

Agilent Technologies

2012 Global Radio-frequency (RF) Test Equipment Company of the Year Award



FROST & SULLIVAN



50 Years of Growth, Innovation & Leadership



Company of the Year Award Radio-frequency (RF) Test Equipment Global, 2012

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 2012 Global Company of the Year Award in Radio-frequency (RF) Test Equipment to Agilent Technologies (Agilent).

Significance of the Company of the Year Award

Key Industry Challenges Addressed

In a highly dynamic and competitive market such as the global RF test equipment market, participants face a significant challenge in keeping pace with the rapid technological developments occurring in this space. The introduction of new and complex standards, such as the IEEE 802.11ac, requires higher frequencies and wider bandwidths than previous Wi-Fi standards, thus leading to the demand for higher performance in test approaches/equipment. Moreover, the rising complexity of wireless technologies, perhaps best illustrated by multiple-input multiple-output (MIMO) technology, have led to the requirement for more sophisticated and advanced test equipment so as to test these technologies in an efficient and timely manner.

Companies that make significant investments in R&D find themselves better positioned to address these market challenges. The regular introduction of new products in line with the evolution of wireless standards and new market requirements is critical for a company to strengthen its position in the global RF test equipment market.

Impact of Company of the Year Award on Key Stakeholders

The Company of the Year Award is a prestigious recognition of Agilent's accomplishments in RF test equipment. An unbiased, third-party recognition can provide a profound impact in enhancing the brand value and accelerating Agilent'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 Agilent'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 Agilent.

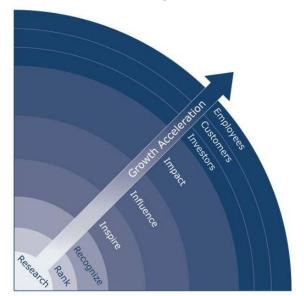


Chart 1: Best Practices Leverage for Growth Acceleration

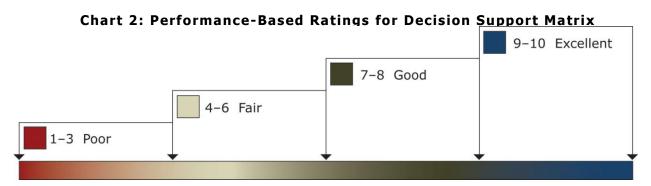
Key Benchmarking Criteria for Company of the Year Award

For the Company of the Year Award, the following criteria were used to benchmark Agilent's performance against key competitors:

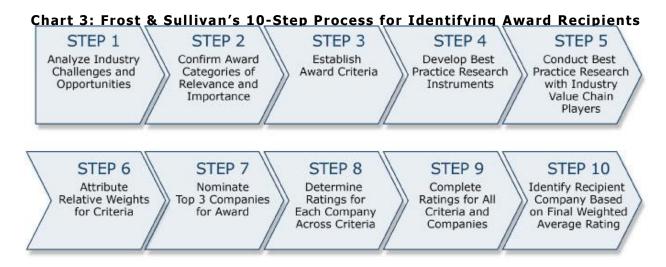
- Growth Strategy Excellence
- Growth Implementation Excellence
- Degree of Innovation with Products and Technologies
- Leadership in Customer Value
- Leadership in Market Penetration

Decision Support Matrix and Measurement Criteria

To support its evaluation of best practices across multiple business performance categories, Frost & Sullivan employs a customized Decision Support Matrix (DSM). The DSM is an analytical tool that compares companies' performance relative to each other with an integration of quantitative and qualitative metrics. The DSM features criteria unique to each Award category and ranks importance by assigning weights to each criterion. The relative weighting reflects current market conditions and illustrates the associated importance of each criterion according to Frost & Sullivan. Fundamentally, each DSM is distinct for each market and Award category. The DSM allows our research and consulting teams to objectively analyze each company's performance on each criterion relative to its top competitors and assign performance ratings on that basis. The DSM follows a 10-point scale that allows for nuances in performance evaluation; ratings guidelines are shown in Chart 2.



This exercise encompasses all criteria, leading to a weighted average ranking of each company. Researchers can then easily identify the company with the highest ranking. As a final step, the research team confirms the veracity of the model by ensuring 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.



Best Practice Award Analysis for Agilent

The Decision Support Matrix, shown in Chart 4, illustrates the relative importance of each criterion for the Company of the Year Award and the ratings for each company under evaluation. To remain unbiased while also protecting the interests of the other organizations reviewed, we have chosen to refer to the other key players as Competitor 1 and Competitor 2.

Chart 4: Decision Support Matrix for Company of the Year Award

Measurement of 1–10 (1 = lowest; 10 = highest)	Award Criteria					
	Growth Strategy Excellence	Growth Implementation Excellence	Degree of Innovation with Products and Technologies	Leadership in Customer Value	Leadership in Market Penetration	Weighted Rating
Relative Weight (%)	20%	20%	20%	20%	20%	100%
Agilent	9	9	10	10	9	9.4
Competitor 1	8	8	9	9	8	8.2
Competitor 2	7	8	8	8	7	7.6

Criterion 1: Growth Strategy Excellence

A leading provider of advanced Electronic Design Automation (EDA) software and test and measurement instruments for applications in electronics, communications and life sciences, Agilent has consistently maintained its position as the dominant participant in the global RF test equipment market. The company offers a broad range of products in this market, which include high-quality signal generators and signal creation software, spectrum and signal analyzers (with optional real-time analysis) and signal analysis software, network analyzers, oscilloscopes, logic analyzers, power meters and electronic counters. It offers both traditional and modular test equipment, which has contributed to sustain its leading position in the global market. Agilent's success can be primarily attributed to its longstanding dominating position in the market, the result of being first to market and its genuine focus on providing the most value to its customers by working closely with them. The company aims at remaining customers' preferred partner for RF by offering best-in-class technologies and advanced functionalities through its highly innovative solutions for both design and test. The company is the largest provider of electronic test solutions in the global market, as a result of its strong focus on technological innovation, along with its ability to address evolving customer needs. In addition to this, the company also has a strong global sales and service network that has provided it with an extensive global presence. Leveraging

these competitive strengths, which include technological excellence, focus on innovation, and global reach, Agilent operates with the primary goal of being the most productive and effective partner for its global customers.

Criterion 2: Growth Implementation Excellence

Striving to provide the most value possible to its global customers, Agilent focuses strongly on research and innovation. In 2012, the company increased its research and development (R&D) investments by 3 percent compared to 2011. Its significant investments in R&D have enabled the company to introduce easy-to-use test solutions that offer fast results even for the most complex test requirements in the RF market such as the X-Series signal generators and signal analyzers, and software for the most flexible signal creation and indepth signal analysis. In addition to test, Agilent continues to expand its EDA capabilities. Leveraging its extensive industry expertise, combined with its highly-skilled application engineers, Agilent continuously strives to develop as well as introduce new and innovative solutions to the market. Its global application engineers work closely with its customers to specifically identify individual customer needs and, if required, customize the test solutions accordingly. Agilent's engineers also extensively participate in standards committees, which help the company stay ahead of the newest technology trends and its competitors in introducing industry-first solutions, which are compliant with newly introduced or yet-to-beintroduced standards. Additionally, in an effort to support its customers globally, the company maintains a strong network of sales and technical support teams across the globe. Driven by such a strong focus on ensuring utmost customer satisfaction, Agilent has been able to build customer trust and gain their loyalty across the world.

Criterion 3: Degree of Innovation with Products and Technologies

The key strength of Agilent lies in its technological excellence. The company's strong skills in technical innovation enable it to offer one of the industry's most extensive and comprehensive ranges of traditional and modular RF test equipment. One of its key offerings in the RF test equipment space are the X-Series signal generators and signal analyzers. They are complementary sets of products that can be used in single channel mode and also be linked together for multichannel solutions, if required. They can work with both internal measurement application software and external software to support multiple measurement applications. The X-Series is also designed to be future-proof and can be upgraded to support new and emerging technologies. Another noteworthy offering of Agilent is its 89600 VSA Software, a highly advanced vector signal analysis software tool that provides complete visibility across signal interactions. Agilent has been using its 89600 VSA software for over a decade now to support more than 70 highly complex modulations types and standards, such as LTE-Advanced and IEEE 802.11ac. In addition to traditional test equipment, Agilent has also been introducing advanced and innovative test instruments in the modular space, which include signal generators, signal analyzers and signal processors. The fact that Agilent's software, such as the 89600 VSA, can be used in both its traditional as well as its modular test equipment, and with its EDA software, brings enhanced value and ease-of-use to its customers. With the rising complexity in testing, Agilent's customers

enjoy the benefit of using the same measurement software in both the traditional and the modular test instruments, without having to invest time and money on learning new software models. For EDA, in addition to ADS, one of the world's leading EDA software for RF/microwave and high-speed digital applications, the company offers SystemVue, which allows system architects to not only innovate and design wireless communication systems but also test them in pieces as prototypes become available. This is accomplished by using SystemVue in combination with test equipment, becoming a complete RF workflow environment. Such an advanced and comprehensive range of solutions allows Agilent to address almost all the major design and testing needs in wireless communications, enabling its customers to turn ideas into validated products faster.

Criterion 4: Leadership in Customer Value

Agilent constantly strives to enhance customer value through the regular introduction of new and innovative design software and test equipment. Leveraging its core skills in technological leadership, Agilent aims to design and introduce industry-first products in order to keep pace with the requirements coming from new standards and applications. It also focuses on constantly improving its solutions in order to make wireless design and testing quicker, simpler and more cost-effective. The company displays a strong dedication to work closely with its customers in order to better understand their requirements and challenges as well as collect their feedback. It also places significant importance on the customization of its products in line with individual customer requirements. Agilent's keen interest in delivering the most value to its customers through its technologically-advanced products and close customer relations, allows it to maintain its dominant position in the global RF test equipment market.

Criterion 5: Leadership in Market Penetration

Being a dominant player in the market, Agilent's position in the market can be primarily attributed to its technological brilliance and its strong customer-focused approach. A key strategy of Agilent to maintain its share in the global market has been to provide a complete product portfolio with multiple performance points that each run common application software, , plus delivering complete solutions verses independent components. Agilent's approach couples flexibility with a clear focus on accelerating measurement insight and maintaining measurement integrity. This approach has allowed Agilent's customers to focus on their development and deployment requirements with the reassurance that the test and measurement needs are completely addressed with the highest level of quality. Geographically, the company has an extensive presence across the world with the leading share of 26.9 per cent in the global RF test equipment market, as of 2011. The company also leads the traditional test equipment space with a share of 42 per cent, as of 2011. The traditional segment of the total RF test equipment markets represents the majority of the revenues currently and in the foreseeable future.

Conclusion

Agilent, a leading provider of advanced EDA software and wireless test and measurement instruments, has been consistently dominating the global RF test equipment market, resulting in a leading share of 26.9 per cent in 2011. The company stands out in this dynamic market through the combination of superior technological skills and strong customer relations across applications, from R&D to manufacturing to field. As a result, Agilent has been chosen as the worthy recipient of the 2012 Frost & Sullivan Company of the Year Award in the Global RF Test Equipment Market.

The CEO 360-Degree Perspective $^{\mathrm{TM}}$ - 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.

The CEO's 360-Degree Perspective™ Model



Critical Importance of TEAM Research

Frost & Sullivan's TEAM Research methodology represents the analytical rigor of our research process. It offers a 360-degree view of industry challenges, trends, and issues by integrating all seven of Frost & Sullivan's research methodologies. Our experience has shown over the years that companies too often make important growth decisions based on a narrow understanding of their environment, leading to errors of both omission and commission. Frost & Sullivan contends that successful growth strategies are founded on a thorough understanding of market, technical, economic, financial, customer, best practices, and demographic analyses. In that vein, the letters T, E, A and M reflect our core technical, economic, applied (financial and best practices) and market analyses. The integration of these research disciplines into the TEAM Research methodology provides an evaluation platform for benchmarking industry players and for creating high-potential growth strategies for our clients.

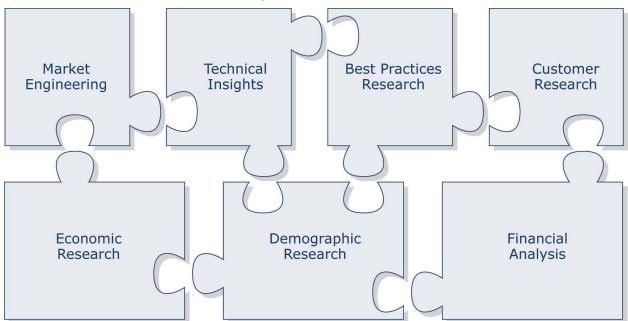


Chart 6: Benchmarking Performance with TEAM Research

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.