

Customer Value Enhancement Award, Composites Design Engineering Solutions, 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 Customer Value Enhancement Award in Composites Design Engineering Solutions to VISTAGY.



Visi-MAP – Vision for the Future of Manufacturing and Production

Frost & Sullivan's strategic research initiative, The Vision of the Future of Manufacturing and Production (Visi-MAP), based on our proprietary 3-C framework (the challenge themes of Competition, Compliance and Collaboration), identifies the mega trends and business imperatives that will reshape manufacturing and production in the next decade.

As the world accelerates toward the future, industry needs improved toolsets and approaches. Frost & Sullivan, as part of this research, spoke to a wide cross section of manufacturing industry thought leaders and identified emerging best-practice approach, hot technologies and high-growth enabling applications which have emerged as critical to reaching the future—safer, faster and in better shape. One of the key mega trends identified as part of the research is Frugal Engineering. The increasing need to reduce manufacturing costs and complexity while ensuring reliability and delivery of an economical end-product necessitates the adoption of suitable solutions. Within the current demand-driven scenario, Frugal Engineering is expected to be a significant trend.

Key Industry Challenges Addressed by Enhancing Customer Value

Demand-driven manufacturing presents several challenges, such as the need to increase production efficiency, optimize raw material usage and increase end-product performance, all at reduced cost. The interconnected factors of material science, design engineering, and manufacturing processes involved in this demand-driven scenario can determine the success or failure of a product, as well as the organization. The adoption of Frugal Engineering is key for solution providers to develop solutions that can deliver operational excellence at an affordable cost.

The use of composites in product development is a major trend within the frugal engineering process. While composites play a major role in reducing the overall weight of an aircraft, automobile, wind blade or other similar products, certain manufacturing challenges associated with usage of composites must be addressed. Such challenges involve every aspect of the manufacturing process from design to manufacturing,

End-users need design engineering software, which takes into account their unique challenges and delivers a performance-oriented design, including an efficient manufacturing process plan. During manufacturing, composites can also cause problems as a result of the economies of scale and complexity associated with volume production.

The increasing competition in the design engineering solution space calls for innovative solutions as well as technologies that address the challenges present in all aspects of the manufacturing process. End users also seek out solution providers with domain and technology expertise in order to benefit from better product lifecycle services.

Impact of Customer Value Enhancement Award on Key Stakeholders

The Customer Value Enhancement Award is a prestigious recognition of VISTAGY's accomplishments in the Composites Design Engineering Solutions. An unbiased, third-party recognition can provide a profound impact in enhancing the brand value and accelerating VISTAGY's growth. As captured in Chart 1 below, by researching, ranking, and recognizing those who deliver excellence and best practices in their respective endeavors, Frost & Sullivan hopes to inspire, influence, and impact three specific constituencies:

- **Investors**

Investors and shareholders always welcome unbiased and impartial third-party recognition. Similarly, prospective investors and shareholders are drawn to companies with a well-established reputation for excellence. Unbiased validation is the best and most credible way to showcase an organization worthy of investment.

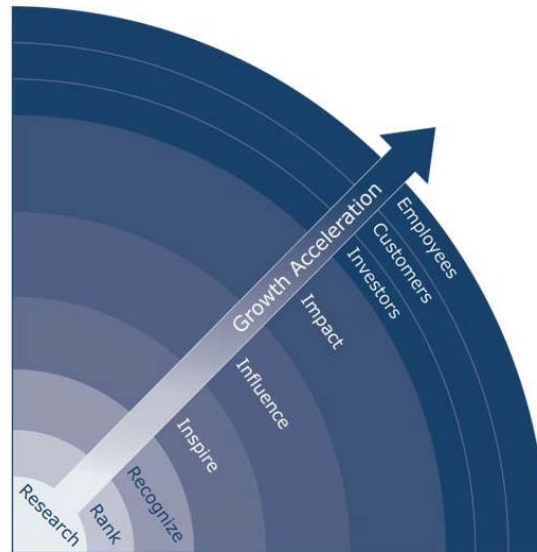
- **Customers**

Third-party industry recognition has been proven to be the most effective way to assure customers that they are partnering with an organization that is leading in its field.

- **Employees**

This Award represents the creativity and dedication of VISTAGY's executive team and employees. Such public recognition can boost morale and inspire your team to continue its best-in-class pursuit of a strong competitive position for VISTAGY.

Chart 1: Best Practices Leverage for Growth Acceleration



Best Practice Award Analysis for VISTAGY

The Frost & Sullivan Award for Customer Value Enhancement Award is presented each year to the company that has demonstrated excellence in implementing strategies that proactively create value for its customers with a focus on improving the return on the investment that customers make in its services or products. This award recognizes the company's inordinate focus on enhancing the value that its customers receive, beyond simply good customer service, leading to improved customer retention and ultimately customer base expansion.

VISTAGY's Performance in Design Engineering Solutions

The prevalence of generic, highly commoditized computer-aided design and manufacturing solutions has spawned an opportunity for applications that add value by addressing the industry-specific needs of designers and manufacturers. VISTAGY's customer-centric suite of design engineering solutions is widely appreciated by end users for its ability to solve complex design and manufacturing issues. To meet current demand-driven challenges, the automotive, aerospace, wind energy, and shipbuilding industries must consistently focus on creating better designs and incorporating innovative materials. VISTAGY, with its innovative core technology, domain expertise, and process knowledge, has consistently delivered solutions that address these end-user challenges, enabling the company to add significant value to its products. VISTAGY has optimized a strategy to sell unique solutions

to a large number of users as is evidenced by its 29.0 percent revenue growth and addition of marquee clients in 2010.

Key Performance Drivers for VISTAGY

Factor 1: Expansion of Customer Base through Delivery of Innovative Solutions that Enhances Customer Value

A key challenge for the global manufacturing community is to engineer products that can enhance performance and reduce life-cycle cost for end users. As such, manufacturers choose solutions that will enable them to engineer products with less technological complexity. Within the automotive, aerospace, marine, and wind energy sectors, weight reduction is a critical challenge due to its significant impact on the overall performance of the end product. Reduced weight can result in reduced fuel consumption and enhanced power delivery for an automobile, an extended range for an aircraft, or reduced cost per megawatt for a Windmill. Weight reduction is a process that starts at the design stage, wherein significant analysis must be done on various types of materials that can deliver enhanced performance and have less weight.

Composites play a significant role in weight reduction as well as performance enhancement, and there are associated challenges that vary by industry. Effective utilization of composites is dependent on the efficiency of the simulation and design engineering solutions. A significant impediment to increased adoption of composites is the lack of expertise in composites engineering, and the ability to design by simulating the complete lifecycle of an end product. End users prefer solution providers with domain expertise and the ability to clearly analyze the manufacturing constraints to help them develop designs that minimize complexity in manufacturing process and deliver enhanced performance excellence.

While there are several design engineering and product lifecycle management (PLM) solution providers, VISTAGY, with its significant domain expertise and FiberSIM[®] composites engineering software, addresses end-user challenges by providing reliable software that reduces manufacturing complexity. VISTAGY's ability to support the complete design-to-manufacturing process for composites empowers its end users to create new products/processes with ease. Based on VISTAGY's EnCapta[®] technology for capturing key design characteristics, FiberSIM has consistently been shown to enable innovation in the composites domain by providing one of the most thorough product descriptions in the industry. To maintain its leadership position, VISTAGY has leveraged technological partnerships with research/educational institutions to consistently deliver innovative design engineering software for new materials and processes, while its partnerships with leading PLM and CAD solution providers demonstrate its product capability as an enabling technology for end users.

VISTAGY's holistic and innovative solutions enabled it to achieve a 29.0 percent revenue growth and 36.0 percent software license growth in 2010. The ability to consistently grow

and expand into new markets at a significant pace is a clear reflection of VISTAGY's solution strength as well as customer confidence. A case in point is one leading Formula 1 Team that depends on FiberSIM to design its composite parts as well as reduce its development time by nearly 50.0 percent, clearly demonstrating the technological superiority and domain expertise of the organization.

Factor 2: Enabling Technology that Facilitates Creation of Better Products/Practices

The constant evolution in the type of materials being used, the adopted manufacturing processes, and the applications drive design engineering software solution providers to consistently innovate and deliver solutions that enhance manufacturing competitiveness. While there are significant benefits associated with adoption of composites, a key challenge is the need to develop manufacturing processes that can deliver volume production at optimal costs in the automotive segment. VISTAGY is in the forefront of developing technologies that can address challenges associated with mass production of automobiles and ensure better designs as well as design techniques.

When we consider the aerospace industry, there are numerous challenges associated with the integration of composites in the ultimate airframe assembly process. It is essential to have a design environment that is flexible enough to handle the integration challenges.

VISTAGY's AeroSuite™, a pioneering, integrated solution suite, addresses these challenges with an enhanced scope that covers the design, assembly, manufacturing, and quality process. While FiberSIM®, a composites engineering solution, enables VISTAGY to provide an innovative design engineering environment, SyncroFIT® has enabled VISTAGY to address complex issues associated with efficient design and manufacturing of airframe assemblies and its associated fasteners, as well as supply chain complexities. This integrated solution offering has enabled aerospace industry end users to address complex engineering and assembly issues while reducing development time.

The organization's ability to deliver pioneering solutions that address issues that have not been effectively addressed by other competitors enables it to achieve significant mindshare among end users. VISTAGY's Seat Design Environment™ (SDE) is one more example. While the seat trim cover designing concept has been traditionally conducted in 2D, VISTAGY, through its SDE, allows 3D-modeling for seat trim designs, thereby ensuring faster time to market, optimal material usage, reduced total engineering costs, and improved cost forecast predictability

Factor 3: Technology Features and Strategic Partnerships that Enhance Overall Customer Experience

Design and simulation are complex and critical processes that help determine the success of a manufacturer's new product development process. There are various factors involved

in an efficient design and manufacturing process that require solutions that are focused not just on the geometry of the product, but also on material properties as well as the overall operational and production processes. VISTAGY, with its domain expertise and industry-specific software solutions, propagates frugal engineering among its end users, thereby increasing efficiency in production and reducing total cost. VISTAGY's solutions complement existing CAD and PLM solutions, thereby enabling end users to retain their existing CAD infrastructure, while enhancing the performance of their design engineering operations.

VISTAGY's technology prowess enables it to be effectively incorporated onto multiple CAD platforms. To effectively address end users' needs and enhance their product delivery capabilities, many CAD and PLM solution providers partner with VISTAGY. Some of the leading PLM solution providers, such as Siemens PLM and PTC, partner with VISTAGY to capitalize on its domain expertise and FiberSIM® module, which demonstrates VISTAGY's unique solution strength and customer recognition as a domain leader. The organization's ability to enhance customer value through innovative approaches to challenges is clearly reflected in its ability to integrate analysis with design by partnering with leading analysis firms, such as ANSYS and MSC. VISTAGY, with its innovative suite of solutions, effectively differentiates itself as a key enabler of sustainable manufacturing. The industry-specific software solutions that help manufacturers do more with less by optimizing material usage, innovating newer processes, and incorporating new materials, positions VISTAGY products as a solution of choice in the composites design engineering space.

Conclusion

VISTAGY, an industry-specific design engineering solution provider, has consistently delivered on its objective of enhancing customer value by enabling efficient design and manufacturing processes. Taking advantage of the diverse engineering applications fostered by the explosion of computer aided design and manufacturing, VISTAGY has applied its unique core technology, domain expertise, and process knowledge to produce innovative, productive, customer-driven solutions to become a leader in multiple domains. The organization's consistent performance and increasing customer base is a validation of its superior solution suite that has the potential to drive manufacturing competitiveness in the US and throughout the world.

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.

Chart 2: 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 3: Benchmarking Performance with TEAM Research



About VISTAGY

VISTAGY, Inc. is a leading global provider of industry-specific engineering software and services that create rich product descriptions for better-informed decision making early in the design cycle. The company enhances commercial 3D CAD platforms by applying specialized process knowledge and domain expertise to create solutions that solve some of the world's most complex engineering problems. VISTAGY is a strategic partner to hundreds of leading manufacturers in the aerospace, automotive, and wind energy industries. The company is headquartered in Waltham, Massachusetts, USA.

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>.