its role as a significant contributor to the advancement of intelligent indoor climate control technologies.

Conclusion

Prominance's PROZAC system represents a cutting-edge advancement in intelligent indoor climate control, seamlessly combining state-of-the-art technologies, innovative engineering, and a customer-centric approach. By addressing the inefficiencies of conventional HVAC systems and overcoming the challenges posed by alternatives like radiant cooling, PROZAC redefines industry benchmarks in efficiency, comfort, and sustainability. Key features such as zone-specific cooling, uniform air distribution, AI-enabled optimization, real-time performance monitoring, and an intuitive mobile interface enable tailored, adaptive, and energy-efficient operation designed to meet diverse industry demands.

Extensive real-world testing has validated energy savings of up to 30%, establishing PROZAC as a reliable and groundbreaking solution. Computational Fluid Dynamics (CFD) simulations further underscore its exceptional capabilities in achieving superior temperature uniformity, enhanced airflow management, and reduced energy consumption. The system's vendor-neutral architecture and use of indigenous hardware and software ensure unmatched adaptability, dependability, and scope for innovation. Positioned to transform indoor climate control across industries, PROZAC delivers exceptional value in energy efficiency, occupant comfort, and operational performance, driving the evolution of intelligent and sustainable HVAC solutions.

With its strong overall performance, Prominance earns Frost & Sullivan's 2025 Global Technology Innovation Leadership Recognition in the intelligent indoor climate control industry.

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What You Need to Know about the Technology Innovation Leadership Recognition

Frost & Sullivan's Technology Innovation Leadership Recognition is its top honor and recognizes the market participant that exemplifies visionary innovation, market-leading performance, and unmatched customer care.

Best Practices Recognition Analysis

For the Technology Innovation Leadership Recognition, Frost & Sullivan analysts independently evaluated the criteria listed below.

Technology Leverage

Commitment to Innovation: Continuous emerging technology adoption and creation enables new product development and enhances product performance

Commitment to Creativity: Company leverages technology advancements to push the limits of form and function in the pursuit of white space innovation

Stage Gate Efficiency: Technology adoption enhances the stage gate process for launching new products and solutions

Commercialization: Company displays a proven track record of taking new technologies to market with a high success rate

Application Diversity: Company develops and/or integrates technology that serves multiple applications and multiple environments

Business Impact

Financial Performance: Strong overall business performance is achieved in terms of revenue, 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: Leveraging innovative technology characterizes the company culture, which enhances employee morale and retention

Best Practices Recognition Analytics Methodology

Inspire the World to Support True Leaders

This long-term process spans 12 months, beginning with the prioritization of the sector. It involves a rigorous approach that includes comprehensive scanning and analytics to identify key best practice trends. A dedicated team of analysts, advisors, coaches, and experts collaborates closely, ensuring thorough review and input. The goal is to maximize the company's long-term value by leveraging unique perspectives to support each Best Practice Recognition and identify meaningful transformation and impact.

		VALUE IMPACT	
STEP		WHAT	WHY
1	**Opportunity Universe**	Identify Sectors with the Greatest Impact on the Global Economy	Value to Economic Development
2	**Transformational Model**	Analyze Strategic Imperatives That Drive Transformation	Understand and Create a Winning Strategy
3	**Ecosystem**	Map Critical Value Chains	Comprehensive Community that Shapes the Sector
4	**Growth Generator**	Data Foundation That Provides Decision Support System	Spark Opportunities and Accelerate Decision-making
5	**Growth Opportunities**	Identify Opportunities Generated by Companies	Drive the Transformation of the Industry
6	**Frost Radar**	Benchmark Companies on Future Growth Potential	Identify Most Powerful Companies to Action
7	**Best Practices**	Identify Companies Achieving Best Practices in All Critical Perspectives	Inspire the World
8	**Companies to Action**	Tell Your Story to the World (BICEP*)	Ecosystem Community Supporting Future Success

*Board of Directors, Investors, Customers, Employees, Partners

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 Generator™

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:

- Megatrend (MT)
- Business Model (BM)
- Technology (TE)
- Industries (IN)
- Customer (CU)
- Geographies (GE)

