
Quality is More Than Making a Good Product

Hiroataka Takeuchi and John A. Quelch



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Corporate executives and consumers have in recent years adopted divergent views of product quality. Several recent surveys indicate how wide the quality perception gap is:

- Three out of five chief executives of the country's largest 1,300 companies said in a 1981 survey that quality is improving; only 13% said it is declining.¹ Yet 49% of 7,000 consumers surveyed in a separate 1981 study said that the quality of U.S. products had declined in the past five years. In addition, 59% expected quality to stay down or decline further in the upcoming five years.²
- Half the executives of major American appliance manufacturers said in a 1981 survey that the reliability of their products had improved in recent years. Only 21% of U.S. consumers expressed that belief.³
- Executives of U.S. auto manufacturers cite internal records that show quality to be improving each year. "Ford quality improved by 27% in our 1981 models over 1980 models," said a Ford executive.⁴

Messrs. Takeuchi and Quelch are assistant professors of marketing at the Harvard Business School. They wrote a previous HBR article, "Nonstore Marketing: Fast Track or Slow?" (July–August 1981). Mr. Takeuchi also wrote, with Allan H. Schmidt, "New Promise of Computer Graphics" for the January–February 1980 issue, and Mr. Quelch also wrote "It's Time to Make Trade Promotion More Productive" for the May–June 1983 issue.

Editor's note: All references are listed at the end of the article.

But surveys show that consumers perceive the quality of U.S. cars to be declining in comparison with imported cars, particularly those from Japan.

Mindful of this gap, many U.S. companies have turned to promotional tactics to improve their quality image. Such efforts are evident in two trends. The first is the greater emphasis advertisements place on the word *quality* and on such themes as reliability, durability, and workmanship. Ford, for instance, advertises that "quality is job one," and Levi Strauss proffers the notion that "quality never goes out of style." And many ads now claim that products are "the best" or "better than" competitors'.

The second trend is the move to quality assurance and extended service programs. Chrysler offers a five-year, 50,000 mile warranty; Whirlpool Corporation promises that parts for all models will be available for 15 years; Hewlett-Packard gives customers a 99% uptime service guarantee on its computers; and Mercedes-Benz makes technicians available for roadside assistance after normal dealer service hours.

While these attempts to change customer perceptions are a step in the right direction, a company's or a product's quality image obviously cannot be improved overnight. It takes time to cultivate customer confidence, and promotional tactics alone will not do the job. In fact, they can backfire if the claims and promises do not hold up and customers perceive them as gimmicks.

To ensure delivery of advertising claims, companies must build quality into their products or services. From a production perspective, this means a companywide commitment to eliminate errors at every stage of the product development process—product design, process design, and manufacturing. It also means working closely with suppliers to eliminate defects from all incoming parts.

Equally important yet often overlooked are the marketing aspects of quality-improvement programs. Companies must be sure they are offering the benefits customers seek. Quality should be primarily customer-driven, not technology-driven, production-driven, or competitor-driven.

In developing product quality programs, companies often fail to take into account two basic sets of questions. First, how do customers define quality, and why are they suddenly demanding higher quality than in the past? Second, how important is high quality in customer service, and how can it be ensured after the sale?

As mundane as these questions may sound, the answers provide essential information on how to build an effective customer-driven quality program. We should not forget that customers, after all, serve as the ultimate judge of quality in the marketplace.

The Production-Service Connection

Product performance and customer service are closely linked in any quality program; the greater the attention to product quality in production, the fewer the demands on the customer service operation to correct subsequent problems. Office equipment manufacturers, for example, are designing products to have fewer manual and more automatic controls. Not only are the products easier to operate and less susceptible to misuse but they also require little maintenance and have internal troubleshooting systems to aid in problem identification. The up-front investment in quality minimizes the need for customer service.

Besides its usual functions, customer service can act as an early warning system to detect product quality problems. Customer surveys measuring product performance can also help spot quality control or design difficulties. And of course detecting defects early spares later embarrassment and headaches.

Quality-improvement successes

It is relevant at this point to consider two companies that have developed successful customer-driven quality programs: L.L. Bean, Inc. and Caterpillar

Tractor Company. Although these two companies are in different businesses—L.L. Bean sells outdoor apparel and equipment primarily through mail-order while Caterpillar manufactures earth-moving equipment, diesel engines, and materials-handling devices, which it sells through dealers—both enjoy an enviable reputation for high quality.

Some 96.7% of 3,000 customers L.L. Bean recently surveyed said that quality is the attribute they like most about the company. Bean executes a customer-driven quality program by:

- Conducting regular customer satisfaction surveys and sample group interviews to track customer and noncustomer perceptions of the quality of its own and its competitors' products and services.
- Tracking on its computer all customer inquiries and complaints and updating the file daily.
- Guaranteeing all its products to be 100% satisfactory and providing a full cash refund, if requested, on any returns.
- Asking customers to fill out a short, coded questionnaire and explain their reasons for returning the merchandise.
- Performing extensive field tests on any new outdoor equipment before listing it in the company's catalogs.
- Even stocking extra buttons for most of the apparel items carried years ago, just in case a customer needs one.

Despite recent financial setbacks, Caterpillar continues to be fully committed to sticking with its quality program, which includes:

- Conducting two customer satisfaction surveys following each purchase, one after 300 hours of product use and the second after 500 hours of use.
- Maintaining a centrally managed list of product problems as identified by customers from around the world.
- Analyzing warranty and service reports submitted by dealers, as part of a product improvement program.
- Asking dealers to conduct a quality audit as soon as the products are received and to attribute defects to either assembly errors or shipping damages.
- Guaranteeing 48-hour delivery of any part to any customer in the world.
- Encouraging dealers to establish side businesses in rebuilding parts to reduce costs and increase the speed of repairs.

How Do Customers Define Quality?

To understand how customers perceive quality, both L.L. Bean and Caterpillar collect much informa-

tion directly from them. Even with such information, though, pinpointing what consumers *really* want is no simple task. For one thing, consumers cannot always articulate their quality requirements. They often speak in generalities, complaining, for instance, that they bought "a lemon" or that manufacturers "don't make 'em like they used to."

Consumers' priorities and perceptions also change over time. Taking automobiles as an example, market data compiled by SRI International suggest that consumer priorities shifted from styling in 1970 to fuel economy in 1975 and then to quality of design and performance in 1980.⁵ (See *Exhibit I*.)

In addition, consumers perceive a product's quality relative to competing products. As John F. Welch, chairman and chief executive of General Electric Company, observed, "The customer...rates us better or worse than somebody else. It's not very scientific, but it's disastrous if you score low."⁶

One of the major problems facing U.S. automobile manufacturers is the public perception that imported cars, particularly those from Japan, are of higher quality. When a 1981 *New York Times*-CBS News poll asked consumers if they thought that Japanese-made cars are usually better quality than those made here, about the same, or not as good, 34% answered better, 30% said the same, 22% said not as good, and 14% did not know. When the Roper Organization asked the same question in 1977, only 18% said better, 30% said the same, 32% said not as good, and 20% did not know.⁷

Further, consumers are demanding high quality at low prices. When a national panel of shoppers was asked where it would like to see food manufacturers invest more, the highest-rated response was "better quality for the same price."⁸ In search of such value, some consumers are even chartering buses to Cohoes Manufacturing Company, an apparel specialty store located in Cohoes, New York that has a reputation

for offering high-quality, designer-label merchandise at discount prices.

Consumers' perceptions of product quality are influenced by various factors at each stage of the buying process. Some of the major influences are listed in *Exhibit II*.

Watching for key trends

What should companies do to improve their understanding of customers' perspectives on quality? We know of no other way than to collect and analyze internal data and to monitor publicly available information.

Internally generated information is obtained principally through customer surveys, interviews of potential customers (such as focus group interviews), reports from salespeople, and field experiments. Recall how L.L. Bean and Caterpillar use these approaches to obtain data on how their current and potential customers rate their products' quality versus those of competitors'.

Publicly available information of a more general nature can be obtained through pollsters, independent research organizations, government agencies, and the news media. Such sources are often helpful in identifying shifts in societal attitudes.

Companies that try to define their customers' attitudes on product and service quality often focus too narrowly on the meaning of quality for their products and services; an understanding of changing attitudes in the broader marketplace can be equally valuable.

Toward the end of the last decade, too many U.S. companies failed to observe that the optimism of the mid-1970s was increasingly giving way to a mood of pessimism and restraint because of deteriorating economic conditions. Several polls taken during the

Exhibit I Changes in the importance to customers of U.S. automobile characteristics			
	1970	1975	1980
1	Styling	Fuel economy	Quality
2	Value for money	Styling	How well-made
3	East of handling and driving	Prior experience with the make	Fuel economy
4	Fuel economy	Size and weight	Value for money
5	Riding comfort	East of handling and driving	Riding comfort

Exhibit II Factors influencing consumer perception of quality*

Before purchase	At point of purchase	After purchase
Company's brand name and image	Performance specifications	Ease of installation and use
Previous experience	Comments of salespeople	Handling of repairs, claims, warranty
Opinions of friends	Warranty provisions	Spare parts availability
Store reputation	Service and repair policies	Service effectiveness
Published test results	Support programs	Reliability
Advertised price for performance	Quoted price for performance	Comparative performance

*Not necessarily in order of importance.

1970s indicated the nature and extent of this shift,⁹ for instance, Gallup polls showed that while only 21% of Americans in the early 1970s believed “next year will be worse than this year,” 55% held this pessimistic outlook by the end of the 1970s.

Pessimistic about what the future held, consumers began adjusting their life-styles. The unrestrained desire during the mid-1970s to buy and own more gave way to more restrained behavior, such as “integrity” buying, “investment” buying, and “life-cycle” buying.

Integrity purchases are those made for their perceived importance to society rather than solely for personal status. Buying a small, energy-efficient automobile, for example, can be a sign of personal integrity. Investment buying is geared toward long-lasting products, even if that means paying a little more. The emphasis is on such values as durability, reliability, craftsmanship, and longevity. In the apparel business, for example, more manufacturers have begun stressing the investment value of clothing. And life-cycle buying entails comparing the cost of buying with the cost of owning. For example, some might see a \$10 light bulb, which uses one-third as much electricity and lasts four times as long as a \$1 conventional light bulb, as the better deal.

These changes in buying behavior reflect the pessimistic outlook of consumers and their growing emphasis on quality rather than quantity: “If we’re going to buy less, let it be better.”

By overlooking this fundamental shift in consumer attitudes, companies missed the opportunity to capitalize on it. If they had monitored the information available, managers could have identified and responded to the trends earlier.

Ensuring Quality After the Sale

As we suggested earlier, the quality of customer service after the sale is often as important as the quality of the product itself. Of course, excellent customer service can rarely compensate for a weak product. But poor customer service can quickly negate all the advantages associated with delivering a product of superior quality. At companies like L.L. Bean and Caterpillar, customer service is not an afterthought but an integral part of the product offering and is subject to the same quality standards as the production process. These companies realize that a top-notch customer service operation can be an effective means of accomplishing the following three objectives:

1. *Differentiating a company from competitors.* As more customers seek to extend the lives of their

durable goods, the perceived quality of customer service becomes an increasingly important factor in the purchase decision. Whirlpool Corporation promises to stand by its products rather than hide behind its distribution channels; it has parlayed a reputation for effective customer service into a distinct competitive advantage that reinforces its image of quality.

2. *Generating new sales leads and discouraging switches to alternative suppliers.* Keeping in regular contact with customers so as to deliver new information to them and gather suggestions for product improvements can ensure the continued satisfaction of existing customers and improve the chances of meeting the needs of potential purchasers.
3. *Reinforcing dealer loyalty.* Companies with strong customer service programs can also broaden their distribution channels more easily to include outlets that may not be able to deliver high levels of postpurchase customer service on their own.

The customer service audit

To be effective, a customer service operation requires a marketing plan. Customer services should be viewed as a product line that must be packaged, priced, communicated, and delivered to customers. An evaluation of a company’s current customer service operation—a customer service audit—is essential to the development of such a plan.

A customer service audit asks managers the following questions:

What are your customer service objectives? Many companies have not established objectives for their customer service operations and have no concept of the role customer service should play in their business and marketing strategies. Every company should know what percentage of its revenue stream it expects to derive from service sales and whether the goal is to make a profit, break even, or—for reasons of competitive advantage—sustain a loss.

What services do you provide? It is useful to develop a grid showing which services your company provides or could provide for each of the products in your line. These might include customer education, financing arrangements, order confirmation and tracing, predelivery preparation, spare-parts inventory, repair service, and claims and complaints handling.

How do you compare with the competition? A similar grid can be used to chart the customer services your competitors provide. Through customer surveys, you can identify those areas of customer service in which your company rates higher or lower than

the competition. In areas where your company is weak, can you invest to improve your performance? Where you are strong, how easy is it for competitors to match or exceed your performance?

What services do your customers want? There is little value in developing superior performance in areas of customer service most customers consider only marginally important. An essential ingredient of the audit is, therefore, to understand the relative importance of various customer services to current and potential customers. Distinct customer segments can often be identified according to the priorities they attach to particular services.

What are your customers' service demand patterns? The level and nature of customer service needed often change over the product's life. Services that are top priority at the time of sale may be less important five years later. Companies must understand the patterns and timing of demand for customer services on each of their products. These they can graph, as Exhibit III shows.

Product A in the exhibit is a security control system, an electronics product with few moving parts. A high level of service is needed immediately following installation to train operators and debug the system. Thereafter, the need for service quickly drops to only periodic replacement of mechanical parts, such as frequently used door switches.

Product B is an automobile. Service requirements are significant during the warranty period because of customer sensitivity to any aesthetic and functional defects and also because repairs are free (to the customer). After the warranty period, however, service requirements beyond basic maintenance will be

more extensive for B than for A, since there are more mechanical parts to wear out.

What trade-offs are your customers prepared to make? Excellent service can always be extended—at a price. You should know the costs to your company of providing assorted customer services through various delivery systems (an 800 telephone number, a customer service agent, a salesperson) at different levels of performance efficiency. At the same time, you should establish what value your customers place on varying levels of customer service, what level of service quality they are prepared to pay for, and whether they prefer to pay for services separately or as part of the product purchase price.

Customers are likely to differ widely in price sensitivity. A printing press manufacturer, for example, has found that daily newspaper publishers, because of the time sensitivity of their product, are willing to pay a high price for immediate repair service, whereas book publishers, being less time pressured, can afford to be more price conscious.

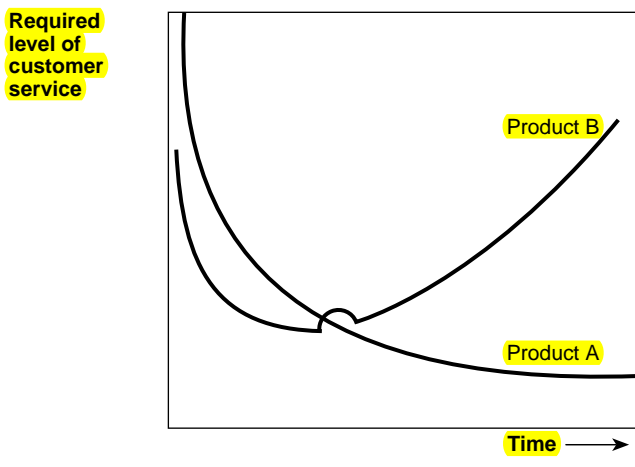
The Customer Service Program

The success of the marketing program will depend as much on effective implementation as on sound analysis and research. After reviewing several customer service operations in a variety of industries, we believe that managers should concentrate on the following seven guidelines for effective program implementation:

1. *Educate your customers.* Customers must be taught both how to use and how not to use a product. And through appropriate training programs, companies can reduce the chances of calls for highly trained service personnel to solve simple problems. General Electric recently established a network of product education centers that purchasers of GE appliances can call toll free. Many consumer problems during the warranty period can be handled at a cost of \$5 per call rather than the \$30 to \$50 cost for a service technician to visit a consumer's home.

2. *Educate your employees.* In many organizations, employees view the customer with a problem as an annoyance rather than as a source of information. A marketing program is often needed to change such negative attitudes and to convince employees not only that customers are the ultimate judge of quality but also that their criticisms should be respected and acted on immediately. The internal marketing program should incorporate detailed procedures to guide customer-employee interactions.

Exhibit III Postpurchase service demands for two products



On Tailfins and Horsepower

Only a few persons would quarrel with the general adoption of esthetically appealing and pleasant styling. But the point is, say the critics, once such styling has been adopted and accepted, why spend so much effort producing and selling an arbitrarily changed design? Similarly, few individuals would argue that we should eliminate entirely or ignore the desire of consumers to gain status; status is considered to be too much a part of our motivations. However, certain means for gaining status may be much more beneficial for the country as a whole than others. Should we, or can we, direct our production and selling efforts with the over-all good of the country in mind?

In the past, businessmen—in particular marketing men—have claimed that rapid obsolescence based on arbitrary style changes is necessary in order to maintain high levels of consumer expenditures. In opposition, the critics have maintained that one cannot pass off the issue by saying our whole economic system is based on any kind of aggressive marketing. Why, they ask, cannot marketers be just as aggressive with worthwhile appeals as with superficial styling changes and prestige selling appeals? As Erwin D. Canham, President of the United States Chamber of Commerce and Editor of the *Christian Science Monitor*, has expressed it [in the book *Management's Mission in a New Society*]:

“There has also been an inflation of goods, of ideas, of taste, of design—a burst of antifunctionalism which

looks like materialism at its worst—for which business will also have to pay the price. Take the automobile industry, for instance: Tailfins, of course, are the commonest scapegoat. Does an expanding economy really require so swift a rate of obsolescence?...Why should not functionalism really be the decisive criterion in the development of automobiles or of anything else? Do we need so much horsepower? Remembering Henry Thoreau, somebody said there should be a Walden-wagon—a simple, effective, functional, economical American automobile.

“But let us not be obsessed with automotive marketing practices. The problem is much wider than that... I believe all business needs the tight, challenging pressure of a competitive market in which price is a dominant factor, so that it will again be producing for economy-minded customers. I think business does a more functional and efficient job in hard times than it does in soft times. And if we are to continue to have deficit-financed prosperity, we should create the disciplinary equivalent of hard competition, simplicity, and functionalism.”

From
John B. Stewart
“Planned Obsolescence”
HBR September-October 1977, p. 14

3. *Be efficient first, nice second.* Given the choice, most customers would rather have efficient resolution of their problem than a smiling face. The two of course are not mutually exclusive, but no company should hesitate to centralize its customer service operation in the interests of efficiency. Federal Express, for example, recently centralized its customer service function to improve quality control of customer-employee interactions, to more easily monitor customer service performance, and to enable field personnel to concentrate on operations and selling. The fear that channeling all calls through three national centers would depersonalize service and annoy customers used to dealing with a field office sales representative proved unwarranted.

4. *Standardize service response systems.* A standard response mechanism is essential for handling inquiries and complaints. L.L. Bean has a standard form that customer service personnel use to cover all telephone inquiries and complaints. As noted earlier,

the documented information is immediately fed into a computer and updated daily to expedite follow-through. In addition, most companies should establish a response system to handle customer problems in which technically sophisticated people are called in on problems not solved within specific time periods by lower-level employees.

5. *Develop a pricing policy.* Quality customer service does not necessarily mean free service. Many customers even prefer to pay for service beyond a minimum level. This is why long warranty periods often have limited appeal; customers recognize that product prices must rise to cover extra warranty costs, which may principally benefit those customers who misuse the product.¹⁰ More important to success than free service is the development of pricing policies and multiple-option service contracts that customers view as equitable and easy to understand.

Because a separate market exists for postsale service in many product categories, running the cus-

customer service operation as a profit center is increasingly common. But the philosophy of "selling the product cheap and making money on the service" is likely to be self-defeating over the long term, since it implicitly encourages poor product quality.

6. *Involve subcontractors, if necessary.* To ensure quality, most companies prefer to have all customer services performed by in-house personnel. When effectiveness is compromised as a result, however, the company must consider subcontracting selected service functions to other members of the distribution channel or to other manufacturers. Otherwise the quality of customer service will decline as an aftermath of cost-cutting or attempts to artificially stimulate demand for customer service to use slack capacity. Docutel, the automated teller manufacturer, for example, transferred responsibility for customer service operations to Texas Instruments because servicing its small base of equipment dispersed nationwide was unprofitable.

7. *Evaluate customer service.* Whether the customer service operation is treated as a cost center or a profit center, quantitative performance standards should be set for each element of the service package. Do an analysis of variances between actual and standard performances. American Airlines and other companies use such variances to calculate bonuses to service personnel. In addition, many companies regularly solicit customers' opinions about service operations and personnel.

In conclusion, we must stress that responsibility for quality cannot rest exclusively with the production department. Marketers must also be active in contributing to perceptions of quality. Marketers have been too passive in managing quality. Successful businesses of today will use marketing techniques to plan, design, and implement quality strategies that stretch beyond the factory floor.

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