

## 2015 European Cardiovascular Information Systems Technology Leadership Award



FROST & SULLIVAN



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## **Background and Company Performance**

#### Industry Challenges

As cardiovascular technology advances, many new tests are utilized to make a specific diagnosis. These tests are both expensive and time consuming, increasing the need for easy-to-use and accurate systems to access testing results. Conventional information storing systems record the measurements or images onto different platforms, requiring doctors to access different systems to gain all of the information necessary to make a diagnosis. Additionally, for patients requiring on-going treatment, doctors must not only access different systems to view each test conducted, but must re-access results from prior visits for comparison purposes, also scattered across different systems. The fragmented nature of this process leads to the loss of many prior patient tests, resulting in wasted capital and time from conducting these tests and a more difficult, less accurate analysis of treatment success.

As the healthcare industry's margins begin to shrink, many hospitals are placing larger focus on departmental production rates. Administrators need a system to track how long diagnostic tests take to conduct, how much time is spent trying to access the results, and how long it takes doctors to make a diagnosis based off of these tests. The fragmented nature of conventional information storing systems makes it difficult to track production rates, creating challenges for administrators to find areas to reduce costs. Many hospitals are turning to cardiovascular information systems (CVIS) with picture archiving and communication systems (PACS) to integrate tests' measurements, images, and patient reports onto a single platform. While these systems offer a smooth integration platform for viewing a variety of different reports and images, many are only configured to work with a single vendor's equipment, limiting hospitals' options of equipment.

## Technology Leverage and Business Impact

In order to combat the fragmented nature of conventional information storage systems, EBIT (Esaote Group) created the SUITESTENSA CVIS PACS imaging platform—a comprehensive cardiovascular system that integrates the patient tracking and reporting capabilities of a CVIS with the image storing capacity of a PACS to provide an easily accessible and trackable platform for patient reports, images, and test results. EBIT's technologically advanced platform allows easy and automatic storage of all cardiology tests (regardless of equipment vendor)onto a single system—including diagnostics from cardiac catheterization laboratories (cath-labs), echocardiograms (echos), electrocardiograms (ECGs), electrophysiology studies (EPs), and any other cardiology diagnostic tests necessary to fully diagnose a patient. Due to its technological advancements, this is the second time that Frost & Sullivan has recognized EBIT for its excellence.

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#### SUITESTENSA: An Innovative, Diverse, and Efficient Solution

Upon its original creation in 1999, the SUITESTENSA system was developed by EBIT's dedicated healthcare IT diagnostics company of the Esaote Group—for the use within cathlabs as a software integrating program. EBIT expanded the platform, first as a system for all tests within the cardiovascular department, and later as a system integration platform between hospital departments. The SUITESTENSA CVIS PACS is EBIT's primary information platform, and allows cardiovascular departments to automatically store all cardiovascular images and testing measurements onto a single system adaptable to project need and available infrastructure. In addition to the system's flexibility, it utilizes Pie Medical Imaging's (Esaote Group) CAAS software to perform image analysis on 2D and 3D measurements collected from X-ray angiography, and is integrated with 3mensio Valves Software, providing surgeons with 3D imaging to visualize and to implant transcatheter aortic valves in the least invasive manner.

EBIT has established relationships with key healthcare equipment vendors, allowing it to understand the different measurement-coding methods utilized by each vendor in the industry. Using this expertise, EBIT integrated the different coding methods onto the SUITESTENSA's DICOM, HL7, and FDAXML communication protocols, permitting it to be utilized in conjunction with different healthcare equipment vendors' offerings without duplication errors. This capability gives hospitals greater flexibility to choose equipment that fits its specific needs and constraints. In addition to SUITESTENSA CVIS PACS' tight integration of different reporting methods, it includes an easy-to-use interface that lets doctors manipulate different reports to match their individual viewing needs.

By utilizing the SUITESTENSA CVIS PACS, cardiovascular doctors can easily access all reports and images needed to make a well-informed patient diagnosis. Additionally, SUITESTENSA CVIS PACS stores all prior tests completed on patients, allowing doctors to easily compare their prescribed treatment's success for individual patients and to adjust treatment on a case-by-case basis. This also lets doctors compare and judge the performance of different treatments, permitting them to develop more accurate solutions for different applications. With prior and current tests stored on a single, user-friendly system, hospitals reduce costs associated with printing the imaging scans.

#### Moving beyond Country and Hospital Borders: EBIT's Plan for Success

Being part of the Esaote Group, EBIT's primary commercialization focus has been in the Italian market, where the company is headquartered; EBIT currently holds more than 50% of the Italian market share. EBIT's SUITESTENSA is compliant with European security and privacy regulations of patient information. As SUITESTENSA expanded into different markets—including Brazil, Colombia, Argentina, Spain, Germany, and other parts of Eastern Europe— EBIT has sustained its commitment to offering comprehensive technological support of its platform. It builds and maintains support facilities in its expansion countries or regions, allowing EBIT to provide timely and consistent technical support for the lifespan of



the SUITESTENSA CVIS PACS.

Additionally, EBIT uses customers' systems as demonstration sites to let potential customers fully understand the capabilities and advantages to the platform before investing in the technology. Due to its large success in the Italian market, EBIT has begun expanding the SUITESTENSA platform across departments and hospitals in this market, allowing doctors to compare test results across departments to gain a more comprehensive view for patient diagnosis. This capability allows hospitals utilizing SUITESTENSA to compare patient's tests and imaging results with results from prior visits to other hospitals, providing a comprehensive view of patients with re-occurring symptoms and allowing doctors to compare treatments utilized for specific diagnoses. By combining the platform's capabilities to connect not only departments but hospitals, doctors are able to reduce the time spent gathering information from other facilities, and provide a more accurate treatment plan based on the analysis of many different types of test and image results.

#### Conclusion

The fragmented nature of the cardiovascular information storing systems cause doctors to waste time accessing different programs to view patient's test results and imaging scans in order to make a diagnosis. Additionally, this disjointed system can sometimes cause patients prior diagnostic results to be left out of a current diagnosis process, forcing doctors to create treatment plans with limited information. EBIT'S SUITESTENSA CVIS PACS platform utilizes tightly integrated IT solutions to automatically store cardiovascular test results onto a single platform, allowing doctors to access both current and previous testing results of patients to create a more comprehensive and valid treatment plan. Its commitment to offering technological support has allowed EBIT to expand into other markets while still maintaining high levels of customer satisfaction.

Because of its technically advanced integration, user-friendly interface, and commitment to customer support, EBIT is recognized with Frost & Sullivan's 2015 European Technology Leadership Award in the Cardiovascular Information Systems market.

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## Significance of Technology Leadership

Technology-rich companies with strong commercialization strategies benefit from the increased demand for high-quality, technologically innovative products. Those products help shape the brand, leading to a strong differentiated market position.



## Understanding Technology Leadership

Technology Leadership recognizes companies that lead the development and successful introduction of high-tech solutions to customers' most pressing needs, altering the industry or business landscape in the process. These companies shape the future of technology and its uses. Ultimately, success is measured by the degree to which a technology is leveraged, and the impact that technology has on growing the business.

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## Key Benchmarking Criteria

For the Technology Leadership Award, Frost & Sullivan analysts independently evaluated two key factors—Technology Leverage and Business Impact—according to the criteria identified below.

#### **Technology Leverage**

Criterion 1: Commitment to Innovation Criterion 2: Commitment to Creativity Criterion 3: Technology Incubation Criterion 4: Commercialization Success Criterion 5: Application Diversity

#### **Business Impact**

Criterion 1: Financial Performance Criterion 2: Customer Acquisition Criterion 3: Operational Efficiency Criterion 4: Growth Potential Criterion 5: Human Capital

## 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 of their understanding 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	ОИТРИТ
1	Monitor, target, and screen	Identify award recipient candidates from around the globe	<ul> <li>Conduct in-depth industry research</li> <li>Identify emerging sectors</li> <li>Scan multiple geographies</li> </ul>	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> <li>Interview thought leaders and industry practitioners</li> <li>Assess candidates' fit with best-practice criteria</li> <li>Rank all candidates</li> </ul>	Matrix positioning all candidates' performance relative to one another
3	Invite thought leadership in best practices	Perform in-depth examination of all candidates	<ul> <li>Confirm best-practice criteria</li> <li>Examine eligibility of all candidates</li> <li>Identify any information gaps</li> </ul>	Detailed profiles of all ranked candidates
4	Initiate research director review	Conduct an unbiased evaluation of all candidate profiles	<ul> <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-practice positioning paper
5	Assemble panel of industry experts	Present findings to an expert panel of industry thought leaders	<ul><li>Share findings</li><li>Strengthen cases for candidate eligibility</li><li>Prioritize candidates</li></ul>	Refined list of prioritized award candidates
6	Conduct global industry review	Build consensus on award candidates' eligibility	<ul> <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	Perform quality check	Develop official award consideration materials	<ul> <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	Reconnect with panel of industry experts	Finalize the selection of the best-practice award recipient	<ul><li>Review analysis with panel</li><li>Build consensus</li><li>Select winner</li></ul>	Decision on which company performs best against all best-practice criteria
9	Communicate recognition	Inform award recipient of award recognition	<ul> <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	Take strategic action	Upon licensing, company may share award news with stakeholders and customers	<ul> <li>Coordinate media outreach</li> <li>Design a marketing plan</li> <li>Assess award's role in future strategic planning</li> </ul>	Widespread awareness of recipient's award status among investors, media personnel, and employees

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#### 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 <a href="http://www.frost.com">http://www.frost.com</a>.

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