

FROST & SULLIVAN

2011

BEST
PRACTICES
AWARD

GLOBAL
INNOVATION MANAGEMENT
CUSTOMER VALUE ENHANCEMENT AWARD

Invention Machine

Customer Value Enhancement Award Innovation Management Systems 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 Innovation Management Systems Market to Invention Machine Corporation (Invention Machine).



Significance of the Customer Value Enhancement Award

Key Industry Challenges Addressed by Enhancing Customer Value

Increased global competition from emerging markets drives end users' need for innovative products and solutions. Traditionally, product design has always been reliant on assumptive methods and prior experience. Now, end users are seeking out systematic and systemic idea management processes to implement across their enterprises in order to effectively differentiate themselves from competitors.

The real challenge for these end users exists in finding an innovation management platform that can offer repeatable and predictable designs that are innovative and non-contradictive. This requires the need for a knowledge sphere that allows collaboration

within and outside the enterprise. End users should be in a position to gather intelligence in a collaborative fashion to translate thoughts into ideas and into commercialized products in the shortest time possible. The inherent challenge to achieve the aforementioned position is to facilitate access to and transference of the right content to the right people. Such a state of interaction is expected to remove constraints from idea generation and promote non-contradicting systems and solutions.

Another inherent challenge with innovation management is the multiple iterations required before the final product production, which consumes more time and may be futile in the end. In order to avoid a lengthy iteration cycle, end users prefer to have corroborative evidence in order to understand the complex interactions a design would have with associated industries or geographic regions. This industry need further bolsters the need for an end-to-end innovation management solution.

Impact of Customer Value Enhancement Award on Key Stakeholders

The Customer Value Enhancement Award is a prestigious recognition of Invention Machine's accomplishments in the Innovation Management Solutions Market. An unbiased, third-party recognition can provide a profound impact in enhancing the brand value and accelerating Invention Machine'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.

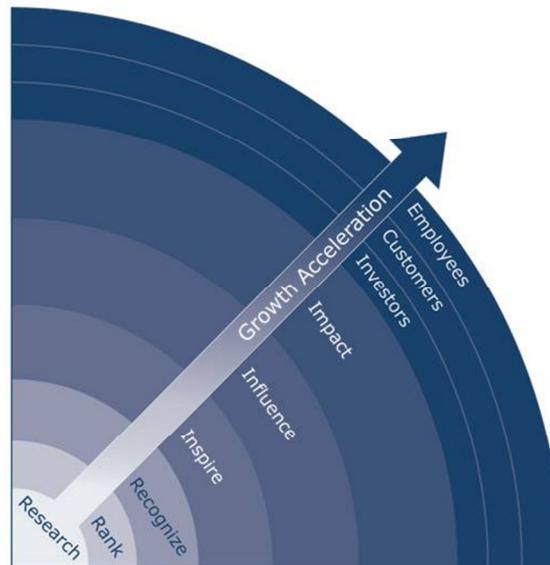
- **Customers**

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 Invention Machine'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 Invention Machine.

Chart 1: Best Practices Leverage for Growth Acceleration



Best Practice Award Analysis for Invention Machine

The Frost & Sullivan Award for Customer Value Enhancement 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.

Invention Machine's Performance in Innovation Management Solutions Market

The organization's prowess in the technology of its innovation management software solution is reflected in the superior growth the company has shown over the past few years. The consistent model of innovation developed by Invention Machine in its software solutions has resulted in repeat business and sustainable growth for the organization, as proven by its acquisition of notable Global 5000 manufacturing customers, such as Boston Scientific, Royal Dutch Shell, Samsung, Northrop Grumman, Statoil and such others.

Key Performance Drivers for Invention Machine

Factor 1: Expansion of Customer Base

The challenge for companies innovating new products and services is often not in finding ideas, but in determining the *right* idea. Somewhere between mining a list of potential ideas and shipping the new or improved product is a host of activities that transform many raw ideas into a realized product delivery. End users are primarily challenged in the innovation design cycle by an inability to understand and resolve design problem-related contradictions to efficiently and effectively generate, select, validate, and refine high-value ideas; such problems often arise from the lack of collaboration with subject matter experts

dispersed within an organization and the inability to locate relevant information across multiple knowledge bases. These design contradictions often lead to numerous design iterations, which prolong the new product development process and can result in the loss of a competitive edge in the market. To reduce iterations and hasten product time to market, end users need to develop a design solution that has the least number of contradictions and a one that best fits technical, financial, production, and market-related constraints. As profitability is often determined by the rate of introduction of timely and innovative products, it is vital for end users to adopt enterprise-class solutions that can drive the process of innovation through a product design process that reduces iterations and encourages collaboration throughout an enterprise.

While there are several idea capture and management software providers, these companies do not offer the comprehensive coverage provided by pioneering organizations like Invention Machine's Goldfire platform. Goldfire is a very broad functional platform that drives innovation and intelligence through integrating the three main design components of research, collaboration and innovation tools.

Research: The platform connects to a wide range of information sources, such as technical sites, patent literature, web sites, both within and outside of an organization. This provides unfettered access to deep subject matter knowledge. To help end users focus on the best ideas, Goldfire's patented semantic technology, through its unique processing capabilities, allows searching on concepts – not just keywords – for precise knowledge retrieval and spot-ranking of probable solutions. Users are then able to draw actionable intelligence from a vast set of data, which simplifies the process of resolving design contradictions.

Collaboration: The globalization of companies has heightened the importance of collaboration between dispersed personnel within an enterprise. Invention Machine's Goldfire platform gives end users the ability to share research, ideas and innovation designs across geographies. The semantic technology automatically identifies an organization's knowledge experts, simplifying the process for users to find, communicate with, and leverage the corporate tribal knowledge of these experts developed over their careers. Such customer-centric capabilities help foster an uninterrupted flow of communication across all teams involved in the innovation design process and helps expedite the maturation process of junior personnel. In addition, the platform also delivers native language-based results, ensuring unimpeded access to information, regardless of location.

Innovation Tools: Invention Machine's customer-centric approach is also evident in its development of its set of out-of-the-box innovation task workflows. Traditionally, the innovation process has been approached on an individual and ad-hoc basis, with an innovator or team tackling a problem and designing a solution in an insular manner. Sustainable innovation that uses a systemic approach to problem solving is required to automate innovation tasks, shorten process time and enable breakthrough thinking. The Goldfire platform contains a set of innovation analysis tools, including manufacturing-centric

tools such as Root Cause Analysis (RCA) and failure mode effects and analysis (FMEA), and hazard and operability (HAZOP), that end users can use to quickly resolve problems. Goldfire also leverages Teoriya Resheniya Izobretatelskikh Zadatch (TRIZ in Russian) or Theory of Inventive Problem Solving (TIPS in English) helping users understand and resolve contradictions in problem statements to realize new products and improve existing products and processes. The use of the above tools moves end users to think beyond the traditional set of solutions to arrive at an optimal solution that mitigates most of the contradictions without compromising system performance.

The complimentary nature of Invention Machine's solution with other applications such as product lifecycle management (PLM) enables end users to build a strong business case for investment in these solutions. Global 5000 manufacturing companies such as Honeywell, Eastman Chemical, Boeing, Leggett & Platt, and MAHLE Group continue to rely on Goldfire to drive innovation within their enterprises. The company's success in expanding its customer base among manufacturers and other end users is evident from Invention Machine's consistent, profitable growth.

Factor 2: Launch of New Products to Offer a One-stop Shop in Response to Customer Demands

As mentioned earlier, end users struggle with finding ways to reduce iterations in the innovation design process. In effort to do so, it is necessary to not only understand the design complexities within the product, but also what interactions the design might have within the associated applications, industries, and geographical regions. As such, end users are looking for solutions that can help them integrate an understanding of the target market, regional advantages and disadvantages, and other types of general business knowledge with the innovation management process. Such an end-to-end management solution would deliver economic benefits in the form of cost-effective process and productivity efficiencies.

In response to end-user needs, Invention Machine continues to innovate and deliver improved benefits to its users, as noted with its latest launch of Goldfire 6. 6. The customer value enhancements that end-users gain in this new release are primarily aimed at bringing repeatable and sustainable innovation best-practices to organizations across industry verticals. The two main advantages of this new platform are integrated collaboration and identification of experts. As discussed earlier, the semantic processing technology within the software automatically identifies subject matter experts and connects them with problem solvers or innovation experts, both within and outside of the enterprise. This enhanced access to expert knowledge allows for a thorough analysis of the problem and exposure to relevant concepts found across industry, corporate, and scientific data sources drives innovation at a much faster pace in comparison to traditional methods of innovation. Goldfire's ability to connect the right people with right context and right solutions is truly commendable and continues to resonate well among manufacturing industries.

Invention Machine's Goldfire platform also incorporates a set of 14 key innovation tasks that guides end users through all stages of product lifecycle. These 14 distinct tasks have been developed based on interactions with clients' solution needs when they are challenged by a problem or market opportunity. A few of the prominent tasks are market research, new product development, risk management, product improvement, technology trending, intellectual property (IP) management, and so on. These task tools take advantage of the proprietary and collected pre-indexed content within the Goldfire solution, which includes industry-specific journals and reports, global intellectual property databases, and extensive web articles. Invention Machine thus provides a single platform that encompasses all the tools necessary to incorporate a sustainable innovation management process that accounts for market and regional conditions, restraints and opportunities. As global companies enter into emerging markets which have very poor IP protection policies and infrastructure, it will be vital to leverage tools such as Goldfire to execute business decisions and drive long-term profitability.

Factor 3: Creating New Sales Avenues for an Established Product

While major enterprises continue to drive growth through development of innovative solutions, another prominent revenue stream for a majority of solution providers is small and medium business (SMB) market segment.

As an early entrant into the SMB market, Invention Machine had adopted a go-to-market strategy to capitalize on the market opportunity through a global network of reseller partners. Invention Machine's strategic collaboration with resellers across APAC, the Americas and Europe is designed to promote sustainable innovation across industry verticals through the creation of a global ecosystem of knowledgeable partners with extensive experience in the product development lifecycle. Most of these re-sellers are also focused on PLM solutions, which make these resellers a compelling fit for end users challenged to shorten time-to-market for new products.

Invention Machine's meticulous approach in geographic expansion is proven by its extension of re-seller market strategy to Europe, Middle East and Africa (EMEA) region. The strong technology-backed solution, diverse implementation experience and consistent customer success delivered designates Invention Machine as one of the most prominent solution providers in the innovation management market.

Conclusion

Invention Machine's reputation in the innovation management market across large, mid and SMB segments shows its ability to cater to diverse organization sizes and the technology prowess of Invention Machine's Goldfire solution propels the solution provider to be one of the most preferred in the market space.

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: The CEO's 360 Degree Perspective™ Model Directs Our Research



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 Invention Machine

Invention Machine provides software that helps organizations leverage knowledge to accelerate innovation, increase productivity and deliver superior products. Hundreds of companies across the globe and in all industries use Invention Machine's Goldfire to collaboratively develop new products, find new markets, and improve products and services that materially impact top and bottom line performance. For additional information, please visit InventionMachine.com.

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>.