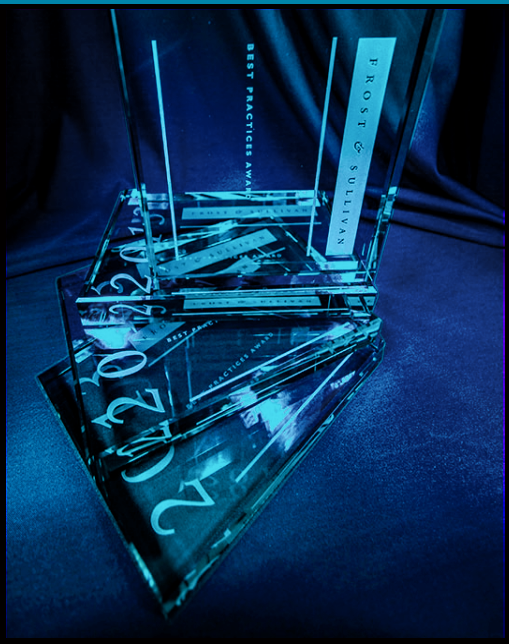




Vidyo®

2016 North American Video Telehealth  
Enabling Technology Leadership Award



FROST & SULLIVAN

BEST  
2016 PRACTICES  
AWARD

NORTH AMERICAN VIDEO TELEHEALTH  
ENABLING TECHNOLOGY LEADERSHIP AWARD

2016  
BEST PRACTICES  
AWARDS

## Contents

Background and Company Performance .....	2
<i>Industry Challenges</i> .....	2
<i>Technology Leverage and Customer Impact</i> .....	3
<i>Conclusion</i> .....	7
Significance of Enabling Technology Leadership .....	9
Understanding Enabling Technology Leadership .....	9
<i>Key Benchmarking Criteria</i> .....	10
Best Practice Award Analysis for Vidyo .....	10
<i>Decision Support Scorecard</i> .....	10
<i>Technology Leverage</i> .....	11
<i>Customer Impact</i> .....	11
<i>Decision Support Matrix</i> .....	12
The Intersection between 360-Degree Research and Best Practices Awards.....	13
<i>Research Methodology</i> .....	13
Best Practices Recognition: 10 Steps to Researching, Identifying, and Recognizing Best Practices .....	14
About Frost & Sullivan .....	15

## Background and Company Performance

### *Industry Challenges*

The healthcare industry in the United States faces many challenges resulting from the increased demand for services from a larger population of patients following the introduction of the Affordable Care Act. One way to deal with the rising flow of patients is to take advantage of the emerging market for virtual telehealth services.

Virtual telehealth services are currently offered by various providers who operate at the national or regional level. In May 2016, Frost & Sullivan assessed this market and stated, "Telehealth virtual visit services are becoming attractive to payers and many new offerings have been announced over the most recent 3-year period."<sup>12</sup> The report also observed, "In 2015, the American Telemedicine Association estimated that 450,000 patients will have had the potential for virtual doctor experiences during that year. Overall, the Association estimated that 15 million patients had some form of telemedicine experience in 2015."<sup>3</sup> Based on this report and other independent research assessments, it is reasonable to conclude that technology-based telehealth virtual visits can meet patient needs by providing them with access to the most appropriate medical expert as quickly as required.

However, these services require an infrastructure that supports high-quality interaction. It is also safe to assume that there will be an increasing demand for video technology within the context of virtual visits. The potential for video services to fulfill its promise will drive an increasing percentage of medical sessions that will utilize real-time video.

However, at this point primary research revealed that video services are not included in most virtual telehealth visits. Only a small number of virtual telehealth providers offer a high percentage of video technology. In practice, the vast majority of virtual visits involve asynchronous communications, patient portals, or non-video real-time audio-based media, such as a landline or wireless phone.

The healthcare industry will benefit from the increased availability of video-supported virtual telehealth services. Moving forward, according to Frost & Sullivan, the growing use of virtual telehealth services will increase the demand for video-based sessions. This requires a broadband infrastructure that promises secure and reliable connectivity and the ability to embed interactive video communications directly into the leading Electronic Health Record (EHR) providers is a game-changer.

---

<sup>2</sup> Frost & Sullivan, US Telehealth Virtual Visits Market Services for the 21st Century House Call, KOOD-48, May 2016.

<sup>3</sup> Ibid.

One of the premier video software platform providers is Vidyo. Leading virtual telehealth service providers and hospital systems use the company's solutions to connect physicians with patients for a variety of medical evaluations, surgical consults, telestroke, in home care, doctor to doctor, doctor to hospital, clinic or nursing home. Vidyo is highly regarded by industry experts. Vidyo is #1 in embedded interactive video and the VidyoWorks™ platform enables multi-point video collaboration to be embedded into healthcare services, applications like electronic health records systems and patient portals as well as devices, like TeleICU beds, medical carts, kiosks, smart glasses, robots and other form factors that bring physicians and patients close together across the continuum of care.

## *Technology Leverage and Customer Impact*

### **Commitment to Innovation**

Vidyo solutions power innovation in the healthcare space and support three critical attributes of any telehealth solution: access, workflow integration, and scale.

#### *Access*

Vidyo has achieved innovation based on over 120 patents that the company holds around the algorithms and techniques needed to deliver real-time video communication over public Internet enabled devices. These techniques have enabled Vidyo to extend telehealth to rural communities and take healthcare beyond the four walls of the healthcare institution and its managed network where this type of session had been confined to previously.

#### *Workflow Integration*

Vidyo has developed a robust ecosystem through the use of its platform and extensive application programming interfaces (APIs) that enable clinical solutions providers to embed video conferencing services into existing workflow tools without disruption. Vidyo is the only company that has embedded video directly into the top EHR systems most used in North America as well as international EHR systems. This is particularly important as a driver of clinical adoption because healthcare professionals want to be assured that the new technology will support the EHR they use and not interfere with established protocols and incumbent systems.

#### *Scale*

The third segment of Vidyo's innovation is scale, which enables the provision of affordable services for a rising number of patients. Medical professionals can take advantage of the wider deployment of video-based services to assess their improved efficiencies and outcomes that can be achieved for patients. Although audio has been the most widely used format for virtual telehealth services, video services offer distinct benefits beyond

the obvious visual information for clinical assessment and includes stronger patient/clinician relationship and trust, which is critical for engagement of a patient in his or her own care.

A notable example of Vidyo's commitment to innovation was the recent announcement of its deep integration with a major electronic health records (EHR) vendor, Epic Systems. Vidyo's service platform is fully integrated into Epic's clinician and patient portals to facilitate seamless workflows and video consults. This makes it easier for doctors and patients to schedule and conduct video consults and record and access health information securely within the Epic portal. It is particularly important as EHR integration is critical for Vidyo's customers in healthcare. One of the early adopters of the integrated solution was the Medical University of South Carolina (MUSC). MUSC leverages Epic's integration of Vidyo into Epic Hyperspace™ and MyChart™ web and mobile applications and it enabled MUSC to extend healthcare services to rural populations in South Carolina. Vidyo is also integrated into other major electronic health record systems like Cerner & EMIS.

Frost & Sullivan believes that Vidyo has demonstrated a commitment to innovation by becoming a highly regarded video enabler with hundreds of healthcare clients who rely on Vidyo's service.

### **Commitment to Creativity**

Vidyo is continuing to build and evolve their solutions and offerings to enable a variety of use cases while augmenting technology with a professional services organization. The professional services team helps customers develop their ideal formula for clinical workflow. Vidyo's team can design and build the workflow in collaboration with customers so that it is part of process that is totally customer needs driven.

Vidyo's technology is highly flexible. A familiar scenario allows physicians to suggest customized ways of delivering new capabilities supported by Vidyo's technology. For example, the Ontario Telehealth Network (OTN), the world's largest telemedicine network, relies on Vidyo for its home care services. Vidyo's professional services engagement with OTN was for fleet management of their distributed cart endpoints. Vidyo's APIs are so simple to use that OTN did the integration of Vidyo into the OTN hub on their own with support of the API support team. The work has included the collaboration with OTN, the service provider for healthcare organizations within the entire province of Ontario for fulfilling telehealth needs. OTN leveraged Vidyo's APIs to video enable the OTN hub—a single sign-on site for clinicians to gain access to specialists and a variety of services (such as scheduling and educational services). The network supports clinical referrals to use video for medical services and consultations. Vidyo's professional services team worked with OTN to define and create a fleet management solution for OTN's large number of telehealth cart endpoints in clinics across their network.

In another example, Vidyo's professional services have enabled the development of an application that supports the transfer of patients. This has reduced inefficiencies and unnecessary patient transfers that incur huge costs for healthcare organizations. Vidyo also offers pre-transfer consultation based on its contact center framework. The professional services organization also created fleet management services. The team is active in designing the video endpoints needed to improve the performance of this service. Frost & Sullivan commends Vidyo for the manner in which it has used its professional services to augment technology and enable positive outcomes focusing on customer needs and following up by creating the desired workflow.

### **Commercialization Success**

From a commercial standpoint, Vidyo has been successful. The company has secured strong brand recognition in the markets it serves. Its services are currently used by more than 120 Integrated Delivery Networks (IDNs) in the US alone, which represents more than 1,800 hospitals. Vidyo's technology is being used for telestroke, telepsychiatry, youth diabetes monitoring, Parkinson's disease diagnosis, remote home monitoring, clinical decision support tools, interactive patient care systems, rural medical delivery, TeleICU, infectious disease management and many others. Vidyo caters to leading healthcare organizations such as Kaiser Permanente, Mayo Clinic, and Cleveland Clinic.

Specific examples include:

- Kaiser Permanente uses Vidyo to power "My Health Manager", a solution that allows physicians and patients to connect, face to face, from home or hospital. Subsequently Kaiser invested \$10M in Vidyo.
- Philips TeleICU program leverages Vidyo's visual communication platform and remote camera control capability to complement their predictive analytics, data visualization, and reporting services for 24/7 access to critical care specialists and information for bedside teams.
- American Well, an exclusive Vidyo partner, has the potential to reach more than 200 million subscribers in need of inexpensive, on-demand consults using virtually any device, on any public Internet connection. It is white-labeled by various health plans and payers, including Blue Cross, Blue Shield, United Healthcare, Wellpoint and others who market Vidyo-powered American Well services under different brand names recognized by established plan members. The American Well app was the top healthcare app downloaded on the App Store in 2014 and 2015.
- Alaska Native Tribal Health Consortium leverages the VidyoWorks platform to provide real-time consultations and examinations to patients in rural locations who would otherwise have to incur significant cost and inconvenience to travel great distances to see a physician.
- Mercy Virtual - Mercy SafeWatch, a Vidyo-enabled Philips TeleICU, provides video-enabled bedside systems to communicate with Mercy's central TeleICU command center that serves five states.

- GetWellNetwork integrated Vidyo technology into their interactive patient care platform. The VidyoWorks platform integrates directly into the bedside solution, enabling providers to improve patient satisfaction through faster nurse call response times, as well as quality of care and productivity through virtual rounding.
- AMD Global Telemedicine Inc. integrates Vidyo technology into AMD's AGNES Interactive™ telemedicine platform for simultaneous clinical assessment and multi-point video conferencing, in a single web-based workspace.

A small sample of other Vidyo customers and partners include: Massachusetts General Hospital, Baptist Health Little Rock, Miami Children's Hospital, Colorado Children's, University of Rochester, Optum, UPMC, Reach, Sutter Health, AMA, HCA, Banner, Carolinas, Providence, and many more.

Additionally, Vidyo is seeing enormous traction and global success in telehealth across APAC, EMEA and LATAM.

### **Price/Performance Value**

Vidyo's value proposition to a healthcare provider is that they need only to invest once in the platform. Moving forward the customer can leverage the platform across multiple workflows for a consistent communications experience regardless of workflow application. It should also be noted that a strong ROI model has been demonstrated even when only one workflow is utilized, such as video connectivity to enable video services.

An example of ROI involves video visits for follow-up care for hospitals threatened by readmission penalties. According to Vidyo, this technology typically achieves positive ROI within three months or less based on the ability of the customer to conduct virtual follow-up visits that may stave off the need for a readmission.

Frost & Sullivan believes that Vidyo offers a simple to understand but highly significant price/performance value for its customers.

### **Customer Service Experience:**

Vidyo has a robust customer service network that leverages its wide-ranging partner ecosystem. Vidyo sells its platform directly to technology partners and OEMs or through channel partners, such as value added resellers (VARs), to care providers and payers. This wide-ranging partner network enables Vidyo to demonstrate its ability to resolve customer issues emanating from various devices and software that are provided by a large array of vendors. Vidyo also offers "plus" support services via its highly trained support team as an option to end users.

Vidyo has a well-defined customer service proposition. A significant customer services menu is available on its Web site. Customers may drill down to specific needs by using:



- **Knowledge Center**, a robust collection of instructional videos, tutorials, and learning resources
- **Documentation**, relevant technical publications for network or information technology (IT) administrators and end users
- **Third Party Software**, a detailed index for legal attributions for open source and third-party software and components included in Vidyo products
- **Peripherals**, a detailed review of the devices that work with Vidyo products
- **Software Downloads**, featuring a thorough list of software clients and extensions
- **Product Lifecycle**, which helps customers learn about “End of Sale” and “End of Life” notices for the products or services that Vidyo plans to sunset support for.

Frost & Sullivan observes that Vidyo offers strong customer support enabling a high degree of problem solving and addressing issues (including those relating to technical components produced by other companies).

### **Brand Equity**

Vidyo sells its platform directly to technology partners and OEMs or through reseller and channel partners to care providers and payers. In both scenarios, the company’s brand image plays a key role in the way the service is positioned.

When the platform is sold through a development partner that is an OEM, the OEM brand is positioned as “powered by Vidyo”. This is similar to the well-known “Intel Inside” formula and demonstrates further the benefits associated with the leveraging of a well-known brand to drive the success of a particular device or service.

Frost & Sullivan believes Vidyo has set a gold standard in the delivery of high-quality visual communications in healthcare and is the market leader in embedded interactive video communications, which is a large and growing market.

### *Conclusion*

Vidyo is associated with high quality, scalable and flexible video collaboration in various vertical markets. However, the key challenge within the healthcare market is that users depend on offering video services within clinical workflows that require reliable quality so that the technology becomes transparent and patients and clinicians can focus on the patient’s health. Providers must also feel confident that the video technology will work with the unique blend of devices and software associated with their practice. To meet this challenge, Vidyo has developed technology to provide physicians and patients with a reliable, high-quality and user-friendly way to connect over mobile and desktop devices. Additionally, Vidyo provides a strategy to ensure that a highly visible and documented partner ecosystem is available to all customers. Although, the supplier of video technology may be totally transparent to the user, a critical success factor is the ability of a system to



operate a complex process that is behind the scene, yet vital. Frost & Sullivan believes that Vidyo has successfully navigated this virtual maze of tools and needs and as a result is enabling the telehealth services that include video to become a day-to-day option for an increasing number of healthcare episodes.

With its strong overall performance, Vidyo has earned Frost & Sullivan's 2016 Enabling Technology Leadership Award for its contribution to the market for video telehealth solutions.

## Significance of Enabling Technology Leadership

Ultimately, growth in any organization depends upon customers purchasing from your company, and then making the decision to return time and again. In a sense, then, everything is truly about the customer—and making those customers happy is the cornerstone of any long-term successful growth strategy. To achieve these goals through technology leadership, an organization must be best-in-class in three key areas: understanding demand, nurturing the brand, and differentiating from the competition.



## Understanding Enabling Technology Leadership

Product quality (driven by innovative technology) is the foundation of delivering customer value. When complemented by an equally rigorous focus on the customer, companies can begin to differentiate themselves from the competition. From awareness, to consideration, to purchase, to follow-up support, best-practice organizations deliver a unique and enjoyable experience that gives customers confidence in the company, its products, and its integrity.

## Key Benchmarking Criteria

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

### Technology Leverage

- Criterion 1: Commitment to Innovation
- Criterion 2: Commitment to Creativity
- Criterion 3: Stage Gate Efficiency
- Criterion 4: Commercialization Success
- Criterion 5: Application Diversity

### Customer Impact

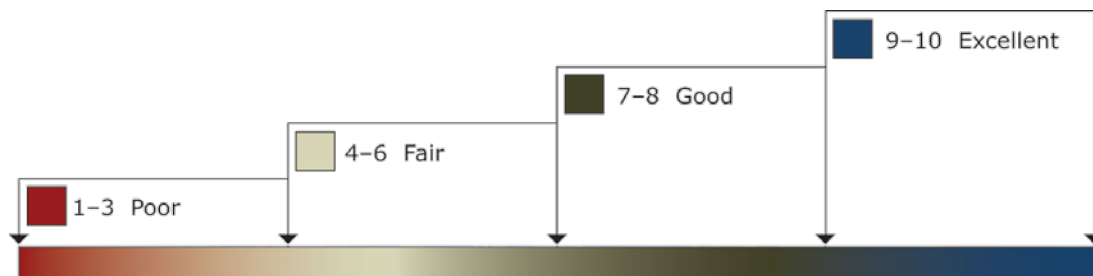
- Criterion 1: Price/Performance Value
- Criterion 2: Customer Purchase Experience
- Criterion 3: Customer Ownership Experience
- Criterion 4: Customer Service Experience
- Criterion 5: Brand Equity

## Best Practice Award Analysis for Vidyo

### 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.

#### RATINGS GUIDELINES



The Decision Support Scorecard is organized by Technology Leverage and Customer 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 ENABLING TECHNOLOGY LEADERSHIP AWARD

<i>Measurement of 1–10 (1 = poor; 10 = excellent)</i>			
<b>Enabling Technology Leadership</b>	Technology Leverage	Customer Impact	Average Rating
<b>Vidyo</b>	<b>10</b>	<b>10</b>	<b>10</b>
Competitor 2	9	9	9.0
Competitor 3	8.5	8.5	8.5

*Technology Leverage*

**Criterion 1: Commitment to Innovation**

Requirement: Conscious, ongoing adoption of emerging technologies that enables new product development and enhances product performances

**Criterion 2: Commitment to Creativity**

Requirement: Technology is leveraged to push the limits of form and function, in the pursuit of “white space” innovation

**Criterion 3: Stage Gate Efficiency**

Requirement: Adoption of technology to enhance the stage gate process for launching new products and solutions

**Criterion 4: Commercialization Success**

Requirement: A proven track record of taking new technologies to market with a high rate of success

**Criterion 5: Application Diversity**

Requirement: The development and/or integration of technologies that serve multiple applications and can be embraced in multiple environments

*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

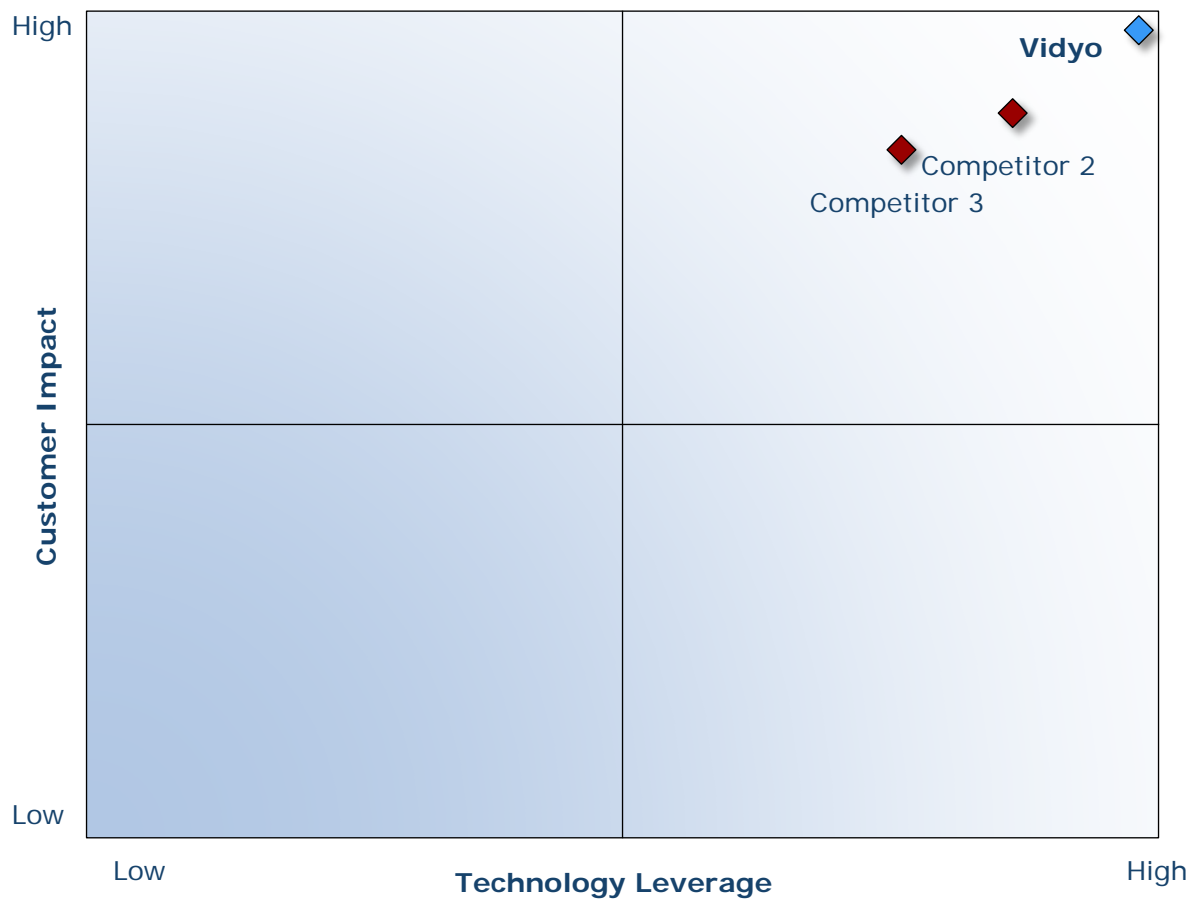
**Criterion 5: Brand Equity**

Requirement: Customers have a positive view of the brand and exhibit high brand loyalty

*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 ENABLING TECHNOLOGY 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 best-in-class levels.

### 360-DEGREE RESEARCH: SEEING ORDER IN THE CHAOS



## 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 <b>Monitor, target, and screen</b>	Identify award recipient candidates from around the globe	<ul style="list-style-type: none"> <li>• Conduct in-depth industry research</li> <li>• Identify emerging sectors</li> <li>• Scan multiple geographies</li> </ul>	Pipeline of candidates who potentially meet all best-practice criteria
2 <b>Perform 360-degree research</b>	Perform comprehensive, 360-degree research on all candidates in the pipeline	<ul style="list-style-type: none"> <li>• Interview thought leaders and industry practitioners</li> <li>• Assess candidates' fit with best-practice criteria</li> <li>• Rank all candidates</li> </ul>	Matrix positioning all candidates' performance relative to one another
3 <b>Invite thought leadership in best practices</b>	Perform in-depth examination of all candidates	<ul style="list-style-type: none"> <li>• Confirm best-practice criteria</li> <li>• Examine eligibility of all candidates</li> <li>• Identify any information gaps</li> </ul>	Detailed profiles of all ranked candidates
4 <b>Initiate research director review</b>	Conduct an unbiased evaluation of all candidate profiles	<ul style="list-style-type: none"> <li>• Brainstorm ranking options</li> <li>• Invite multiple perspectives on candidates' performance</li> <li>• Update candidate profiles</li> </ul>	Final prioritization of all eligible candidates and companion best-practice positioning paper
5 <b>Assemble panel of industry experts</b>	Present findings to an expert panel of industry thought leaders	<ul style="list-style-type: none"> <li>• Share findings</li> <li>• Strengthen cases for candidate eligibility</li> <li>• Prioritize candidates</li> </ul>	Refined list of prioritized award candidates
6 <b>Conduct global industry review</b>	Build consensus on award candidates' eligibility	<ul style="list-style-type: none"> <li>• Hold global team meeting to review all candidates</li> <li>• Pressure-test fit with criteria</li> <li>• Confirm inclusion of all eligible candidates</li> </ul>	Final list of eligible award candidates, representing success stories worldwide
7 <b>Perform quality check</b>	Develop official award consideration materials	<ul style="list-style-type: none"> <li>• Perform final performance benchmarking activities</li> <li>• Write nominations</li> <li>• Perform quality review</li> </ul>	High-quality, accurate, and creative presentation of nominees' successes
8 <b>Reconnect with panel of industry experts</b>	Finalize the selection of the best-practice award recipient	<ul style="list-style-type: none"> <li>• Review analysis with panel</li> <li>• Build consensus</li> <li>• Select winner</li> </ul>	Decision on which company performs best against all best-practice criteria
9 <b>Communicate recognition</b>	Inform award recipient of award recognition	<ul style="list-style-type: none"> <li>• Present award to the CEO</li> <li>• Inspire the organization for continued success</li> <li>• Celebrate the recipient's performance</li> </ul>	Announcement of award and plan for how recipient can use the award to enhance the brand
10 <b>Take strategic action</b>	Upon licensing, company may share award news with stakeholders and customers	<ul style="list-style-type: none"> <li>• Coordinate media outreach</li> <li>• Design a marketing plan</li> <li>• Assess award's role in future strategic planning</li> </ul>	Widespread awareness of recipient's award status among investors, media personnel, and employees



## 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 almost 50 years of experience in partnering with Global 1000 companies, emerging businesses and the investment community from 31 offices on six continents. To join our Growth Partnership, please visit <http://www.frost.com>.