



2014 Global IT-Based Water Management Solutions
Emerging Market Innovation Award



F R O S T & S U L L I V A N



50 Years of Growth, Innovation & Leadership

Emerging Market Innovation Award Information Technology-Based Water Management Global, 2014

Frost & Sullivan's Global Research Platform

Frost & Sullivan is in its 50th year of business with a global research organization of 1,800 analysts and consultants who monitor more than 300 industries and 250,000 companies. The company's research philosophy originates with the CEO's 360-Degree Perspective™, which serves as the foundation of its TEAM Research™ methodology. This unique approach enables us to determine how best-in-class companies worldwide manage growth, innovation and leadership. Based on the findings of this Best Practices research, Frost & Sullivan is proud to present the 2014 Global Emerging Market Innovation Award in IT-Based Water Management Solutions to Arad Group.

Significance of the Emerging Market Innovation (EMI) Award

Faced with an ever-rising population and exponentially diminishing natural resources, water management is critical, especially in emerging markets. Although most emerging markets are trying to implement water management strategies, efficient water management remains a key issue due to challenges in infrastructure, technology, and technical knowhow. Tapping into the potential of these markets will boost a company's growth, however, the company would have to devise and follow a tailored emerging market strategy, as these markets are inherently very different from developed markets. A true 'Emerging Market Innovator' bypasses the 'one-size-fits-all' approach, and instead, suitably reorients their strategies, products, and solutions to address the unique challenges and needs of emerging markets.

Key Industry Challenges

- Sub-par infrastructure is a challenge in some emerging markets. For instance, faulty pipes pose a constraint to efficient water management.
- High price sensitivity in emerging markets often impedes the adoption of a company's water management products/solutions.
- Unfamiliarity with the use of advanced metering solutions is a barrier to market acceptance.

Frost & Sullivan firmly believes that water management and metering companies can broaden their portfolios and gain sustained, global market leadership by using emerging market innovation to address these challenges.

Key Benchmarking Criteria for the Emerging Market Innovation Award

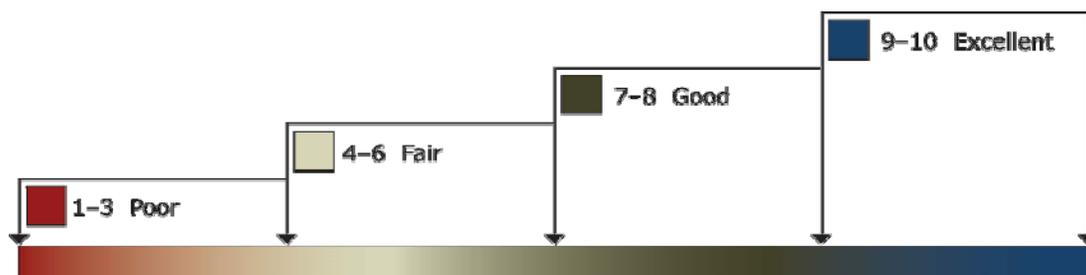
For the Emerging Market Innovation Award, the following criteria were used to benchmark Arad Group's performance against key competitors:

- Focus on Growth through Geographic Expansion
- Ability to Localize for Emerging Market Requirements
- Inclusive Approach to Emerging Markets
- Customer Service Adapted to Regional Needs
- Unique Go-to-Market Model and Impact on Growth

Decision Support Matrix and Measurement Criteria

To support its evaluation of best practices across multiple business performance categories, Frost & Sullivan employs a customized Decision Support Matrix (DSM). The DSM is an analytical tool that compares companies' performance relative to each other with an integration of quantitative and qualitative metrics. The DSM features criteria unique to each Award category and ranks importance by assigning weights to each criterion. The relative weighting reflects current market conditions and illustrates the associated importance of each criterion according to Frost & Sullivan. Fundamentally, each DSM is distinct for each market and Award category. The DSM allows our research and consulting teams to objectively analyze each company's performance on each criterion relative to its top competitors and assign performance ratings on that basis. The DSM follows a 10-point scale that allows for nuances in performance evaluation; ratings guidelines are shown in Chart 1.

Chart 1: Performance-Based Ratings for Decision Support Matrix



This exercise encompasses all criteria, leading to a weighted average ranking of each company. Researchers can then easily identify the company with the highest ranking. As a final step, the research team confirms the veracity of the model by ensuring that small changes to the ratings for a specific criterion do not lead to a significant change in the overall relative rankings of the companies.

Chart 2: Frost & Sullivan’s 10-Step Process for Identifying Award Recipients



Best Practice Award Analysis for Arad Group

The Decision Support Matrix, shown in Chart 3, illustrates the relative importance of each criterion for the Emerging Market Innovation Award and the ratings for each company under evaluation. To remain unbiased while also protecting the interests of the other organizations reviewed, we have chosen to refer to the other key players as Competitor 1 and Competitor 2.

Chart 3: Decision Support Matrix: Emerging Market Innovation Award

<i>Measurement of 1–10 (1 = lowest; 10 = highest)</i>	Award Criteria					Weighted Rating
	Focus on Growth through Geographic Expansion	Ability to Localize for Emerging Market Requirements	Inclusive Approach to Emerging Markets	Customer Service Adapted to Regional Needs	Unique Go-to-Market Model and Impact on Growth	
Relative Weight (%)	20%	20%	20%	20%	20%	100%
Arad Group	9.0	9.5	9.0	9.0	8.5	9.0
Competitor 1	8.5	8.5	7.5	8.0	8.0	8.1
Competitor 2	8.0	7.5	7.0	7.0	7.5	7.4

Criterion 1: Focus on Growth through Geographic Expansion

Arad Group works to provide smart water meter solutions to water utilities by capitalising on the need for efficient water management in emerging markets. Headquartered in Israel, the group owns three subsidiaries in Israel, one in China, one in the United States, and one in Spain. The company has successfully established a widespread presence across emerging markets such as Mexico, Brazil, South Africa, India, and the Philippines. Emerging markets form a significant part of Arad Group's business, and the company's robust growth in these markets is the result of a concrete emerging market strategy. First, Arad Group identifies emerging markets that possess both the need for water metering and a business culture that would support Arad Group projects. The company then collaborates with local partners once the target markets are identified. Arad Group provides tailored water metering solutions, including customised meters, meter-reading systems, and training programs. It is evident that emerging markets represent an integral part of the company's business, as it has plans to expand into countries such as Malaysia, Indonesia, Peru, Venezuela, and Colombia. These markets are likely to account for close to one-third of the company's revenue in the short term.

Criterion 2: Ability to Localize for Emerging Market Requirements

Arad Group specialises in manufacturing tailor-made water meters based on country requirements. For instance, Indian water meters are built to withstand air shocks resulting from disruptions in the water supply. The company also addresses the challenge of faulty pipelines and resultant water leaks in emerging markets. Arad Group's automatic meter-reading (AMR) solutions allow water utilities to detect the exact location of leaks in the pipeline and fix them without having to replace the entire pipeline, thus saving considerable time and money. Arad Group offers customised remote meter-reading systems that are fitted to the needs of water utilities in emerging markets. 'Drive-by AMR' makes use of a vehicle that is fitted with a remote reading device that collects multiple meter readings across large areas in a short period of time.. 'Walk-by AMR' utilises a portable hand-held device, making it a highly economical option for utilities. Financing remains a major challenge, despite the plethora of products and solutions that Arad Group makes available to emerging markets. In these markets, the company surmounts this by augmenting its service portfolio to provide financing solutions to utilities. In 2013, the company launched a water-management mobile application in Israel, linking consumers to their water utility's database. When linked, consumers gain access to a wide variety of information, including consumption levels, forecasts, leak alerts, and information about anticipated water-supply disruptions in the area. As a result of these distinct initiatives, Arad Group's products and solutions have gained widespread acceptance across emerging markets.

Criterion 3: Inclusive Approach to Emerging Markets

Arad Group follows a step-by-step approach when establishing and expanding its business

in emerging markets. This is in order to surmount the challenges associated with penetrating emerging markets, such as language and cultural barriers. To begin with, local partnerships for sales and services are established to help the company navigate through unfamiliar markets. Local partners assist with overcoming language, cultural, and legal barriers. When the level of activity in a particular market reaches a sizeable level, Arad Group moves to establish a subsidiary in the market, thereby transitioning from indirect to direct operations. Following this approach, Arad Group was able to successfully establish Arad Measuring Technologies Wuhan Co. Ltd. in China in 2012.

Criterion 4: Customer Service Adapted to Regional Needs

Arad Group's customer services are targeted at utilities, which in turn provide improved services to consumers in a region. Technical support services are offered through a multi-tiered system, which ensures the complete penetration of the company's products and solutions. The 1st tier involves local teams that are present in all emerging markets. These teams are trained and certified to service Arad Group's products, and customers can approach these teams for services including queries, additional information, and meter replacement. The 2nd tier involves product specialists who are based in Israel and the United States. If there is a problem that cannot be solved at either of these tiers, it goes to the company's research and development wing in Israel, which forms the 3rd tier. Through this system, Arad Group ensures that consumer queries are efficiently and systematically dealt with.

Companies are often met with resistance from consumers in emerging markets when introducing high-end products and solutions, which is due to unfamiliarity and a lack of know-how. Arad Group is not a stranger to this. It has introduced professional training services to tackle this challenge. Arad Group's tailored training services are targeted at advancing the knowledge and skills of its customers, thereby ensuring optimum utilisation of its water-management systems.

Criterion 5: Unique Go-to-Market Model and Impact on Growth

Arad Group has developed CityMind, a Web-based meter data management system that allows for remote management of multiple meters. This was done in order to help the managing and monitoring of multiple meters in the company's area of operation. In addition, this utility provides users with varied reports, statistical analyses, and real-time alerts. Arad Group also successfully collaborated with IBM Corporation to develop a special algorithm for CityMind that reduces false-positive meter alerts by 55%, saving a lot of utility time and money. This all-encompassing CityMind solution is successfully being used by several utilities worldwide, and the company is exploring the possibility of similar collaborations with other IT companies in the area of advanced data analysis. With respect to the meters themselves, Arad Group distinguishes itself by placing the radio systems inside the meters, as opposed to its competitors that place the radio systems externally. Internal placement eliminates the risk of theft or damage to the systems. Following these

distinct initiatives, Arad Group has established itself as a stalwart in smart water-meter solutions across emerging markets.

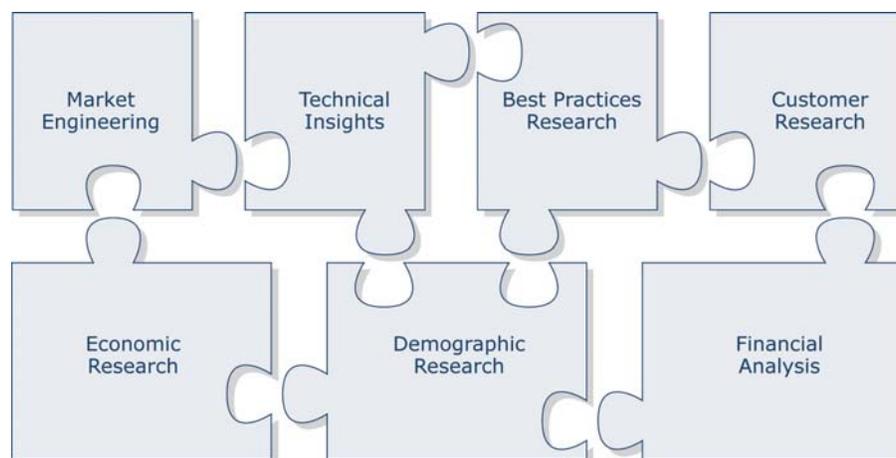
Conclusion

Water management is a pressing need in emerging markets. However, challenges such as improper infrastructure, a lack of expertise, and insufficient finances have encumbered efficient water management. Arad Group has rightly identified these challenges and offers customised water meters, meter-reading systems, and tailored training programs to utilities in emerging markets. The company's well-devised emerging market strategy, which has sustained growth thus far, will support further market expansion, thereby improving water management and sustainable development in those markets. For these reasons, Frost & Sullivan recognizes Arad Group with the 2014 Global Emerging Market Innovation Award in IT-Based Water Management Solutions.

Critical Importance of TEAM Research

Frost & Sullivan's TEAM Research methodology represents the analytical rigor of our research process. It offers a 360-degree view of industry challenges, trends, and issues by integrating all seven of Frost & Sullivan's research methodologies. Our experience has shown over the years that companies too often make important growth decisions based on a narrow understanding of their environment, leading to errors of both omission and commission. Frost & Sullivan contends that successful growth strategies are founded on a thorough understanding of market, technical, economic, financial, customer, best practices, and demographic analyses. In that vein, the letters T, E, A and M reflect our core technical, economic, applied (financial and best practices) and market analyses. The integration of these research disciplines into the TEAM Research methodology provides an evaluation platform for benchmarking industry players and for creating high-potential growth strategies for our clients.

Chart 4: Benchmarking Performance with TEAM Research



About Frost & Sullivan

Frost & Sullivan, the Growth Partnership Company, enables clients to accelerate growth and achieve best-in-class positions in growth, innovation and leadership. The company's Growth Partnership Service provides the CEO and the CEO's Growth Team with disciplined research and best-practice models to drive the generation, evaluation and implementation of powerful growth strategies. Frost & Sullivan leverages 50 years of experience in partnering with Global 1000 companies, emerging businesses and the investment community from more than 40 offices on six continents. To join our Growth Partnership, please visit <http://www.frost.com>.