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BEST PRACTICES

AWARDS

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2020 BEST PRACTICES AWARD

DENSO

**2020 NORTH AMERICAN
AUTOMOTIVE AFTERMARKET
COMPANY OF THE YEAR AWARD**

Contents

<i>Background and Company Performance</i>	3
<i>Industry Challenges</i>	3
<i>Visionary Innovation & Performance and Customer Impact</i>	3
<i>Conclusion</i>	5
<i>Significance of Company of the Year</i>	6
<i>Understanding Company of the Year</i>	6
<i>Key Benchmarking Criteria</i>	7
<i>Visionary Innovation & Performance</i>	7
<i>Customer Impact</i>	7
<i>Best Practices Recognition: 10 Steps to Researching, Identifying, and Recognizing Best Practices</i>	8
<i>The Intersection between 360-Degree Research and Best Practices Awards</i>	9
<i>Research Methodology</i>	9
<i>About Frost & Sullivan</i>	9

Background and Company Performance

Industry Challenges

The global automotive aftermarket revenue increased by 4.2% in 2019, and it is expected to witness similar growth during 2020. While activity in mature markets such as the United States and Europe is slowing down, developing markets will provide momentum to the automotive aftermarket in 2020. This does not mean that the mature markets are not relevant because they are growing slowly; instead, these regions still constitute almost 38% of the overall global market. Within these markets, growth is visible in newer aftermarket categories emerging from the penetration of connected, autonomous, shared, and electrified (CASE) technologies in vehicle parc.

Connected vehicles provide new service opportunities from prognostics to diagnostics, even though the balance of power is skewed towards the original equipment manufacturers (OEMs) that have maximum access to data from their vehicles. Moreover, penetration of electronics in vehicle functionalities is largely driving vehicle connectivity, but this is complicating technicians' ability to service newer vehicles.

Frost & Sullivan recognizes that the independent aftermarket is at a disadvantage as a downstream stakeholder, and therefore exposure to newer electronic technologies is limited, further hampering the ability to effectively service these vehicles. Similar challenges are being witnessed from the penetration of alternate powertrains in electric and hybrid vehicles. Beyond the service side of the value chain, these vehicles have serious potential to reduce demand for various products in the aftermarket including fuel, lubricants, oils, and engine components. This shift poses a challenge for suppliers in how to sustain their business that relies specifically on internal combustion (IC) engine products.

Other aspects of CASE that create problematic aftermarket implications are the different levels of autonomy in vehicles that use multiple sensors and cameras to facilitate autonomous operations. The impact is twofold: On the one hand, the arrival of autonomous vehicles has potential to reduce the number of road accidents and therefore directly eats into collision repair workshop business; it also creates complications for the technician workforce by presenting newer products and new functionalities to manage. On the other hand, adoption of advanced automatic driver assistance systems (ADAS) open an opportunity for suppliers to diversify and invest in developing applications that support autonomous functionalities, from parts (including sensors) to tools and equipment for recalibrating them. Frost & Sullivan concludes that in this evolving automotive aftermarket landscape, suppliers have an opportunity to leverage change, and in fact improve it by targeting technician training and education programs to create a downstream advantage.

Visionary Innovation and Performance/Customer Impact

Enhancing Customer Ownership Experience with Focus on Customer Service

DENSO CORPORATION is a global OE supplier to many OEMs as well as a major aftermarket supplier of replacement parts. The company's product portfolio is extensive: product categories include powertrain systems, electronic systems, thermal systems, and

information and safety systems. In the aftermarket, DENSO offers a wide portfolio of parts covering maintenance, repair, collision, and accessories. Leveraging the strength of its diverse product categories, the company enjoys a strong position across different markets. This extended breadth of product portfolio offerings ensures that the company's solutions are relevant to a wide vehicle parc, which means DENSO is able to leverage the growth opportunity by addressing evolving aftermarket demands. Additionally, the company sells business-centric products to the aftermarket particular to refrigeration and air conditioning, another growing area as transportation and logistics requirements are picking up in both developed and developing markets, thus serving newer retail models.

Financial Performance

During 2019, DENSO amassed overall revenue of \$48.3 billion, with 5% YOY growth. In North America, the company's revenue for the same year was \$11.04 billion, with YOY growth almost matching that of global growth. Although new car sales fell by almost 5%, the company's overall business growth remained commendable. DENSO's operating margin declined as compared to the previous year, but this was due largely to its investments in production capacity expansion and research and development (R&D) activities. These investments will eventually contribute to more robust revenue growth and improvements in the operating margin over the long run.

Also in 2019, DENSO's global revenue from aftermarket and non-automotive businesses was calculated at \$5.5 billion, growing at 2.3% YOY. Looking at historical performance, company revenues grew at a CAGR of 5.9% over the last 5 years. North America constitutes almost 22% of the automotive revenues for DENSO, and the region's contribution to the aftermarket revenues is no less.

Visionary Scenarios through Mega Trends and Addressing Unmet Needs

While aftermarket demand in North America is largely fueled by the ageing vehicle parc, presently at its peak as compared to past years, the market is also getting disrupted in more ways than one. Vehicle designs are advancing at a swift pace, with the addition of new electronic functionalities. These include telematics-focused connected car applications, ADAS-equipped autonomous applications, and alternate powertrain solutions for electric and hybrid vehicles. All these changes directly challenge the traditional OE suppliers to innovate and evolve their portfolios.

DENSO has been up for the challenge by developing sensor applications that form the core of ADAS-related functionalities, such as LIDAR and vision sensors; similarly, in tackling the market challenge of shifting towards alternate powertrain solutions, the company's portfolio has diversified and now includes relevant control units, motor generators, and battery monitoring units. DENSO's future sightedness is not limited to its OE supply channel alone; in fact, it has been developing downstream capabilities accordingly for the aftermarket as well. This includes training its employees to up-skill them for newer applications like Internet of Things (IoT) and autonomous vehicles. In fact, the company invested \$1.95 million in a facility in Michigan (US) last year dedicated to such training operations.

This new training facility supplements an elaborate training platform that the company operates, 'DENSO Auto Care'. The program provides trainings both online and in classrooms for technicians on vehicle repair and servicing. Frost & Sullivan recognizes that this technician training best practice positions DENSO to not only drive its brand closer to its channel partners, but also to address a prominent unmet need arising from the gap in skillset between the OE and independent aftermarket workforce. The curriculum offered in these training programs is structured and specialized, targeting a variety of functionalities; for example, its DENSO Electric Drive trains technicians on hybrid and electric vehicle technology.

Brand Equity

DENSO has extensive experience servicing the OE sector, supplying original parts to car manufacturers for more than 65 years. Company products cater not just to the automotive market, but also cover non-automotive applications like agriculture equipment, medical devices, logistics, and security systems. In the aftermarket, DENSO has been supplying parts for the majority of OEM brands since 1972. With its long-standing OE supply relationships, the company has been able to consistently deliver OE-quality products to the aftermarket, covering a variety of makes and models. As an OE supplier, the company is able leverage its innovative capabilities in design and development, thereby bringing newer products to the aftermarket much faster than many of its competitors are able to achieve. Also, its learning from the OE experience is further extended to continually advance products for the aftermarket, including design changes and use of high-quality materials in spark plugs.

DENSO's 'First Time Fit' promise is a testimony to the confidence that the company has in its products, guaranteeing a successful product match upon initial installation by technicians. Such accuracy in design ensures quality fit and performance while subsequently saving technicians effort and time. Frost & Sullivan lauds the company's excellence in manufacturing processes and quality norms, recognizing DENSO strongly publicizes this promise to enhance its brand equity.

Conclusion

Frost & Sullivan celebrates DENSO for effectively leveraging its long-standing OE supply presence by extending capabilities to the aftermarket and consistently delivering high-quality products. The company's commitment to providing OE quality products has resulted in increasing demand for its solutions over the years. DENSO has not limited itself to remain a traditional parts supplier, and in fact has diversified to keep pace with the latest trends in the automotive industry. This far sightedness paired with its keen ability to strategize led the company to invest in equipping technicians with the latest skills and technological know-how, thereby leading the industry in preparing the aftermarket to properly address the challenges and opportunities emerging from newer vehicle designs.

For its strong overall performance, DENSO CORPORATION is recognized with Frost & Sullivan's 2020 Company of the Year Award.

Significance of Company of the Year

To receive the Company of the Year Award (i.e., to be recognized as a leader not only in your industry, but among non-industry peers) requires a company to demonstrate excellence in growth, innovation, and leadership. This excellence typically translates into superior performance in three key areas—demand generation, brand development, and competitive positioning—that serve as the foundation of a company’s future success and prepare it to deliver on the 2 factors that define the Company of the Year Award: Visionary Innovation and Performance, and Customer Impact).



Understanding Company of the Year

Driving demand, brand strength, and competitive differentiation all play critical roles in delivering unique value to customers. This three-fold focus, however, must ideally be complemented by an equally rigorous focus on Visionary Innovation and Performance to enhance Customer Impact.

Key Benchmarking Criteria

For the Company of the Year Award, Frost & Sullivan analysts independently evaluated each factor according to the criteria identified below.

Visionary Innovation & Performance

Criterion 1: Addressing Unmet Needs

Requirement: Implementing a robust process to continuously unearth customers' unmet or underserved 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 opportunity solutions.

Criterion 3: 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 4: Blue Ocean Strategy

Requirement: Strategic focus on 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 revenue, 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 they are buying the 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.

Best Practices Recognition: 10 Steps to Researching, Identifying, and Recognizing Best Practices

Frost & Sullivan analysts 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 world	<ul style="list-style-type: none"> • Conduct in-depth industry research • Identify emerging industries • Scan multiple regions 	Pipeline of candidates that potentially meet all best practices 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 practices 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	<ul style="list-style-type: none"> • Confirm best practices 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 practices 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 practices 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 practices criteria
9 Communicate recognition	Inform award recipient of 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 able to 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 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 the 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, resulting in 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 participants 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, helps clients 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 practices models to drive the generation, evaluation, and implementation of powerful growth strategies. Frost & Sullivan leverages nearly 60 years of experience in partnering with Global 1000 companies, emerging businesses, and the investment community from 45 offices on 6 continents. To join Frost & Sullivan's Growth Partnership, visit <http://www.frost.com>.