

New Product Innovation Award Desktop Videoconferencing Global, 2011

Frost & Sullivan's Global Research Platform

Frost & Sullivan is in its 50th year in 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 2011 Global New Product Innovation Award in Desktop Videoconferencing to Avistar.

Significance of the New Product Innovation Award

Key Industry Challenges

Enterprises are looking to advanced communications technologies, such as desktop videoconferencing, as a means to improve collaboration and to enable timely flow of information across the increasingly dispersed and virtual workplace. New deployment models, including centralization and virtualization, are also opening opportunities to deliver the operational and service support efficiencies that enterprises seek. However, cost, complexity, performance, and manageability constraints have contributed to curb enterprise adoption.

In efforts to reduce cost and complexity while still advancing their capabilities, enterprises are moving toward communications architectures, which consolidate infrastructure components in a centralized deployment model. Enterprises are removing as much equipment as possible from remote and branch sites to which services are delivered from a central location where equipment is physically maintained more effectively by locally deployed staff. Enterprises are also embracing virtualization technologies that allow multiple software instances to be implemented on a single hardware appliance to share physical footprint, power, processing, and storage resources dynamically.

In these still-early days of the technology, virtual desktop infrastructure (VDI) solutions have proven an effective method of centralizing business productivity and line of business solutions. Results thus far in support of real-time communications applications have not fared as well. This is because VDI has not been applicable to real-time communications applications, such as desktop videoconferencing, due to intensive bandwidth requirements for real-time audio and video, which can overburden networks, leading to poor performance. The inability to employ VDI for both business and real-time desktop communications applications has thwarted the infrastructure consolidation efforts of many enterprises and

has forced them to deploy dual, disparate architectures as they move forward with their technology investments.

Many communications vendors recognize these enterprise concerns. However, very few are able to address the scale, performance, bandwidth allocation, and reliability challenges of deploying real-time communications applications in virtual desktop environments.

Innovative vendors do not ask enterprises to compromise their centralization and virtualization plans when deploying advanced communications technologies. Truly innovative vendors leverage their expertise, assets, and partner resources to develop effective solutions that solve the very real challenges of deploying and managing advanced, rich-media communications solutions while leveraging the efficiencies of centralization and virtualization. By establishing a reputation for innovation, leading vendors generate greater visibility for their products in the marketplace, thereby expanding the opportunities for themselves and their partner ecosystems.

Key Benchmarking Criteria for the New Product Innovation Award

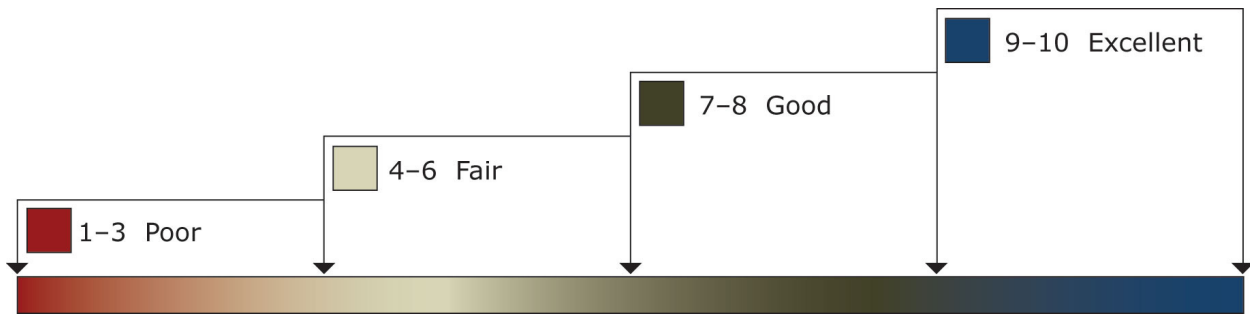
For the New Product Innovation Award, the following criteria were used to benchmark Avistar's performance against key competitors:

- **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 2.

Chart 2: 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 3: Frost & Sullivan’s 10-Step Process for Identifying Award Recipients



Best Practice Award Analysis for Avistar

The Decision Support Matrix, shown in Chart 4, 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 4: 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%
Avistar	10	10	10	9	9	9.6
Competitor 1	8	9	9	8	8	8.6
Competitor 2	10	8	9	8	8	8.6

Criterion 1: Innovative Element of the Product

Business software and communications applications are on a rapid course of convergence. These business critical technologies are coming together with continued networking, infrastructure, and endpoint developments. As such, enterprises are expecting advancements in virtual desktop infrastructure technologies (VDI) to support both the IT and communications software domains. However, previous attempts to virtualize desktop videoconferencing applications have fallen short of scale, performance, and reliability expectations, or have taken highly proprietary, siloed approaches to solve these challenges.

Avistar has risen to the occasion. The company has fortified its collaboration with Citrix and together, the partners are pooling their respective expertise and assets to tackle the connectivity and performance challenges that are inherent to the centralization and distribution of real-time desktop communications applications. Avistar, which introduced C3 Integrator™ for Citrix earlier this year and has successfully deployed the solution to enterprise clients around the world leverages Citrix XenApp and XenDesktop to enable enterprises to move their desktop computing resources into the cloud or data center and to deliver Avistar software-based desktop videoconferencing applications remotely to

distributed user endpoints. Based on the success of the Avistar solution, Citrix licensed the underlying Avistar technology to enhance the voice and video communications capabilities of XenDesktop and XenApp. Due for launch in 2012, Citrix will be the first VDI vendor to provide support for scalable communication capabilities within its solutions.

Criterion 2: Leverage of Leading Edge Technologies

The Avistar virtual desktop videoconferencing solution is not a 'bolt-on' integration. Rather it utilizes tightly amalgamated, best-of-breed components from both Avistar and Citrix. The Avistar C3 Integrator and Citrix virtualization software co-reside on required server hardware to share resources and reduce operational costs and complexity. Avistar's H.264 codec and client plug-ins are provisioned to the user endpoints where encoding and decoding is performed. Avistar bandwidth management capabilities work to optimize bandwidth consumption. Citrix infrastructure conducts processing functions in the data center and communicates with the Avistar codec at the endpoint to deliver features to the user desktop.

The partners are each focusing on their own areas of expertise and are contributing highly complementary assets to resolve the resource allocation and performance issues that have typically plagued the scalability and performance of real-time communications applications in VDI environments.

Criterion 3: Value Added Features/Benefits

In effect, the Avistar virtual desktop videoconferencing solution enables enterprises to future-proof their solutions as they invest now in next-generation communications solutions.

Avistar's developments with Citrix allow enterprises to embrace VDI for both their business and communications applications. The capability opens real opportunities for OPEX and CAPEX savings that are the proven core value propositions of convergence. The Avistar C3 Integrator for Citrix virtual desktop infrastructure allows enterprises to streamline their infrastructures in a centralized model without having to sacrifice scale or performance. The full Avistar C3 set of high definition videoconferencing features are supported with no impact to server scalability. IT staff familiar with Citrix XenApp and XenDesktop can utilize their skills to support Avistar C3. The lower cost, more easily managed and maintained solution will encourage enterprises to deploy desktop videoconferencing more pervasively throughout their organization.

Criterion 4: Increased Customer ROI

The overall operational efficiencies of centralization and distribution of applications to remote users are well known and the value proposition is resonating with enterprises. The ability to deliver videoconferencing applications to virtual desktops will allow enterprises to incorporate rich media real-time communications solutions as part of their overall VDI

strategies. Avistar's software-based architecture is critical as customers can consolidate their physical infrastructure components, while existing Citrix accounts can add value to their current investments. As a whole, the capabilities should allow enterprises to implement desktop videoconferencing much more cost effectively compared to siloed, hardware-centric designs and, therefore, see return on investments in shorter order.

Criterion 5: Customer Acquisition/Penetration Potential

Avistar's objective has long been to deliver high-quality desktop videoconferencing solutions that are cost effective to acquire, deploy, and maintain. This commitment is demonstrated by the company's software-based MCU and dynamic bandwidth management products, which Avistar cites as foundational to its solutions and core to its differentiation in the competitive market.

In their continual efforts to cut costs and improve efficiencies, many customers are investigating virtualization as well as videoconferencing. With its first to market position, Avistar will earn greater visibility and therefore, greater consideration for its solutions by enterprises.

The Citrix partnership and jointly developed solutions will open a wealth of new opportunities for Avistar. Citrix commands an impressive and growing base of enterprise customers, and the company will be an important channel to market for Avistar. The Avistar C3 adapter licensed by Citrix will be embedded in XenApp and XenDesktop. Avistar will be in position to sell its infrastructure products into Citrix accounts that are seeking scalable and cost effective videoconferencing solutions. Avistar APIs and toolkits will also be made available for partners to build their own conferencing solutions on top of the Citrix infrastructure and service providers will be able to license Avistar APIs to offer their own VDI desktop videoconferencing services.

Conclusion

Avistar has recognized the top challenges that have impeded enterprise adoption of advanced convergence solutions. The company has answered the call by leveraging its expertise and prominent partnership to produce innovative solutions that allow enterprises to implement advanced desktop videoconferencing more cost effectively and efficiently. Based on Frost & Sullivan's independent analysis of the Global Desktop Videoconferencing market, Avistar is being recognized with the 2011 Global New Product Innovation Award.

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 5 below, the following six-step process outlines how our researchers and consultants embed the CEO 360-Degree Perspective™ into their analyses and recommendations.

360-Degree Perspective™ Model

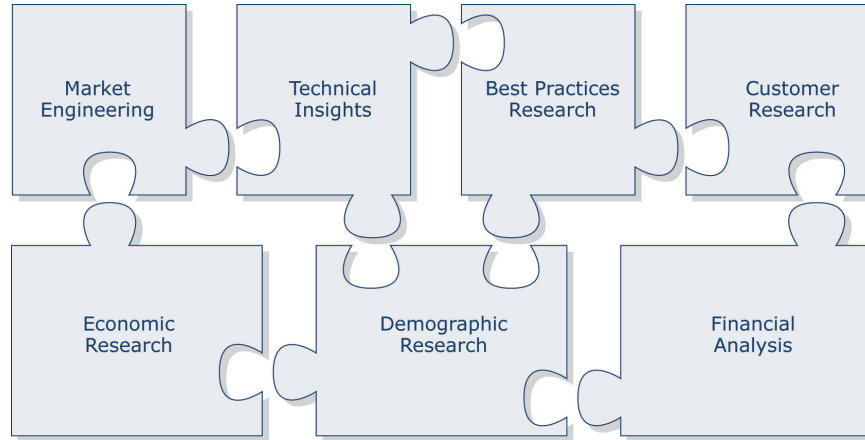


Critical Importance of TEAM Research

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 6: 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>.