ELICO®

Connecting Science & Lab

2025 CUSTOMER VALUE LEADER

Maximizing the Price/Performance ROI for Customers

RECOGNIZED FOR BEST PRACTICES IN THE INDIAN SMART WATER QUALITY MONITORING SOLUTIONS INDUSTRY

FROST & SULLIVAN

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. Elico excels in many of the criteria in the smart water quality monitoring solutions space.



The India Smart Water Monitoring Market Landscape

The India smart water monitoring market is experiencing significant growth, driven by concerns over water quality, scarcity, and the need for efficient water management solutions. Key industries like manufacturing, energy production, and utilities are increasingly adopting advanced technologies to optimize water usage, reduce waste, and meet environmental regulations. The demand for real-time monitoring and data analytics is also rising, helping industries improve operational efficiency, ensure compliance, and make data-driven decisions.

> *"Elico's smart water monitoring solutions ensure efficient water management by providing real-time, accurate data for water quality analysis. These solutions are critical for detecting contaminants, optimizing water usage, and maintaining compliance with environmental regulations."*
>
> ***- Paul Hudson,***
> ***Senior Industry Analyst***
> ***Sustainability and Circular Economy***

Urbanization and population growth increase pressure on municipal water systems, requiring modern infrastructure for efficient distribution and water quality maintenance. Smart water monitoring systems help detect leaks, prevent water loss, and optimize resource management. As urban areas expand, the demand for scalable, cost-effective water management solutions is expected to rise, driving further market growth.

However, rural areas face distinct challenges, including inadequate infrastructure, irregular water supply, and contamination. Limited access to quality water monitoring systems in these regions results in poor

health outcomes and economic strain. Addressing these issues requires affordable, scalable technologies such as Internet of Things (IoT)-based systems, solar-powered devices, and easy-to-maintain solutions tailored to rural needs.

Despite the market's potential, it faces several challenges. High initial investment costs, limited awareness, and data security concerns hinder widespread adoption. Navigating India's complex regulatory environment is another obstacle, as companies must comply with local policies to avoid delays and penalties.

Opportunities for growth lie in integrating technologies like artificial intelligence, machine learning, and cloud-based solutions to enhance data analysis and operational efficiency. Strategic partnerships and region-specific solutions also offer growth potential. By focusing on innovation, sustainability, and aligning with local needs, businesses can tap into India's expanding smart water monitoring market. Moreover, addressing urban and rural challenges while leveraging advanced technologies is key to driving sustainable water management solutions. This approach supports economic growth and positions India to lead in sustainable water management practices in the future.

Elico: Pioneering Analytical Instrumentation in India

Founded in 1960 and headquartered in Hyderabad, India, Elico has a distinguished legacy of scientific and technological innovations with the vision of becoming a globally renowned company. Specializing in the design, development, and manufacturing of advanced electronic analytical instruments, the company establishes its expertise in spectrophotometry, chromatography, electrochemistry, and flame photometry technologies. These innovations allow Elico to offer solutions for diverse applications, from complex scientific research to routine field testing.

Elico's commitment to innovation is strengthened by its in-house research and collaborations with leading academic and research institutions. The company serves globally, catering to different industries (e.g., agriculture, food processing, pharmaceuticals, water management, environment, and homeland security). Its smart water monitoring solutions ensure efficient water management by providing real-time, accurate data for water quality analysis. These solutions are critical for detecting contaminants, optimizing water usage, and maintaining compliance with environmental regulations.

With a strong presence across India, including a network of branches and dedicated sales and service engineers, Elico continues to connect science with practical applications. By advancing smart water monitoring technologies, the company solves water challenges, accelerates scientific discovery, and fosters a healthier, more sustainable future.

Innovation and Technological Advancements in Water Monitoring

Elico differentiates itself in India's smart water monitoring sector by offering innovative solutions that address the country's growing water management challenges. The company has transitioned to developing advanced technology-driven solutions tailored to India's unique water-related issues. A major factor behind Elico's success is its focus on leveraging technology to enhance water condition monitoring. Traditional water testing methods in India, depend on manual sampling, lengthy testing processes, and expensive equipment, making them inefficient and inadequate for the country's diverse needs.

Additionally, the geographical and infrastructural challenges hinder the timely water quality assessment. Elico responds to these gaps by incorporating IoT technology into its solutions, revolutionizing water monitoring and management.

The e-Jal™ portable multiparameter water quality analyzer (PE-149) stands as a testament to Elico's commitment to innovation and excellence in water quality monitoring. Designed to cater to diverse sectoral needs, the e-Jal Analyzer offers a unique blend of precision, portability, and advanced technology. It is particularly suited for field conditions where laboratory infrastructure may be unavailable, ensuring reliable and efficient water analysis anytime and anywhere. This portable, battery-operated device features a 5-inch high-resolution display, pre-calibrated parameters, and pre-programmed methods for ease of use. It measures key water quality parameters such as Physical, Metals, Non-Metals, Toxic Metals, and Organic Compounds. Additionally, the analyzer supports multiple reagent types, including liquid, powder and tablet forms for simplified testing and offers advanced connectivity options for seamless data sharing and cloud integration. The built-in global positioning system tracker adds further utility by providing precise geolocation tagging, enhancing data accuracy for informed decision-making. With its robust design and ability to deliver precise results, the e-Jal Analyzer supports large-scale sample analysis, improving efficiency and reducing operational costs for users.

> *"By providing accurate, timely results and reducing response times, the company enhances community confidence in water safety efforts. Through these innovative solutions, the company addresses pressing public health challenges and solidifies its reputation as a trusted partner in advancing water quality standards across India."*
>
> ***- Norazah Bachok***
> ***Best Practices Research Analyst***

Complementing this offering, Elico introduces its online analyzers, developed to meet the increasing demand for automated, accurate, and efficient online monitoring. By enabling real-time process control, it eliminates the delays associated with traditional laboratory testing, significantly reducing costs and enhancing operational efficiency. At the forefront of this range is the AquaSense Series, an IoT and cloud-enabled solution tailored for water quality monitoring. These smart devices provide real-time alerts, allowing end-users to take timely corrective actions. With data uploaded to the cloud, users can perform comprehensive analytics for actionable insights. The AquaSense Series also incorporates renewable energy options such as solar power, low power wide area connectivity, and low reagent consumption, reinforcing its sustainability and cost-effectiveness.

These advanced analyzers leverage automation and adhere to international systems such as International Organization for Standardization (ISO) 9001, ISO 14001, and ISO 27001 certifications, along with product certifications like CE and RoHS Compliance, which affirm its commitment to quality management, environmental stewardship, and information security. These certifications ensure that Elico's solutions remain reliable, efficient, and aligned with global standards.

Frost & Sullivan applauds Elico's relentless focus on delivering value-driven solutions that address critical industry challenges. By combining precision, sustainability, and customer-centric design, the company empowers its users with tools that enhance operational efficiency, reduce costs, and support better decision-making, solidifying its position as a leader in analytical instrumentation.

Sustainable Best Practices: Higher Customer Value

India's rural regions grapple with persistent challenges related to inconsistent water supplies and poor water quality. Traditional water supply systems, such as borewells, often face issues like sediment buildup, contamination, and fluctuating water levels, making it difficult to ensure consistent access to safe water. Elico addresses these challenges by developing solar-powered systems that monitor the water quality real time, offering an innovative, sustainable solution tailored to rural areas. Given the limited access to electricity in many remote regions, the company's solar-powered systems are particularly effective, providing communities with an eco-friendly and reliable way to manage their water resources.

These solar-powered systems monitor water quality and integrate advanced filtration technologies that improve water safety by preventing the buildup of harmful substances. This dual functionality ensures immediate safety and the long-term sustainability of water supply infrastructure. Additionally, the real-time data generated by Elico's systems extend the lifespan of water infrastructure by detecting contamination early, an essential feature in rural areas where maintaining a steady supply of clean water is often a significant challenge. Solar power ensures continuous monitoring, independent of unpredictable local power grids, ensuring uninterrupted service.

Elico's solutions are also closely aligned with the Indian government's Jal Jeevan Mission, which aims to provide functional tap water connections to every rural household by 2028. A key component of this mission is ensuring consistent water quality monitoring, which has historically been hindered by infrastructure gaps and a lack of trained personnel in remote areas. The company's integration with the Water Quality Monitoring Information System, which collects and analyzes water data in real-time, enables authorities to monitor water conditions continuously, facilitating timely interventions and improved water management.

Elico's collaboration with the Jal Jeevan Mission and its use of real-time water monitoring data further strengthens the company's commitment to improving water quality in underserved areas. By enabling better resource management and timely action, these efforts contribute to enhanced public health, a higher quality of life, and more reliable water infrastructure, establishing Elico as a key player in delivering sustainable solutions that drive customer value and positive social impact.

Transforming Rural Communities and Enhancing Public Health

As part of Govt of India's community-focused initiatives, Elico provides mobile water quality testing solutions to address water quality challenges in underserved regions. These mobile laboratories enable real-time analysis and reporting of water quality, delivering actionable insights to improve public health and ensure safe drinking water. Tailored for rural and remote areas, these solutions underscore Elico's dedication to accessibility and customer value.

In Haryana, Elico's mobile laboratory visits two to three villages daily, creating a significant impact on local water management. By bringing advanced water testing technology directly to communities, it empowers authorities to identify and address water quality concerns promptly. This proactive approach reduces health risks associated with contaminated water while fostering public trust in safety initiatives. The immediate data provided ensures effective and timely interventions, minimizing delays in resolving issues.

Similarly, in other rural regions of Uttar Pradesh, these solutions act as a catalyst for enhancing water quality programs. By delivering advanced testing capabilities to areas lacking adequate infrastructure, Elico bridges critical gaps, enabling efficient and reliable monitoring. Parameters such as chlorine residuals, turbidity, and pH levels are analyzed on-site, allowing authorities to make informed decisions. This model significantly boosts the effectiveness of water quality initiatives, benefiting thousands of residents.

Elico's customer-centered approach ensures its mobile units integrate seamlessly into local water management systems. By providing accurate, timely results and reducing response times, the company enhances community confidence in water safety efforts. Through these innovative solutions, the company addresses pressing public health challenges and solidifies its reputation as a trusted partner in advancing water quality standards across India.

Growth Strategies through Partnerships and Product Expansions

Elico plans to expand its product offerings by introducing innovations for on-the-spot testing of chemical and bacteriological contaminants in water, further enhancing the safety and efficiency of water quality monitoring. To support this, the company has made significant investments in research and development, collaborating with institutions like the National Institute of Technology Warangal and other universities. These strategic partnerships enable Elico to stay at the forefront of innovation, continuously improving existing products while developing new solutions to address emerging water quality challenges.

Elico is also exploring expansion within India, leveraging its expertise in water monitoring technology to address the country's growing water management needs. As challenges related to water scarcity, pollution, and infrastructure development intensify across India, the company's solutions, which are locally relevant and competitive, position it as a key player in the Indian water management sector.

Elico's commitment to innovation and national expansion strengthens its ability to provide superior customer value in water quality management. By investing in advanced technologies and forming strategic partnerships, the company ensures the development of effective, reliable solutions that address customer needs directly. Its extensive outreach enables Elico to deliver impactful water safety solutions, enhancing public health and meeting the evolving demands of diverse communities across the country.

Conclusion

Elico's commitment to product innovation and sustainability enables it to deliver substantial value to customers in India's water monitoring sector. By integrating advanced technologies such as the Internet of Things, solar-powered systems, and mobile laboratories, the company transforms water quality monitoring, particularly in rural areas where infrastructure and reliable data are often limited. Its solutions, including portable multi-parameter analyzers and real-time monitoring systems, provide customers with more efficient and accurate water assessments, empowering them to make timely decisions and ensure access to safe water.

Elico's focus on sustainability enhances customer value, offering eco-friendly, cost-effective, and reliable water monitoring solutions, especially for remote regions. Through continuous research and development, along with collaborations with academic institutions, the company remains responsive to

emerging water quality challenges, refining its products to meet customer needs better.

By offering scalable and adaptable solutions, Elico helps customers address the diverse and evolving water management challenges across India. Its forward-thinking approach contributes to sustainable water management practices and improves access to clean water for communities nationwide, adding lasting value for its customers.

In recognition of its strong overall performance and significant contributions to the Indian water management sector. Elico is honored with Frost & Sullivan's 2025 India Customer Value Leadership Award in the smart water quality monitoring solutions industry. This accolade underscores Elico's mission to enable secure, sustainable water access for communities nationwide and to drive meaningful, lasting value for its customers.

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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

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About Frost & Sullivan

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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.

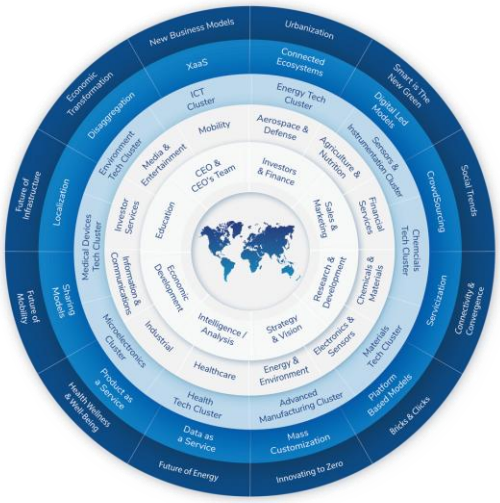


Key Impacts:

- **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)