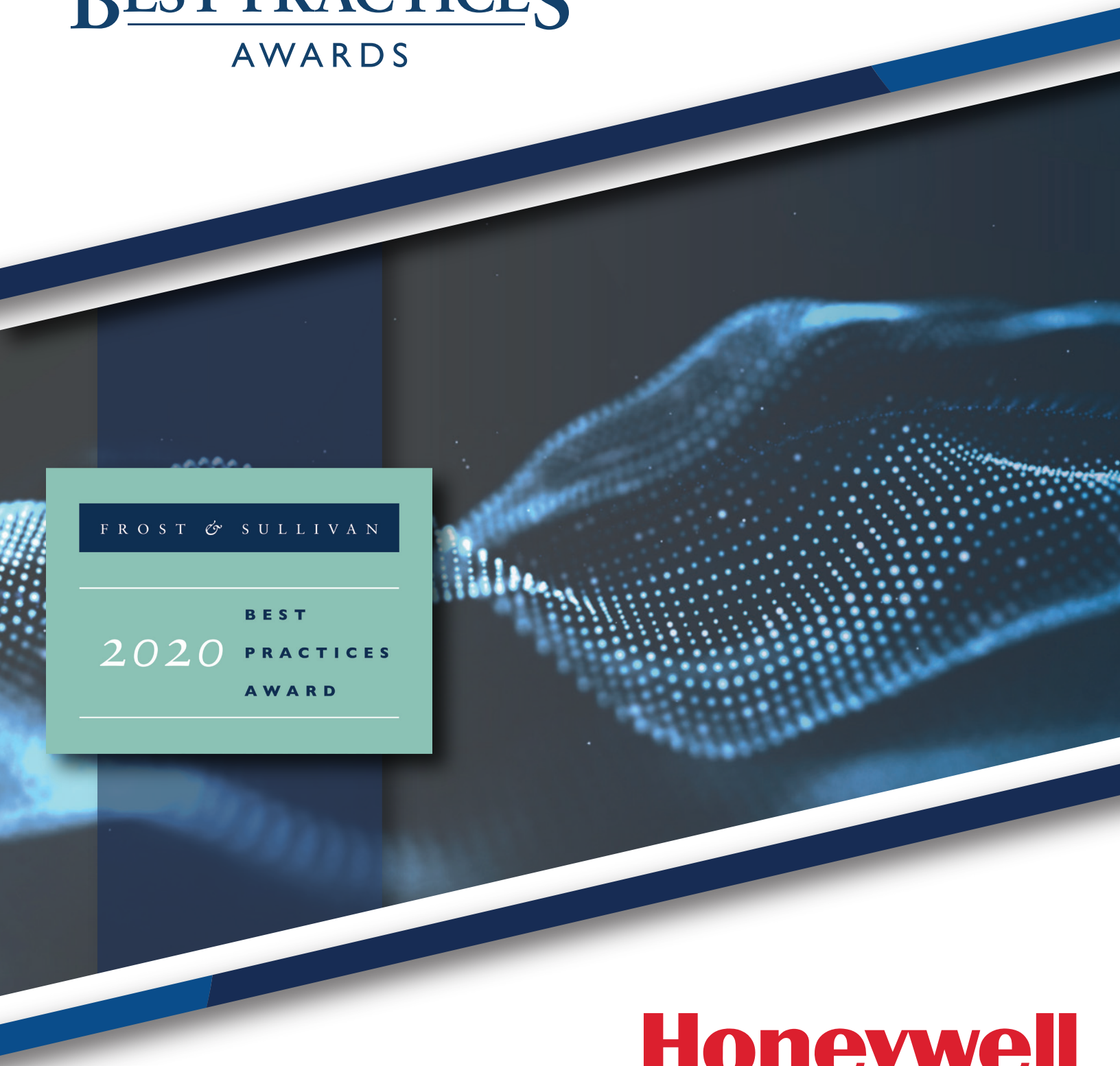
FROST & SULLIVAN

BEST PRACTICES AWARDS



Honeywell

2020 GLOBAL INDUSTRIAL ENTERPRISE PERFORMANCE MANAGEMENT TECHNOLOGY INNOVATION LEADERSHIP AWARD

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Background and Company Performance

Industry Challenges

Operational optimization, which is still a very manual process, has been a key challenge in the industrial landscape. While industries have committed to creating systems to operate in place of humans, the development of these systems has been historically difficult and haphazard. For many years, the space of enterprise performance management was a no man's land that had no comprehensive solution either from enterprise software players or process automation players. Traditionally, disparate plant control and operations management technologies have operated in silos, a scenario which has created multiple platforms with overlapping functions. Vendors have tried to stitch these applications and products together, but doing so is a cumbersome task, particularly for companies that have not participated in the digital transformation wave.

Along with high initial investments, these barriers have complicated systematic benefits to customers and dissuaded the large-scale adoption of enterprise performance management systems. Moreover, with no systematic solution, there was no way to address the disparate functionalities with a platform-centric approach.

Solutions providers that wish to take up the challenge, then, must overcome significant technological and logistical hurdles. They must create systems that allow multiple technologies to work in tandem, centralizing tools and functionalities and making them accessible to users. Companies that can circumvent the traditional barriers and accomplish this feat will provide tremendous value to their customers in the industrial space.

Technology Leverage and Business Impact of Honeywell International Inc.

Leveraging more than 100 years of industry expertise, Honeywell International Inc. (Honeywell) is a Fortune 100 software-industrial company that delivers industry specific solutions that include aerospace products and services; control technologies for buildings and industry; and performance materials globally. Honeywell Connected Enterprise (HCE) was established in 2018 to accelerate software development and Industrial Internet of Things solutions. HCE expands industrial customer's performance with Internet of Things and other advanced software technologies. One of the company's most recent contributions is its Honeywell Forge platform. Launched as an enterprise performance management solution, Honeywell Forge acts as a bridge between the operational technology (OT) and information technology (IT) worlds.

Best-in-class Solutions Offered under One Umbrella

Honeywell addresses the industry challenges around siloed operating systems, enterprise complexity, and the demand for increased automation. These three technology guiding problems led the company to offer a unified operating model with an extensible foundation with autonomous control. Honeywell also addresses the lack of top-to-bottom visibility that large enterprises face by providing them with the clarity to transform their operations quickly and efficiently. It offers customers visibility into how their operations are performing

as well as the ability to derive meaningful insights from disparate data through business intelligence.

Frost & Sullivan notes that Honeywell addresses the industry requirements by considering them through two lenses: technology problems and business problems. Unlike competing technologies, Honeywell Forge for Industrial offers the capability to convert massive amounts of data from equipment, processes, and people into intuitive, actionable insights that enable monitoring enterprise operations from a single screen. Honeywell Forge for Industrial delivers real-time data and visual intelligence that allows industrial customers to make informed decisions based on their key performance indicators. The platform provides visual analytics at the enterprise, plant, and unit levels by comparing actual process and asset performance against digital twins. Integrated and accurate models provide better intelligence, deeper insights, and actionable guidance across business, engineering, operations, and maintenance teams.

Honeywell Forge for Industrial is a highly extensible and scalable platform that drives operational best practices and helps industrial customers address issues that impact process and equipment performance, reliability, safety, and profitability. On the process side, Honeywell Forge provides several class-leading solutions of Honeywell, such as advanced process control, process simulation and control, and corrosion control. On the operations management side, the Honeywell Forge solution provides a slew of integrated solutions that help in production and enterprise data management and alarm management, and overall operations management.

The solution is organized into twelve modules that span the performance management of processes, operations, assets, and people. These modules provide leverage automation controls, cybersecurity, workflow management, application programming interfaces and application builders, and monitoring tools to manage everything from process control and asset performance to productivity and alarm management.

Honeywell created a niche for Honeywell Forge for Industrial as the OT world's enterprise resource planning (ERP) system, setting a whole new paradigm for enterprise performance management. The solution has evolved organically from the convergence of several existing and new Honeywell products. As a comprehensive platform, it will improve how companies collect, analyze, and act on data from their operations. In other words, it will fundamentally change the way work gets done in industrial settings.

Vendor-agnostic Capabilities Allow Configuration to Meet Customer Requirements

Frost & Sullivan appreciates that Honeywell Forge is a vendor-agnostic platform, both at the hardware and software levels. While Honeywell has its own hardware and automation businesses with domain expertise in both, Honeywell Forge is not restricted to only Honeywell hardware or software. Frost & Sullivan notes that the platform does not require its customers to be on the platform for them to adopt its services; customers can bring in their products purchased from competitors or use the custom codes for developing and placing components on the platform, which makes Honeywell Forge for Industrial highly extensible and configurable. The solution adapts and evolves with the customer

requirements and does not require replacement within three to four years based on new technology. It is secure with its software- and hardware-enabled cybersecurity products and services, which come embedded within the product.

Delivering Superior Customer Service Experiences

Frost & Sullivan appreciates Honeywell, as the company aggressively innovates on its platform with new emerging and advanced technologies that can increase operational efficiency and drive optimal performance. The company's Honeywell Forge platform caters to senior decision-makers and C-suite executives' needs with a holistic approach that enables these organizations to improve their decision-making. Some examples include the following:

- Honeywell provided cybersecurity software to a large chemicals company, enabling the client to measure and monitor cyber risks in the ICS environments at 10 plants.
- A global oil company leveraged Honeywell Forge's artificial intelligence models and digital twin to increase operational efficiency and reduce unexpected maintenance.
- An Indian multinational conglomerate used Honeywell Forge to connect and monitor critical assets, increase energy efficiency, and transition to a demand-based maintenance approach, with a projected savings of more than $45 million over the course of five years.
- Honeywell helped one of the world's largest service providers of commercial explosives, used primarily in mining and construction, to implement a track and trace solution. Honeywell offered the client field operations combined with an internal track and trace platform with mobile applications, making it flexible and reducing the need for costly infrastructure.

Potential for Growth and Development

Honeywell gives its customers the liberty to choose any of the 12 products or combinations of products depending on their requirements. What they receive is Honeywell Forge and not just one specific service. Frost & Sullivan notes that this capability will contribute to its growth potential. The company focuses on offering a simplified adoption path to extend customers' abilities. Honeywell Forge has a more product-led than technology-led approach, allowing customers to choose to transform their process, operation, assets, or people or combine to increase the percentage of services required to get benefits. Frost & Sullivan believes that this approach will not just be beneficial to customers but will also help the company grow as satisfied customers contribute to brand equity, which in turn reflects in the growth of the product.

Frost & Sullivan believes there will be a change in paradigm once collaborations occur between ERP IT companies and ERP OT companies. The right partner ecosystem will contribute to Honeywell's growth potential. Honeywell Forge partnered with SAP to unify financial and operational data, providing insights across enterprises by combining IT and OT analytics with the cloud to gain an advantage over peers. Also, Honeywell and Tech Mahindra have collaborated to build factories of the future, which will help the

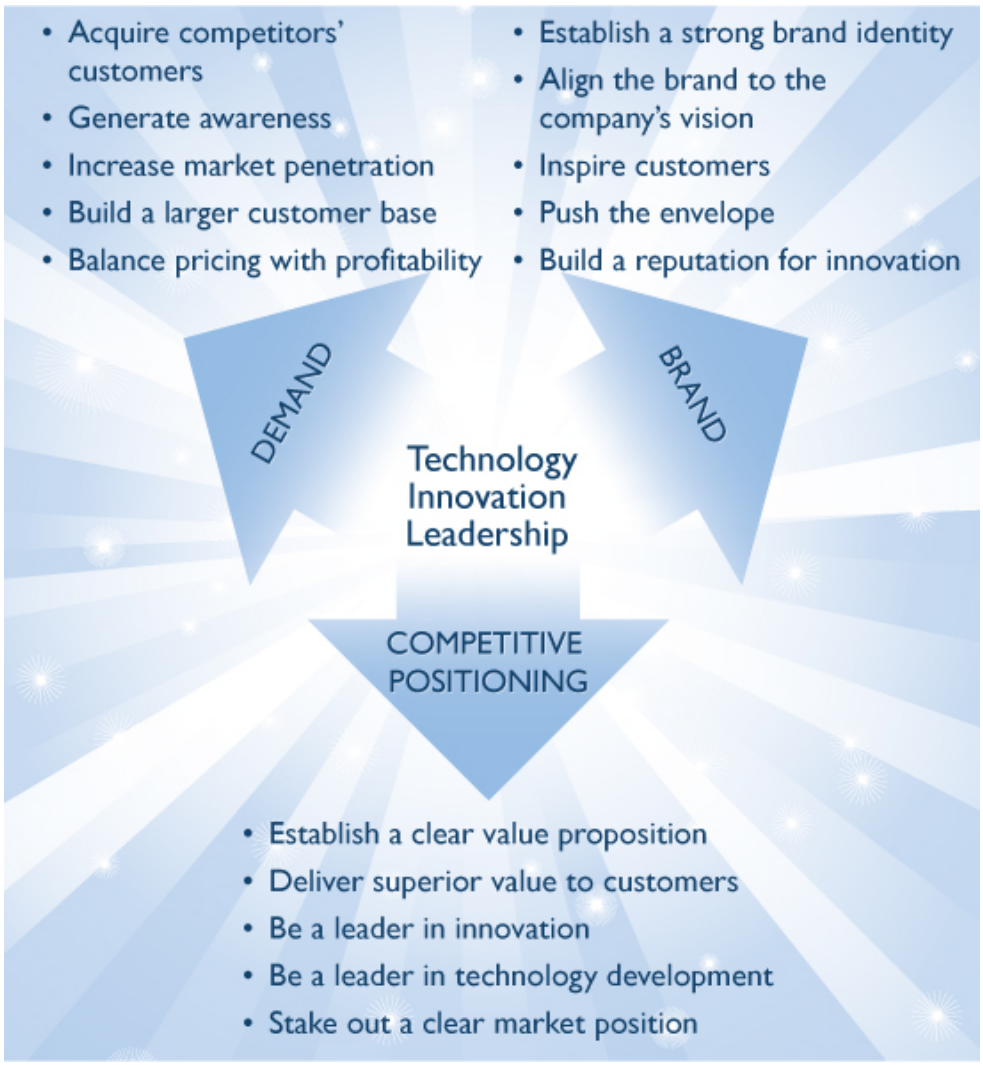
manufacturing industry embark on the journey of digital transformation using fifth generation technology, Industry 4.0, and software capabilities.

Conclusion

Honeywell International Inc. (Honeywell) addresses the challenges surrounding enterprise performance management systems, specifically related to the siloed nature of operating systems, enterprise complexity, and the need for increased autonomy. These three technology-guiding problems led the company to offer a unified operating model with an extensible foundation and autonomous control. Honeywell Forge is highly configurable; the solution adapts and evolves with the customer requirements and does not require replacement within three to four years based on new technology. For its commitment to innovative, technical excellence, and unique abilities, Honeywell earns Frost & Sullivan's 2020 Global Technology Innovation Leadership Award in the industrial enterprise performance management industry.

Significance of Technology Innovation Leadership

Technology-rich companies with strong commercialization strategies benefit from the increased demand for high-quality, technologically-innovative products. Those products help shape the brand, leading to a strong, differentiated market position.



Understanding Technology Innovation Leadership

Technology Innovation Leadership recognizes companies that lead the development and successful introduction of high-tech solutions to customers' most pressing needs, altering the industry or business landscape in the process. These companies shape the future of technology and its uses. Ultimately, success is measured by the degree to which a technology is leveraged and the impact that technology has on growing the business.

Key Benchmarking Criteria

For the Technology Innovation Leadership Award, Frost & Sullivan analysts independently evaluated two key factors—Technology Leverage and Business Impact—according to the criteria identified below.

Technology Leverage

Criterion 1: Commitment to Innovation
Requirement: Conscious, ongoing development of an organization's culture that supports the pursuit of groundbreaking ideas through the leverage of technology.

Criterion 2: Commitment to Creativity
Requirement: Employees rewarded for pushing the limits of form and function by integrating the latest technologies to enhance products.

Criterion 3: Technology Incubation
Requirement: A structured process with adequate investment to incubate new technologies developed internally or through strategic partnerships.

Criterion 4: Commercialization Success
Requirement: A proven track record of commercializing new technologies by enabling new products and/or through licensing strategies.

Criterion 5: Application Diversity
Requirement: The development of technologies that serve multiple products, multiple applications, and multiple user environments.

Business Impact

Criterion 1: Financial Performance
Requirement: Overall financial performance is strong in terms of revenue, revenue growth, operating margin, and other key financial metrics.

Criterion 2: Customer Acquisition
Requirement: Overall technology strength enables 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: Technology focus strengthens brand, reinforces customer loyalty, and enhances growth potential.

Criterion 5: Human Capital
Requirement: Company culture is characterized by a strong commitment to customer impact through technology leverage, which enhances employee morale and retention.

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.

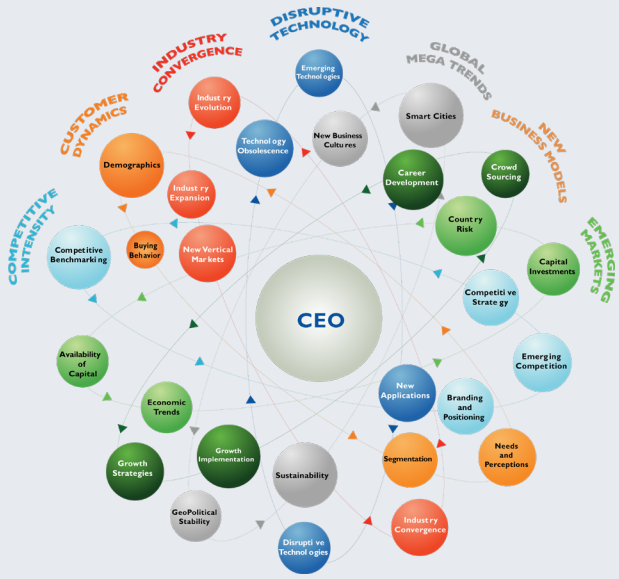
	STEP	OBJECTIVE	KEY ACTIVITIES	OUTPUT
1	**Monitor, target, and screen**	Identify Award recipient candidates from around the globe	• Conduct in-depth industry research • Identify emerging sectors • Scan multiple geographies	Pipeline of candidates who potentially meet all best-practice criteria
2	**Perform 360-degree research**	Perform comprehensive, 360-degree research on all candidates in the pipeline	• Interview thought leaders and industry practitioners • Assess candidates' fit with best-practice criteria • Rank all candidates	Matrix positioning of 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 findings • Strengthen cases for candidate eligibility • Prioritize 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 panel • Build consensus • Select recipient	Decision on which company performs best against all best-practice criteria
9	**Communicate recognition**	Inform Award recipient of Award recognition	• 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 is able to 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

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.

360-DEGREE RESEARCH: SEEING ORDER IN THE CHAOS



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 more than 50 years of experience in partnering with Global 1000 companies, emerging businesses, and the investment community from 45 offices on six continents. To join our Growth Partnership, please visit http://www.frost.com.