

---

# Market-Led Quality

Neil A. Morgan  
Nigel F. Piercy

*Few, if any, industrial organizations today have remained unaffected by the quality movement, which emerged as one of the key management issues of the 1980s. Although the quality issue has a long history in most industrial organizations, dating from the introduction of quality control concepts in the post-War era and developing through quality assurance in the 1960s and 1970s, the quality issue gained much more importance and widespread acceptance in the form of total quality management (TQM) in the 1980s.*

*This article questions the relationship between marketing and quality as management functions and demonstrates how an holistic approach to the strategic management of quality can affect the role that marketing plays in developing quality strategies and implementing quality programs in industrial organizations.*

## WHY IS QUALITY SO IMPORTANT?

Quality as a management issue cannot be viewed simply as another in a long line of fashionable management fads or "quick fixes" [1], which will go away if marketers ignore it long enough. The reality is that quality has become an important issue in the operation and strategies of many commercial organizations [2, 3].

The emerging empirical evidence suggests that quality affects business performance of industrial and consumer organizations in three major areas. First, quality has an

impact on manufacturing and operations costs in producing both products and services. Hard evidence suggests that increasing quality can lead to significantly lower manufacturing costs [4–6] and increased productivity [7–9].

Second, there is some evidence to support a relationship between price and perceived quality, particularly in markets where other quality "cues" such as branding and product features are unavailable [10, 11]. This relationship may be viewed as bidirectional. Increasing product/service quality may allow higher prices to be charged, but price also provides a quality indicator under some market conditions [5, 12, 13].

Third, much of the empirical work using the PIMS data base has identified a strong positive association between quality improvements and market share gains [14]. Thus, it is proposed that relative perceived product or service quality may be a good predictor of market share.

Thus, increasing quality may be seen to have a potentially enormous impact on profitability, both through reducing an organization's operations costs and improving its market position. The accumulating evidence concerning the relationship between quality and business performance, and the creation and continued existence of quality staff, line functions, and departments in many industrial organizations, make it likely that quality is a management function that will enjoy a long life.

Given the obvious importance of quality and its reflection within organizations in terms of quality functions, strategies, and programs, it appears vital, for a number of reasons, that marketers are able to understand the qual-

---

Address correspondence to Neil A. Morgan, Cardiff Business School, University of Wales, Colum Drive, Cardiff CF1 3EU, United Kingdom.

---

---

ity issue and thus to take an active role in the development and implementation of quality strategies and programs.

### WHAT EXACTLY IS QUALITY?

Here we encounter the central problem that causes marketers to be uncertain of their role in the management of quality. There is no universally accepted definition or view about what quality actually *is*. There have been numerous attempts to tackle this issue, but these have resulted in different and often conflicting or competing perspectives [6].

3. *People involvement*. The total quality management (TQM) approach in particular emphasizes that all employees of the organization have a role to play in quality programs (and this is extended to encompass staffs of supplier and distributor organizations).

Despite the problems of defining quality, the concepts of quality and quality management have moved into the marketing and strategic management literature in the last decade. While no universally accepted marketing view of quality has emerged, there have been a number of

---

## There are three pillars of quality.

---

Unfortunately, the definitions of quality that are most widely available and accessible to senior managers in industrial organizations come from the quality “gurus” and consultants. These definitions include those from Crosby’s “conformance to requirements” [15], Deming’s “predictable degree of conformity and dependability at low cost and suited to the market” [7], Juran’s “fitness for purpose” [16], and Oakland’s “meeting the customer requirements” [17].

These perspectives on what quality actually is have been accepted in most organizations and used as the basis for developing and implementing quality strategies and programs throughout the 1980s. Thus, the focus of the management of quality consists of three main pillars:

1. *Customer focus*. Quality programs emphasize providing quality in terms of customer needs and specifications.
2. *Process understanding*. The primary quality mechanism is the understanding, design, and control of the process by which goods and services are produced and delivered to customers.

underlying conceptual developments that have been widely accepted and with which industrial marketers should be familiar.

First, it has been widely agreed that quality is not an absolute, discrete concept and that the terms “high” and “low” quality have little meaning. Quality has come to be seen as important primarily in terms of customer perceptions [18–20].

Second, the concept of perceived quality has been viewed as the product of the difference between customer expectations and customer perceptions of outcomes [21–23]. This process has been likened to the disconfirmation paradigm approach to customer satisfaction developed by Churchill and Suprenant [24].

Finally, it has been recognized that customer quality perceptions are created via a quality evaluation process that involves not simply perceptions of outcome but also includes perceptions of the process by which that outcome has been achieved, and the context in which production and exchange occurs. Quality has been found to be evaluated by customers and services across a number of dimensions in different product/service market contexts [25–27].

---

### THE CURRENT ROLE OF MARKETING IN QUALITY PROGRAMS

Despite uncertainty regarding the role of marketing in developing quality strategies and implementing quality

---

---

NEIL A. MORGAN is Lecturer in Marketing and Strategy and NIGEL F. PIERCY is Professor of Marketing and Strategy at Cardiff Business School, University of Wales, Cardiff, United Kingdom.

---

---

programs, a limited prescriptive literature has nonetheless emerged. In essence, the debate has thus far concentrated on three main areas of the relationship between marketing and quality:

1. The marketing of quality products and services (i.e., using the outcome of the organization's quality programs, empirical and comparative data concerning specifications, reliability, performance, and so on, and various objective forms of quality certification in marketing communications) in an attempt to gain non-price-competitive advantage [28–30].
2. Applying quality improvement concepts and principles to the marketing function within the organization. This involves viewing marketing management itself as a process that is open to improvement in order to remove variations in outputs and to achieve quality marketing performance [31–33]. This is consistent with the idea that quality is an organization-wide responsibility [34].
3. In continuing the idea that every function within an organization has a role to play in quality strategies and programs, a number of specific roles have been made explicit for marketers. These roles typically include determining customer requirements, downgrading and selling some products as seconds, incorporating quality messages in marketing communications, and analyzing competitor quality activities [17,31,32].

While the prescriptive literature may be viewed as advocating a relatively limited role for marketers in the management of quality, the reality of the nature of the relationship between marketing and quality within industrial organizations may be even more limited.

Experience and observation, supported by existing case material, suggests that quality strategies and programs in most organizations are developed, led, and implemented by staff quality specialists and technical quality departments. In reality, the role of marketing in quality management is dictated by quality specialists and typically does not involve a role for marketing in the narrow terms suggested in the prescriptive literature.

Therefore, in most organizations quality has come to be viewed by marketers as primarily a manufacturing or engineering responsibility. In many cases, even the role of marketing in determining customer priorities, requirements, and quality evaluation criteria is negated by the setting of quality goals and objectives based on internal

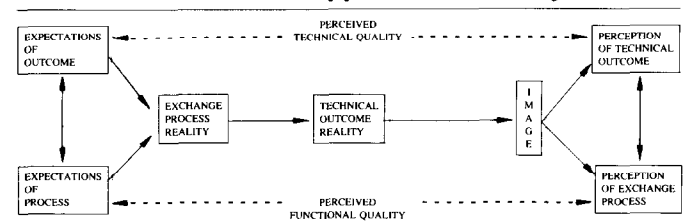
subjective perceptions of customer needs rather than objective market research and intelligence [35–37]. Indeed, there is a danger of this inward-looking perspective becoming a self-fulfilling prophesy, as marketing “fails” in its appointed task of identifying, predicting, and measuring customer needs and priorities in the terms required by the TQM engineer.

## AN HOLISTIC APPROACH TO QUALITY

Marketers who are not content with their role in the management of quality as assigned by the existing prescriptive literature and the even more myopic reality seen in many industrial organizations may gain greater insight into the quality issue and the potential role of marketing by adopting an holistic approach to quality such as that shown in Figure 1. This holistic model of quality explicitly recognizes that (1) customer quality perceptions are a product of the difference between initial customer expectations and their perceptions of the outcomes achieved in buying a product or service; (2) customers evaluate at least two dimensions of quality: “technical” quality in terms of how a product or service performs (i.e., what a customer actually receives) and “functional” quality in terms of how the product or service is provided, including all interaction between the customer and the organization; and (3) customer perceptions of the technical and functional quality of the products and services they purchase can be affected by their image of the supplier organizations.

Such an holistic approach to the quality issue suggests a much broader role for marketing in the management of quality not least because it puts into perspective the current role of quality departments and technical quality specialists. If the typical responsibilities of the quality department are considered alongside the common tools and techniques of quality management such as inspection tests, statistical process control, quality audits, and quality information systems, then the focus of the quality strategies currently developed and implemented in in-

FIGURE 1. The Holistic Approach to Quality



(Source: Adapted from Gronroos, 1984)

---

---

# Customer perceptions and expectations must be managed.

---

dustrial organizations may be seen to be aimed at improving the technical outcome reality component of the holistic quality model. Process changes driven by existing quality strategies relate mainly to process in terms of physical production processes rather than process in the sense of functional quality related to the interaction between customers and the organizations as a part of the exchange process. Thus, as a mechanism for managing quality, the existing reality of quality staff functions and quality programs may be seen as little more than enlarged attempts at technical quality control and assurance.

Holistic approaches to the strategic management of quality as outlined in Figure 1 not only put into new perspective the current role of quality departments and technical quality specialists in the customer quality evaluation process, but suggest a much broader role for marketers in quality strategies designed to affect customer quality perceptions. The role of marketing in the strategic management of quality may be viewed in two broad areas of responsibility: (1) the management of customer expectations, and (2) the management of customer perceptions of outcomes.

## **THE MANAGEMENT OF CUSTOMER EXPECTATIONS**

In the existing prescriptive literature, the role of marketers in the expectations side of the quality equation relates to the use of market research techniques to uncover customer expectation criteria and priorities. However, in the wider sense of an holistic approach to quality, this role may be broadened. In this wider sense, managing quality involves the active management of customer expectations to prevent two common problems with existing quality strategies—over promising and overengineering.

The use of quality messages and images in marketing communications programs is entirely consistent with the prescriptive literature on the role of marketing in the management of quality. However, this can often have the effect of raising the expectations of existing and po-

tential customers. While raising expectations may lead to the attraction of new customers in the short term, without corresponding success in raising customer perceptions of the outcome of the purchase by the same amount (which is much more difficult to achieve), the customer perceptions of quality will actually go down.

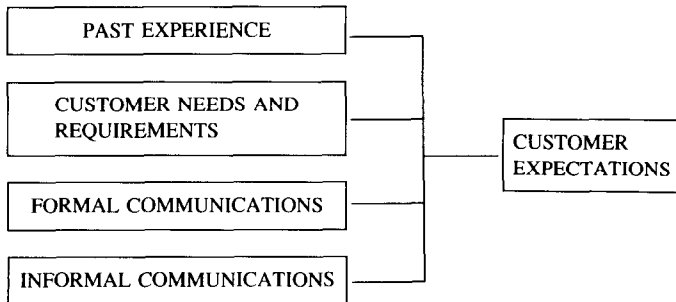
The converse of overpromising is the problem of overengineering. This is the wasting of organizational resources in providing an outcome reality that either far exceeds customers' range of expectations or that delivers an outcome reality in terms of criteria such as features or performance that are simply not important to customers and do not make up a part of their expectations. While this problem may be avoided by the use of market research and intelligence in setting specifications and goals for quality strategies in line with the prescriptive literature, the reality is that most quality strategy goals and specifications are set by quality departments and specialists with little or no reference to the marketing function or marketing information and research that it may potentially provide.

Thus, the role of marketing in the management of expectations is more than the simple researching of customer needs and requirements using marketing research tools and techniques in order to avoid overengineering and to concentrate, via appropriate quality goal setting, the resources and efforts of the quality strategy on the highest priority customer needs and requirements in order to achieve the most effective impact on customer quality perceptions. In addition, it must also include the active manipulation of customer expectations to prevent overpromising.

While the customer expectations construct has received relatively little attention in the quality literature, Parasuraman, Zeithaml, and Berry's [38] work in the service sector, based on the earlier work of Churchill and Suprenant [24], identified needs, past experience, and word-of-mouth communications as the determinants of customer expectations. It may also be argued that formal marketing communications may play a role in the forming

---

of expectations, since advertisements, promotional literature, and even word-of-mouth communication via the sales force usually contains some information that customers can use in forming their expectations. Thus, customer expectations may relate to at least four sources:



With this basic conceptual model of the customer expectation construct and the objective of actively managing customer expectations as a key part of the strategic man-

agement of quality, the potential role of marketing in holistic quality strategies becomes much clearer. In a transaction-specific model of quality, then, past experience is not a variable that may be easily manipulated by marketers via communication. However, knowledge of customers' past experiences in purchasing a type of product or service from the organization or its competitors will be valuable information for quality strategists. Similarly, marketers may have little influence over customer needs and requirements, but marketing information concerning customer needs criteria and priorities is essential in developing quality strategies designed to affect customer quality perceptions.

### **THE MANAGEMENT OF CUSTOMER PERCEPTIONS**

The other side of the holistic quality equation is the customers' quality perception of the technical and functional reality of the purchase of a product or service. In the context of the potential outcomes or consequences of a quality strategy, customer perceptions of quality are of primary importance, since these perceptions will drive

---

# Quality is more than engineering and manufacturing.

---

agement of quality, the potential role of marketing in holistic quality strategies becomes much clearer.

In a transaction-specific model of quality, then, past experience is not a variable that may be easily manipulated by marketers via communication. However, knowledge of customers' past experiences in purchasing a type of product or service from the organization or its competitors will be valuable information for quality strategists. Similarly, marketers may have little influence over customer needs and requirements, but marketing information concerning customer needs criteria and priorities is essential in developing quality strategies designed to affect customer quality perceptions.

In terms of actively manipulating customer expectations, marketers play a potentially fundamental role by providing formal and informal marketing communications that provide customers with bases for translating their needs, requirements, and past experiences into expectations of the product or service and the supplier or-

customer loyalty, future buying behavior, word-of-mouth recommendation, and price sensitivity, all of which are likely to directly affect the desired organizational outcomes of quality strategy, increased market share, and increased margins.

In the context of customer quality evaluations, perception has been viewed as "the process of organizing, interpreting and deriving meaning from stimuli, through the senses" [39]. The way in which customers arrive at quality perceptions of products and services is usually viewed in terms of a multiattribute model, which includes sets of intrinsic attributes such as reliability, primary operating performance, durability, safety, features, purity, etc., and extrinsic attributes such as delivery, availability, variety, warranty, after-sales service, and so on [26, 40]. Since customers view quality as a multidimensional construct and typically evaluate quality through a number of explicit and implicit attributes, cues, and surrogates on each dimension, then modelling the customer-perceived

---

quality process is both complex and extremely difficult. The attributes and dimensions of quality, as well as the types of intrinsic and extrinsic cues, are often specific to particular product/service categories and buyer types; thus generalizable models are extremely difficult to construct.

Based on the holistic quality model presented in Figure 1, however, we propose a number of potential roles for marketing in the management of customer perceptions of quality. The two "reality" components of the quality model suggest different roles for marketing in the quality process. The exchange process reality component relates to the "how" of the exchange between customer and supplier. Much of the human interaction in the exchange process between the supplier and key customer personnel is likely to involve the sales force in industrial organizations, which is often within the sphere of influence, if not the direct control, of the marketing function. Thus, the way in which human interaction in the exchange process takes place, the context in which it takes place, and the content of interactive communication may be open to marketing influence, or even control, via sales force recruitment and training, customer care programs for contact personnel, and perhaps even facilities design. In the context of industrial services, the exchange process is likely to involve the actual service provider. Again, the marketing function may be able to influence the reality of the exchange process via marketing and communications training of service provision staff as well as by customer care programs and facilities design.

The impact and potential role of marketing in the technical reality outcome component of the quality model is likely to be through the setting of product/service specifications via marketing research. The nature of this input is likely to change throughout the product/service life cycle and will obviously be of critical importance during the new product development process through market intelligence, market research, and product/service test marketing. Later in the product/service life cycle it is likely to involve the continuous tracking of customer satisfaction, defections, complaints, and the use of test marketing and market research in product/service redesign and repositioning that often occurs later in the life cycle.

However, while quality strategies (both with and without marketing input) seek to continuously improve the objective technical and functional reality outcomes of the production and exchange processes, customer percep-

tions of both of these dimensions of quality do not necessarily reflect the objective reality. Gronroos [25] in the service sector and Garvin [6] in examining industrial and consumer goods have both highlighted the potential impact of corporate image—i.e., how the customer perceives the supplier organization—as an intervening variable between the objective reality of the production outcome and exchange process and customer perceptions of these outcomes. Thus, the image of the supplier in the customers' mind can affect the way in which they perceive the reality of the exchange process and its physical outcome.

The responsibility for corporate image often lies within the domain of formally organized marketing functions in industrial organizations. This may provide a vehicle for leveraging the role of marketers in managing customer quality perceptions as an integral part of holistic approaches to the management of quality. Indeed, the role of marketing in the management of customer perceptions of quality may be further enhanced by consideration of reinforcement communications strategies and messages aimed at existing customers. These may not only affect customer quality perceptions through corporate image, but may directly affect customer perceptions of outcomes of past transactions between the customer and the organization by providing confidence messages, rationalization of the purchase choice, implicit cues through pricing, packaging, warranties, and so on. These even include competitive positioning information and messages that can affect customer quality perceptions by indicating the likely technical and functional outcomes of using available alternative suppliers.

Thus, the role of marketing in the strategic management of quality in industrial organizations may be much greater than the existing literature suggests. It is certainly greater, and of more central importance, than that dictated by existing quality functions, strategies, and programs within commercial organizations. Not only is the potential role of marketing much greater than may have previously been thought, but there are a number of existing marketing responsibilities, tools, and techniques such as marketing research, test marketing, marketing communications, pricing, package design, new product/service development, corporate image, internal marketing, customer services, and even marketing training that may enable marketers to play a greater and more explicit role in the strategic management of quality in industrial organizations.

---

---

## **BENEFITS OF MARKETING LEADERSHIP IN QUALITY MANAGEMENT**

If we accept the potential opportunities that an holistic approach to the management of quality affords industrial organizations as a whole, and the marketing function in particular, then marketers may feel that "we have enough to do already without increasing our responsibilities." However, there are a number of potential benefits for the marketing function in taking greater responsibility for the strategic management of quality.

First, the holistic approach to quality may offer marketers an alternative mechanism for achieving a market orientation within their organizations. The holistic quality model is conceptually very similar to the market orientations proposed by Kohli and Jaworski [41] and Narver and Slater [42]. Many writers and analysts have commented on the lack of market or marketing orientation in industrial organizations. In this context, holistic quality management with marketing leadership may provide an organization-wide vehicle for focussing the organization's quality efforts on the central issues of real customer needs, requirements, and expectations, a notion that is implicit in the marketing concept. Implicit in the TQM approach that currently dominates the management of quality in industrial organizations is the notion that quality is a responsibility shared by every individual, business unit, and management function within an organization. This idea is congruent with the organization-wide responsiveness to market intelligence that is central to achieving a market orientation. When this is considered alongside the emerging evidence of the effects of inter-functional conflict on the effectiveness of marketing in organizations [43], then quality may be viewed as a vehicle for increasing communication and cooperation between marketing and other functions. In particular, the holistic management of quality may increase connectedness and reduce conflict between marketing and engineering, production, and manufacturing. Increasing communication and lowering conflict may serve to increase the potential effectiveness of marketing in industrial organizations.

Second, it has been suggested that in manufacturing organizations the marketing function may be in the mature stage of its life cycle and moving toward the disaggregation of traditional marketing responsibilities and the break-up of integrated marketing departments [44]. With the creation of trade marketing departments and the

separation of sales force management, customer service, etc., marketing leadership in the management of quality may extend the life cycle of integrated marketing functions.

There are also some obvious benefits for industrial organizations as a whole in adopting the holistic approach to the strategic management of quality. The effectiveness of quality programs is likely to be enhanced if marketing leadership enables the organization to manage customer expectations and perceptions of outcomes as well as the reality of exchange process and technical outcomes that presently constitute the core of quality management in industrial organizations.

Enhancing the effectiveness of quality programs by concentrating more directly on customer quality perceptions may well enable the organization to improve its business performance through strengthening market position and decreasing costs in the ways suggested by Garvin [6] and Phillips et al. [5]. If nothing else, the greater involvement of marketing in quality management should reduce the problems of overpromising and over-engineering that characterize many quality strategies.

In reality, the ability of marketers to gain a leadership role in the strategic management of quality will depend on the particular context of individual organizations. It may be that in the industrial sector, organizations in which formalized marketing departments are relatively new, and organizations that have yet to create a formalized response to the quality issue, will provide the greatest opportunities for marketers to achieve "ownership" of the quality issue. However, the potential benefits of the holistic approach to quality may also be attractive to organizations that already have quality staff functions and formalized quality strategies and programs, particularly if marketers can show top management the problems with traditional approaches to quality as they relate to their own organization.

Based on the arguments contained here, we propose a "market-led quality strategy" that encompasses the holistic viewpoint [45]. It may also legitimize the enlarged role of marketing in the quality issue and counter the long-term tendency to introspection contained in operations-driven TQM programs.

Certainly, the quality issue is likely to remain important to senior managers in industrial organizations throughout the 1990s. While marketers' response to quality management has been minimal to date, the holistic approach to the management of quality outlined here pro-

vides marketers with some ideas and potential guidelines that may benefit both the marketing function and the entire organization.

## REFERENCES

1. McGill, Michael E., *American Business and the Quick Fix*, Henry Holt and Co., New York, 1988.
2. Ross, Joel E. and Shetty, Y. Krishnam, Making Quality A Fundamental Part of Strategy, *Long Range Planning* **18**, 53–57 (1985).
3. Jacobson, R. and Aaker, David A., The Strategic Role of Product Quality, *Journal of Marketing* **51**, 31–44 (1987).
4. Fine, Charles H., Quality Improvement and Learning in Productive Systems, *Management Science*, October, 686–705 (1986).
5. Phillips, L. W., Chang, D. R., and Buzzell, R. D., Product Quality, Cost Position and Business Performance, *Journal of Marketing* **47**, 26–43 (1983).
6. Garvin, David A., *Managing Quality*, Free Press, New York, 1988.
7. Deming, W. Edwards, *Quality, Productivity and Competition Position*, MIT Press, Cambridge, Massachusetts, 1982, Chap. 1, pp. 1–2.
8. Curtin, Frank T., Automating existing facilities: GE Modernizes Dishwasher, Transportation Equipment Plants, *Industrial Engineering* **21**, 32–38 (September 1983).
9. Hayes, Robert H. and Wheelwright, Steven C., *Restoring Our Competitive Edge*, John Wiley, New York, 1984.
10. Gale, Bradley T. and Klavans, Richard, Formulating a Quality Improvement Strategy, *Journal of Business Strategy* **5**, 21–32 (1985).
11. Stokes, Raymond C., The Effects of Price, Package Design, and Brand Familiarity as Perceived Quality, in *Perceived Quality*, J. Jacoby and J.C. Olson, eds., Lexington Books, Lexington, Massachusetts, 1985.
12. Buzzell, Robert D. and Wiersema, Frederick D., Modelling Changes in Market Share: A Cross-Sectional Analysis, *Strategic Management Journal* **2**, 27–42 (1981).
13. Craig, C. Samuel and Douglas, Susan P., Strategic Factors Associated with Market and Financial Performance, *Quarterly Review of Economics and Business* **22**, 101–111 (1982).
14. Gabor, Andre, *Pricing: Principles and Practices*, Heinemann, Oxford, 1977.
15. Crosby, Philip, *Quality is Free*, McGraw-Hill, New York, 1979.
16. Juran, Joe, ed., *Quality Control Handbook*, McGraw-Hill, New York, 1974.
17. Oakland, John S., *Total Quality Management*, Heinemann, Oxford, 1989.
18. Takeuchi, H. and Quelch, J. A., Quality is More than Making a Good Product, *Harvard Business Review* **53**, 139–145 (1983).
19. Holbrook, Morris B. and Corfman, Kim P., Quality and Value in the Consumption Experience: Phaldus Rides Again, in *Perceived Quality*, J. Jacoby and J.C. Olson eds., Lexington Books, Lexington, Massachusetts, 1985.
20. Sheehy, B., The Changing Face of the Quality Debate: Balancing Product and Service Quality, *National Productivity Review* **7**, 169–172 (1988).
21. Gronroos, Christian, *Strategic Management and Marketing in the Service Sector*, Chartwell-Bratt, London, 1984.
22. Lewis, R. C. and Booms, B. H., The Marketing Aspects of Service Quality, in *Emerging Perspectives as Services Marketing*, L. Berry, G. L. Shostack, and G. Upah, eds., AMA, Chicago, 1983.
23. Berry, Leonard L., Zeithaml, Valerie A., and Parasuraman, A., Quality Counts in Services Too, *Business Horizons* **27**, 44–52 (1985).
24. Churchill, Gilbert A. and Suprenant, Carol F., An Investigation into the Determinants of Customer Satisfaction, *Journal of Marketing Research* **19**, 491–504 (1982).
25. Gronroos, Christian, A Service Quality Model and its Marketing Implications, *European Journal of Marketing* **18**, 36–44 (1984).
26. Garvin, David A., Competing on the Eight Dimensions of Quality, *Harvard Business Review* **57**, 173–184 (1987).
27. Parasuraman, A., Zeithaml, V. A., and Berry, L. L., SERVQUAL: A Multiple-Item Scale for Measuring Customer Perceptions of Service Quality, *Journal of Retailing* **64**, 12–37 (1988).
28. Farris, Paul W. and Reibstein, David J., Low Prices, Ad Expenditures and Profits are Limited, *Harvard Business Review* **57**, 173–184 (1979).
29. Bertrand, Kate, Marketers Discover What Quality Really Means, *Business Marketing*, April 58–70 (1987).
30. Cravens, David W., The Marketing of Quality, *Incentive*, Nov. 26–34 (1988).
31. Kohoutek, Henry J., Coupling Quality Assurance Programs to Marketing, *Industrial Marketing Management* **17**, 177–188 (1988).
32. Cravens, David W., Holland, Charles W., Lamb, Charles W., and Moncrieff, William C., Marketing's Role in Product and Service Quality, *Industrial Marketing Management* **17**, 285–304 (1988).
33. Berry, D. and Cooper, S., Quality Control in Marketing, *Direct Marketing*, May 50–60 (1989).
34. Hutchins, David, Making Quality Everybody's Business, *International Journal of Quality and Reliability Management* **1**, 26–30 (1984).
35. Bonner, P. Greg and Nelson, Richard, Product Attributes and Perceived Quality: Foods, in *Perceived Quality*, J. Jacoby, and J.C. Olson, eds., Lexington Books, Lexington, Massachusetts, 1985.
36. Pinto, E. J. and S. A., The Issues Involved in the Implementation of a Quality System in a Fabrication Company, *International Journal of Quality and Reliability Management* **6**, 59–70 (1989).
37. Van Ham, Kees and Williams, Roger, The Quest for Quality at Philips, *Long Range Planning* **19**, 25–30 (1986).
38. Parasuraman, A., Zeithaml, Valerie A., and Berry, Leonard L., A Conceptual Model of Service Quality and its Implications for Future Research, *Journal of Marketing* **49**, 41–50 (1985).
39. Monroe, Kent B. and Krishnan, R., The Effect of Price on Subjective Product Evaluations, in *Perceived Quality*, J. Jacoby, and J.C. Olson, eds., Lexington Books, Lexington, Massachusetts, 1985.
40. Walsh, M., Management of Quality as a Strategy, *International Journal of Quality and Reliability Management* **2**, 37–50 (1985).
41. Kohli, Ajay K. and Jarworski, Bernard J., Market Orientation: The Construct, Research Propositions and Managerial Implications, *Journal of Marketing* **54**, 1–19 (1990).
42. Narver, John C. and Slater, Stanley F., The Effect of a Market Orientation on Business Profitability, *Journal of Marketing* **54**, 20–36 (1990).
43. Ruekert, Robert and Walker, Orville C., Marketing's Interaction with Other Functional Units: A Conceptual Framework and Empirical Evidence, *Journal of Marketing* **51**, 1–19 (1987).
44. Piercy, Nigel F., *Marketing Organization*, Allen & Unwin, London, 1985.
45. Morgan, Neil A., and Piercy, Nigel F. The Interface of Marketing and Quality: Research Propositions for Market-Led Quality Strategy, in *Enhancing Knowledge Development in Marketing*, AMA, Chicago, 1991. 728–737.