

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

FROST & SULLIVAN BEST PRACTICES AWARD

RESIDENTIAL WATER TREATMENT - NORTH AMERICA

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Company of the Year Award 2019



FROST & SULLIVAN

2019

BEST  
PRACTICES  
AWARD

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## Background and Company Performance

### *Industry Challenges*

Many Americans remain unaware that for years they have ingested, and continue to ingest, per- and polyfluoroalkyl (PFAS) chemicals present in municipal drinking water supply. PFAS, and in particular perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS), are chemical compounds that have been used in many products for their fire retardant, non-stick, and water-proof characteristics. It is now known, however, that these chemicals do not degrade naturally over time. As a result, products such as firefighting foam enter the environment after use, and PFAS chemicals leach into water bodies, which are then used as drinking water supply. PFAS has been shown to have detrimental impacts on infant and childhood growth, learning, and behavior; women's health and pregnancy; cholesterol levels; and the immune system; and in some cases, may result in cancer. While PFAS chemicals have been removed from products in much of today's manufacturing landscape, they remain pervasive in the environment. The Centers for Disease Control and Prevention (CDC) has determined PFAS is present in nearly all Americans and requires 3 to 9 years to filter out of the body.

As knowledge of PFAS, its extent, and seriousness of impact grows, the impetus to treat and filter it out of residential drinking water grows. This health-critical need delivers a treatment solution growth rate in municipal filtration for PFAS at over 20.0%, while companies providing residential solutions see six-figure growth rates. There are numerous challenges, however, that complicate the thorough filtration of PFAS from drinking water. These include a lack of robust federal and state guidance, a lack of wide availability of certified filtration solutions, and a lack of simple and easy-to-manage home filtration solutions.

Currently, the United States Environmental Protection Agency (US EPA) is reviewing whether to revise its guidelines on PFAS levels in drinking water and if it should move towards enforceable limits, but as of today, PFAS levels in drinking water are recommended to be under 70 parts per trillion (PPT). At a state level, however, many recommendations are much lower and are pushing towards the non-detectable (0 PPT) level. Without firm regulations in place, some confusion exists for the public, for drinking water treatment plants, and for solution providers all looking to ensure they are adequately dealing with PFAS contamination. Ultimately, the healthy PPT limit, the burden of treatment responsibility, and the appropriate course of action remain unclear, so confusion persists in the marketplace.

Conventional thinking places the burden of safe drinking water on water utilities and municipalities, but the lack of cohesion and uniformity on guidance and filtration at the municipal level requires a broader array of solutions for residential and light commercial customers. Filtration products designed for homes and commercial businesses ensure, regardless of state or federal (in)action, that the water people drink is safe from contamination. A critical complement to these products is NSF (National Sanitation Foundation) certification, which provides independent assurance of efficacy and reliability.

Further, most of the general public that works with residential and light commercial water filtration products are neither engineers nor plumbers that have a background in installation and maintenance of water filtration systems. Companies that deliver solutions to the residential market must ensure their products are as easy to operate and maintain as possible, without impairing function. Simplicity ensures correct operation and positive customer engagement with the product, which is central to gaining traction in the marketplace.

Addressing the contamination challenge of PFAS infiltration in drinking water supplies is a critical requirement today and into the future; however, each of the embedded challenges must be addressed first to ensure stakeholders' ability to respond adequately to the need.

### *Visionary Innovation and Performance/Customer Impact*

Aquasana, Inc. has developed a leading industry profile for advanced solutions in residential water treatment. Seeing the PFAS challenge emerge at an early stage, the Austin, TX-based company worked to develop and commercialize NSF P473-certified PFAS filtration products covering whole home, under the sink, and countertop applications. Aquasana products are engineered in the United States and are certified to address up to 88 common water contaminants.

### **Addressing Unmet Needs**

For decades, PFAS compounds were introduced to the environment, and from as early as the 1970s, companies, such as 3M, have documented PFAS accumulation and its toxicity. However, the lack of official government and public knowledge has meant that necessary filtration solutions were only introduced recently. The lack of a cohesive national strategy remains in the United States, leaving many stakeholders uncertain of what action to take and when.

The Texas-based company Aquasana empowers residential customers to take direct action in purifying their drinking water, and not be held back by regulator indecision. This trailblazing company now has 7 products certified by the NSF to filter out PFAS to levels below 70 ppt from drinking water. Aquasana's proactive strategy addresses a critical human health challenge while the EPA and municipalities are still trying to form a direct strategy. Further, the range of 7 products gives customers a choice to prioritize their preferences and makes safe water filtration accessible to various parts of a home or building.

## **Visionary Scenarios through Mega Trends**

Aquasana wholly embraces the direct-to-consumer business model, selling its products online and over the phone, directly to its customers, making the process as simple as possible. Conventional selling methods rely on brick-and-mortar stores and expert installation from plumbers and contractors. Aquasana, however, strives to deliver efficiency and savings for the customer by leveraging web and telephone sales channels in addition to ensuring its products offer advanced performance yet remain simple enough for home owners to install and maintain. This business model also offers Aquasana direct lines of communication with customers regarding performance and other insights into demand and preference. Indeed, this direct feedback loop spurred the company to tackle PFAS contamination in the first place. The company's consumer-centric relationship, delivered by its online and direct sales model, enabled it to identify and act on customer demand concerning PFAS earlier than its competitors. Ultimately, Aquasana was the first company to obtain critical NSF certification and continue this pattern as the first to offer an entire-house filter, OptimH2O, that is certified to address PFAS.

## **Implementation of Best Practices to Drive the Customer Ownership Experience**

Due to its direct sales model and the hands-on interaction customers have with the home water filtration products, Aquasana thrives as it implements best practices that enhance the customer ownership experience. Aquasana delivers an excellent customer ownership experience in a number of ways: First, the wide PFAS filtration product line provides customers numerous ways to filter out contaminants. They can choose between countertop, under the sink, and whole-house filters to remove PFAS from residential water. This product range provides flexibility to address either an entire property's water supply or just drinking water available from the tap as needed. For instance, apartment dwellers or those without physical or legal access to building piping, address water quality control at the tap in their private unit. Second, innovative product designs to mimic point-of-use systems allow even Aquasana whole-house filters to be maintained by the homeowner, bypassing the costs and scheduling a professional. Third, Aquasana provides performance indicator lights on its Clean Water Machine countertop filter and OptimH2O whole house system to alert owners of a product that requires attention: green to indicate the filter is good, yellow to prompt replacement soon, and red to direct the customer to immediately replace the filter. These three best practices all converge in delivering a best-in-class customer ownership experience and set Aquasana apart; in contrast, competitors lack whole-house filtration products and therefore offer less flexibility in their customers' choice in filtration solutions.

## **Price/Performance Value**

The PFAS-related range of residential filtration products offered by Aquasana also offers customers flexibility in pricing and affordability. The Clean Water Machine Countertop Water Filter is currently available for \$129.99, while the whole-house OptimH2O filter is available for as low as \$1,799. As a result, aside from offering benefits in physical and legal access to water pipes, Aquasana works to ensure a broad range of customers can

afford contaminant-free drinking water, which goes beyond just PFAS. Specifically, Aquasana line of drinking water and whole house products are certified to reduce up to 97.6% of chlorine and chloramines, 99.62% of lead, 99.95% of cysts, and 98.2% of PFOA/PFOS. A key goal of Aquasana is to provide further evidence and certification of the effectiveness of its filters, as likely its products already filter out additional substances that have yet to be independently tested and confirmed. Customers of Aquasana filters are assured of the products' effectiveness in targeting the above contaminants, but they are also very likely receiving further value from the filtration of other elements in their home water supply.

The level of customer interest has been overwhelming for Aquasana. While interest from consumers started as a trickle with just the first impacted communities, word has spread about PFOA most notably through the news outlets. Frost & Sullivan is impressed that Aquasana has strategically positioned itself in the middle of a high customer demand market, delivering customers an in-demand product and receiving significant business growth rewards in return.

### **Brand Equity**

Delivering clean water is not just a business opportunity, but a critical service for preserving human health and safety. As a result, Aquasana anchors its mission to the element of service and support of those in need. In doing so, the company serves its customers in both their future and present need. In 2018, the company, through its parent A. O. Smith, unveiled the new L. R. Smith Corporate Technology Center in Milwaukee, Wisconsin. The 42,000 square foot facility employs hundreds of research and development (R&D) professionals to advance its product innovation efforts that serve customers in water treatment, along with potable and hydronic water heating and air purification.

Further, when immediate disasters strike and when human need is critical (people suffering from vulnerability), Aquasana works with partners to help alleviate clean drinking water supply issues. In 2016, when the Flint water crisis occurred, Aquasana partnered with Good360, a nonpartisan nonprofit that connects manufacturers of in-need products to populations in need. Aquasana's water filters, certified to remove lead, were of central importance to the population of Flint, Michigan. Aquasana also works with big box store Lowe's nationwide to leverage its geographic footprint to get heavily discounted products to parts of the country that are in need. Through these visionary R&D activities supported by on-the-ground relief efforts, Aquasana is delivering on today's critical needs, but also looking ahead to identify future ones and create new products that are available when problems emerge, as achieved with its PFAS contamination solutions.

## *Conclusion*

Aquasana sets the pace for the North American residential water filtration industry as it centers itself at the convergence between customer need and technical innovation. Despite high levels of water contamination nationwide, regulators and drinking water utilities have yet to create clear and confident regulations that address PFAS contamination and reassure the population of its safety. Aquasana, however, was the first residential water treatment company to achieve NSF certification for PFAS treatment and the first to develop a whole-house filtration product. As a result, Aquasana sees its PFAS-filtration products sell out due to high customer demand, and it continues to document the contaminant removal that its products deliver to customers who deserve clean drinking water.

For its strong overall performance, Aquasana has earned Frost & Sullivan's 2019 Company of the Year Award.

## Significance of Company of the Year

To receive the Company of the Year Award (i.e., to be recognized as a leader not only in your industry, but among non-industry peers) requires a company to demonstrate excellence in growth, innovation, and leadership. This excellence typically translates into superior performance in three key areas—demand generation, brand development, and competitive positioning—that serve as the foundation of a company’s future success and prepare it to deliver on the 2 factors that define the Company of the Year Award: Visionary Innovation and Performance, and Customer Impact).



## Understanding Company of the Year

Driving demand, brand strength, and competitive differentiation all play critical roles in delivering unique value to customers. This three-fold focus, however, must ideally be complemented by an equally rigorous focus on Visionary Innovation and Performance to enhance Customer Impact.

## Key Benchmarking Criteria

For the Company of the Year Award, Frost & Sullivan analysts independently evaluated each factor according to the criteria identified below.

### Visionary Innovation and Performance

- Criterion 1: Addressing Unmet Needs
- Criterion 2: Visionary Scenarios through Mega Trends
- Criterion 3: Implementation of Best Practices
- Criterion 4: Blue Ocean Strategy
- Criterion 5: Financial Performance

### Customer Impact

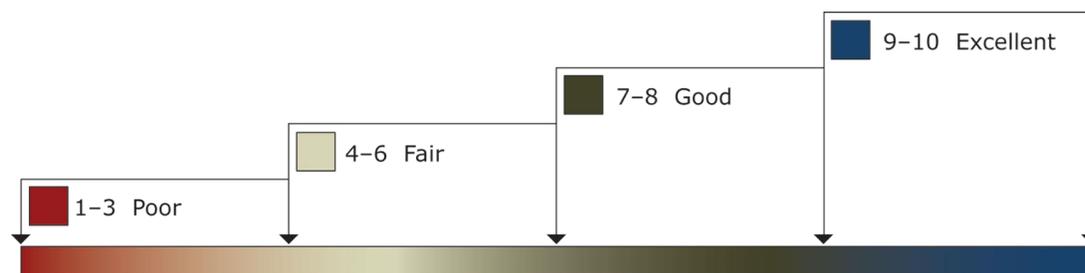
- Criterion 1: Price/Performance Value
- Criterion 2: Customer Purchase Experience
- Criterion 3: Customer Ownership Experience
- Criterion 4: Customer Service Experience
- Criterion 5: Brand Equity

## Best Practices Award Analysis for Aquasana

### Decision Support Scorecard

To support its evaluation of best practices across multiple business performance categories, Frost & Sullivan employs a customized Decision Support Scorecard. This tool allows research and consulting teams to objectively analyze performance according to the key benchmarking criteria listed in the previous section, and to assign ratings on that basis. The tool follows a 10-point scale that allows for nuances in performance evaluation. Ratings guidelines are illustrated below.

#### RATINGS GUIDELINES



The Decision Support Scorecard considers Visionary Innovation and Performance and Customer Impact (i.e., the overarching categories for all 10 benchmarking criteria; the definitions for each criterion are provided beneath the scorecard). The research team confirms the veracity of this weighted scorecard through sensitivity analysis, which confirms 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.

The results of this analysis are shown below. To remain unbiased and to protect the interests of all organizations reviewed, Frost & Sullivan has chosen to refer to the other key participants as Competitor 1 and Competitor 2.

<i>Measurement of 1-10 (1 = poor; 10 = excellent)</i>			
<b>Company of the Year</b>	Visionary Innovation & Performance	Customer Impact	<b>Average Rating</b>
<b>Aquasana</b>	<b>10</b>	<b>10</b>	<b>10</b>
Competitor 1	7	8	7.5
Competitor 2	6	6	6

### *Visionary Innovation & Performance*

#### **Criterion 1: Addressing Unmet Needs**

Requirement: Implementing a robust process to continuously unearth customers’ unmet or underserved needs, and creating the products or solutions to address them effectively.

#### **Criterion 2: Visionary Scenarios through Mega Trends**

Requirement: Incorporating long-range, macro-level scenarios into the innovation strategy, thereby enabling first-to-market growth opportunity solutions.

#### **Criterion 3: Implementation of Best Practices**

Requirement: Best-in-class strategy implementation characterized by processes, tools, or activities that generate a consistent and repeatable level of success.

#### **Criterion 4: Blue Ocean Strategy**

Requirement: Strategic focus on creating a leadership position in a potentially uncontested market space, manifested by stiff barriers to entry for competitors.

#### **Criterion 5: Financial Performance**

Requirement: Strong overall business performance in terms of revenue, revenue growth, operating margin, and other key financial metrics.

### *Customer Impact*

#### **Criterion 1: Price/Performance Value**

Requirement: Products or services offer the best value for the price compared to similar offerings in the market.

#### **Criterion 2: Customer Purchase Experience**

Requirement: Customers feel they are buying the optimal solution that addresses both their unique needs and their unique constraints.

#### **Criterion 3: Customer Ownership Experience**

Requirement: Customers are proud to own the company’s product or service and have a positive experience throughout the life of the product or service.

**Criterion 4: Customer Service Experience**

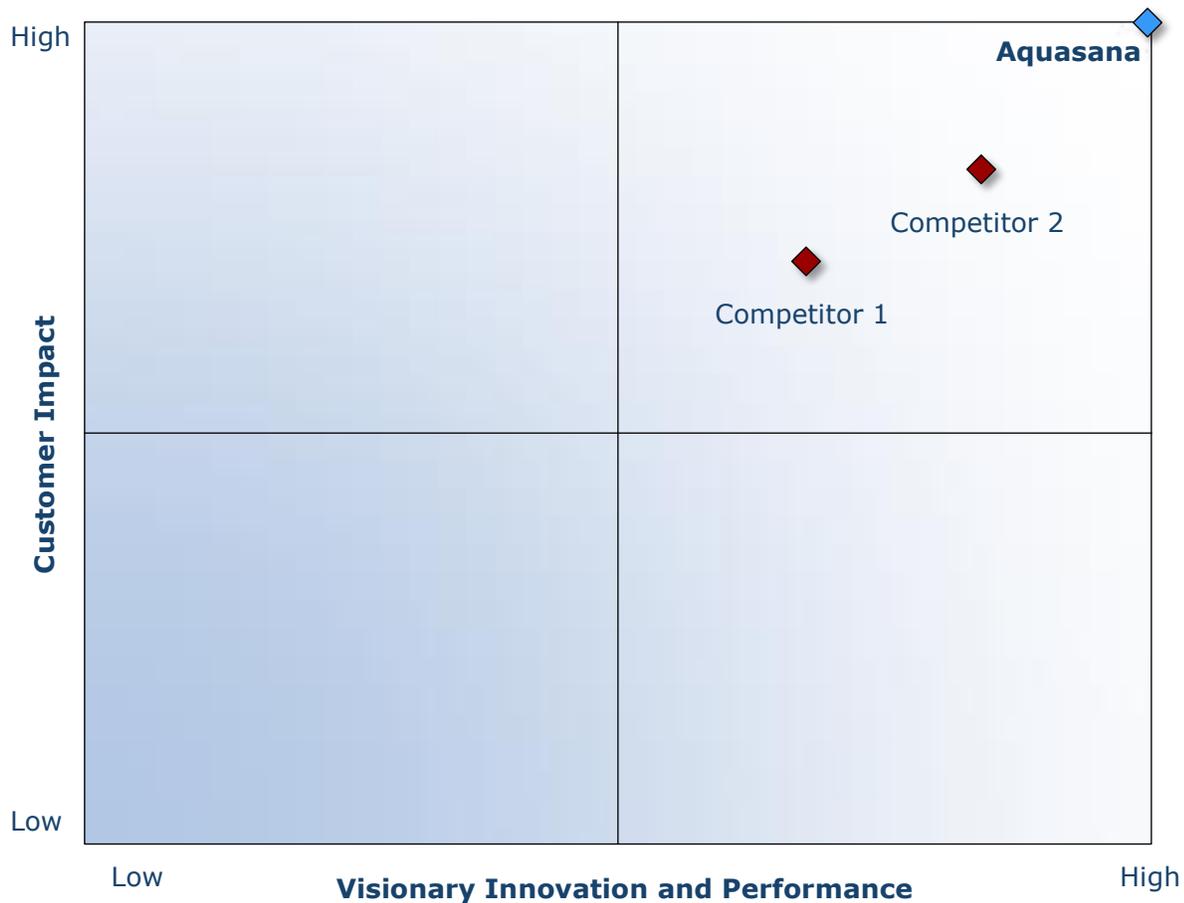
Requirement: Customer service is accessible, fast, stress-free, and of high quality.

**Criterion 5: Brand Equity**

Requirement: Customers have a positive view of the brand and exhibit high brand loyalty.

*Decision Support Matrix*

Once all companies have been evaluated according to the Decision Support Scorecard, analysts then position the candidates on the matrix shown below, enabling them to visualize which companies are truly breakthrough and which ones are not yet operating at best-in-class levels.



## Best Practices Recognition: 10 Steps to Researching, Identifying, and Recognizing Best Practices

Frost & Sullivan analysts follow a 10-step process to evaluate award candidates and assess their fit with select best practice criteria. The reputation and integrity of the awards are based on close adherence to this process.

STEP	OBJECTIVE	KEY ACTIVITIES	OUTPUT
1 <b>Monitor, target, and screen</b>	Identify award recipient candidates from around the world	<ul style="list-style-type: none"> <li>• Conduct in-depth industry research</li> <li>• Identify emerging industries</li> <li>• Scan multiple regions</li> </ul>	Pipeline of candidates that potentially meet all best practices criteria
2 <b>Perform 360-degree research</b>	Perform comprehensive, 360-degree research on all candidates in the pipeline	<ul style="list-style-type: none"> <li>• Interview thought leaders and industry practitioners</li> <li>• Assess candidates' fit with best practices criteria</li> <li>• Rank all candidates</li> </ul>	Matrix positioning of all candidates' performance relative to one another
3 <b>Invite thought leadership in best practices</b>	Perform in-depth examination of all candidates	<ul style="list-style-type: none"> <li>• Confirm best practices criteria</li> <li>• Examine eligibility of all candidates</li> <li>• Identify any information gaps</li> </ul>	Detailed profiles of all ranked candidates
4 <b>Initiate research director review</b>	Conduct an unbiased evaluation of all candidate profiles	<ul style="list-style-type: none"> <li>• Brainstorm ranking options</li> <li>• Invite multiple perspectives on candidates' performance</li> <li>• Update candidate profiles</li> </ul>	Final prioritization of all eligible candidates and companion best practices positioning paper
5 <b>Assemble panel of industry experts</b>	Present findings to an expert panel of industry thought leaders	<ul style="list-style-type: none"> <li>• Share findings</li> <li>• Strengthen cases for candidate eligibility</li> <li>• Prioritize candidates</li> </ul>	Refined list of prioritized award candidates
6 <b>Conduct global industry review</b>	Build consensus on Award candidates' eligibility	<ul style="list-style-type: none"> <li>• Hold global team meeting to review all candidates</li> <li>• Pressure-test fit with criteria</li> <li>• Confirm inclusion of all eligible candidates</li> </ul>	Final list of eligible award candidates, representing success stories worldwide
7 <b>Perform quality check</b>	Develop official award consideration materials	<ul style="list-style-type: none"> <li>• Perform final performance benchmarking activities</li> <li>• Write nominations</li> <li>• Perform quality review</li> </ul>	High-quality, accurate, and creative presentation of nominees' successes
8 <b>Reconnect with panel of industry experts</b>	Finalize the selection of the best practices award recipient	<ul style="list-style-type: none"> <li>• Review analysis with panel</li> <li>• Build consensus</li> <li>• Select winner</li> </ul>	Decision on which company performs best against all best practices criteria
9 <b>Communicate recognition</b>	Inform award recipient of recognition	<ul style="list-style-type: none"> <li>• Present award to the CEO</li> <li>• Inspire the organization for continued success</li> <li>• Celebrate the recipient's performance</li> </ul>	Announcement of award and plan for how recipient can use the award to enhance the brand
10 <b>Take strategic action</b>	Upon licensing, company able to share award news with stakeholders and customers	<ul style="list-style-type: none"> <li>• Coordinate media outreach</li> <li>• Design a marketing plan</li> <li>• Assess award's role in strategic planning</li> </ul>	Widespread awareness of recipient's award status among investors, media personnel, and employees

## The Intersection between 360-Degree Research and Best Practices Awards

### Research Methodology

Frost & Sullivan's 360-degree research methodology represents the analytical rigor of the research process. It offers a 360-degree view of industry challenges, trends, and issues by integrating all 7 of Frost & Sullivan's research methodologies. Too often companies make important growth decisions based on a narrow understanding of their environment, resulting in errors of both omission and commission. Successful growth strategies are founded on a thorough understanding of market, technical, economic, financial, customer, best practices, and demographic analyses. The integration of these research disciplines into the 360-degree research methodology provides an evaluation platform for benchmarking industry participants and for identifying those performing at best-in-class levels.

### 360-DEGREE RESEARCH: SEEING ORDER IN THE CHAOS



## About Frost & Sullivan

Frost & Sullivan, the Growth Partnership Company, helps clients 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 practices models to drive the generation, evaluation, and implementation of powerful growth strategies. Frost & Sullivan leverages nearly 60 years of experience in partnering with Global 1000 companies, emerging businesses, and the investment community from 45 offices on 6 continents. To join Frost & Sullivan's Growth Partnership, visit <http://www.frost.com>.