FROST & SULLIVAN

2024 CUSTOMER VALUE LEADER

IN THE APAC CONTRACT
DEVELOPMENT AND
MANUFACTURING
ORGANIZATION INDUSTRY

FROST & SULLIVAN

2024

PRACTICES



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. Bushu Pharma excels in many of the criteria in the contract development and manufacturing organization space.

AWARD CRITERIA	
Customer Impact	
Price/Performance Value	
Customer Purchase Experience	
Customer Ownership Experience	
Customer Service Experience	
Brand Equity	

Bushu Pharma: A CDMO Trailblazer

Founded in 1998 and headquartered in Kawagoe, Saitama, Japan, Bushu Pharmaceuticals (Bushu Pharma) is a premier contract development and manufacturing organization (CDMO) of pharmaceuticals and medical devices. Renowned for its comprehensive services spanning development to distribution, the

"Frost & Sullivan remains impressed by Bushu Pharma's ongoing investments and efforts to offer customers state-of-the-art capabilities, increased capacity, and innovative solutions, providing top-tier pharmaceutical manufacturing and supply chain management services."

- Surbhi Gupta Industry Principal company has established itself as a market leader through a strong track record of delivering safe, high-quality products on time and cost-effectively. It leverages deep domain knowledge, extensive experience, and Good Manufacturing Practices (GMP) certifications from major international regulatory agencies (e.g., United States Food and Drug Administration [FDA], European Medicines Agency, and Pharmaceuticals, and Medical Devices Agency), to establish a robust global presence, supplying medicinal products to 56 countries. In 2022, Kohlberg Kravis Roberts (KKR), a leading global investment firm,

acquired Bushu Pharma, highlighting its exceptional value proposition and growth potential.

In 2023, Frost & Sullivan recognized Bushu Pharma for delivering unmatched customer value, showcasing advanced manufacturing capabilities, and employing an innovative supply management approach in the CDMO space, and remains impressed with the company's continuing innovation and leadership.

Transformative Innovation Drives Unmatched Capabilities

Bushu Pharma offers comprehensive services and cutting-edge capabilities to support customers across the product lifecycle, from development and manufacturing to packaging, quality control, regulatory compliance, and supply chain management. The company utilizes its advanced, wide-ranging manufacturing capabilities, extensive specialized facilities, and highly skilled workforce to produce a broad spectrum of pharmaceutical products, ranging from small molecule drugs to complex biologics, including high potency and sterile products. Bushu Pharma excels in managing complex processes such as product testing and technical transfer (i.e., analytical methods, validation processes, and manufacturing procedures transfer from a client's site to its facilities while ensuring consistency, quality, and regulatory compliance). Its unmatched capabilities ensure consistent delivery of exceptional quality assurance, ontime delivery, and competitive costs, establishing it as a preferred partner in APAC.

Dedicated to delivering exceptional customer value, Bushu Pharma continually enhances its services and deliverables to exceed expectations. The company emphasizes agility and flexibility, offering contract manufacturing services tailored to the specific needs of its customers. By leveraging its deep domain knowledge and extensive experience, Bushu Pharma collaborates closely with clients to deliver customized solutions and diverse business outcomes. From scaling operations and expediting deliveries to specialized packaging and entering new market segments, Bushu Pharma effectively provides exceptional results, ensuring customer success.

Bushu Pharma continuously enhances its capabilities to improve quality, accelerate delivery, and increase cost-efficiency. In 2023, the company launched its fifth facility and second packaging center, the Soka Packaging Center. This new facility significantly strengthens Bushu Pharma's cold chain capabilities, offering ultra-low temperature product packaging services. The state-of-the-art cold storage warehouse, with a capacity of 1,671 pallets, is the largest of all its cold chain facilities. In 2024, Bushu Pharma expanded its capacity by adding a new injectable filling line (i.e., an automated system designed to efficiently and accurately fill containers with medications), expected to be operational by mid-2025 following comprehensive testing and validation. The company continues to invest in the latest technologies, introducing automated guided forklifts and humanoid dual-arm collaborative robots to enhance efficiency, boost productivity, and ensure high safety and quality standards. Frost & Sullivan remains impressed by Bushu Pharma's ongoing investments and efforts to offer customers state-of-the-art capabilities, increased capacity, and innovative solutions, providing top-tier pharmaceutical manufacturing and supply chain management services.

Demonstrated Leadership through Breakthrough Solutions

Driven by its commitment to helping advance global healthcare and promoting better health worldwide, Bushu Pharma goes beyond its core competencies to offer innovative, integrated supply chain solutions. One of its key offerings is its expertise in managing full-scale overseas shipment procedures (e.g., handling import tax, securing GMP approvals for export, specialized packaging serialization, and navigating regulatory requirements for key Asian markets). Leveraging its extensive know-how, Bushu Pharma facilitates seamless entry into the Asian market for international pharmaceutical companies. Through GATEWAY to ASIA services, Bushu Pharma enables United States (US) and European companies to export

their products in bulk to Japan, managing the entire process from quality inspection and labeling to packaging and final distribution. This comprehensive service ensures that products are efficiently and compliantly distributed throughout Japan and the broader Asian markets, streamlining the supply chain. By using GATEWAY to ASIA, Bushu Pharma significantly shortens lead times for entering the Asian market, maintains lean inventory levels, and reduces logistics costs and carbon emissions for global pharmaceutical companies compared to traditional supply chains.¹

Bushu Pharma enhances its supply chain efficiency and market entry strategies through strategic partnerships with leading logistics and distribution experts. In recent years, its alliance with specialist

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- Rubini Kamal Best Practices Research Analyst pharmaceutical distributor Sukuzen Group (Sukuzen) has facilitated the sharing of advanced technology (i.e., Suzuken's Cubixx drug traceability system for drug temperature control and monitoring), logistical space, and resources. This collaboration has empowered Bushu Pharma to efficiently launch new products in the Japanese market, leading to significant growth. In 2024, Bushu Pharma formed a partnership with Suzuken and EPS Holdings to address the issue of drug availability in Japan, where many new drugs approved in Europe and the US remain unapproved.² This collaboration offers a

comprehensive one-stop service to streamline market entry by providing development, approval, manufacturing, and distribution support. By leveraging the foreign exceptional approval system, the partnership allows international companies to obtain approval in Japan without needing a local subsidiary, thereby increasing brand recognition in the Japanese market. The model requires no initial investment from the licensing companies, as development costs are covered by Suzuken and EPS Holdings and recouped from future sales. This approach helps emerging pharmaceutical companies navigate regulatory and financial challenges, facilitating the introduction of vital new drugs into Japan. The concept of this model is especially suitable for mitigating the drug loss like rare disease drugs in the Japanese market.

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Driving Reliability, Sustainability, and Excellence, Building Trust

Bushu Pharma prioritizes operational excellence and stringent quality control, establishing itself as a secure, trusted manufacturer in the pharmaceutical space. Since 2019, the company invested in the Bushu Continuity Plan, creating a resilient and sustainable business system designed to operate effectively during large-scale disasters and pandemic conditions, ensuring the continuous production and supply of pharmaceutical products to patients worldwide. For instance, Bushu Pharma implemented an ecological, fireproof, and seismically isolated structure at its Soka Packaging Center, featuring 364 bearing locations,

¹ Frost & Sullivan Interview with Bushu Pharma (Frost & Sullivan, July 2024)

² https://www.bushu-pharma.com/en/news-and-pr/press-releases-en/bushu-pharmaceuticals-suzuken-group-and-eps-holdings-sign-partnership-agreement-to-support-the-introduction-of-unapproved-drugs-drug-loss-products-into-the-japanese-market/

30 dampers, and 72 hours of electricity storage capacity. These measures ensure structural stability, protection against seismic events, and uninterrupted power supply, enabling continuous operations and reliable pharmaceutical production even during disasters.

Additionally, Bushu Pharma continuously tracks environmental conditions and security parameters within its facilities with a temperature and security monitoring system. This system ensures that pharmaceutical products are stored and handled optimally, preserving their efficacy and safety. Real-time monitoring also enhances security measures, preventing unauthorized access and safeguarding sensitive materials. Bushu Pharma upholds high-quality standards and compliance, undergoing over 55 authority inspections and client audits per year with no reports of significant findings or compliance issues. The company also actively pursues international regulatory certifications for its facilities. In 2023, it proudly announced the successful completion of an FDA inspection at its Misato factory, reinforcing customer trust.

Bushu Pharma enhances customer value through robust environmental sustainability measures. The company has made significant strides in reducing its environmental impact and costs by implementing LED lighting with motion sensors at its Soka facility, installing solar panels at its Soka, Misato, and Kawagoe factories, transitioning to renewable energy at its Aizu factory, and adopting paper trays and biomass films for packaging. Additionally, Bushu Pharma rigorously monitors wastewater quality at its Kawagoe, Misato, and Aizu factories, ensuring that biochemical oxygen demand and hydrogen ion concentration remain below voluntary control values, which are lower than regulatory standards. It also ensures that wastewater is microbially treated and well-filtered before being discharged into rivers.

In 2023, Bushu Pharma achieved a "B" rating (topping its "B-" in 2022) in its CDP Score Report, which evaluates organizations based on the quality and thoroughness of their environmental disclosure and performance. This score improvement, surpassing the Asia regional average and the biotech and pharma sector average of C, demonstrates Bushu Pharma's genuine commitment to environmental sustainability, positioning the company as a leader in responsible environmental stewardship.

Bushu Pharma recognizes its employees as its greatest asset and the driving force behind its leading position and sustained growth. Demonstrating this firm belief, in 2024, the company launched an innovative broad-based employee ownership program. With support from its shareholder KKR, this program offers all 1,330 employees across its five sites the opportunity to share in the company's success. By fostering an ownership and engagement culture, Bushu Pharma aims to enhance employee satisfaction, empower its workforce, and drive continued growth. This employee value initiative reflects the company's dedication to recognizing and rewarding the contributions of its team members, empowering continued innovation and excellence, and reinforcing Bushu Pharma's leadership position.³

Bushu Pharma's ongoing commitment to retaining customer trust and delivering value is evident in its global client base of over 95 commercial clients, with 50% of them coming from foreign-affiliated clients.⁴ In 2023, the company reported strong growth in revenue from the previous year, approaching double digits.⁵ These impressive figures highlight Bushu Pharma's strong track record in managing logistics, regulatory compliance, and market demands across diverse regions. With its steadfast commitment to

https://www.bushu-pharma.com/en/news-and-pr/event-en/bushu-pharma-announces-launch-of-employee-ownership-program/

⁴ https://www.bushu-pharma.com/en/

⁵ Frost & Sullivan Interview with Bushu Pharma (Frost & Sullivan, July 2024)

enhancing services, technologies, and expertise, Frost & Sullivan believes that Bushu Pharma is well-positioned to lead the CDMO sector into its next growth phase, capturing market share and maintaining its leadership in the years to come.

Conclusion

Bushu Pharma consistently delivers exceptional customer value through its comprehensive and integrated approach to the pharmaceutical product lifecycle, from development to supply chain management. By investing in advanced manufacturing capabilities and specialized facilities, and embracing new technologies, the company maintains its strong track record of delivering high-quality products on time and cost-effectively. Its innovative GATEWAY to ASIA services streamlines market entry for international clients, while strategic partnerships facilitate efficient product distribution and address regional challenges. Bushu Pharma's commitment to operational excellence, environmental sustainability, and employee engagement solidifies its reputation as a trusted and reliable partner. This comprehensive approach helps the company exceed customer expectations, ensuring sustained growth and a strong market position.

With its strong overall performance, Bushu Pharma earns Frost & Sullivan's 2024 APAC Customer Value Leadership Award in the contract development and manufacturing organization industry.

What You Need to Know about the Customer Value Leadership Recognition

Frost & Sullivan's Customer Value Leadership Award recognizes the company that offers products or services customers find superior for the overall price, performance, and quality.

Best Practices Award Analysis

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

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

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 $^{\text{TM}}$.

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

OPPORTUNITY UNIVERSE Capture full range of growth opportunities and prioritize them based on key criteria OPPORTUNITY EVALUATION Adapt strategy to changing market dynamics and unearth new opportunities PLANNING & IMPLEMENTATION Execute strategic plan with milestones, targets, owners and deadlines OPPORTUNITY EVALUATION Conduct deep, 360-degree analysis of prioritized opportunities GO-TO-MARKET STRATEGY Translate strategic alternatives into a cogent strategy

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)

