

2015 North American Video Collaboration Solutions for Manufacturing Customer Value Leadership Award



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Background and Company Performance

Industry Challenges

As operations become increasingly global, resources critical to key, strategic decision-making processes become spatially distributed. Therefore, there is an inherent need to bring a company's decision-makers and strategic thinkers closer to make business decisions and innovations a team effort rather than a one-man job. Although globalization has resulted in rapid expansion, manufacturing companies in particular face a significant dearth of onsite experts to ensure superior operational efficiency. This limited pool of resources results in experts travelling to different manufacturing facilities or customer locations across the globe most of the time. This not only leads to lost productivity and poor service but also increases costs for the company, which consequently impacts the bottom line.

Talent that is distributed across the globe needs to be made available on demand to contribute to business projects and also to encourage and deliver significantly high-quality innovations through efficient collaboration among disparate teams. Remote asset management and control, which is part of the Internet of Things (IoT), also involves more than data analysis. Organizations need to bring the right people and processes to the situation to aid in real-time decisions.

While remote communication mechanisms are being deployed by many companies to decrease travel time and downtime, traditional video-conferencing or video chat methods are not suitable to collaborate on 'things' effectively in the field. Moreover, although such paradigms can be deployed under office premises, the real challenge lies in interacting with fieldworkers to enhance productivity, generate new revenue sources, reduce costs, and improve overall service. In addition, manufacturing or customer facilities can also be at locations with very low network bandwidth and high security requirements. Therefore, a solution with advanced functionality, tight security, and the ability to perform even at low bandwidth is essential.

Under such circumstances, companies that can engineer a highly efficient video-collaboration solution with advanced capabilities are expected to deliver great value to customers, while also enhancing their brand position and competitive edge in the North American space.

Customer Impact and Business Impact

Price/Performance Value

Driven by the increased importance of globalization, companies now have offices across different countries and continents. While such companies display exceptional growth potential, they also experience a shortage of subject-matter experts. Under such circumstances, experts continuously need to travel to different parts of the world to train junior team members, perform facility maintenance and repairs, conduct safety audits,

and carry out inspections. Unfortunately, the frequent travel and related expenses result in lost productivity and increased costs for the company; this negatively impacts the bottom line.

Abreast of these emerging industry concerns, Librestream Technologies, Inc. (Librestream) rightly leveraged its expertise in virtual-presence technology to engineer its highly advanced Onsight mobile collaboration platform. With distinct capabilities to collaborate on 'things' and also operate at rugged locations and low-bandwidth areas, the company's futuristic Onsight product portfolio demonstrates exceptional video-collaboration capabilities even with field workers.

The Onsight platform includes three options that fit different environments and use cases: Librestream's hardware including the wireless mobile video smart camera or collaboration hub devices, the Onsight Connect collaboration software for mobile devices and computers, and Onsight Embedded to allow an enterprise to integrate the Onsight video collaboration capability within an existing application. Regardless of the endpoint chosen, Librestream provides the same secure hosted cloud services, centralized management, and advanced capabilities that ensure call reliability and performance in the field.

One of its advanced collaboration capabilities is the ability for subject matter experts to remotely control the Onsight endpoint in the field. This remote control means that field workers need little to no training to collaborate through Onsight and provides a streamlined workflow for teams.

The cloud services also provide system administrators with centralized management tools for their Onsight systems. In addition, the solution also takes security requirements into consideration and has incorporated stringent authentication procedures. For instance, a customer will also have to go through five levels of authentication before accessing Onsight. This software does not store customer data in the cloud, which further solidifies its security.

While traditional video-conferencing solutions fail to perform at remote locations, Onsight's capability to offer a rich, remote collaboration experience between subject-matter experts and field workers through advanced capabilities—such as detailed visuals, ability to telestrate or draw on a screen, high-resolution image capture, easy image sharing, and remote control of field cameras—places Librestream's solution at the forefront of market competition.

The solution delivers the best value proposition to its customers, as it is packed with advanced functionalities such as real-time, high-quality video streaming, two-way audio through Voice Over Internet Protocol (VOIP), extensive zoom-in capabilities, enhanced security through data encryption, high-resolution image capture, onscreen drawing to highlight problem areas, and the ability to function at a very low bandwidth.

Librestream's Case Example: A leading apparel manufacturer was faced with quality and product design issues that required 20 weeks of travel in a year to ensure that these issues were resolved. The Onsight solution helped the company to review samples virtually and speed-up the problem-resolution time, thus leading to shorter delivery lead-times and operational cost savings.

Customer Purchase Experience

In addition to product innovation, Librestream also focuses on establishing a strong partner network to provide its ever-increasing customer base with a fulfilling purchase experience. Due to the large number of certified partners that ensure effective sales, deployment, and integration of Librestream's Onsight video collaboration system, the company thoroughly trains its partners to provide customers with the best purchase experience possible. To become a certified solution provider of the Onsight system, partners will need to attend Librestream's Sales Certification and Technical Certification programs.

The Sales Certification is a one-day training program that focuses on equipping partners' sales teams with the right methods and tools to efficiently present, demonstrate, and sell Librestream's highly advanced Onsight video-collaboration solution to its customers. The Technical Certification program, on the other hand, is targeted towards partners' technical teams. It is a two-day program in which Librestream provides a company's technical resources with a deep understanding of the Onsight system. A consultative sales approach combined with a thorough understanding of the Onsight video-collaboration solution, enables customers to make informed purchase decisions.

In addition to training solution providers, Librestream also provides continuous support to the members of its strong partner network as well as its customers. The partners also have access to vast knowledge repositories, which also contribute towards intensifying partners' knowledge about the Onsight system and help provide its wide customer base a robust purchase and deployment experience.

Librestream's Case Example: In many cases, Onsight is used to collaborate on issues across companies within the value chain, which makes detailed knowledge of the solution important. For example, one airline uses Onsight to collaborate with both their specialized technicians as well as the OEM aircraft manufacturer in live virtual sessions to help resolve Aircraft on Ground (AOG) issues. Using Onsight, these teams can bridge calls across the organizations and eliminate the need for travel by seeing and hearing issues with the aircraft live, in some cases reporting a 60% improvement in turnaround time.

Customer Service Experience

In addition to engineering solid video-collaboration solutions for the manufacturing industry, Librestream also focuses on delivering superior services to its customers, ensuring that users of Librestream's Onsight solution derive maximum value from it.

The company offers a comprehensive support service that includes training, technical support, and hosting services. Such a complete offering from Librestream is instrumental in the efficient planning and deployment of Onsight. The company also provides a wide range of online as well as in-person training options and courses for customers. Apart from these in-depth training sessions that offer customers ease of use, Librestream also has a rich knowledge repository that the customers can access any time should any problem arise. In addition, customers can also directly reach out to Librestream's support service team over the phone.

For customers lacking the required internal-video infrastructure, Librestream offers hosted services such as Onsight Session Initiation Protocol SIP Service and Onsight TeamLink. The Onsight SIP Service with its advanced functionalities allows for easy and fast deployment of the Onsight system; Onsight TeamLink is a cloud-based firewall traversal solution that ensures infrastructure security and addresses connectivity problems across networks.

Librestream continues to deliver a satisfying customer service experience through its continuous improvements and innovations. In order to keep up with growing customer demands, Librestream introduced an upgraded Onsight Connect software application that is compatible with the iPhone and iPad, an Onsight Embedded solution that provides an SDK for integrated application development on Apple iOS and Android platforms, as well as the Onsight Collaboration Hub, which is an Apple accessory that brings in external video sources such as wearable cameras and industrial devices such as borescopes.

Librestream's Case Example: Librestream's solution is now used extensively within manufacturing and service industries to improve customer service. One equipment manufacturer identified significant savings from warranty cost avoidance, improved parts management, and reduced truck rolls as a result of escalating support calls to include video through Onsight. In this situation, the end user customer calls into the manufacturer's internal support center for assistance. The support technician can immediately escalate to a remote video inspection with the end user. Savings are estimated at \$29M annually as a result of this streamlined and more accurate workflow.

Operational Efficiency

The requirement to provide maintenance services, repairs, and overhaul in harsh and rugged environments, such as oil fields or manufacturing plant floor, is growing because operations have moved to more complex and expensive conditions. Furthermore, there is a significant decline in the number of experienced employees well-equipped to handle rugged environments or complex equipment. Therefore, customers require a provision for an effective and flexible remote solution that can effectively address these requirements.

Based out of Winnipeg, Canada, Librestream focuses on providing mobile video-collaboration systems to the manufacturing and service industry to enable remote problem-solving capabilities. By improving on conventional video-conferencing techniques

and implementing advanced functionalities, the company's Onsight video-collaboration system finds applications outside office premises, even at remote and rugged locations such as the oil field, factory floor, and servicing sites.

While smartphones and tablets can be used as a video and communication medium, Librestream's new enterprise-grade Onsight Collaboration Hub can enable technicians to directly plug the system into an industrial device such as a borescope or thermal-imaging device and enable experts to see the internal cause of the problem. Librestream's capability to not only provide detailed visuals but also allows users to draw onscreen, share images and remotely control the camera in the field make them a necessity for accurate, timely and effective decision making.

Librestream's Case Example: A leading automotive collision repair chain required a solution to improve appraiser accuracy, customer service and greater workforce flexibility. While the average onsite appraiser addressed three or four estimates, the Onsight solution enabled them to perform an average of eight estimates per day increasing the productivity by 200% to 260% overall.

Customer Acquisition

In the face of increased globalization where companies are faced with a limited pool of experts for consulting and maintenance of facilities, Librestream's advanced Onsight video collaboration system has been instrumental in establishing a superior video communication between experts, suppliers, customers, and field workers. By virtue of such unrivalled performance, Librestream has deployed Onsight globally across industries that include automotive, aerospace, industrial equipment, and consumer packaged goods manufacturers as well as Oil and Gas (O&G), military, and service-based businesses, which include Fortune 500 organizations.

Librestream's Case Example: The robust video-collaboration system has been crucial in enhancing productivity and service while alleviating costs. For instance, Sub-Zero Group Inc., the luxury appliance manufacturing company, leveraged the solution within its daily processes to design, launch, manufacture, and service its products. The company uses Onsight to discuss both internal and external real-time design and production issues, eventually reducing new product introduction cycles by 10 to 20% approximately. Leveraging the Onsight system within the manufacturing plant, the company was also able to reduce production line downtime by 5 to 10%. Sub-Zero also uses Onsight on tablets and smartphones within their field service operation for better service response and cost savings.

Streamline Operations

By deploying Onsight's video-collaboration system, companies can also streamline operations. For instance, a leading consumer-goods manufacturer implemented the advanced solution to ensure a collaborated operation mechanism between the thousands

of its experts located across different offices. With exceptional video quality and capabilities to highlight minor defects in equipment, Onsight ensures easy maintenance of existing equipment and commissioning of new equipment. In addition, the Research and Development (R&D) departments of manufacturing companies can deploy Onsight's video-collaboration system to share designs and ideas among team engineers.

Librestream's virtual-presence collaboration system supports mobile video that can help address the challenges faced by operations within harsh environments with limited local expertise and safety concerns. It also proves to be highly beneficial for O&G companies given the remote and rugged locations they need to operate in. As Onsight demonstrates the capability to function efficiently even at low bandwidth, O&G companies can significantly enhance their business operations.

Librestream's Case Example: Baker Hughes is one O&G company that uses Librestream's solution to improve their operation. One use case is to enable virtual customer witness tests. In this application, customers need to witness the disassembly and inspection of equipment returned from the field. It used to take 4 hours per job and require customers to travel 8 hours to get to the repair facility. Now, customers can stay in their office and complete the test remotely, improving safety metrics from reduced travel, speeding the repair of tools, and enhancing service.

Growth Potential

Librestream has demonstrated exceptional value by recording 300% growth in the last 5 years in the North American, European, and Asian markets. While the company already boasts a strong customer base from the manufacturing domain, it has also extended its offerings to service-based businesses. For instance, the second largest property insurance company in the United States has integrated the Onsight video-collaboration system into their mobile application to deliver high-quality service to its customers. By integrating Onsight within their mobile customer app, this insurance company reports considerable customer service improvements, processing claims in 15 minutes instead of the traditional 7 days. Also, manufacturing companies can make use of integrating Librestream's Onsight in providing enhanced services to their dealers and customers by enabling video-based customer service and improving field service workflows.

While the company's expansion in different sectors contributes toward accelerating its growth, Librestream also continuously improves on its solution portfolio. In addition to its highly innovative product offerings, Librestream's partnerships with some of the most well-known technology companies such as Cisco, Verizon, and Inmarsat have enhanced the company's growth. Cisco has implemented Librestream's Onsight system into its complementing solutions to provide its customers with excellent performance. Inmarsat has assisted Librestream in testing its Onsight video-collaboration solution with their satellite network services. In addition, Librestream has partnered with Verizon to optimize collaboration over cellular networks. In military and government organizations,

Librestream has worked with Fortress (now General Dynamics) to provide military grade security.

With expansion into other industry verticals supported by partnerships with leading technology firms and continuous improvements on the company's product portfolio, Librestream has strengthened its position in the global market.

Librestream's Case Example: The US National Guard recently equipped its Weapons of Mass Destruction Civil Support Teams (WMD-CST) with Onsight to provide remote subject matter experts with a way to review potentially hazardous situations instantly and securely. This team are the first responders for the US National Guard, responsible for assessing potential incidents. The US National Guard undertook significant testing of the Onsight platform before selecting Librestream.

Conclusion

Librestream has been successful in delivering enhanced customer value by leveraging its world-class video collaboration solution: Onsight. By focusing on addressing unmet customer needs by equipping the Onsight system with advanced capabilities, such as purpose-built hardware, detailed visuals, telestration, taking pictures, easy image sharing, and even remote control of the camera in the field, Librestream has been able to provide the best value to its customers. Furthermore, its ability to deliver a best-in-class performance, even at a low bandwidth, distinguishes it from competing offerings. With its newest Onsight Embedded offering, allowing customers to integrate Onsight within a custom application further sets it apart.

Driven by its goal to deliver smarter solutions with a comprehensive service experience, Librestream has attained significant growth of 300% over the last 5 years. The influx of the Internet of Things (IoT) will further require more operational flexibility and agility, providing companies like Librestream with expanded opportunities in the future.

With its strong overall performance, Librestream has earned Frost & Sullivan's 2015 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, and differentiating from the competition.



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, Frost & Sullivan analysts independently 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

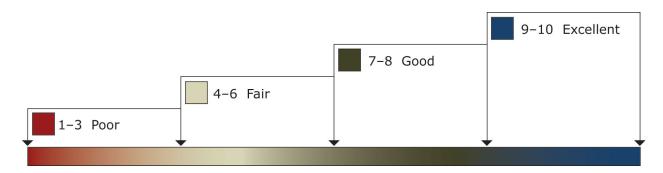
Criterion 5: Brand Equity

Business Impact

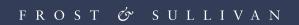
Criterion 1: Financial Performance Criterion 2: Customer Acquisition Criterion 3: Operational Efficiency Criterion 4: Growth Potential Criterion 5: Human Capital

Best Practice Award Analysis for Librestream 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.



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 as Competitor 2 and Competitor 3.

DECISION SUPPORT SCORECARD FOR CUSTOMER VALUE LEADERSHIP AWARD

Measurement of 1–10 (1 = poor; 10 = excellent)			
Customer Value Leadership	Customer Impact	Business Impact	Average Rating
Librestream	10	9	9.5
Competitor 2	9	8	8.5
Competitor 3	7	7	7.0

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

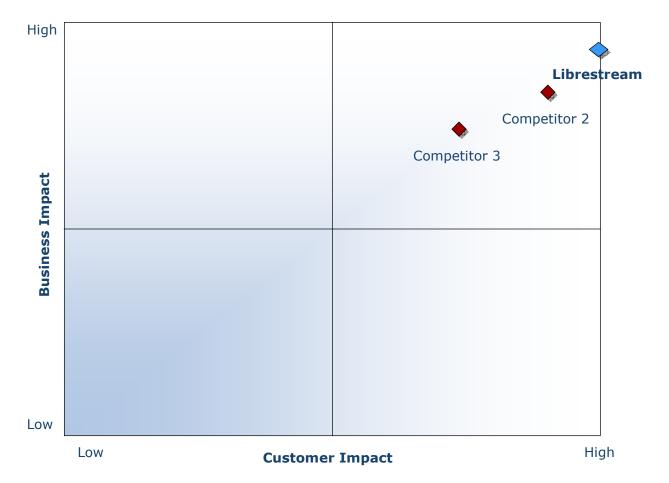
Requirement: Company culture is characterized by a strong commitment to quality and customers, which in turn enhances employee morale and retention

Note: The Business Impact and Customer Impact values reflect the stage of deployment of this technology within many manufacturers. For this research case companies rated are in a more mature phase of deployment.

Decision Support Matrix

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



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 bestin-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	 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	 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	 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	Upon licensing, company may 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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