

2014 Global Condition Monitoring Customer Value Leadership Award



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50 Years of Growth, Innovation & Leadership

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Background and Company Performance

Industry Challenges

Although the global condition-monitoring equipment market is a mature, yet evolving industry, it is plagued by a wide range of industry challenges. Lack of customer awareness and openness, an aging workforce, well-established incumbents, and the current global economic instability are all factors that limit the advancement of this industry. Customers of condition-monitoring equipment have historically tended to be cautious and risk-averse, unwilling to experiment with technologies that have yet to be proven in the field.

However, with the growing emphasis on improving plant productivity and efficiency, the trend toward online condition monitoring and understanding causes for machine failure through diagnostics and predictive maintenance strategies is gaining prominence. Companies that are able to effectively deliver and communicate the value and cost benefits of such hardware and software condition monitoring solutions are expected to be highly successful in this market.

Customer Impact and Business Impact of SETPOINT

Customer Ownership Experience

The SETPOINT story began just 4 years ago in 2010 when Metrix Instrument Company embarked on efforts to expand into the API 670 monitoring market. Historically, the 45-year old Metrix business had remained focused primarily on device-level offerings such as sensors, vibration transmitters, and vibration switches, emerging as a leader in that niche.

Faced with the challenge of further growth, a strategic decision was made to develop an offering that would allow the business to enter the systems market. A team of highly experienced individuals were assembled to build and lead what would become the new SETPOINT™ product line. Their experience was extensive; in fact, they were the same principals that had designed the world's largest installed base of machinery protection systems – the Bently Nevada® 3300 and 3500 series. In the space of 18 months, the SETPOINT platform was developed and first units were shipped. Dozens of innovations were embedded in this new system, including a self-contained "universal" monitoring module (UMM) that could be configured do any required measurements in a single module type – making the addition of new measurements no more difficult than loading a new app on your smartphone. Quality is world-class: with more than 150 million customer runtime hours accumulated on the UMM hardware, only a single module failure has been reported.

In 2011, the SETPOINT team further expanded its capabilities by embarking on the addition of condition monitoring software to its portfolio. Rather than building a standalone software infrastructure – as is used by every other provider in this space – the SETPOINT team was innovative again by entering into a partnership with OSIsoft, - maker

of the PI System® software. Together, they showed that high-bandwidth, sub-millisecond vibration waveform data could be streamed directly into a PI database – something that had been routinely dismissed by the vibration industry as "impractical" or even "impossible." Time to market was less than 12 months – unheard of in this industry – and during that time the performance capabilities of the PI System continued along its Moore's Law trajectory, doubling in speed and making high-speed, online vibration data collection completely practical.

The SETPOINT team's decision to harness the power and installed base of the PI System, rather than developing a stand-alone condition monitoring infrastructure, was both insightful and strategic. The PI System is a real time data infrastructure – often used as a process historian – that captures, manages, analyzes, and visualizes, real-time data. Over 14,000 PI Systems are in use globally, and research indicates that over 65% of Global 500 process and manufacturing companies are using this system at their plants and facilities. Strategically, the SETPOINT team was able to reduce time to market by not reinventing a real time data infrastructure and simply using the PI System instead. It was also able to tap directly into the huge installed base of PI System users globally, eliminating the need for the customer to invest in a separate condition monitoring software system. This results in significant cost savings by utilizing an already existing software platform in the PI System, instead of making additional investments into IT and operations infrastructure and maintaining 2 separate ecosystems.

Growth Potential

A primary reason behind SETPOINT's strategic partnership with OSIsoft is the elimination of redundant computing, network, and software infrastructure, using the existing PI System to do more for its customers. Another reason is OSIsoft's ability to envision future market dynamics and Mega Trends that could affect the businesses, economies, and societies of tomorrow. A prominent trend in the condition-monitoring industry is the drive toward data analytics and predictive maintenance strategies. Companies strive to run their plants more efficiently and productively by continuous monitoring their critical assets, which helps customers make informed decisions based on understanding machinery behavior and vibration signatures through permanently installed sensors.

A third reason is that making quick and informed decisions on the condition of an asset requires real-time analysis of large volumes of data, also known as Big Data. OSIsoft is the foremost leader in Big Data, with the PI System being an integral part of the Big Data ecosystem, converting real-time data into actionable information in critical applications such as oil and gas, power generation, and process industries. Customers use this data as part of their overall plant maintenance and reliability strategies to maximize machinery uptime and productivity.

Price/Performance Value

SETPOINT's collaboration with OSIsoft has given the company access to a rich ecosystem of more than 400 OSIsoft partners. The open infrastructure of the PI System enables cross collaboration and knowledge sharing among its partners through a common platform by using a vast amount of historical and real-time data. Capabilities such as expert system anomaly detection, thermodynamic performance monitoring, statistical data mining, reporting tools, Microsoft Office integration, and many others are all available through this network of partners and their shared use of the PI System as the data infrastructure. This provides substantial value to customers because numerous application silos do not have to be constructed, each with its own proprietary database, and the likelihood that the required application already exists within OSIsoft's Partner ecosystem is high.

SETPOINT has also focused considerable efforts on simplifying the hardware while delivering powerful features through its software. Inspired by current trends in the smartphone industry, SETPOINT monitoring capabilities are simply firmware apps sharing a common, single hardware module. SETPOINT's universal monitoring module, for example, eliminates the more than one dozen different module types used in competing platforms to provide a similar suite of capabilities. Spare parts and long-term cost of ownership is dramatically reduced.

But perhaps most pronounced aspect of its customer value story is SETPOINT's ability to completely eliminate severs, networks, and software used exclusively for condition monitoring and use a plant's existing PI System infrastructure instead. This creates a powerful and compelling reason to adopt SETPOINT technology rather than continue in status quo approaches.

Customer Acquisition

Despite the lack of significant technology innovation or product differentiation in the market, SETPOINT has emerged as a refreshing exception. Its smartphone-like approach to hardware and its use of the customer's existing PI System data infrastructure demonstrates that it is possible to be innovative in this industry by tapping into unmet and unarticulated needs. SETPOINT has consistently stood out as a result of its understanding of the market and technology needs of its customers.

The company has understood better than most the conservative nature of the industry and its reluctance to change. They have used this to their advantage by recognizing the pervasiveness and widespread use of the PI System and offering a solution that replaces a separate condition monitoring silo with the PI System the customer is already using. As a result, the SETPOINT solution is also considered to be one of the most cost-effective offerings on the market.

The success of the SETPOINT hardware and software has resulted in its ability to stand alone as a separate business unit, and now operates completely independently of Metrix. Its customer list is expanding rapidly with installations that include key names such as Eastman Chemical, Valero Energy, Saudi Aramco, Gazprom, Chevron, Arcelor Mittal, PEMEX, Alstom, Honda, Toshiba, FirstEnergy, Linde, and Petrobras.

Conclusion

In a market characterized by limited technology progress and development, SETPOINT's bold and innovative approach to product development has produced several unique solutions, resolving the most critical challenges of its customers. Users have responded very positively to its efforts, despite the presence of market incumbents.

With its strong overall performance, SETPOINT has earned Frost & Sullivan's 2014 Customer Value Leadership Award.

Significance of Customer Value Leadership

Ultimately, growth in any organization depends upon customers purchasing from your company, and then making the decision to return time and again. Delighting customers is therefore the cornerstone of any successful growth strategy. To achieve these dual goals (growth and customer delight), an organization must be best-in-class in three key areas: understanding demand, nurturing the brand, differentiating from the competition. This



three-fold approach to delivering customer value is explored further below.

Understanding Customer Value Leadership

Customer Value Leadership is defined and measured by two macro-level categories: customer impact and business impact. These two sides work together to make customers feel valued, and confident in their products' quality and long shelf life. This dual satisfaction translates into repeat purchases and a high lifetime customer value.

Key Benchmarking Criteria

For the Customer Value Leadership Award, we evaluated two key factors—Customer Impact and Business Impact—according to the criteria identified below.

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

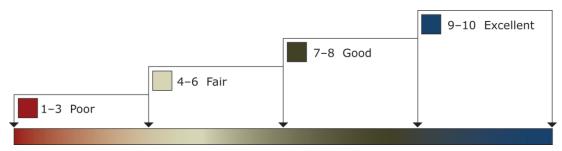
Business Impact

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

Best Practice Award Analysis for SETPOINT 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 our 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 is organized by Customer Impact and Business Impact (i.e., the overarching categories for all 10 benchmarking criteria; the definitions for each criteria 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, we have chosen to refer to the other key players in as Company 2 and Company 3.

DECISION SUPPORT SCORECARD FOR CUSTOMER VALUE LEADERSHIP AWARD (ILLUSTRATIVE)

Measurement of 1–10 (1 = poor; 10 = excellent)			
Customer Value Leadership	Customer Impact	Business Impact	Average Rating
SETPOINT	9.5	9	9.25
Competitor 2	8	7	7.5
Competitor 3	7.5	7	7.25

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 like they are buying the most 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

Business Impact

Criterion 1: Financial Performance

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

Criterion 2: Customer Acquisition

Requirement: Customer facing processes support the efficient and consistent acquisition of new customers, even as it enhances retention of current customers

Criterion 3: Operational Efficiency

Requirement: Staff is able to perform assigned tasks productively, quickly, and to a high quality standard

Criterion 4: Growth Potential

Requirements: Customer focus strengthens brand, reinforces customer loyalty and enhances growth potential

Criterion 5: Human Capital

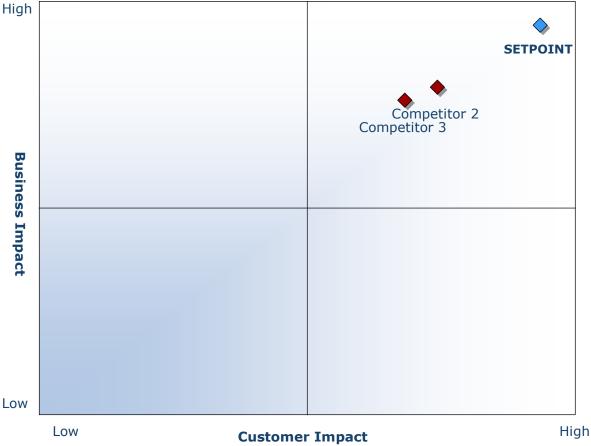
Requirement: Company culture is characterized by a strong commitment to quality and customers, which in turn enhances employee morale and retention

Decision Support Matrix

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Once all companies have been evaluated according to the Decision Support Scorecard, analysts can 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.

DECISION SUPPORT MATRIX FOR CUSTOMER VALUE LEADERSHIP AWARD (ILLUSTRATIVE)



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.

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

Our awards team follows a 10-step process (illustrated below) to evaluate award candidates and assess their fit with our best practice criteria. The reputation and integrity of our awards process 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	 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 Perform omprehensive, and industry practitioners Assess candidates' fit with		Matrix positioning all candidates' performance relative to one another
3	Invite thought leadership in best practices	Perform in-depth examination of all candidates	 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	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	Share findingsStrengthen cases for candidate eligibilityPrioritize candidates	Refined list of prioritized award candidates
6	Conduct global industry review	Build consensus on award candidates' eligibility • 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	 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	Review analysis with panelBuild consensusSelect winner	Decision on which company performs best against all best-practice criteria
9	Communicate recognition	Inform award recipient of award recognition	 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	Once Licensed, share award news with stakeholders and customers	 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

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About Frost & Sullivan

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