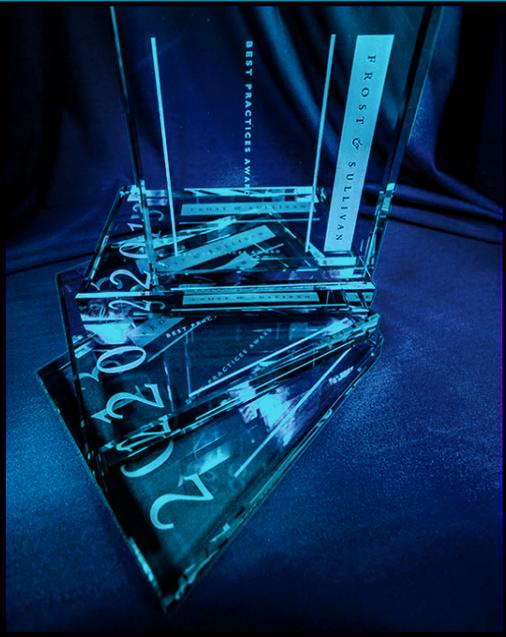


FROST & SULLIVAN



OPTUM®

2016 North American
Population Health Management
Company of the Year Award



FROST & SULLIVAN

BEST
2016 PRACTICES
AWARD

NORTH AMERICAN POPULATION HEALTH
MANAGEMENT COMPANY OF THE YEAR AWARD

2016
BEST PRACTICES
AWARDS

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Background and Company Performance

Industry Challenges

US healthcare spending is at an all-time high. The cumulative cost of chronic disease management in the United States was \$2.3 trillion in 2010 (almost 86% of the total national health expenditure); by 2020, almost 50% of the US population is likely to have at least one chronic condition. Historically, the US healthcare market's emphasis has been more treatment-focused than prevention-focused, thereby failing to successfully manage at-risk patients and indirectly catalyzing incremental demand for healthcare services. As the demand for healthcare services increases and factors such as physician shortages make an impact, many US-based health systems are likely to fall short in catering to evolving patient needs. Providers and payers are in dire need of a suite of healthcare technology solutions and services that increase care delivery efficiency and improve health outcomes at a population level.

Regulations and payment incentives are being put in place to promote care digitization and outcome improvement. This includes enabling the movement away from fee-for-service/volume models to outcome-based systems that advocate accountable care. The transition towards value-based care propelled the growth of accountable care organizations (ACOs), patient-centered medical homes, and provider-sponsored health plans that embrace various performance-based payment programs.

Today, providers strive to better coordinate care, leverage evidence-based principles, engage patients, and benchmark outcomes. The principle objective is to identify appropriate care workflows, control readmissions, manage chronic conditions, and promote self-care so that incoming patients heal quickly, transitioning patients avoid readmission, and healthy populations stay healthy.

The US population health management (PHM) supply market is at a nascent stage, and a select few companies have managed to improve patient outcomes and minimize financial risk for their clients. The market is expected to observe fierce competitive rivalry as small, modular PHM firms compete against large, platform providers. Winners will successfully weigh market needs and offer secure, interoperable, and highly customized solutions that monitor, predict, and manage patient conditions across the continuum of care.

Visionary Innovation & Performance and Customer Impact

Optum Addressing Unmet Needs of Providers

Frost & Sullivan's recent research in PHM revealed that many payers and providers are struggling to optimize efficiency of care due to lack of technological preparedness. The US healthcare information technology (IT) market is marred by closed-loop, modular

applications that fail to improve functional outcomes of a defined patient population. Hence, different US-based healthcare entities exhibit a variety of unmet care needs.

Optum's PHM approach is derived from the population but applied to individuals requiring unique, evidence-based clinical intervention. The company's robust analytics solution automates collection and normalization of disparate patient data and generates patient-specific workflows for physicians at the point of care. Physicians are empowered to administer data-driven clinical decisions that could reduce average length of patient stay, expedite clinical trial eligibility assessments, optimize referral management, and minimize readmissions. Providers often encounter interoperability and security issues while exchanging notes and patient data across the provider network. Optum provides superior connectivity and a HIPAA-compliant care coordination infrastructure that connects with all major providers regardless of their underlying technology platforms. Since its care coordination technology is cloud-based, providers enjoy unmatched scalability and receive the benefits of periodic upgrades. Optum processes massive amounts of clinical and claims data every year. The company has managed to procure and curate clinical records of 85 million patients and claims data of 170 million patients. This allows the company to benchmark providers' clinical and financial utilization at practice and patient levels. The performance management technology points to areas that need immediate attention, automates segmentation of high-risk/high-cost patients, and reports compliance of qualitative and quantitative standards.

Optum Addressing Unmet Needs of Payers

Payers and payer-providers are aiming to invest in technologies and services that bolster their abilities to manage, monitor, and predict member performance. Many are trying to devise consumer-centric health plans that incentivize preventive, value-based care and safeguard corporate profitability. Progressive payers reach out to Optum with requirements specific to care gap assessment, premium management, member goal setting, care standardization, and regulatory compliance. Evolving US healthcare guidelines reform member engagement objectives, shared saving key performance indicators (KPIs), rating methodologies, and penalty benchmarks at regular intervals. Optum ensures that every payer is effectively assessing industry transformation and re-engineering business propositions in accordance with the changing healthcare landscape.

Blue Ocean Strategy

Optum is a preferred PHM vendor of a variety of healthcare stakeholders: providers, employers, life sciences, health plans, governments, and consumers. The company offers multiple health IT solutions that are collectively applicable to the entire healthcare ecosystem. This is a critical feat in an industry that historically represented vendors concentrating on a single IT specialty.

Optum is widely regarded for its end-to-end PHM capability, but the company is also revered for its proven expertise in actuarial services, revenue cycle management, clinical informatics, electronic medical record (EMR) implementation management, hospice pharmacy management, and IT infrastructure services. The company is helping clients reduce sourcing complexity by allowing them consolidate key health IT spending. The consolidated engagement approach extends much-needed spend control to health entities and lends superior service credibility to Optum.

“Optum offers one-stop shopping in an integrated environment. They listen to their customers and implement improvements based on their customers’ needs and feedback. The technology they offer is second to none, and includes A/R solutions from beginning to end in a competitive cost environment,” said Mike Wilson, director of business services for DCH Health System.

Optum, despite participating in a contested market, has managed to create a niche for its technologies and services. The company is equally versed to draw evidence from payers, providers, and consumers. Its holistic healthcare approach is highly receptive to progressive healthcare entities that are transitioning to various risk or value-based healthcare ecosystems. As the US healthcare market continues to evolve and incentivize efficient care delivery, Optum is likely to sustain its unique competitive advantage. In the post-electronic health record (EHR) era, opportunities around health IT-enabled clinical intervention are endless. Optum is better positioned to offer deep-rooted applications for the entire spectrum of value-based healthcare services.

Financial Performance

Optum’s revenue grew by 70% in Q4 2015 from Q4, 2014. It enabled UnitedHealth Group (Optum’s parent company) to increase revenue by 30% (\$43.6 billion) and beat the average analyst estimate (\$43.2 billion) for the period.

During the full year of 2015, Optum earned \$67.6 billion — an increase of 42% from 2014 — and contributed 40% to the UnitedHealth Group’s full-year earnings from operations. Optum reported double-digit percentage revenue growth for all segments: OptumHealth, Optum Insight, and OptumRx. OptumRx, the pharmacy care service division, contributed \$48.0 billion in 2015 and registered year-over-year growth of 51%. OptumHealth revenue grew 21.6% for the period, and OptumInsight, 21.8%.

Optum’s full-year operating margin was 6.3% in 2015. The overall financial performance was driven by OptumRx’s revenue increase and multiple strategic initiatives that include acquisition of Catamaran and a revenue cycle relationship with Dignity Health. Optum’s revenue from its top 25 clients grew by 400%; the company is poised to register strong financial performance in 2016 with an increase in bookings.

Implementation of Best Practices

In a recent study, Frost & Sullivan explored PHM best practices for the US healthcare marketplace and devised a PHM implementation roadmap for progressive payers and providers shifting from volume- to value-based healthcare reimbursement ecosystems. Frost & Sullivan recognizes Optum's superior ability to adapt to diverse value-based care needs of market participants and combine a suite of technology solutions that enable its clients to successfully navigate through the PHM journey.

Optum Best Practices Applied on the Entire PHM Value Chain

- **Define Opportunity Areas:** Frost & Sullivan observed that many US-based providers have failed to optimize financial results due to lack of strategic direction pertaining to PHM-enabled clinical intervention. According to Centers for Medicare and Medicaid Services (CMS), in 2014, around 20 Pioneer ACOs accepted upside risk arrangements but 49% of them failed to achieve shared savings due to poor strategic guidance and operational inefficiencies. Most of these providers were unable to adhere to CMS quality benchmarks; a few incurred losses as they failed to effectively forecast clinical utilization. Optum exhibits proven expertise that counters this critical industry pain point. Optum provides industry-leading advisory services in regard to value-based healthcare and allows providers optimize payer relationships. Optum's subject matter experts work closely with provider executives to help them define and implement transformational health IT strategies, and tailors risk-based reimbursement models specific to providers' operational maturity. The company also benchmarks business models, utilization metrics, and clinical outcomes at a community level. Robust, end-to-end PHM advisory services enable Optum's clients to prevent unnecessary utilization, minimize readmission, improve quality compliance, and sustain corporate profitability.
- **Develop Longitudinal Patient Record:** Best-in-class providers develop longitudinal patient records through bi-directional IT integration and health information exchange. Optum offers an ICD-10-enabled and HIPAA-compliant IT system that seamlessly interfaces with disparate multimedia sources. The cloud-based analytics tool allows providers to procure evidence-based clinical intelligence from the entire healthcare marketplace and prepare a unique patient record that physicians can refer to at the point of care through any EHR. Optum's ability to curate, normalize, and harmonize millions of claim, clinical, and socioeconomic data points is unmatched, and the company is committed to facilitate individualized clinical intervention to expedite recovery, reinforce compliance, and prevent readmission.

Initiate Evidenced-Based Care: Frost & Sullivan in its recent PHM study emphasized that providers must initiate customized intervention based on patients' primary conditions and risk profiles. With the use of a defined and agile intervention approach, patient care can be improved across the continuum. Optum pioneered this principle.

Its analytics solutions review patient conditions holistically and develop homogenous, condition-specific patient clusters. Evidence-based intervention guidelines can be derived from integrated applications and applied on different patient cohorts to improve outcomes and minimize adverse events.

- **Coordinate Siloed Care Departments:** Many providers struggle to unify care departments that utilize disparate EHRs, medical devices, clinical decision support systems, and reporting tools. Optum provides superior, IT-agnostic connectivity. Physicians can exchange notes securely and communicate with patients, care managers, and nurses remotely. Providers looking to recalibrate value-based health IT infrastructure can avoid migrating to new systems as Optum's technology is compatible with 98% of EMR/electronic data interchange platforms and almost 100% of payers.
- **Empower Patients through Engagement:** Optum's predictive patient engagement solutions highlight and track chronic and at-risk patients in real time and allow physicians to prioritize intervention. Care managers can schedule visits and flag care inconsistencies. The technology also provides patient outcome benchmarking support to physicians and nurses.
- **Analyze and Benchmark Clinical and Financial Performance:** Optum is one of the few vendors that propose sound reporting functions at patient, provider, and population levels. Its SF™ Health Surveys analyze patients' socioeconomic risk profiles and determine their immediate and impending care needs. The survey can be integrated into any EHR for physicians' point-of-care access. Optum also provides robust financial measurement tools that assess provider performance at practice and patient levels, and allows executives to remotely monitor regulatory adherence and target compliance.

Customer Purchase Experience

Optum is widely regarded as the preferred choice for ACO qualification, shared savings optimization, and clinical efficiency improvement. The company is flexible to offer both modular and end-to-end PHM applications. Its 30,000 employees are equally competent to drive tangible values for volume and value-based healthcare organizations.

Optum has built a strong and diverse client portfolio through customized engagements. Midsize to large integrated delivery networks, hospitals, ACOs, and physician practices frequently reach out to Optum for various value-based healthcare needs.

Select Case: Risk Stratification and Patient Engagement

As an example, Optum deployed its predictive analytics solution at an integrated healthcare network that serves more than 2 million consumers in the eastern region of the U.S. The technology projected number of admissions, readmissions, and emergency

department visits for major chronic conditions. This led the provider to define a patient population that was most vulnerable to hospital admission and adjust ambulatory interventions for each patient who later received personalized care plans throughout the care continuum.

Precise risk assessment and proactive outreach empowered the provider to avoid higher clinical utilization and save money.

Customer Service Experience

Optum's superior customer service experience stems from a unique, patient-centric engagement model. The company segments a community population by analyzing each individual's propensity to acquire multiple chronic conditions in the near future. High-risk individuals receive telephonic guidance from care coaches and low-risk individuals are empowered to take personal, proactive steps through online and on-site interviews. To successfully implement the model, Optum has deployed a team of field managers who regularly track and manage patient needs. The team comprises nurses, pharmacists, social workers, and behavioral specialists. Field-based nurses work alongside provider care managers and ensure patient compliance with medication, care plans, and recovery guidance. Pharmacists provide timely product alerts to transitioning patients, and behavioral specialists communicate the value of a disciplined self-care routine through personal discussions. Such a progressive engagement model is rare in the US market; leading providers have realized significant clinical and financial benefits from their long-term, value-driven associations with Optum.

Conclusion

More than 100 healthcare IT companies participate in the US PHM market, but most propose solutions for a specific PHM segment (mainly health intelligence and data analytics). The PHM ecosystem is larger, and includes data management, risk stratification, care management, patient engagement, and performance management capabilities. Only a select few companies have managed to optimize the entire ecosystem and help both payers and providers improve the health of a community population and reduce per-capita healthcare costs.

Because of its strong overall performance, Optum has earned Frost & Sullivan's 2016 North America Company of the Year Award for the PHM market.

Significance of Company of the Year

To win the Company of the Year award (i.e., to be recognized as a leader not only in your industry, but among your non-industry peers as well) requires a company to demonstrate excellence in growth, innovation, and leadership. This kind of excellence typically translates into superior performance in three key areas: demand generation, brand development, and competitive positioning. These areas serve as the foundation of a company's future success and prepare it to deliver on the two criteria that define the Company of the Year Award (Visionary Innovation & Performance and Customer Impact).



Understanding Company of the Year

As discussed above, driving demand, brand strength, and competitive differentiation all play a critical role in delivering unique value to customers. This three-fold focus, however, must ideally be complemented by an equally rigorous focus on visionary innovation to enhance customer value and impact.

Key Benchmarking Criteria

For the Company of the Year Award, Frost & Sullivan analysts independently evaluated two key factors—Visionary Innovation & Performance and Customer Impact—according to the criteria identified below.

Visionary Innovation & Performance

- Criterion 1: Addressing Unmet Needs
- Criterion 2: Visionary Scenarios Through Mega Trends
- Criterion 3: Implementation Best Practices
- Criterion 4: Blue Ocean Strategy
- Criterion 5: Financial Performance

Customer Impact

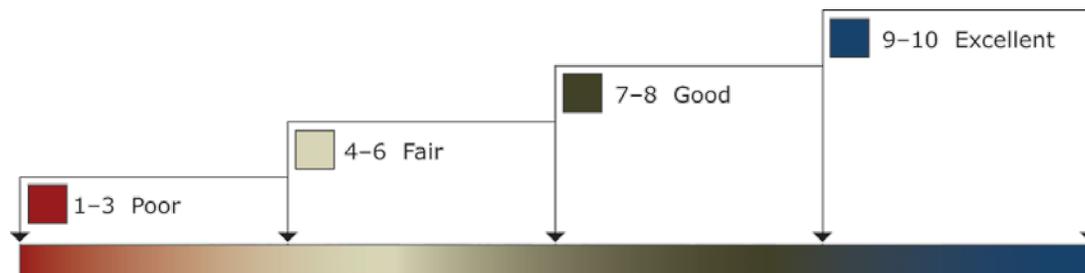
- Criterion 1: Price/Performance Value
- Criterion 2: Customer Purchase Experience
- Criterion 3: Customer Ownership Experience
- Criterion 4: Customer Service Experience
- Criterion 5: Brand Equity

Best Practice Award Analysis for Optum

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 Visionary Innovation & Performance 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 COMPANY OF THE YEAR AWARD

<i>Measurement of 1–10 (1 = poor; 10 = excellent)</i>			
Company of the Year	Visionary Innovation & Performance	Customer Impact	Average Rating
Optum	9	9	9
Competitor 2	8	8	8
Competitor 3	7	7	7

Visionary Innovation & Performance

Criterion 1: Addressing Unmet Needs

Requirement: Implementing a robust process to continuously unearth customers’ unmet or under-served needs, and creating the products or solutions to address them effectively

Criterion 2: Visionary Scenarios Through Mega Trends

Requirement: Incorporating long-range, macro-level scenarios into the innovation strategy, thereby enabling “first to market” growth opportunities solutions

Criterion 4: Implementation of Best Practices

Requirement: Best-in-class strategy implementation characterized by processes, tools, or activities that generate a consistent and repeatable level of success.

Criterion 3: Blue Ocean Strategy

Requirement: Strategic focus in creating a leadership position in a potentially “uncontested” market space, manifested by stiff barriers to entry for competitors

Criterion 5: Financial Performance

Requirement: Strong overall business performance in terms of revenues, revenue growth, operating margin and other key financial metrics

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

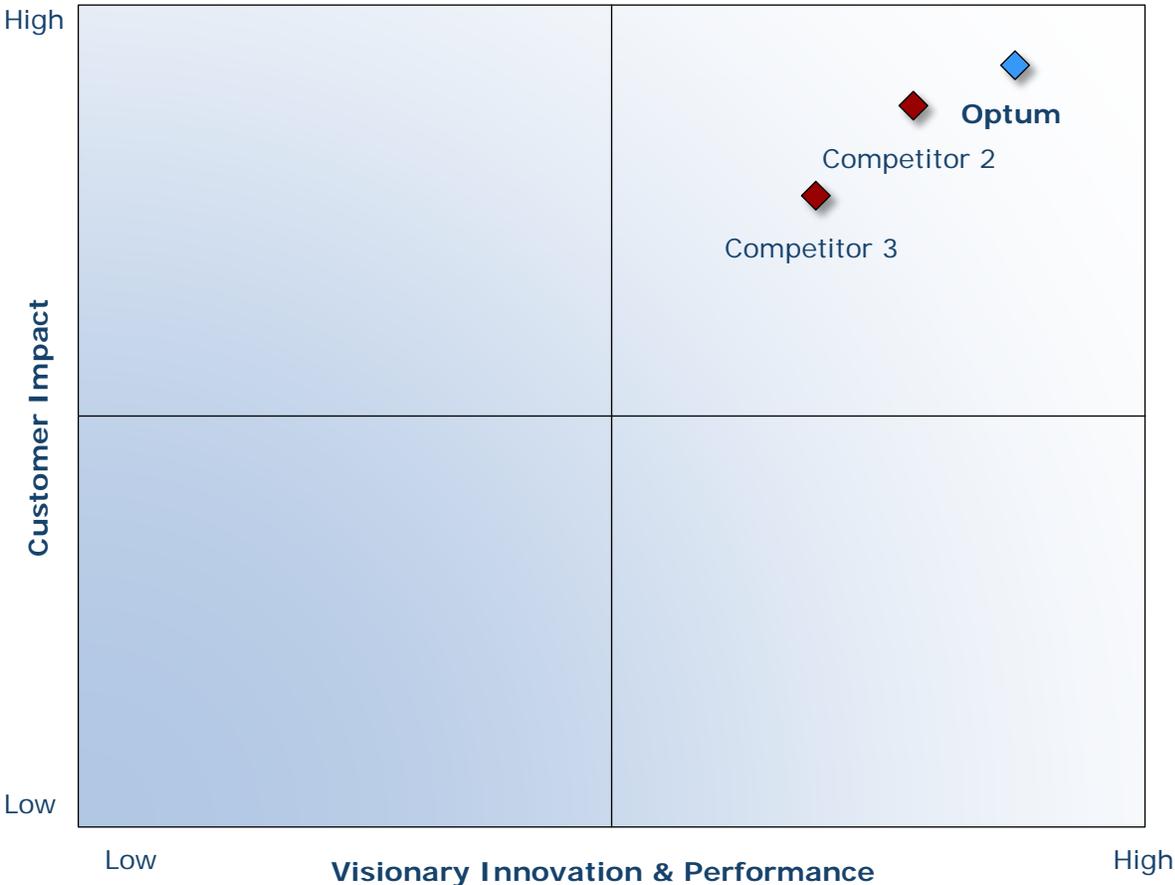
Criterion 5: Brand Equity

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 COMPANY OF THE YEAR 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 Monitor, target, and screen	Identify award recipient candidates from around the globe	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Interview thought leaders and industry practitioners • Assess candidates' fit with best-practice criteria • Rank all candidates 	Matrix positioning all candidates' performance relative to one another
3 Invite thought leadership in best practices	Perform in-depth examination of all candidates	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Review analysis with panel • Build consensus • Select winner 	Decision on which company performs best against all best-practice criteria
9 Communicate recognition	Inform award recipient of award recognition	<ul style="list-style-type: none"> • Present award to the CEO • 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 may share award news with stakeholders and customers	<ul style="list-style-type: none"> • 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

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>.