



The Quarterly Quality Report
An ASQ Analysis of Quality & Customer Satisfaction With
Manufacturing Non-Durable Goods

*Commentary by Jack West, American Society for Quality
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Introduction

This report on quality is based on data from the American Customer Satisfaction Index (ACSI), a key economic indicator and the nation's leading measure of customer satisfaction. It offers further analysis and commentary by ASQ experts on the perceived quality component of ACSI.

In the manufacturing non-durables sector of the American Customer Satisfaction Index, where perceived quality scores remain high and very stable across the board, there were several interesting company stories coming out of the third quarter results.

Coors and Pepsi have caught up with their rivals; Nike has stumbled in its race with Reebok; and Sara Lee rises into the top ranks of food manufacturers while Heinz spills ketchup on itself. For Coors, a statistically significant gain this quarter pulls it even with rivals Anheuser-Busch and SABMiller. Sara Lee's strong showing this quarter puts it in a virtual tie at the top of its category along with Hershey, General Mills, and last year's leader H.J. Heinz.

Perceived quality in the manufacturing non-durables segment of the American Customer Satisfaction Index was up slightly during the third quarter of 2006 compared to the same quarter last year. It now stands at 88.2, substantially higher than the 79.8 mark for the overall ACSI national quality index. (See Table 1.)

Manufacturing non-durables received the highest perceived quality marks from customers of any sector tracked by ACSI. Most industry groups continue to receive high scores from consumers, with only athletic shoes and cigarettes holding down the average for non-durables as a whole. Even at the individual company level, scores are for the most part very high compared to other ACSI measured companies.

Reasons for these uniformly high marks have to do with the nature of the industries in the sector and their products. Competition here is very intense, and the cost to the consumer for switching between brands is low. As a result, companies are forced to compete on quality as well as price and innovation.

Perceived quality scores in the manufacturing non-durables sector are also very stable. Of the 38 named consumer non-durables companies tracked this quarter, only two—Sara Lee Corporation and Molson Coors brewers—experienced a statistically significant increase over last year’s scores. None of the measured companies declined by a statistically significant amount.

Table 1
ACSI Perceived Overall Quality

	Q3 '06	Q3 '05	% Change from last year	Q3 Yr 1	% Change from 1st year
NATIONAL INDEX (all industries measured this quarter)	79.8	78.0	2.3	79.9	(0.1)
MANUFACTURING – NON DURABLES	88.2	87.0	1.4	86.9	1.5
Apparel	86	85	1.2	85	1.2
Athletic Shoes	81	82	(1.2)	83	(2.4)
Personal Care & Cleaning Products	89	89	0.0	89	0.0
Food Manufacturing	89	88	1.1	90	(1.1)
Beverages & Soft Drinks	90	89	1.1	91	(1.1)
Breweries -- Beer	89	88	1.1	88	1.1
Pet Food	88	87	1.1	89	(1.1)
Cigarettes	85	85	0.0	86	(1.2)

FOOD MANUFACTURING

Within the food manufacturing segment, interesting companies this quarter include Sara Lee, Heinz, Tyson and Dole.

Sara Lee's increase in perceived quality this quarter vaults this purveyor of baked goods and deli meats into the top ranks of the food manufacturing category. Last year's clear leader in perceived quality, H.J. Heinz Co., slipped this year but still is at the top in perceived quality among food manufacturers.

Interestingly, two of the three lowest scoring companies—Tyson Foods and Dole Food Company—are sellers of raw foods such as fresh vegetables and fresh poultry, whereas the other measured companies sell prepared foods and packaged and bottled goods. Tyson's perceived quality score places it all alone at the bottom of this food group.

What's Cooking at Sara Lee

Sara Lee, this quarter's top-performing food manufacturer, is representative of many of the industry's best practices and a good case study for considering reactions to trends shaping this consumer-driven industry. Food consumers today desire freshness, minimal processing, and food that is ready to eat. Meeting those needs requires producers to execute efficiently in production and distribution and to be nimble in product development.

About a year and a half ago, Sara Lee began a restructuring that includes the divestiture of apparel businesses and the shedding of certain non-core product lines in its food businesses. Shedding products less satisfying to customers may have helped to bring up its perceived quality score this quarter.

Sara Lee has introduced lean manufacturing processes into its production plants, coupled with team-based, employee-led kaizen improvement activities, to drive efficiencies. Its continuous improvement initiatives are tied closely to its global information systems. Both activities are carried out under the wing of its chief information officer, and both are being aggressively employed to increase efficiency through cost and time savings companywide.

Using improvement data to enhance performance also allows the company to shorten time to market, which is critical to success in the highly competitive food business.

Tyson and Dole: Tripped Up by Consumer Wariness

With perceived quality scores generally so high in ACSI's food manufacturing category, why are some noticeably lower than the rest?

In the case of Tyson and Dole, wariness over food safety may be a factor. Recurring news reports of contaminated beef and poultry and recent E. coli scares in fresh spinach, lettuce, and tomatoes will have damaging effects on consumers' quality ratings of any company identified in any way with the problems.

New developments in food industry safety standards and process quality advances aimed at elevating consumer confidence could in time also raise the perceived quality scores of these food processors.

Certain other factors must also be taken into account in explaining the relatively lower scores of Tyson and Dole. Those other factors are customer loyalty, perceived value, and customer expectations—factors that speak to how these brands are seen in the marketplace and how their quality is perceived.

In ACSI's customer loyalty measurement, neither Tyson nor Dole comes close to the other companies in the food manufacturing category. Both are at least two standard deviations below the norm for the measured companies. In perceived value, once again Tyson and Dole score the lowest of any of the measured food manufacturing companies. In terms of customer expectations, Dole is run-of-the mill compared to the other measured food companies. In this high-scoring food manufacturing category, being just average translates to a customer expectation of solid value for Dole as opposed to premium positioning in the market, in spite of any attempt on the company's part to market itself as a premium brand. Tyson, however, scores almost three standard deviations below the average for customer expectations among the measured food companies.

SOFT DRINKS: Pepsi Uncaps a Lead While Coke Fizzles

PepsiCo's leadership in perceived quality may be attributable in part to its stronger market presence in diet sodas and waters, which may have a perceived quality edge due to consumer perceptions that they are healthier than carbonated sodas. Pepsi has been quicker to tap into American consumers' growing concerns with obesity and switch to lower-cal beverages. Their flagging appetite for sodas cuts into demand for Coke's product lines. PepsiCo derives 23 percent of its worldwide profit from carbonated beverages compared to about 85 percent at Coca-Cola.

Pepsi's new CEO says she intends to stick to the health and wellness approach of her predecessor, an approach that emphasizes diet soft drinks and various forms of bottled waters. Bottled water, the fastest-growing segment of the beverage business, has become a \$10 billion market worldwide; growth is especially strong in the United States.

Although Coca-Cola dominates the soft-drink world with a global market share of 36 percent (PepsiCo is a close second at 35 percent, followed by Cadbury Schweppes at 17 percent), PepsiCo is number 1 in the noncarbonated soft drinks category.

ATHLETIC SHOES: Nike Stumbles in Race with Reebok

Last year when we produced this consumer non-durables report, we anticipated the impending acquisition of Reebok by Adidas and stated that the challenge for Adidas/Reebok—a combination of very different business cultures—would be to maintain quality as it attempts to go toe-to-toe with sales leader Nike. The acquisition was completed at the end of January 2006 without a hitch as far as Reebok's perceived quality. The 2.4% gain by Reebok this quarter, coupled with a similar drop by Nike, puts Reebok perceived quality firmly ahead of Nike.

Nike also stumbles in comparison to Reebok in terms of value. Consumers are much more likely to believe they get value for the money spent on Reebok compared to Nike. And although Reebok captures a significantly higher customer loyalty score than Nike, both companies are vulnerable on this score—with Nike posting the lowest and Reebok the second lowest customer loyalty marks of any of the manufacturing non-durables companies.

Unlike the food processing segment, where manufacturing skills represent core competencies of the business, the athletic shoes segment's core competencies are creating, marketing and distributing global brands. Manufacturing is almost entirely done by subcontractors operating primarily in countries where labor costs are low.

In this business environment, in addition to the usual challenges of supply chain management (at which Nike and Reebok both excel), there is the added complication of addressing social responsibility issues such as fair labor practices and safe working conditions in cultures very different from the United States. A company's performance in the area of social responsibility may also affect how consumers perceive the quality of the company's products, since these issues are of growing concern to many consumers. While both companies have made strides in this area, they have been consistent targets of critics, and the high visibility of these issues may contribute to the fact that the athletic shoes category has the lowest perceived quality score among all manufacturing non-durables.

Nike has programs in place to provide oversight of working conditions and human rights issues in addition to managing supplier production quality at its contract manufacturers. Originally using third-party monitors, Nike now handles these functions internally. The company measures its overall performance with a balanced scorecard that includes compliance measures in addition to cost, delivery, and quality measures. The company has become an advocate for bringing into better alignment the codes of conduct of various compliance and monitoring organizations.

For companies the size of Nike and Reebok, monitoring can be a major undertaking. Nike contracts with 70 manufacturing plants employing almost 250,000 people for its footwear production alone and another 760 plants making apparel and equipment. The plants are located in 52 countries.

Reebok contracts with 41 footwear manufacturing plants and another 543 apparel manufacturing plants. Reebok was the first footwear program to be accredited by the Fair Labor Association.

WHAT DO QUALITY SCORES MEAN?

Even though determination of quality is a complex and highly subjective calculus involving the simultaneous processing of many factors inside the mind of the consumer, that does not mean it can't be quantified.

The ASQ Quarterly Quality Report relies on the tested methodology of the ACSI to help quantify the subjective evaluations of the goods and services acquired and consumed in the United States. Interviews with many customers probe multiple facets of quality such as product or service attributes, price, and market fit to measure the subjective evaluations of the goods and services acquired and consumed in the United States. Data derived from these interviews are used as inputs to the ACSI's econometric model, which combines numerous proxy measures (reflecting the consumer's overall consumption experience) to arrive at an index number on a 0 to 100 scale. This is not a percentage. Unlike the output of many familiar consumer surveys, an ASQ Quarterly Quality Report score of 80, for example, does not mean that 80% of consumers who were interviewed have high regard for the quality of the particular product or service in question.

The unique methodology used to calculate the ASQ Quarterly Quality Report's quality scores has the advantage of allowing for cross-industry and cross-company comparison. For example, it allows us to say with assurance that consumers have higher regard for the quality of beer than they have for the quality of banking services, or that consumers think Heinz products have better quality than Dole products.

METHODOLOGY

This report on quality offers further analysis by ASQ experts and is based on a key economic indicator and the nation's leading measure of customer satisfaction, the American Customer Satisfaction Index. Produced by the University of Michigan in partnership with the American Society for Quality and CFI Group, the ACSI is produced quarterly, measuring more than 200 companies in 41 industries. The index has been issued and supported by the partnership for more than 10 years.

The ACSI uses two primary criteria to define the consumer's quality experience:

- 1.) customization, or the degree to which a product or service fulfills the customer's key requirements
- 2.) reliability, or how reliably these requirements are delivered.

ACSI data collection occurs through thousands of quarterly interviews with customers who have purchased and used specific products or services within defined time periods. It treats satisfaction with quality as a cumulative experience rather than a most-recent-transaction experience.

Customer interviews that formed the basis of the overall ACSI and its quality component occurred during the period of July through September of this year. Customers of companies in the apparel, athletic shoes, personal care & cleaning products, food manufacturing, beverages, pet food, and cigarettes industries were interviewed.

Each quarter a different sector is measured, with the fresh data being used to update the national ACSI score quarterly on a rolling basis. ASQ plans to issue Quarterly Quality Reports, with analyses on these sectors, based on the latest ACSI scores.

Table 3
Data Collection and Sector Update Schedule

Sector	Consumer Interviews	Results Released
Utilities, Transportation, Information, Healthcare & Social Assistance, Accommodation & Food Services	January - March	May
Manufacturing/Durable Goods, E-Business	April - June	August
Manufacturing/Non-durable Goods	July - September	November
Retail Trade, Finance & Insurance, E-Commerce	October - December	February
Public Administration	Throughout the year	December

About the Author

Jack West is a past president of the American Society for Quality and a quality expert. A Six Sigma Master Black Belt instructor and consultant, West has held various engineering and management positions at Westinghouse Electric Corporation and Northrop Grumman. He holds a doctorate in business administration and a master’s degree in management, both from The George Washington University. John Ryan, ASQ public policy analyst, also contributed to this report.

About the American Society for Quality (ASQ)

The American Society for Quality is the world’s leading authority on quality. With more than 90,000 individual and organizational members, the professional association advances learning, quality improvement, and knowledge exchange to improve business results and to create better workplaces and communities worldwide. As champion of the quality movement, ASQ offers technologies, concepts, tools, and training to quality professionals, quality practitioners, and everyday consumers, encouraging all to Make Good Great™. ASQ has been the sole administrator of the prestigious Malcolm Baldrige National Quality Award since 1991. Headquartered in Milwaukee, WI, the 60-year-old organization is a founding partner of the American Customer Satisfaction Index (ACSI), a prominent quarterly economic indicator.

Other information about ASQ and the ACSI can be found on the following Web sites:

- <http://www.asq.org/quality-report/index.html>
- <http://www.theacsi.org/>