

CLARIUS RECEIVES THE 2023 COMPANY OF THE YEAR AWARD

*Identified as best in class in the North American
ultraportable ultrasound industry*

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. Clarius excels in many of the criteria in the ultraportable ultrasound space.

AWARD CRITERIA	
<i>Visionary Innovation & Performance</i>	<i>Customer Impact</i>
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

Market Overview: Ultraportable Ultrasound Devices

Conventional ultrasound methods often require the expertise of certified sonographers to handle bulky, complex, and costly (around \$150,000) ultrasound equipment.¹ Operator-dependent, consistently high image quality remains elusive in these machines. In recent years, imaging vendors developed compact, user-friendly ultrasound systems for improved patient experience. Unfortunately, most portable solutions have limitations as image quality tends to decline with equipment downsizing.

To cater to the healthcare industry's needs, ultrasound vendors must provide compact capabilities and superior image quality for healthcare professionals to utilize across settings cost-effectively, eliminating unnecessary downstream procedures. For instance, healthcare professionals can prevent needless surgery-related risks, minimizing costs and prolonged time associated with surgeries.²

Frost & Sullivan sees a tremendous growth opportunity for accurate, reliable ultraportable, handheld ultrasound devices. These small devices can provide more comfort to the patient and make it easier to perform routine checkups and in-office procedures.³

¹ "Ultrasound", Mayo Clinic, <https://www.mayoclinic.org/tests-procedures/ultrasound/about/pac-20395177>.

² "Global Ultrasound Growth Opportunities," Frost & Sullivan, July 6, 2022.

³ Ibid.

Clarius: Innovation, Trust, Collaboration

Based in Vancouver, Canada, Clarius focuses on developing and producing cutting-edge handheld ultrasound technologies. Established in 2014, it has become a notable player in the industry. One key factor that sets Clarius apart from its competitors is its ability to deliver exceptional hospital-grade performance without breaking the bank. The company provides high-quality products at an affordable price point, making it a top choice for budget-conscious medical institutions and health systems that do not want to sacrifice quality for cost. In 2022, Frost & Sullivan recognized Clarius for its commitment to creativity and innovation, growth potential, and commercialization success, and remains impressed with its continuous innovation and sustained leadership.

“Clarius’ revolutionary ultrasound technologies allow users with a medical license to utilize ultrasound anywhere and anytime.”

- Christine Savoie
Best Practices Research Associate

Clarius’ revolutionary ultrasound technologies allow users with a medical license to utilize ultrasound anywhere and anytime. The company’s advanced handheld ultrasound solutions enable clinicians to capture high-quality images with an ultra-portable wireless device. Real-time ultrasound imaging is displayed on iOS or Android devices using a direct WIFI connection, and images are securely stored on a DICOM

server or the Clarius Cloud platform. Clarius Cloud stores ultrasound images and reports while complying with the Health Insurance Portability and Accountability Act (HIPAA) and the European Union’s health standards. Furthermore, medical professionals can easily capture and interpret images using artificial intelligence (AI), making Clarius a leading innovator in the ultrasound industry.⁴

Currently, the company offers ten different ultrasound probes: seven for medical use and three for veterinary use, enhancing human and animal lives. Each device can fit into the palm of a hand, measuring approximately 5.5 inches by 3 inches by 1.5 inches.⁵ The wireless systems are designed to optimize imaging across various applications, with specialty probes for emergency and critical care, anesthesiology, pain management, MSK, orthopedic surgery, obstetrics, urology, cardiology, and a myriad of other specialties.

Clarius takes great pride in maintaining a standard of excellence when providing clinicians with exceptional ultrasound images. These high-quality images aid in real-time and accurate diagnoses, as well as ensuring safe and reliable procedural guidance. The company’s core principles promote and deliver high-quality ultrasound images from handheld devices at an affordable price, starting at \$3,395 per device. Hospitals and clinicians can bundle their scanner(s) with seven different package options, including the device(s), Clarius Cloud access with unlimited storage, advanced AI software, and a host of security and interoperability solutions to allow

Clarius Ultrasound



Source: Clarius

⁴ “Advanced App Features,” Clarius, <https://clarius.com/advanced-app-features/>.

⁵ “C3 HD3 Multipurpose Scanner,” Clarius, <https://clarius.com/scanners/c3/>.

seamless integration into a hospital or clinic IT system.⁶ These aid health systems in implementing the Quadruple Aim Framework.

Health systems leveraging point-of-care ultrasound (POCUS) to implement the Quadruple Aim Framework achieve multiple advantages:

1. **Cost Reduction:** Lower-priced POCUS solutions lead to faster diagnoses and reduced procedural complications, reducing healthcare costs.
2. **Improved Patient Outcomes:** Bedside monitoring with POCUS enhances patient outcomes and population health.
3. **Enhanced Patient Experience:** POCUS significantly reduces complications, ensuring safer and more satisfying patient experiences, while enhancing patient-clinician engagement.
4. **Increased Clinician Satisfaction:** Using wireless, portable high-definition ultrasound streamlines workflows, boosting clinician satisfaction.

Furthermore, POCUS improves patient safety through evidence-based practices like ultrasound-guided placement of central venous catheters.⁷ It also enhances patient satisfaction and relationships with healthcare providers⁸, decreases Emergency Department length of stay for certain medical conditions⁹, and yields cost savings and potential revenue generation for health systems.¹⁰

In one application, using POCUS to diagnose respiratory distress as compared to the standard of care (i.e., chest X-ray or CT scan) reveals a 4.5-hour decrease in time to accurate diagnosis for these patients.¹¹ Most recently, studies have shown that hospitals using POCUS to diagnose patients experiencing heart failure, one of the most frequent causes of emergency department visits, decrease the time to disposition decision and total length of hospital stay.¹²

Roadmap to Success: Customer-Centric, Continuous, Proactive

The Clarius vision centers on better patient care with the stated purpose, “We envision a future where better patient care is enabled by medical imaging in every setting.”¹³

Dr. Virginia Robinson, a practicing rural physician, is a great example of improved patient care. She and her patients are a long drive away from the various imaging offered at hospitals.

“Handheld ultrasound has made an incredible difference to rural physicians where we do not have CT scans, where we do not have diagnostic ultrasound, and it has really leveled the playing field in terms of rural patients receiving the same level of care that you can get in the city.

⁶ “How Does Handheld Compare to Compact Ultrasound,” Clarius, <https://clarius.com/compare-handheld-vs-compact-ultrasound/>.

⁷ Agency for Healthcare Research and Quality Guidelines.

⁸ Zoe D. Howard, et al, “Bedside Ultrasound Maximizes Patient Satisfaction,” National Library of Medicine, August 12, 2013, <https://pubmed.ncbi.nlm.nih.gov/23942153/>.

⁹ Maurizio Zanobetti, et al, “Point-of-Care Ultrasonography for Evaluation of Acute Dyspnea in the ED,” National Library of Medicine, February 16, 2017, <https://pubmed.ncbi.nlm.nih.gov/28212836/>.

¹⁰ Srikar Adhikari, et al, “Implementation of a Novel Point-of-Care Ultrasound Billing and Reimbursement Program: Fiscal Impact,” National Library of Medicine, March 15, 2014, <https://pubmed.ncbi.nlm.nih.gov/24736125/>.

¹¹ Heba R. Gaber, et al, “Diagnostic Accuracy and Temporal Impact of Ultrasound in Patients with Dyspnea Admitted to the Emergency Department,” Clinical and Experimental Emergency Medicine, September 11, 2019, <https://www.ceemjournal.org/journal/view.php?doi=10.15441/ceem.18.072>.

¹² Zanobetti, et al, “Point-of-Care Ultrasonography for Evaluation of Acute Dyspnea in the ED,” <https://pubmed.ncbi.nlm.nih.gov/28212836/>.

¹³ “About Clarius,” Clarius, <https://clarius.com/about/>.

Ultrasound has helped me save lives. It gives me the joy of diagnostic certainty so I can treat patients immediately.”

– Dr. Virginia Robinson, Rural Medicine¹⁴

Clarius provides ultrasound solutions to clinicians in a range of healthcare sectors. It provides exceptional 24/7 customer service through its dedicated team of customer success experts that supports customers with everything from training on how to use its products, instructing how to care for the equipment, and even what to do when there are technological issues.¹⁵

The company offers customers essential resources, including a virtual classroom where anyone can watch videos on how to use its products, a library of live and on-demand webinars, and a blog and podcast with updated information on its ultrasound scanners’ capabilities, enabling clients to become as knowledgeable as possible on its products, which in turn builds confidence in its use.¹⁶ Clarius attends over 150 medical and veterinary events annually to promote and educate future customers about its products worldwide.

Clarius places great importance on gathering client feedback and closely monitoring the latest industry trends. With lessons learned from COVID-19’s impact on healthcare, the company recognizes the need to adapt and evolve its product roadmap to stay ahead of the curve in terms of innovation. By keeping a finger on the pulse of the industry, Clarius is better equipped to meet the evolving needs of clinicians and improve patient outcomes.

The company maintains communication with its clients to gather feedback and showcase the effectiveness of its handheld devices to potential customers. These client check-ins ensure high customer satisfaction.¹⁷

Positioned for Growth, Promises for the Future

Clarius has grown to more than 150 employees, nearly all with previous experience in the healthcare industry. Since its inception, the company’s sterling reputation and customer-centric framework have led to its coveted preferred partner status. Over the years, it added a range of new ultrasound probes and AI technology to its product portfolio, expanding applications and its established base. Clarius launched its

“In less than a decade, the company’s customers span over 60 countries and, with over 20,000 ultrasound scanners in the field, it holds third in the global market share for the ultraportable ultrasound industry.”

***- Christine Savoie
Best Practices Research Associate***

first ultrasound probe in 2016. The company innovated further, introducing its second-generation devices in 2019.

As of 2023, Clarius is on the third generation of handheld ultrasound probes, rapidly expanding human and veterinary medicine applications.¹⁸ In less than a decade, the company’s customers span over 60 countries, and with over 20,000 ultrasound

¹⁴ “Client Testimonial – Dr. Virginia Robinson,” Clarius.

¹⁵ “Clarius Help Center,” Clarius, <https://support.clarius.com/hc/en-us>.

¹⁶ “Classroom,” Clarius, <https://clarius.com/classroom/>.

¹⁷ Frost and Sullivan Interview with Ohad Arazi and Genèse Castonguay of Clarius, March 24, 2023.

¹⁸ Ibid.

scanners in the field, it holds third in the global market share for the ultraportable ultrasound industry.¹⁹

Recent developments in handheld ultrasound scanners for at-home use uncover emerging opportunities in women's health, particularly remote pregnancy monitoring, alleviating barriers to quality care access.²⁰ Clarius has its sights set on the fertility and pregnancy markets for its next conquest. It hopes to create an affordable ultrasound probe that pregnant women can use in the privacy of their own homes so they can safely monitor their pregnancy.²¹ Expansion into this market will promote further growth and cement its industry-leading position.

Frost & Sullivan believes Clarius is well-positioned to drive the ultraportable ultrasound space into its next growth phase, capturing market share and sustaining its leadership in the coming years.

Conclusion

Traditional ultrasound solutions are bulky, expensive, and complex, only operated by licensed sonographers, thus limiting who can purchase and use ultrasound imaging for diagnostic applications. Clarius addresses these unmet needs with a strong leadership focus that incorporates customer-centric strategies and exemplifies best practice implementation. Part of its strategy revolves around customer education, while the other focuses on innovation for current and future customer needs. The company distinguishes itself from its competitors with its devices' exceptional performance and affordability. Unlike its competitors, Clarius' handheld ultrasound devices have exceptional image quality, cloud storage, and artificial technology at a more reasonable price. The company remains a trusted partner, earning a reputation for offering the best in the ultraportable ultrasound industry.

With its strong overall performance, Clarius earns Frost & Sullivan's 2023 North American Company of the Year Award in the ultraportable ultrasound market.

¹⁹ Ibid.

²⁰ "Global Remote Pregnancy Monitoring Solutions Growth Opportunities," Frost & Sullivan, December 2022.

²¹ 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)**

