

FUJIFILM

2012 North American Digital Mammography New Product Innovation Award



FROST & SULLIVAN



50 Years of Growth, Innovation & Leadership

New Product Innovation Award Digital Mammography North America, 2012

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 2012 North American New Product Innovation Award in Digital Mammography to FUJIFILM Medical Systems U.S.A., Inc.

Significance of the New Product Innovation Award

Key Industry Challenges

The U.S. Food & Drug Administration's reclassification of full-field digital mammography (FFDM) systems from Class III to Class II devices in November of 2010 has led to significant growth in the number of competitors in the U.S. FFDM market. Naturally, this growth has been accompanied by a corresponding increase in the number of commercially available FFDM solutions on the market. Since the FDA's reclassification of FFDM devices, six new competitors have entered the U.S. FFDM Equipment market, four of which have brought new DR-based FFDM systems to the market. Given the considerable number of new DR mammography systems available to U.S. breast imaging facilities, Frost & Sullivan analyzed several aspects of new competitors' DR systems as a means to evaluate and compare the degree of innovation of each system. Based on its analysis, Frost & Sullivan has deemed the Aspire™ HD digital mammography system by FUJIFILM Medical Systems U.S.A., Inc. to be the 2012 North American New Product Innovation of the Year in Digital Mammography.

Key Benchmarking Criteria for the New Product Innovation Award

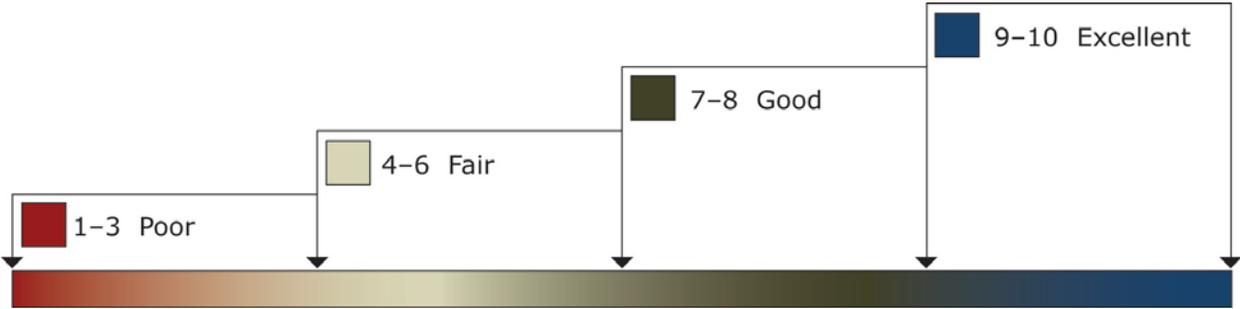
For the New Product Innovation Award, the following criteria were used to benchmark Fujifilm's performance against key competitors:

- Innovative Element of the Product
- Leverage of Leading-Edge Technologies
- Value Added Features/Benefits
- Increased Customer ROI
- Customer Acquisition/Penetration Potential

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 Fujifilm Medical Systems

The Decision Support Matrix, shown in Chart 3, illustrates the relative importance of each criterion for the New Product 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 for New Product Innovation Award

<i>Measurement of 1–10 (1 = lowest; 10 = highest)</i>	Award Criteria					
	Innovative Element of the Product	Leverage of Leading-Edge Technologies	Value Added Features/Benefits	Increased Customer ROI	Customer Acquisition/Penetration Potential	Weighted Rating
Relative Weight (%)	20%	20%	20%	20%	20%	100%
Fujifilm Medical Systems	9	10	9	10	10	9.6
Competitor 1	7	8	9	8	8	8.0
Competitor 2	8	9	9	8	8	8.4
Competitor 3	9	10	9	9	9	9.2

Innovative Element of the Product

Launched commercially in the United States in September of 2011, the Aspire™ HD is the first and only digital mammography system to offer a direct conversion amorphous selenium (a-Se) flat panel detector that does not rely on thin film transistor (TFT) readout electronics. Instead, the system's detector is based on a novel dual-layer a-Se design that replaces commonly used TFT electronics with Fujifilm's proprietary Direct Optical Switching (DOS) technology enabling an industry-leading pixel size of 50 microns in the Aspire HD's detector. DOS eliminates the considerable levels of noise that emanate from electrical switches such as TFTs.

Leverage of Leading-Edge Technologies

The Aspire™ HD's detector consists of highly purified a-Se that was developed using Fujifilm's extensive experience with vacuum deposition technology. The dual-layer structure of the detector consists of a thick upper layer of high X-ray absorption a-Se, which directly and efficiently converts X-ray radiation into electrical signals. This is followed by a thinner layer of a-Se that employs Fujifilm's DOS technology in order to provide low-noise data readouts. The direct transfer of image information enabled by Fujifilm's DOS approach

reduces scatter and blurring, and the increased efficiency enables lower operating temperatures, which extend the life of the detector.

Fujifilm also leverages its 70 years of experience in developing image analysis solutions to include cutting-edge image processing technologies in the Aspire™ HD.

Value Added Features/Benefits

Given its detector pixel size of only 50 microns, the Aspire™ HD enables very high spatial resolution in mammographic images. Moreover, Fujifilm's DOS technology and its unique detector design reduce the time delay that is required between X-ray exposures due to faster removal of residual charge in the detector. Lower noise levels resulting from the use of DOS also translate into more efficient use of X-ray radiation and, therefore, lower dose exposure requirements. Together, the Aspire™ HD's use of DOS and a tungsten x-ray tube with a rhodium filter enable dose reductions of up to 30 percent relative to TFT-based FFDM systems and as much as 50 percent compared to film-screen and CR-based X-ray mammography systems. With the Aspire™ HD, patients and clinicians alike benefit from faster exam times, lower radiation dose exposures, and higher diagnostic confidence enabled by the greater level of detail in resulting images.

Increased Customer ROI

Together with its competitive price point, the Aspire™ HD offers several unique features and benefits that increase diagnostic accuracy, streamline workflow, improve patient comfort, and increase productivity, ultimately leading to a higher return-on-investment (ROI) for users. Offering a 24 x 30cm detection area, the design of the Aspire™ HD provides a field of view that extends all the way to the chest wall, ensuring complete visualization of the whole breast. In addition to providing more positional stability during craniocaudal (CC) and mediolateral oblique (MLO) views, the ergonomic armrests and handles and chest and axilla pads included in the design of the Aspire HD also improve patient comfort.

The Aspire™ HD also offers several features that streamline workflow and increase productivity. In addition to providing manual and semi-automatic X-ray exposure control modes, the system offers a fully automatic exposure mode that optimizes exposures based on the thickness of the breast. The system includes features that automatically optimize the force used for breast compression and automatically decompress the breast after exposures. The ability to set all imaging parameters on a single screen of the user interface in Fujifilm's Acquisition Workstation (AWS) and to view up to 4 side-by-side images on the system's large portrait-style monitor are also conducive to improved clinical workflow and increased productivity.

Customer Acquisition/Penetration Potential

The unique ability to provide both CR- and DR-based FFDM systems has led to a worldwide installed base of more than 8,000 digital mammography systems for Fujifilm. Frost & Sullivan anticipates rapid conversion of both new and existing Fujifilm customers to the

Aspire HD due to the enhanced capabilities and improved efficiencies enabled by this digital mammography system.

Conclusion

Frost & Sullivan analyzed several aspects of new U.S. FFDM market competitors' DR systems as a means to evaluate and compare the degree of innovation of each system. Based on its analysis, Frost & Sullivan has deemed the Aspire™ HD digital mammography system by FUJIFILM Medical Systems U.S.A., Inc. to be the 2012 North American New Product Innovation of the Year in Digital Mammography.

The CEO 360-Degree Perspective™ - Visionary Platform for Growth Strategies

The CEO 360-Degree Perspective™ model provides a clear illustration of the complex business universe in which CEOs and their management teams live today. It represents the foundation of Frost & Sullivan's global research organization and provides the basis on which companies can gain a visionary and strategic understanding of the market. The CEO 360-Degree Perspective™ is also a "must-have" requirement for the identification and analysis of best-practice performance by industry leaders.

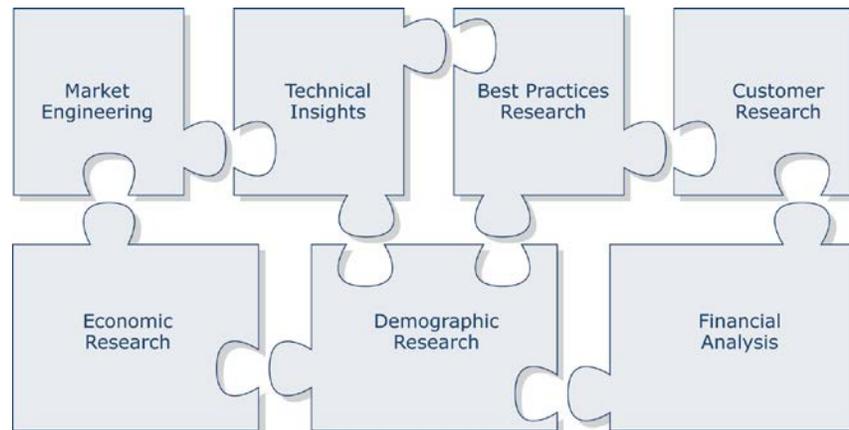
The CEO 360-Degree Perspective™ model enables our clients to gain a comprehensive, action-oriented understanding of market evolution and its implications for their companies' growth strategies. As illustrated in Chart 4 below, the following six-step process outlines how our researchers and consultants embed the CEO 360-Degree Perspective™ into their analyses and recommendations.

Chart 4: CEO's 360-Degree Perspective™ Model



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 5: 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>.