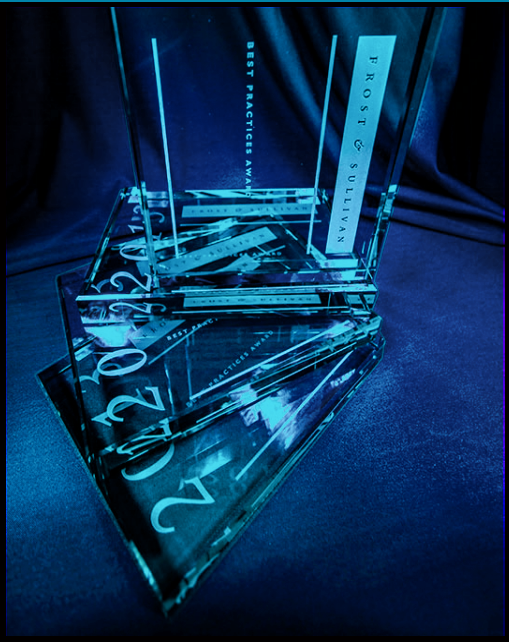


F R O S T & S U L L I V A N

volparasolutions™

2016 Global Breast Density Assessment
Solutions Competitive Strategy
Innovation and Leadership Award



FROST & SULLIVAN

BEST
2016 PRACTICES
AWARD

GLOBAL BREAST DENSITY ASSESSMENT
SOLUTIONS COMPETITIVE STRATEGY
INNOVATION AND LEADERSHIP AWARD

2016
BEST PRACTICES
AWARDS

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Background and Company Performance

Industry Challenges

Breast density as an important parameter for breast screening arrived in the spotlight several years ago. At the moment, 25 states in the US have adopted legislation requiring medical facilities to notify patients about their breast density. At the same time, countries such as Malaysia, the Netherlands, the United Kingdom, and Japan are conducting large-scale research related to breast density.

While there is significant debate about the benefits and potential risks of additional screening tests, a current industry challenge is to provide reliable data to determine when additional screening could be beneficial and educate people how knowledge of their breast density can help them make better-informed decisions. A pioneer in this area, Volpara Solutions has been advocating the importance of tracking breast density parameters since appearing on the market; yet Frost & Sullivan believes that this year the company implemented several innovations that are creating new and exciting perspectives for the company and industry as a whole.

Strategy Innovation and Customer Impact

Strategy Effectiveness

Volpara Solutions offers a multi-vendor breast density assessment products suite that currently consists of VolparaDensity, VolparaDose, VolparaAnalytics, Volpara Research and Volpara Density Maps. Tying together these best-of-breed solution components, the company is currently developing the Volpara Enterprise solution.

Last year alone, Volpara Solutions installed 150 breast density assessment solutions, covering a total of over 500 installed x-ray units over 33 countries. As its customer base expands, the company's catchment—the number of women screened using Volpara Density solutions—is growing exponentially; almost doubled from 4 million in 2014 to 7 million in 2015 to nearly 10 million today.

The company's strategic marketing strategy positively impacted this drastic growth:

- Geographical expansion by entering new markets—in 2015 the company made its first installations in India and Belgium
- Collaboration with leading original equipment manufacturers (OEMs) ensured the compatibility of Volpara Solutions' products with various manufacturers' equipment.

As a nimble entrepreneurial company, Volpara Solutions also managed to update rapidly its solution to suit the requirements of the 5th edition of the Breast Imaging-Reporting and Data System (BI-RADS®) Atlas issued by the American College of Radiology (ACR).

Another notable contributing factor to the growth of Volpara Solutions' customer base is the company's strong media engagement and involvement in breast density research and education around the globe (in such countries as Malaysia, Japan, the UK, the Netherlands, among others).

Competitive Differentiation

In 2016, Volpara Solutions received FDA clearance for the latest addition to its product lineup—Volpara Density Maps, a one-of-a-kind solution providing the ability to track changes in patients' breast density over time. Currently, the company is working on VolparaEnterprise, a solution providing an evaluation of mammography and tomosynthesis systems, including patient dose, examination times, and overall quality control. Together with VolparaAnalytics, this solution will generate a substantial amount of data, which may potentially be used for finding consistent patterns in groups of patients based on demographics (e.g., age, race, number of screening tests taken).

The company believes that the more specific data it provides to the medical professional, the more it contributes to securing an accurate diagnosis for patients; this is a driving force behind new solution developments that collect a new type of data.

Volpara Solutions also leverages modern network technologies and supporting new IT deployment models. The company made its first cloud-based installation on a mobile mammography unit this year. In Switzerland all of the company's solutions installed in the country connect to a cloud-based system for collecting and analyzing patients' data at the country level—proving convenient and effective in driving population health management efforts. The company plans to increase the usage of the cloud system in other geographies as well.

Volpara Solutions' strategy around data analytics has already started to pay off with new clinical discoveries. Data accumulated from VolparaAnalytics have shed light on the impact of compression level on the results' accuracy. The company found that both under-compression and over-compression negatively affect the accuracy of screening results, and concluded that there should be more research to identify appropriate compression levels.

Volpara Solutions found regional patterns with respect to average breast density. In Malaysia, a study conducted on 20,000 women indicated higher breast density parameters than those in Western countries. Moreover, compression applied during mammography was twice as strong as during the screenings in other countries—potentially a reason why breast screening procedures are not so popular in the region. These findings and future studies create an opportunity to develop country-based screening profiles and standards, potentially leading to more personalized screening and precise results.

The company is confident that its advanced software is capable of analyzing and

processing the increasing amount of collected data to determine such standards and common patterns. Scientific leadership and credibility of the company, as well as its involvement with the newest technologies, and its aspiration to use those for finding consistent patterns across population all set the company apart from competitors.

Volpara Solutions intends to further expand its analytics capabilities by leveraging an increasing set of metrics that allow the company switch to predictive healthcare - the next frontier for the healthcare industry.

Executive Team Alignment

Volpara Solutions focuses significant efforts on education to combat low awareness of risk factors associated with breast density in the clinical and patient community, as well as increase awareness of specialized screenings. The company proactively provides educational activities at multiple conferences, meetings, and events, thereby helping the company meet new clients while increasing general public knowledge and brand equity.

Heavily focused on technical excellence, Volpara Solutions is positioning itself as a scientific leader and a research hub in the breast density and volumetric assessment field. To date, the company has produced more than 140 research papers on technology validation and innovation and plans to continue conducting and leveraging its research to further growth and development worldwide.

Stakeholder Integration

Despite breast density considerations not being something completely new, it takes time to spread the knowledge to the general public and raise awareness for the sake of all stakeholders. Volpara Solutions has invested considerable effort in proving the benefits of awareness of breast density and its effect on the accuracy of breast screening results and conveyed the message to patients through multiple studies and presentations.

Alliance of all the stakeholders, including research institutes, OEMs, investors and solution vendors on a global scale is gradually pushing breast density assessment into a standard part of breast screening procedure. Similarly, rising awareness is driving more patients to request breast density assessment, and pushing governments to consider mandating the procedure while re-adjusting legislation and reimbursement schemes accordingly.

Customer Ownership Experience

A truly customer-focused company from the onset, Volpara Solutions is continuously effective at capturing customer feedback and reflecting it in the next generation of products to suit customers' needs and concerns. Customer feedback is gathered during the sales process, including direct sales, distributor sales, and OEMs, as well as through medical advisory board, users meetings and trade shows. As such, Volpara customers benefit from customized solutions, while taking part in the ongoing development of its

solution.

The company also communicates directly with key opinion leaders regarding its products. The cumulative information from these channels supports further solution development. In fact, Volpara Density Maps is one solution that is a direct byproduct of customer input.

Providing Best-in-Class Customer Support

Volpara Solutions has service teams located in all regions where the company operates, helping with installation, staff training, and ongoing product support. In addition to a team of clinical training specialists, Volpara Solutions' sales team is also trained on using the application—exemplifying the company's consultative selling approach.

As a result of a successful customer-first strategy, Volpara Solutions constantly receives positive feedback from its customers, who appreciate the precision analysis the company's volumetric density approach offers, as well as the system's state-of-the-art reliability and functionality.

Volpara Solutions strives to provide competitive pricing for its clients and is considering new pricing models to allow more customers access to its solutions.

Brand Equity

Despite only being in the market for 7 years, Volpara Solutions has built such strong brand recognition that it is fast becoming an industry standard. In Canada, one of the regions is considering recommending the company's product line as the industry standard in its territory; in South Korea, the government is exploring the possibility of reimbursing the use of Volpara Solutions' products.

One important milestone for the company was the recent signing of a distribution agreement with GE Healthcare, a market leader in breast imaging equipment. GE Healthcare started offering Volpara Solution's products as an add-on to its product line. GE Healthcare and the existing partnership agreements demonstrate a growing industry awareness of Volpara Solutions.

Further validating the company's technology, solutions, and approach to the market are multiple studies conducted by third-party independent researchers that serve to prove the accuracy and robustness of Volpara Solutions—thereby also contributed to solidifying the company's brand equity.

Conclusion

Breast density assessment solutions have been on the market for a while; however, in order to bring proper change to the current breast density screening practices, raising awareness among women is critical. Volpara Solutions is successfully working in this direction, concurrently increasing their brand recognition and expanding client base, while providing accurate and reliable solutions.

With its strong overall performance, Volpara Solutions earns Frost & Sullivan's 2016 Competitive Strategy Innovation and Leadership Award in the global breast density assessment solutions market.

Significance of Competitive Strategy Innovation and Leadership

Any successful approach to achieving top-line growth must (1) take into account what competitors are, and are not, doing; (2) meet customer demand with a comprehensive, value-driven product or service portfolio; and (3) establish a brand that resonates deeply with customers and stands apart from other providers. Companies must succeed at these three things—brand, demand, and positioning—to achieve best-practice levels in competitive strategy.



Understanding Competitive Strategy Innovation and Leadership

Demand, brand strength, and competitive differentiation all play a critical role in delivering unique value to customers. This three-fold focus, however, must ideally be complemented by an equally rigorous focus on strategy innovation and customer impact.

Key Benchmarking Criteria

For the Competitive Strategy Innovation and Leadership Award, Frost & Sullivan analysts independently evaluated two key factors—Strategy Innovation and Customer Impact—according to the criteria identified below.

Strategy Innovation

- Criterion 1: Strategy Effectiveness
- Criterion 2: Strategy Execution
- Criterion 3: Competitive Differentiation
- Criterion 4: Executive Team Alignment
- Criterion 5: Stakeholder Integration

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

The Intersection between 360-Degree Research and Best Practices Awards

Research Methodology

Frost & Sullivan's 360-degree 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 7 of Frost & Sullivan's research methodologies. Too often, companies make important growth decisions based on a narrow understanding of their environment, leading to 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 players and for identifying those performing at best-in-class levels.



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

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

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 almost 50 years of experience in partnering with Global 1000 companies, emerging businesses and the investment community from 31 offices on six continents. To join our Growth Partnership, please visit <http://www.frost.com>.