QUALITY

The rating of a car and the value of an auto manufacturer’s brand are dependent on the customer’s appraisal of quality. A company can reinforce its brand by continually providing the value customers expect, but failing to meet expectations even once makes it harder to maintain a platform for providing new value to those customers.

Mobility needs are rising in the face of structural changes in the global economy, engendered by increased urbanization in countries around the world. Nissan is expanding production to fulfill its mission of offering people worldwide the rich benefits of mobility. At the same time, it believes that automakers have an important responsibility to constantly offer customers the kind of quality with which they will be satisfied.

Nissan aims to be a company trusted by its customers by addressing quality as a companywide issue. The company seeks to provide top-level quality to customers at every stage, from the planning of new vehicles through development, manufacturing, distribution and sales to after-sales service.

Customer feedback received by Nissan’s customer call center (Japan):

180,000 customer inquiries
Nissan makes year-round use of the CSR scorecard as a fundamental tool to manage, review and validate its progress in each of the sustainability strategies defined for its CSR activities. The table below shows some of the values behind Nissan’s ongoing activities and the indices used in the scorecard to gauge the company’s performance.

<table>
<thead>
<tr>
<th>Nissan Priorities</th>
<th>Nissan Objectives</th>
<th>Indicators of Progress</th>
<th>FY2014 Results</th>
<th>FY2015 Results</th>
<th>Assessment</th>
<th>Action Planned for Next Year Onward</th>
<th>Long-Term Vision</th>
</tr>
</thead>
</table>
| **Product quality**       | Under quality improvement goals of Nissan Power 88, make Infiniti a leading luxury brand and make Nissan a leading global automotive brand by FY2016 | Achievement of high scores in external indicators published by third-party organizations, including magazines and other media sources | North America: Consumer Reports and J.D. Power IQS/VDS | • U.S.: 7 models were recommended in Consumer Reports  
• U.S.: Juke, Infiniti QX60 and Infiniti QX70 took the top spots, while Murano, Z, Maxima, Frontier and Infiniti QX70 ranked in the top 3 in the J.D. Power IQS segment | - | Further strengthen quality improvement activities for new and existing models under the leadership of the Executive Vice President for quality | Strive for the top level in quality from the customer’s perspective |
|                          |                                                                                  |                                                                                        | In Europe: U.K.: What Car? Germany: ADAC Italy: Quattroruote | • U.K.: Note earned 4 stars while Qashqai and Juke earned 3 stars in What Car? | - | - | - |
|                          |                                                                                  |                                                                                        | In other regions: China: J.D. Power IQS/VDS South Africa: Ipsos PSI Brazil: Quatro Rodas India: J.D. Power IQS | • South Africa: NP200 and Micra ranked 1st, and Navara ranked 2nd in each Ipsos PSI segment  
• India: Micra ranked 4th and Terrano 3rd in each segment in J.D. Power IQS  
• China: Sunphy ranked 2nd in its segment in J.D. Power IQS | - | - | - |
|                          |                                                                                  |                                                                                        | Japan: J.D. Power IQS | • Japan: DAZY ROOX and Nissan LEAF ranked 2nd in each segment in J.D. Power IQS | - | - | - |
|                          |                                                                                  |                                                                                        | North America & Asia: J.D. PowerSSI/CSI Europe: G6K SSI and TNS CSI Mexico & Brazil: Ipsos SSI/CSI | Maintained Top-Level Quality in Japan, China and Mexico; implemented kaizen actions in ASEAN and India—where levels were below industry average—and other major markets with the goal of attaining Top-Level Quality | - | - | - |
|                          |                                                                                  |                                                                                        | Maintained Top-Level Quality in Japan, China and Mexico; went from below industry average in sales field to Top-Level Quality in India; improved to industry average level in ASEAN | Maintained Top-Level Quality in Japan, China and Mexico; went from below industry average in sales field to Top-Level Quality in India; improved to industry average level in ASEAN | - | - | - |
|                          |                                                                                  |                                                                                        | Systemize and standardize best practices in countries that have already attained Top-Level Quality to raise quality levels in other countries; grasp customer feedback earlier and accelerate initiatives leading to improvement | Maintain Top-Level Quality for sales and service | - | - | - |
There are many aspects to quality. Nissan seeks to provide high quality at all stages of the customer experience. To achieve this, Nissan pursues effective companywide cooperation at the cross-functional and cross-regional levels.

In 2011, Nissan announced its "Enhancing Quality" program, spelling out clear quality-related goals and methods that are to be achieved by fiscal 2016. Nissan aims to be recognized by customers as a brand with top-level quality. The company is working on both product quality and sales and service quality with the aim of reaching the top level in every region globally.

The product quality of a vehicle is fundamental for a customer to use it safely and comfortably over the long term. Nissan aims to provide a high level of quality that meets customer expectations during the entire lifecycle of a vehicle. This includes the perceived quality when a customer opens the vehicle door in the showroom, sits in the seat and takes a test drive; the initial quality in the first year after purchase; and the durability that remains even after many years of use.

Nissan also conducts initiatives to increase customer satisfaction (CS) in the area of sales and service quality. The company aims to exceed expectations at every customer contact point, from visiting dealerships, purchasing a car and receiving maintenance to when the customer decides to replace the car.

Nissan listens to customers and reflects their feedback in every process throughout the company in its pursuit of customer satisfaction.

Quality is a means of displaying how successfully Nissan interacts with its customers. The aim is to provide the value that customers expect and to respond rapidly if they are not satisfied. The company listens to all feedback, reflecting it in measures to improve quality at every stage—from vehicle design and development to after-sales service.

Rapid Response to Customer Feedback
Nissan responds to customer comments and questions worldwide through a range of methods, such as points of contact at dealers, call centers and surveys.

Nissan's customer call center in Japan annually receives approximately 180,000 cases of comments and questions from customers. All catalogs, instruction manuals and similar materials published in the last 50 years have been digitized for easy searching, letting operators address customer concerns as quickly as possible. Operators also have access to a database of frequently asked questions and their answers, organized by vehicle models, keywords and categories.

Employees who buy Nissan vehicles are also customers and important stakeholders. The "Quality Listening Box" on the company intranet lets employees actively contribute information to raise the quality of products and services.

Sharing Customer Feedback
Opinions and comments received by the customer call center in Japan are anonymized and shared companywide on the intranet, where employees can access and view the database at any time. At the same time, the information is promptly sent by email to executives and senior managers.

A space has also been set aside within the company for all employees to freely view customer feedback whenever they like, so they can reflect customer perspectives in the pursuit of their duties. In addition to details on comments and inquiries dealt with by the customer call center, this space features opinions, wishes and encouraging words of praise received directly from customers by CAs, or car-life advisors, at dealers.
Reflecting Customer Feedback in Products and Services
Nissan has implemented a system for reflecting customer feedback in its products and services. The feedback is put to work through reliable information sharing among all functions, including product planning, R&D, manufacturing and sales.

Vehicle quality involves more than just mechanical faults: It includes all factors that may affect customer satisfaction (CS). Nissan sees these factors as issues requiring action and strives to improve quality in all these areas.

The value that customers expect from vehicles varies according to their personal tastes and unique expectations, and can be affected by such market factors as the level of car ownership or the climate in a certain market. Although Nissan uses a set of basic specifications for global design, it also makes adjustments to meet regional needs. The Chief Quality Engineer (CQE) performs this role, working to enhance CS and reduce defects by participating in the vehicle manufacturing process from the product planning stage. Nissan gleans customer perspectives from market information and employee monitors. Priorities are set from the planning and development stages to consider responses that will be reflected in products and services.

Developing a CS Mindset
To improve quality across the company, all employees must consider the customer's perspective and keep CS in mind as they work. For this reason, Nissan implements regular CS training.

The training covers quality policy in the Nissan Group and quality improvement measures, incorporating actual feedback from customers in group discussions. Nissan lets employees discuss what the company can do for customers and what action is necessary in the current situation, thus fostering a quality-improvement mindset rooted in CS among individual employees. The training is currently offered in Japan, the United States, Europe, China and Asia and Oceania, with further expansion ongoing.

The company has held the Nissan Quality Forums for executives, employees and suppliers since 2003. These forums use information displays, video presentations and actual vehicles and parts to showcase Nissan's latest status on quality, customer feedback and activities aimed at meeting targets. Almost 10,000 participants reaffirm the importance of quality at these annual forums, which are organized cross-functionally by the Total Customer Satisfaction Function (TCSX) and the R&D, manufacturing, sales/service and other divisions in order to raise all employees' awareness of CS and quality-improvement issues. The forums take place in Japan, the United States, Mexico, the United Kingdom, Russia, China, Thailand, Indonesia and other locations around the world.

Securing Future Quality Through Training
Mechanics play a prominent part in connecting Nissan with customers. There are five Nissan Automobile Technical Colleges in Japan—in Yokohama, Kyoto, the prefectures of Tochigi, Aichi and Ehime—which train budding mechanics. The executive responsible for quality visits them to teach the students about Nissan’s philosophy and various initiatives related to quality and to pass down to them the inherent qualities, or “DNA,” that Nissan hopes to see in its employees.

Product quality is a basic feature in allowing customers to use a vehicle safely and comfortably over the long term. For Nissan, a leading automaker with a strong level of *monozukuri*, Japan’s tradition of careful craftsmanship, the product quality of its vehicles is the foundation for its sustainability as a company. Nissan considers quality from the customer’s perspective at all times and responds quickly in case a defect occurs, making efforts to prevent a recurrence so as not to inconvenience the customer. The company ascertains customer dissatisfaction and addresses it through all possible means. Product quality is being improved to increase customers’ satisfaction.

Within product quality, Nissan includes perceived quality, initial quality and durability. Quality improvement efforts target the entire lifecycle of a vehicle, from planning and design to R&D, manufacturing, distribution, sales and after-sales service. Nissan monitors the results of third-party quality surveys for use as internal indices and makes improvements throughout the PDCA (plan, do, check, act) cycle.
Product Quality Assessments by External Bodies
Nissan uses the results of third-party quality surveys as internal indices, applying them in improving the manufacturing of its vehicles. The company has set high-level indices and is striving to achieve them in each of the regions in which it operates.

Perceived Quality
Perceived quality is the quality that customers feel when seeing, touching and operating a vehicle. For example, when customers come to the showroom they open the vehicle doors, sit in the seats and check things like the texture of interior fittings.

The feeling of quality is a subjective matter, and fixing quantified criteria requires very careful investigation. To define criteria for quality evaluation from the customer's point of view, Nissan evaluates cars using the opinions of numerous employee product monitors and specialists with in-house training. The company also surveys customers who have purchased or are considering purchasing a Nissan car.

The company is now working to gain a better understanding of customers' perceptions in different markets around the world while reflecting those perceptions in new vehicles from the development stage. Nissan scientifically measures and analyzes customer perceptions to gain a quantitative grasp of what makes people feel good. This information shapes the company's specific design targets.

Improving Initial Quality
Initial quality issues involve defects that occur within a year of a new car purchase. Nissan has endeavored to reduce defects by establishing internal indices showing the frequency of defect claims within 3 and 12 months following sales.

To ensure that customers are satisfied, Nissan maintains a firm commitment to enhancing quality at the manufacturing stage for every single vehicle that comes off the line. Toward this end, Nissan has implemented the Alliance Production Way as its fundamental approach in this area. The Chief Vehicle Engineer, responsible for development, and the CQE meet to share information from the market in order to promptly respond to customers' wishes and potential satisfaction concerns.

The company confirms quality improvements for each process and considers the necessary risk-reduction measures by visualizing potential risks at the planning stage. As a result of these activities, in Japan the Nissan LEAF was selected as the best vehicle in the midsize segment of the J.D. Power Initial Quality Study, a benchmark among automakers for measuring new vehicle quality.

By advancing all these processes with transparent criteria, Nissan can ensure the high quality of new models from the outset.

Enhancing Durability
Product life is affected by durability issues that can arise from long vehicle use: molded resin parts changing color or deforming, surface materials becoming abraded, chrome stripping away and material fatigue producing odd noises in the vehicle. Nissan consistently obtains data for the two to four years after the initial sale during the warranty period and conducts quality checks on recovered vehicles and parts actually used by customers for the early identification of defects. Analysis of such data contributes to the development of technologies that are more resistant to durability issues.

Working with Suppliers to Improve Product Quality
As Nissan's production network expands worldwide, there is greater risk of problems arising related to quality and supply of parts in the areas of operation. The company works with suppliers to improve quality at all production sites from the parts design stage onward to help ensure product quality.

Nissan is promoting stronger global management for the head offices of its suppliers with global operations and working to enhance its own global quality management. When suppliers fall short of Nissan standards in their production control or quality control during the manufacturing process, the company offers support for their improvement efforts by visiting the shop floor and seeing what is actually happening.

Nissan has also prepared checklists based on successful resolution of past issues. The company is implementing various quality-improvement measures by working not only with its direct suppliers but also with its tier-2 suppliers.
Swift Improvement of Quality in Local Markets
Nissan is strengthening direct communication with sales companies and customers to promptly identify and respond to customer dissatisfaction and defects. The Total Customer Satisfaction Function (TCSX) addresses customer dissatisfaction and quality issues based on information from sales companies and the customer call center. It shares the information with the R&D and manufacturing divisions to investigate the causes and come up with countermeasures. The countermeasures are reflected on the production models in the market. In this way, Nissan seeks permanent solutions in order to prevent additional issues.

The global expansion of Nissan’s corporate activities has increased the company’s exposure to potential customer dissatisfaction and quality issues in many more regions of the world. Nissan established its Field Quality Centers (FQCs) with the goal of promptly gaining an understanding of quality issues and analyzing the causes. There are now 11 FQCs in operation in Japan, the United States, Europe, China, Mexico, Brazil, South Africa, India, Australia, Indonesia and Malaysia.

The centers conduct market quality research and analysis in five phases. First, they recall problem products from the market to clarify the facts and conduct detailed interviews to replicate the defects. Second, they bring suppliers together with the company’s R&D and manufacturing personnel to share information, to decide on areas for further investigation and to assign responsibilities. Based on the findings of the detailed studies, all staff members gather again to scientifically pinpoint the cause of problems and decide on specific countermeasures. These measures are incorporated in future R&D and manufacturing activities and in building new management structures to prevent recurrence of reliability issues or incidents.

Producing Products of Consistent Quality Worldwide
Nissan has adopted the 4G Strategies to produce high-quality products globally. These strategies enable Nissan to quickly create optimum production structures for providing consistently high-quality products to customers around the world.

Nissan’s 4G Strategies

Global Production Engineering Center (GPEC)
The GPEC develops optimized production processes through focused trials and analysis of new vehicles. In addition to dramatically improving quality in the vehicle production preparation stage, it strives to establish quality consistency globally by spreading high quality standards to manufacturing plants in and outside Japan.

Global Packaging Design Center (GPDC)
The GPDC functions as a training center for developing logistics specialists to work at manufacturing bases. Training includes parts packaging design, packaging testing and evaluation methods, CAD and optimum logistics cost management to maintain high quality.

Global Training Centers (GTCs)
Manufacturing quality and productivity depend greatly on the skills of individual workers. To raise these skills to a competitive level in Nissan’s plants worldwide, the GTCs carry out training through classroom lectures and skills training activities based on the Alliance Production Way. Graduates of the Master Trainer programs take part in training programs for local staff in regional training centers, effectively passing their skills on to others.

Global Launching Experts (GLEs)
GLEs provide support in resolving issues related to monozukuri (production) that arise in the new vehicle launch phase. Nissan is meeting QCT (quality, cost, time) targets for each new vehicle launch thanks to the evaluations and advice from GLE core members and the support of GLE registered members.
Fair and Swift Action on Major Quality Issues

Nissan’s primary responsibility as a manufacturer is to make every effort to ensure that product issues do not occur in the first place. Another duty is to ensure that vehicles, which are extraordinarily complex industrial products, are manufactured to be as ready as possible for various eventualities. Nissan’s approach is to conduct recalls transparently and to handle them fairly and promptly. The decision to conduct a recall is based on the company’s compliance with relevant laws and consideration of how the issue may affect customers’ safety. When a recall is judged to be necessary, Nissan implements it swiftly, placing top priority on customers’ safety and on minimizing disruption to their lives.

Nissan’s robust recall decision process has received high praise from the U.S. Department of Transportation as a model for the automotive industry, and has already been implemented at all operation sites worldwide.

The Nissan Sales and Service Way

Nissan has established the Nissan Sales and Service Way (NSSW) as a set of global guidelines. These aim to improve customer perceptions of Nissan’s brands and products, as well as to increase satisfaction with its sales and marketing activities and after-sales service. The company conducts a range of activities to increase customer satisfaction and to improve sales and service quality based on the NSSW. These activities include dealer training to improve product knowledge, technical capability and customer handling, as well as the provision of guidance to improve dealership operations in response to customer satisfaction surveys. Nissan is also developing personnel and systems to put these improvements into place and to focus its operations even more on customer needs, with care given to feedback collected through call centers and other channels.

Nissan carries out these initiatives globally while keeping in mind differences in cultural conditions and customs across countries and regions. The company strives to provide the best customer service during the purchase and ownership experiences.

SALES AND SERVICE QUALITY

While targeting high quality in its vehicles, Nissan works to increase the quality of its sales and service to customers in the buying process. The goal is to exceed customer expectations at all contact points. Through effective management of sales and service quality at sales companies in major national markets around the world, Nissan strives to improve customer satisfaction (CS). Based on the Nissan Sales and Service Way (NSSW) principles, the company’s goal is to achieve top-level CS in 16 key national markets including Japan, the United States and major European markets, thereby boosting its brand image worldwide.

Customer Sales and Service Evaluation

To deliver top-level sales and service quality, the purchase and service experience of Nissan car owners must be analyzed objectively. Studies are implemented based on third-party surveys in each national market.

Nissan has set J.D. Power’s Sales Satisfaction Index (SSI; covering such items as delivery process, delivery timing and sales staff) and Customer Service Index (CSI; including service quality, vehicle pick-up and service advisors) as internal indicators. In fiscal 2015, Nissan maintained top levels for SSI in Japan, China and Mexico, and for CSI in Japan and Mexico.

Improving Dealership Operations

To ensure thorough application of NSSW guidelines at a global level and to boost the quality of sales and service activities at dealerships, Nissan trains specialist staff and makes continual improvements to these activities. The company has started training experts at sales companies tasked with enhancing operations by instructing them on appropriate customer relations practices.

These specialists gain an accurate picture of what takes place on dealership sales floors, supporting dealers with measures fitted to their individual situations. They also visit dealerships after analyzing SSI and CSI surveys and identifying customer sentiment, clarifying the issues by observing workplace operations and interviewing on-site staff. They then discuss potential solutions with the staff and provide guidance so these outlets can make autonomous improvements.
New Tools for Supporting Dealerships
Nissan dealerships aim to provide easy-to-understand information so that customers can make decisions on the models they are considering with comprehensive knowledge of the vehicles’ appeal. Outlets also endeavor to quickly and accurately grasp customers’ repair and inspection needs after purchase. There has recently been room for improvement, though, with dealer actions failing at times to satisfy customers due to repetitious questions, long waiting times and complicated explanations.

Nissan reviewed its new vehicle purchase and repair processes from a customer perspective, introducing digital tools to support dealership operations. For example, dealers previously referred to a standard catalog when explaining vehicle functions at the time of delivery. Now, digital tools enable customers to select functions they wish to know about, enabling more comprehensive, effective and efficient explanations. Nissan strives to implement meticulous service tailored to customer needs throughout the entire process of purchasing a vehicle or bringing it in for repair or inspection.

Establishing Global Dealership Standards
To meet changes in customers’ expectations of dealerships and purchasing behavior, Nissan is making improvements to sales facilities, as well as their service approaches and other intangible aspects. The Nissan Retail Environment Design Initiative (NREDI) 2.0 is a newly developed global standard for the next generation of dealerships under the Nissan brand.

The company has overhauled dealership design and layout with an eye on addressing customer dissatisfaction with existing stores, responding to diversifying needs and boosting brand appeal. Nissan is integrating these overhauls with a rethinking of other points of customer contact, such as its website, as well as intangible systems and services in dealerships. It aims to create attractive dealerships for all customers—whether they have come to purchase a new car or to get a vehicle inspected or serviced—that are comfortable, welcoming places to spend time while also offering needed services as efficiently as possible.

Nissan’s goal is to provide its customers with dealership experiences of globally consistent high quality. New outlet construction has begun as a pilot scheme in major markets; the new standard will be progressively rolled out worldwide.