

Before you measure quality, define it

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It's important to remember that quality is in the eye of the beholder, finds Alan Earls

Quality counts for nothing, if customers aren't interested in the product or can't afford it. Sometimes, in the virtuous cycle of building better products and manufacturing processes, manufacturers lose sight of that.

Indeed, say experts, it is crucial to include customer awareness and market sensitivity in any quality program, to ensure that the people who ultimately pay the bills get the kind of quality they care about. "Quality, like beauty, is one of those attributes that is almost entirely in the eyes of the beholder," says Beth Zimmerman, founder and principal of Cerebellas LLC, a New York-based company focusing on intelligence development and strategic planning, primarily for B2B clients.

Zimmerman says many industrial and manufacturing customers end up defining quality in terms of physical or empirical characteristics, such as durability, reliability and ease of use and maintenance. Still others perceive quality in terms of its benefits to their business: time or manpower saved, process improvements, speed to market. However, she warns, a business should never assume what quality means to its customers—not only because it is a dimension that has many variables—but because customers' own definitions of quality change over time. This is especially true if competitors are perceived as offering goods of comparable quality, which forces customers to migrate their expectations of quality, usually upwards, in order to help differentiate one provider from another.

"A customer's definition of quality at any given time—and a provider's ability to meet or exceed those standards—will largely determine if premium [i.e. non-commodity] pricing is possible," says Zimmerman. In addition, she notes, the value of a product (and its ability to achieve premium pricing) is also dependent on how well a product's quality can be tied to improvements or benefits in the overall value chain of the

customer's business.

Taking a similar tack, David Fields, Managing Director of Ascendant Consulting, LLC and developer of a program called, "Shhh!...Your Customers' Whispers," says that often in the effort to reach the pinnacle of total quality, manufacturers take their eye off the true objective: meeting customer needs. "There are actually times when 80 percent quality is better than 100 percent because it's cheaper, faster and more flexible," says Fields. "It depends on what the customer's cost of failure is and the value of success—understand that and you better understand how to use quality as part of the overall business strategy," he adds.

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Indeed, Richard Hodge and Lou Schachter, who focus on the sales-side of Ascendant's business operations, conducted a survey of nearly 100 top-level executives. One of the things they learned was that customers don't want products anymore. They want solutions and ideas that will improve their business or quality of life and provide a return on their investment. Kevin Prouty, senior director manufacturing solutions, Symbol Technologies, says traditionally quality was measured in terms of things like yield or scrap but the dimensions of quality have continued to expand because it has been shown to be a way to add value and strengthen brands. "In the short term, from a capital spending standpoint, it can be more expensive to design quality into the product but when you are a company like Toyota, the long-term payoff can be huge in terms of image and your position in the market," says Prouty.

In deciding where and when to spend on quality, Prouty says the key is taking an integrated approach. "It may start with manufacturing or be driven by manufacturing but it has to be well integrated into what top management is thinking and the actions of the rest of the corporation," he adds.

“If you can demonstrate success that starts to have a positive impact on the brand, suddenly people like the senior VP of sales will start to take notice.” “At our company, first and foremost, we try to understand what is important to the customer,” says Vincent Lyons. He is vice president of technology and development for Leggett & Platt, a \$5.3 billion S&P 500 manufacturer of residential furnishings, commercial fixturing and components, aluminum products, industrial materials, and specialized products.

That understanding, the “Phase 1” of quality, then drives the development of requirements when products are developed, he adds. “We develop a ranking of quality and other product attributes based on focus groups and meeting with both end customers and the wholesale and retail clients to whom we sell,” he explains.

“Of course, we understand TQM [total quality management] and we are ISO certified but we strive to focus on what the customer wants,” says Lyons. To make sure the process isn’t purely reactive, Lyons says they also ask customers to envision the product they would like to have if there were “no limits.” This feedback helps inform the development of new products as well as providing indicators of where quality targets should be placed.

Stever Robbins, a consultant who studied with W. Edward Demings and is the author of *It Takes a Lot More than Attitude...to Lead a Stellar Organization*, also sees the customer view as crucial. He offers a concrete list of dos and don’ts for turning customer wants into final products.

For starters, Robbins says quality involves technical requirements, customer expectations, and a number of givens. For example, he says, quality should start at the technical minimum necessary to function. If you’re manufacturing tooth brushes, the bristles shouldn’t fall out under normal use. Similarly, quality should include explicit customer expectations, and you should focus effort mainly where customers care, he says. This is where marketing can really give useful input. “Simply going for 100 percent quality on every dimension is a waste. It often takes 90 percent of the effort to get from 80 percent to 100 percent quality level, and customers may only care about 80 percent,” says Robbins. For example, iPods differentiate on style and ease of use. On those dimensions, it’s worth Apple shooting to exceed customer expectations. On feature flexibility, the quality level is quite low, because as long as it can import, locate, and play songs, going for plug-in applications and downloadable games isn’t relevant to customers.

On the other hand, Robbins says quality should always include “givens” for the product. “Some things, customers don’t request because they’re assumed,” says Robbins. Thus, a contractor building a tunnel shouldn’t need to be told, for example, that the tunnel shouldn’t collapse six months after opening. That’s a minimum requirement for it even to be called a tunnel.

Rita Gunther McGrath agrees. She is the co-author of *MarketBusters: 40 Strategic Moves that Drive Exceptional Business Growth*, and an Associate Professor at the Columbia Business School, specializing in innovation, strategy and corporate growth. McGrath says quality is not being perfect on

every dimension of everything and quality for its own sake is not valuable.

More to the point, says McGrath, customer satisfaction doesn’t bear a direct linear relationship to purchasing propensity – instead, “it’s a curve with a vast ‘zone of indifference’ between poor quality and great quality.” All too many manufacturers get stuck traveling along that zone, she says, providing products that are better than acceptable, but not getting to “wow.”

“When customers are looking for ‘quality’ all too often they are happy enough with good enough; when manufacturers go on a quality kick, it is all too easy to overshoot the needs of customers and invest heavily in quality that adds nothing to the bottom line,” says McGrath.

Thus, says McGrath, rule #1 for investing in quality is to think through how a particular quality investment will do one or both of two things:

- Improve a key performance metric that drives your own operational efficiency or productivity; or
 - Improve a key aspect of your offering that customers will notice and pay more for, either through margins or volume.
- With respect to customers, McGrath says you can think of quality in terms of three questions:
- Is your performance so poor that customers experience strong negative feelings? In that case, an investment is probably worthwhile.
 - Is your performance “good enough” because improving it won’t drive customers to buy more? In that case, why bother, unless it saves you time or money.
 - Is there something you could improve with a quality initiative that would elicit a “wow” reaction from the customer? In this case, it is worth seriously considering.

Of course, notes Ron Atkinson, president of American Society for Quality (ASQ), in the long run, it is critical to also remember that there are really two legs to a quality philosophy, one focuses on the customer and the product while the other focuses internally on the development and operation of efficient processes. When it comes to the customer, Atkinson says the House of Quality matrix approach, defined within the well known Quality Function Deployment (QFD) process, provides a helpful way for handling the many inevitable tradeoffs between cost, price, and quality.

“The other half of the equation involves the processes that the customer may never perceive or understand that help deliver the product,” says Lyons. One of the tools that can help with this half of quality decision making, says Lyons, is Failure Modes and Effects Analysis (FMEA), which is a process of identifying potential reliability problems as early as possible in design and development.

Atkinson, who works in the automotive industry, says in the final analysis, it’s a matter of keeping a balance between long-term goals and visions and the nitty-gritty involved in day-to-day operations. “Customers would love to have a Jetson car that runs forever on some magical fuel that costs nothing, but we aren’t there yet,” he adds.