FROST & SULLIVAN

# 2025 Frost & Sullivan
# **Company of the Year Recognition**

The Southeast Asia Smart Building Solutions Industry
Excellence in Best Practices

FROST & SULLIVAN
BEST PRACTICES
AWARDS

**Azbil Corporation**

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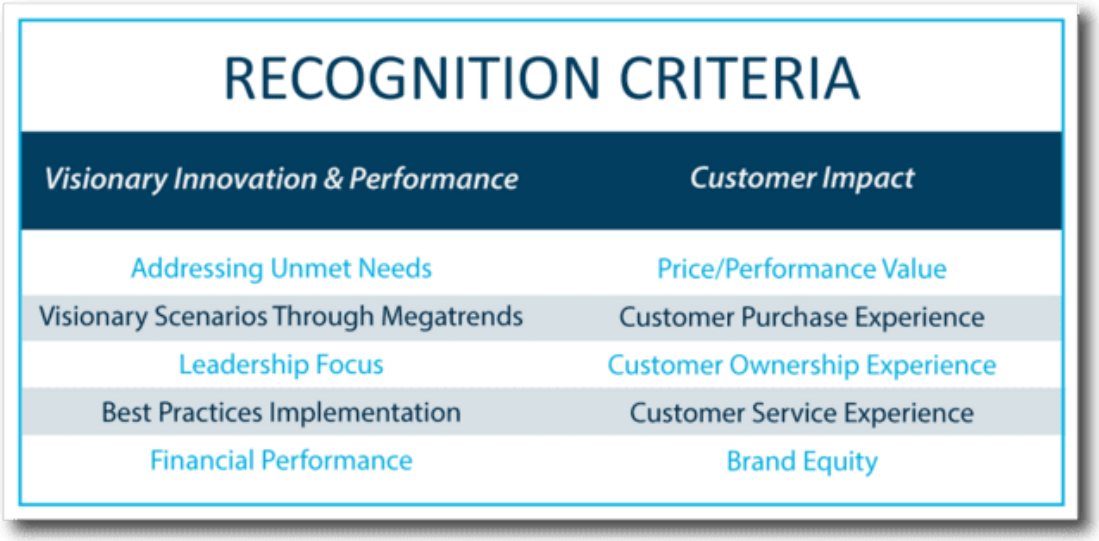
## Best Practices Criteria for World-class Performance

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. Azbil Corporation excels in many of the criteria in the smart building solutions space.




## Southeast Asia's Smart Building Industry Dynamics

The Southeast Asian (SEA) smart building solutions market is evolving rapidly, shaped by global megatrends and regional imperatives. Globally, the industry is estimated to reach $15.84 billion in 2025, growing at a rate of 11.9% from 2024.[1] While these figures highlight global momentum, the Asia Pacific region is expected to register accelerated growth with a 24% year-over-year increase in 2025. SEA is emerging as one of the most dynamic frontiers, driven by rapid urbanization, climate vulnerability, and government sustainability commitments.

Climate change is a major challenge in the region. Rising sea levels threaten major cities (such as Jakarta and Bangkok), while extreme heatwaves and unpredictable weather patterns put pressure on national grids. Energy demand is increasing sharply, with cooling loads consuming a significant portion of urban electricity. As a result, smart building technologies that reduce greenhouse gas emissions while maintaining comfort and reliability are no longer optional, but essential.

Governments are responding with bold policy agendas. Singapore's Green Plan 2030, Malaysia's National Energy Transition Roadmap, Thailand's Bio-Circular-Green Economy framework, and Indonesia's renewable energy expansion initiatives all place the built environment at the center of decarbonization strategies. These policies are creating a favorable environment for smart building adoption, particularly solutions that deliver measurable energy savings and carbon reductions.

[1] Global Homes and Buildings Industry Outlook, 2025 (Frost & Sullivan, May 2025)

Corporate priorities are also shifting. Post-pandemic realities, including inflation, supply chain disruptions, and geopolitical uncertainty, accelerate restructuring efforts. Businesses are investing in renewable energy, resilient supply chains, and new workplace models that emphasize productivity and wellness. Given these trends, demand for healthier, more sustainable, and more resilient buildings is intensifying, driving up the uptake of automation, digital technologies, and integrated energy management solutions.

However, the path forward is not without challenges. High upfront costs deter investment in developing economies. Complex decision-making processes involving multiple stakeholders often delay large infrastructure projects. Economic uncertainty also shifts focus away from sustainability in the short term, while entrenched practices and cultural resistance to change hinder adoption. These obstacles underscore the need for education, incentives, and proven results to drive market transformation. Against this backdrop, success in SEA requires more than advanced technology. Providers must tailor solutions to local requirements, integrate solutions across the building lifecycle, and deliver clear financial and environmental returns.

## Azbil: Leading Smart Building Solutions in Southeast Asia

Azbil Corporation, established in 1906 and headquartered in Tokyo, is a leading company in building and industrial automation, using its measurement and control technologies to provide customers with high value-added solutions to make their building management, manufacturing processes, and facility operations more efficient and sustainable. Harnessing over a century of global expertise in measurement and control, the company transforms the market by combining global expertise, regional presence, and a human-centered philosophy that aligns with the unique needs of the SEA market. Its solutions span three interconnected domains: building automation, advanced automation, and life automation, enabling Azbil to address human, industrial, and environmental requirements in a cohesive, integrated manner.

Azbil advances global technology and product development for sustainability through linked research and development systems across regions. Its Silicon Valley center focuses on next-generation measurement and control technology, analyzing Internet of Things (IoT) and artificial intelligence (AI) trends, standardization, and collaborations with universities and startups for AI-driven innovations. The new center in Singapore accelerates Asian market development, linking with Japan for rapid application testing and regional solutions. Japan's center coordinates overall efforts. This setup enables timely market response, flexible business collaboration, and co-creation with partners for revolutionary technologies.

Azbil has a global footprint in over 15 countries, with subsidiaries in Singapore, Malaysia, Thailand, Vietnam, Indonesia, and the Philippines anchoring its presence in SEA. Recognizing the region’s strategic importance, the company reorganized its Strategic Planning and Development Office for SEA under the International Business Headquarters in April 2023, strengthening collaboration, accelerating localization, and harmonizing with evolving market dynamics. Guided by the philosophy of “human-centered automation,” Azbil integrates advanced technologies with human needs, creating solutions that improve comfort, safety, and sustainability while driving economic value.

## Pioneering Digital Twin Integration for Next-Generation Building Management

Azbil’s competitive advantage lies in the breadth and integration of its portfolio, innovation in digital twin and AI platforms, and proven ability to deliver lifecycle value. Unlike competitors that often operate in

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>
> ***- Norazah Bachok***
> ***Research Analyst, Best Practices***

narrow silos, the company unites building, advanced, and life automation into a single ecosystem, creating an advantage that few rivals can match.

Building automation forms the core of this ecosystem. As a pioneer in heating, ventilation, and air conditioning (HVAC) control, Azbil offers a comprehensive product lineup that includes sensors, controllers, valves, and full building management systems. These products are embedded within a lifecycle business model that ensures customers benefit from continuous optimization, predictive maintenance, and ongoing upgrades. This approach directly addresses SEA's dual priorities for reducing energy consumption and improving occupant wellness (i.e., the health, comfort, and well-being of building users), particularly in hot and humid climates where air conditioning is a necessity and a major energy burden.

Advanced automation extends these capabilities to industrial and precision sectors, with micro-electro-mechanical systems-based sensors, big data analytics, and IoT-enabled services. By integrating building and industrial operations, Azbil bolsters its competitive advantage in SEA, where mixed-use developments, factories, and commercial complexes often coexist. Life automation reinforces this with smart metering, energy management, and air purification services that complement the carbon neutrality goals of governments and corporations alike.

Recent innovations highlight Azbil's leadership. Its intelligent building management system (IBMS) integrates with the chiller plant digital twin (CPDT) to transform building operations. Unlike conventional systems that passively monitor conditions, this combination creates a real-time digital replica of chiller plants, enabling predictive fault detection, scenario testing, and continuous optimization. At a 32-megawatt (MW) Tier III and Tier IV data center in Indonesia, the company's IBMS with CPDT significantly reduces power consumption while maintaining reliability. For SEA's booming data center industry, where uptime is non-negotiable and power usage effectiveness is a critical metric, Azbil's solution represents a measurable and repeatable competitive edge.

Azbil's air side digital twin (ADT) demonstrates a similar breakthrough. Built on decades of control expertise, it simulates and monitors air-handling units and variable air volume systems, tracking over 10,000 points per application. Features such as auto-identification of system models, deterioration analysis of fans and coils, prioritized performance assessments, and actionable recommendations, allow facilities to quantify energy-saving potential while maintaining comfort. ADT's dashboards, alerts, and simulation tools empower operators to proactively adjust setpoints, airflow, and temperature strategies, turning reactive building management into predictive and intelligent operations.

Frost & Sullivan finds that these innovations set Azbil apart from competitors that offer only incremental efficiency improvements. By embedding intelligence into the core of HVAC and energy systems, the company delivers solutions that are technically advanced and financially compelling. Its ability to minimize operating expenditure, extend asset life, and align with carbon neutrality targets explains their steady

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>
> ***- Anirudh Bhaskaran***
> ***Associate Director***

global net sales growth from 2020 to 2023 and 14.2% overseas sales compound annual growth rate for the same period.

### Redefining Smart Buildings through AI-driven Features and Cloud Integrations

Azbil's approach to technology integration goes beyond product development; it redefines how buildings are managed in a digital-first world. CPDT exemplifies this strategy. By creating a dynamic, AI-driven model of cooling systems, CPDT identifies efficiency gaps, predicts maintenance requirements, and integrates with building information modeling platforms for virtual navigation. This capability is particularly critical in SEA, where cooling accounts for a substantial portion of building energy consumption.

The ADT applies similar principles to ventilation and air distribution, simulating air-handling unit and variable air volume operations to pinpoint degradation, inefficiencies, and optimization opportunities. Its ability to track thousands of data points, provide prioritized analyses, and run scenario simulations allows building operators to maximize energy savings without compromising comfort. Together, CPDT and ADT form a comprehensive digital twin ecosystem that addresses plant-level and air side operations.

Cloud-based services enhance these capabilities, enabling scalable facility management, tenant engagement, and post-installation upgrades at lower costs. With over 500 contracts already secured, Azbil's cloud offerings demonstrate strong adoption and scalability. This model is particularly well-suited to SEA, where affordability and adaptability are critical for market.

What truly differentiates Azbil is its ability to deploy cutting-edge technologies at scale. Internally, the company is using generative AI, with over 7,000 employees actively engaged and over 900 low-code applications developed to streamline operations. This internal adoption translates into agility and responsiveness, ensuring faster delivery of customer-facing solutions. Frost & Sullivan's analysis highlights that many competitors are still in the early stages of piloting digital twin or AI-driven solutions, often limiting their offerings to visualization dashboards. The company, by contrast, operationalizes these technologies to deliver real-time optimization and predictive intelligence. This depth of integration provides customers with visibility and actionable insights, reinforcing Azbil's position as a technology leader in the region.

### Forging Powerful Partnerships for Innovation, Talent, and Sustainable Growth

Azbil's success in SEA is also fueled by its collaborative ecosystem, which spans academia, venture capital, and industry partnerships. These alliances ensure a continuous pipeline of innovation, talent, and market relevance.

In academia, Azbil cultivates long-term collaborations to strengthen technology and human capital. A 2024 memorandum of understanding with Universiti Teknologi Malaysia and Malaysia-Japan

International Institute of Technology focuses on joint research, decarbonization technologies, and human resource development.[2] Beyond hiring graduates and hosting internships, the company co-develops energy conservation education tools under the Clean Energy Future Initiative for Association of Southeast Asian Nations, showing its commitment to building capacity in the region.

Industry alliances reinforce Azbil's operational impact. Partnerships with Clean Energy Connect in solar, Forest Energy in biomass, and X1Studio in data center supervisory control and data acquisition systems enable the company to facilitate comprehensive solutions that integrate renewable energy, carbon reduction, and mission-critical infrastructure monitoring.

By combining academic research, venture-driven innovation, and strategic synergies, Azbil ensures that its solutions are advanced, localized, and sustainable. Its collaborative approach reflects a clear understanding that industry leadership in SEA requires more than proprietary technology; it requires ecosystems of innovation and trust.

### Driving Customer Success through Lifecycle Excellence and Measurable Impact

Customer engagement defines Azbil's success in SEA. Its lifecycle approach ensures value delivery across every stage—from installation through to operation, optimization, and eventual replacement. This long-term commitment sets the company apart from competitors that often end their engagement upon deployment.

Azbil's projects demonstrate its versatility across sectors (e.g., aviation, banking, hospitality, and data centers), while consistently delivering measurable results. Stakeholder engagement through exhibitions, dialogues, and industry events (such as Smart Building EXPO and Innovative Industry Fair for E x E Solutions) further strengthens trust and co-creation with customers. The company also invests in human capital, aiming to triple the number of sustainable service engineers to 1,800, supported by remote diagnostics, predictive maintenance, and digital engineering platforms.

Frost & Sullivan recognizes that Azbil's practice of linking its compensation directly to measurable performance results sets a benchmark for customer-centric operations in the industry. This results-driven alignment minimizes client risk, ensures tangible accountability, and delivers proven long-term value through guaranteed energy savings and efficiency gains.

### Remarkable Financial Growth and Strategic Excellence for Sustainable Leadership

Azbil's financial results and strategic priorities underscore its strength in SEA. In fiscal year 2024, orders in the building automation segment grew by 12.3% year-on-year to JPY153.6 billion, while sales increased 10.5% to JPY148.7 billion. Segment profit rose 25.8% to JPY24.3 billion.[3] Overseas sales have exceeded pre-pandemic levels, with lifecycle service contracts and building upgrades as key growth drivers.

Strategically, Azbil focuses on areas most relevant to the region—wellness in building environments, advanced automation in manufacturing, and energy and carbon neutrality. Its integrated customer-

[2] https://www.azbil.com/press/240712.html

[3] Azbil updates to Frost & Sullivan query

centric model spans design, engineering, installation, and maintenance, ensuring seamless service delivery.

The company's regional production capacity is also expanding, with a new base in Thailand completed in 2024 and additional facilities in China, diversifying supply chains and reducing geopolitical risk. Azbil's sustainability targets are ambitious and actionable. By 2030, Azbil aims to achieve 3.40 million metric tons of annual carbon dioxide ($CO_2$) reduction at customer sites, cut greenhouse gas emissions by 55% in scopes 1 and 2 and 33% in scope 3, and design all new products to be 100% recyclable. Currently, 63% of electricity consumption is sourced from renewable energy, with a target to achieve 100% by 2050. More than 300 supply chain partners have been assessed for environmental, social, and governance risks and $CO_2$ reduction, ensuring sustainability extends beyond direct operations.

Digital transformation is equally central. Externally, cloud-based building automation services continue to grow, secured by Azbil's dedicated cybersecurity office. Human capital investment through the Azbil Academy has reached over 170,000 participants, with training focused on digital transformation, global leadership, and continuous learning.

From Frost & Sullivan's analysis, Azbil's performance reflects strong financial resilience and strategic foresight. While competitors often pursue short-term growth in narrow markets, the company invests in sustainability, digital innovation, and human capital, ensuring long-term leadership. Its consistent delivery of measurable energy savings, combined with ambitious carbon reduction targets, positions it as a model for how technology providers can align business growth with societal goals.

## Conclusion

Azbil has emerged as a leading force in Southeast Asia's (SEA) smart building solutions market by combining a century of expertise with human-centered automation. Its ability to integrate building, advanced, and life automation into a unified ecosystem enables customers to achieve efficiency, resilience, and sustainability in ways that competitors cannot easily replicate.

Innovations such as the intelligent building management system, chiller plant digital twin, and air side digital twin redefine building management by embedding artificial intelligence and predictive intelligence directly into operations. These technologies deliver measurable energy savings, cost efficiency, and improved reliability, addressing the region's urgent need for low-carbon, high-performance infrastructure.

Azbil's leadership is reinforced further by its partnerships with academia, venture capital, and industry, expanding innovation pipeline and strengthening local capabilities. Its customer-centric lifecycle model ensures measurable results across airports, data centers, financial institutions, and hospitality.

With its strong overall performance, Azbil earns Frost & Sullivan's 2025 SEA Company of the Year Recognition in the smart building solutions industry.

# What You Need to Know about the Company of the Year Recognition

Frost & Sullivan's Company of the Year 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 Company of the Year Recognition, 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 to create growth opportunities across the entire value chain

**Visionary Scenarios Through Megatrends**: Long-range scenarios are incorporated into the innovation strategy by leveraging mega trends and cutting-edge technologies, thereby accelerating the transformational growth journey

**Leadership Focus**: The company focuses on building a leadership position in core markets to create stiff barriers to entry for new competitors and enhance its future growth potential

**Best Practices Implementation**: Best-in-class implementation is characterized by processes, tools, or activities that generate consistent, repeatable, and scalable success

**Financial Performance**: Strong overall business performance is achieved by striking the optimal balance between investing in revenue growth and maximizing operating margin

### Customer Impact

**Price/Performance Value**: Products or services offer the best ROI and superior value compared to similar market offerings

**Customer Purchase Experience**: Purchase experience with minimal friction and high transparency assures customers that they are buying the optimal solution to address both their needs and constraints

**Customer Ownership Excellence**: Products and solutions evolve continuously in sync with the customers' own growth journeys, engendering pride of ownership and enhanced customer experience

**Customer Service Experience**: Customer service is readily accessible and stress-free, and delivered with high quality, high availability, and fast response time

**Brand Equity**: Customers perceive the brand positively and exhibit high brand loyalty, which is regularly measured and confirmed through a high Net Promoter Score®

# 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)