

# Is strategy strategic? impact of total quality management on strategy

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## Executive Overview

***As total quality management (TQM) reshapes business practices, it tends to nudge every firm toward a few common strategic planning objectives, namely: continuous improvement in quality of goods and services, responsiveness and flexibility of internal and supplier processes, and waste and cost elimination. A slightly longer set of TQM principles provides guidance helpful in connecting daily activities and decisions with TQM's strategic objectives. While the TQM principles do not fully deal with some complex competitive issues, they do appear to greatly simplify and stabilize much of strategic management.***

***As TQM basics become more influential, senior executives may be drawn away from formulating unique strategies, setting high-level numerical goals, and monitoring performance against the goals. As can be inferred from behaviors of some senior executives of companies winning quality awards, the executive role shifts toward facilitating changes necessary to make TQM everybody's business.***

## In My View

*A high-priced consultant was brought in to Stew Leonard's food store for strategic planning sessions. As Stew Jr. tells it, Stew Sr., who couldn't attend, was asked by phone for his inputs.*

*"I bought some corn yesterday and had it for dinner last night," Stew Sr. said, "and it wasn't really sweet."*

*"Dad, this isn't that kind of meeting. We're talking about strategy," replied Stew Jr.*

*Stew Sr. wasn't to be dissuaded. Corn was the issue; it had to get to the store fresh and sweet, same day as picked. The conversation zeroed in on how to do that, and, as Stew Jr. explains, "We had to completely rearrange the trucking, and our farmer had to start picking earlier."<sup>1</sup>*

Is Stew Leonard Sr., the store's founder, incapable of thinking strategically? Not at all. He knows that *quality* of the product brings in and retains customers—enough of them that this Norwalk, Connecticut, store is thought to have the highest sales per square foot of any retail store in the country. Quality provides competitive advantage. The pursuit of quality seems to be as strategic as whatever the consultant and the other store managers were to discuss.

### **"The Basics" as Strategy, Policy, Culture**

While doing research for my 1982 book, *Japanese Manufacturing Techniques*, it struck me that executives in superior Japanese companies seem to do comparatively little of what is usually thought of as strategic planning.<sup>2</sup> Instead, like Stew Leonard Sr., they spend more time overseeing organizational dedication to "the basics" of competitive advantage.

Jeffrey Funk, who in 1989 conducted on-site research at Mitsubishi Electric Company in Japan, supports this view. He contrasts the Western practice of senior

managers devising policy and imposing it upon subordinates with what he observed. At Mitsubishi Electric's Semiconductor Equipment Department, notes Funk, "engineers are free to develop any process they want to develop, as long as it reduces cycle time or improves equipment quality."<sup>3</sup>

Funk claims that Mitsubishi's top managers spend little time "planning the acquisition and divestiture of businesses," which, he says, "seems to be the primary activity of America's top management." How do Mitsubishi's executives spend their time? Much of it, according to Funk, is evaluating proposed improvement projects (including markets, products, production sites, and technologies). He points out that as many as four degrees of improvement—ranging from modest to advanced—may be under consideration at the same time.<sup>4</sup> Product and technology project proposals, generated by engineers and plant people, must reduce cycle time or improve equipment quality—which are basic to competitive success in that business unit.

These competitive factors, high quality and short cycle time (in design, production, and delivery), have been elevated to a place in the mission statements of a number of Western—not just Japanese—companies and nonprofit organizations. If we add a few other related words—employee involvement, supplier and customer partnerships, flexibility, reduced variation, waste elimination, and continuous improvement—we capture the main elements of *total quality management (TQM)*, which has become a remarkably strong influence in Western management.

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*If the TQM agenda is as substantive, stable, and competitively potent as it is made out to be, then it is time to consider its strategic impact. Is TQM becoming a dominant component of strategic planning? If so, it might be good news, in view of the often turbulent economic effects of conventional business strategies—which have tended toward outwitting the tax system, playing follow-the-leader, pick-a-number target setting, trying to outguess the competition, shuffling resources, and so on.*

That mode of strategic management often seems helter-skelter. For lower echelons—outside customers, too—it can be baffling and disruptive.

A sound strategy should be readily absorbable into the culture of the firm—meaningful for day-to-day as well as for long-range actions, decisions, plans. Stew Leonard seems to have had the right idea—seeing the connection between dependable same-day delivery of sweet corn and the long-term health of his firm. Companies adopting the TQM agenda may be on the same wave length.

In the remaining discussion, we examine the influence of TQM; and note, further, the weaknesses of conventional strategic thought, which seems out of phase with emergent beliefs about employee-driven, customer-centered business practices. The intent is not to pose a complete, revised, ironclad "theory of business strategy." Rather it is to show that:

1. The basics of total quality management, which may be reduced to a few principles, can effectively govern much of what conventionally required executive-level strategic planning and goal-setting.
2. Remaining competitive issues (those not clearly covered by generally accepted TQM principles) are best resolved by organization-wide planning, with executive oversight.

#### **From Basics To Principles**

I'll restate what I believe to be basic pursuits, as reflected by total quality

### Evolution of Strategy

The forty-year-old dictionary on my nearest shelf (Thorndike-Barnhart, Doubleday, 1951) defines *strategic* using nothing but military descriptions. That long ago, strategy was not discussed in business and industry, nor in the business schools. Later on, strategy was elevated to prominence in business school curricula—often the capstone course in MBA and undergraduate business programs. Strategic planning became the favored pursuit of senior business executives, and the glamorous, highest-priced occupation of the big management consulting firms.

management practices and policies of our newly enlightened companies and managers. They are:

- Ever better, more appealing, less variable quality of the product or service itself.
- Ever quicker, less variable response—from design and development through supplier and sales channels, offices, and plants all the way to the final user.
- Ever greater flexibility—in adjusting to customers' shifting volume and "mix" requirements.
- Ever lower cost—through quality improvement, rework reduction, and non-value-adding (NVA) waste elimination.

These four objects of continuous improvement are general categories. For application, they must be translated into—or supported by—specific operational guidelines. Exhibit 1 is a 19-point list of such guidelines, each of which furthers one, more than one, or all of the four basic objects of improvement.

This tentative (not definitive) list, which is based on observations of improvement practices in TQM-oriented firms, has been modified a few times, as firms in more and more lines of business catch continuous improvement fever. Manufacturing firms, under the withering heat of Asian competition, caught the fever first, and earlier published versions of the lists contained manufacturing language. The list in Exhibit 1 is neutral as to type of business.

The nineteen items, in eight categories, are labeled "principles of total quality management." To be a *principle*, an item must apply nearly all the time. The idea is simply to (a) do what is consistent with the principles and (b) avoid doing anything that would violate any of them.

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***The first principle, getting to know the customer, is the most important—and tends to lead to the other eighteen principles. One newspaper writer stated that Boeing's new 777 is the first "commercial jetliner . . . whose most distinctive elements originated with its customers"—United Airlines and British Airways especially.<sup>5</sup> Throughout development, those two customers had permanent representatives on the design teams.***

Communication was continuous, not only about design features but also about costs, timing, and capacity—and, unavoidably, competitive air carriers and competitive plane makers. Getting so thoroughly close to the customer (TQM principle number 1) provides insights about the competition (principle number 2),

*General*

1. Get to know the next and final customer
2. Get to know the direct competition, and the world-class leaders (whether competitors or not)
3. Dedicate to continual, rapid improvement in quality, response time, flexibility, and cost
4. Achieve unified purpose via extensive sharing of information and involvement in planning and implementation of change

*Design and Organization*

5. Cut the number of components or operations and number of suppliers to a few good ones
6. Organize resources into chains of customers, each chain mostly self-contained and focused on a product or customer "family"

*Operations*

7. Cut flow time, distance, inventory, and space along the chain of customers
8. Cut setup, changeover, get-ready, and startup time
9. Operate at the customer's rate of use (or a smoothed representation of it)

*Human Resource Development*

10. Continually invest in human resources through cross-training (for mastery), education, job switching, and multi-year cross-career re-assignments; and improved health, safety, and security
11. Develop operator-owners of products, processes, and outcomes via broadened owner-like reward and recognition

*Quality and Process Improvement*

12. Make it easier to produce or provide the product without mishap or process variation
13. Record and own quality, process, and mishap data at the workplace
14. Ensure that front-line associates get first chance at process improvement—before staff experts

*Accounting and Control*

15. Cut transactions and reporting; control causes and measure performance at the source, not via periodic cost reports.

*Capacity*

16. Maintain/improve present resources and human work before thinking about new equipment and automation
17. Automate incrementally when process variability cannot otherwise be reduced
18. Seek to have multiple work stations, machines, flow lines, cells for each product or customer family

*Marketing and Sales*

19. Market and sell your firm's increasing customer-oriented capabilities and competencies

Exhibit 1. Principles of Total Quality Management

which are sure to weigh into any Boeing decisions on such matters as capacity, pricing, and production rate.

Though the nineteen TQM principles reach across most business functions, it is not hard to think of strategic questions that are not directly answered by them. When

should capacity be added? Where should the new facility be built? What emphasis (i.e., money) should be given to in-house R&D? Is this the time to cut prices and put the heat on the competition in the northeastern market?

Each such critical question begs consideration of a prodigious number of variables, and rarely do executives make the decision with much confidence. While the TQM principles won't make the decision, they can improve the odds that a good decision will be made. This is especially true of principle number 4, achieve unified purpose via extensive sharing of information and involvement in planning and implementation of change.

At Zytex Corp., a 1991 Malcolm Baldrige National Quality Award winner, this principle is carried into the firm's four-step strategic planning process.<sup>6</sup> First, data are collected from customers and through formal and informal market research and benchmarking. In the next step six cross-functional teams develop a five-year strategic plan, and about 150 employees (a fifth of the company's 750 people)—representing all shifts, departments, and kinds of expertise—review and critique it. Additionally, a few customers and suppliers are invited to pass judgment on the plan, after which executives finalize it; the final plan includes generalized one-year objectives.

That one-year plan is used in the third step, involving every Zytex employee, in which departments and lower-level teams develop their own quality plans—detailed action plans with measurable monthly goals. The fourth step involves translation of strategic plans into financial plans.

Few companies apply the fourth principle to the extent that Zytex does, but many companies show signs of trying to implement most of the other eighteen TQM principles.

Principles 5 through 18, collectively, are aimed at driving out costly overhead, speeding up the design and production process, improving flexibility of human and physical resources, and eliminating uncertainties caused by rework and shaky suppliers. These factors seem likely to touch on many of the chief concerns of Zytex's or Boeing's customers, as well as key competitive strengths and soft spots of competing firms. Thus, strong, company-wide, on-going attention to those TQM principles automatically addresses, at least in part, many competitive opportunities.

### Goals And Policies

If TQM principles can, in fact, ease the burden of knotty strategic decisions facing senior management, how does the executive art change? We have been told, in the business press, that our newly made executives should be managing the pace of continuous improvement via "stretch" goal-setting, building teamwork and trust among the key department and business unit managers, developing a corporate culture, and—newly arrived from Japan—policy deployment.

Today, a minority opinion is that high-level managers should *not* engage in numerical goal-setting. Perhaps this opinion is related, in part, to points 10 and 11 of Dr. W. Edwards Deming's well-known 14 points; the tenth and eleventh call for elimination of numerical *productivity* and *work standards* goals.

What about numerical cost, profit, sales, market share, capacity utilization, and return-on-investment goals? Preoccupation with such goals sometimes is cited as a reason why our executives find it hard to look beyond the next quarterly report. The numbers in that report are, in the main, the ones referred to by those who ridicule "by-the-numbers management." Pressures to meet them tend to push managers into making ill-advised decisions: keeping prices high (eroding sales



volume) to meet a tough profit target, cutting prices below costs to prop up current sales, foregoing machine maintenance to meet a productivity (or cost or utilization) goal, and so on.

On the other hand, numerical targets for sales, profit, and so forth are necessary for budgeting and financial management—the need for which no one seriously questions. The TQM line of thought on goals vs. budgets might be as follows:

- Budgetary accuracy is an appropriate object of continuous improvement, and TQM data analysis methods offer an excellent way to improve the accuracy of budgeting (or accuracy of nearly any process, for that matter).
- Deviation from the budget is like deviation from tolerances on a component part; it is suitable for monitoring on statistical process control charts, so that a point out of the control limits may be easily spotted and dealt with. Zytex Corporation, the previously cited 1991 Baldrige prize winner, pioneered in the use of control charts for this purpose.
- Meeting the budget is, inherently, neither good nor bad. More sales, more profits, and lower costs than budgeted usually are happy events (unless at the expense of future results). Thus, budget items *should not be goals!* Quick reaction to take advantage of a good situation or a bad one, reflected by a sharp deviation from the budget, is what's important.

In today's admired companies, of course, executive goal-setting is not limited to items on the P&L statement and balance sheet. It extends to goals that are close to the essence of total quality management—for example, cycle time, quality, skill-upgrading, and machine up-time goals.

**Budget items should not be goals!**

These are essentials. But must executives express them as numerical goals—or stretch goals—such as Motorola's six-sigma quality goal? The stretch-goal bandwagon may have been inaugurated by John Young when in 1979, as president of Hewlett Packard, he set a company-wide goal of a ten-fold improvement in quality within ten years. The goal was met.<sup>7</sup> Not so well publicized are other, more recent, stretch goals at H-P—which, according to H-P insiders, were unrealistic and not met.

Given their extensive inculcation of TQM practices, do fine companies like Motorola and Hewlett Packard need high-level numerical goals? Perhaps not. These companies are well along with implementation of an array of devices that drive continuous, rapid improvement—in the eyes of the customer. The array includes product- or customer-focused organizational units (principles 6 and 18), multi-skilling (principle 10), expanded reward and recognition (principles 11, 13, and 15), potent improvement tools (principles 12, 13, and 14), quick response (principles 7, 8, and 9)—and more.

**Total quality management requires everyone to be working on measurable improvement meaningful in their own jobs.**

Self-imposed or team-imposed numerical goals are a different story—quite acceptable as long as they do not stray out of TQM boundaries. In fact, when a team sets its own goals, numerical or just indefinitely rapid, it owns goal setting, which is consistent with the ownership principle, number 11.

A tenet of TQM is that "you only improve what you measure." But aggregate numbers planned and measured high in the organization ("management by the numbers") have little relevance to the work of most people in the organization. Total quality management requires everyone to be working on measurable improvement meaningful in their own jobs.

**Leader-Facilitator**

The TQM environment of local ownership calls for executives and managers to function as highly visible advocates, facilitators, and cheerleaders. The roving

executive examines wall charts tracking improvement efforts in every work area for every process. Rapid improvements are cheered. Slow improvements, stalls, and trends in the wrong direction call for on-the-spot discussion. Recriminations are out of order. Instead the visiting manager asks why "the excellent rate of reduction in \_\_\_\_ has plateaued." The response might be, "We have a new supervisor, who has different ideas. What happened to the supervisory training program?" to which the executive says, "You're right! We haven't run the training program for the new supervisors. I'll make sure we get that going again."

Company policies, closely associated with the principles of total quality management, are absorbed into every corner of the organization via continuous training. Senior managers supply reinforcement by frequent, active involvement in implementation of TQM-based policy, with successes and problems made visible on wall charts.

The concerns of visiting managers viewing the wall charts and those doing the plotting are identical. The charts are the focal point for discussion. "Management-by-wandering-around" does not get into technical details of the job—of which the managers aren't familiar. Nor are visiting managers reduced to small talk, for lack of anything meaningful and mutually important to discuss. Nor is there a need to concoct a number as the improvement goal (managerial tinkering). Instead, the focus is on *rate* of improvement, and obstacles in the way.

While not many company's senior managers have adopted the leader-facilitator *modus operandi*, a few are leaning that way, especially in some of the companies that have won a Malcolm Baldrige quality award. One is Milliken and Company, a privately held textile and chemical manufacturer that was awarded a Baldrige in 1989. CEO Roger Milliken used to manage conventionally. So did his plant managers and staff department heads. Monthly cost variance reports absorbed a full day of site managers' review, analysis, responses, excuses, and blame shifting. Mr. Milliken spent a good deal of time on the road visiting sites with the worst variances.

The conventional reports still exist at Milliken, but only a few die-hard plant managers continue to hold the review meetings. Mr. Milliken now spends *none* of his time on variance reviews; today, the topic is quality—in all its manifestations.

Mr. Milliken's dominant activity is visiting his own *internal* customers—in design centers, labs, staff departments, and plants, not in conference rooms over computer sheets and flip-charts. Mr. Milliken and other senior managers also spend time reaching out to external customers—suppliers, too; they were doing this well before receiving the Baldrige (which requires outreach activities). A common device is the "sharing rally," typically two- or three-day meetings of customers and *their* customers, plus suppliers and freight carriers. CEOs and presidents from invited companies step to the rostrum and make presentations—often to blood rivals in the audience—on how TQM is progressing in their companies.

Being active with internal and external customers and suppliers can yield what many executives might find comforting: better knowledge of what's going on so that they may set more realistic stretch goals—thus allowing them to cling to their goal-setting habits. Managers may find it hard *not* to set goals, since the habit is so ingrained. It may take a decade or more for cautious executives in superior companies to develop sufficient confidence that total quality management actually works.

### Summary

Strategic decisions have far-reaching effects—on sales, capacity, finances, the competition, the environment, risk, rate of change, and so forth. Our mental

image of the strategic process—on a battlefield, as well as in business—is of decision makers sifting information received from lieutenants and gleaned from written reports.

It's time to alter the mental image. The leader becomes strategically influential less by making decisions and more by seeing that good decisions are made. Since the most senior leader has wide-ranging contacts in the financial, political, and business communities, the information-gleaning role of executives shall continue to be important. But trying to set strategy and manage a business based on those limited sources of enlightenment results in the kind of short-term by-the-numbers management that has been so competitively destructive to Western companies.

While we should expect top executives to cultivate broad external contracts, we should realize that most of them cannot maintain extensive, detailed knowledge about their own firms' technologies, existing products and those under development, processes, markets, suppliers, and capacity. That being the case, how can executives do well at setting business goals and policies? The answer is, usually they can't. What they can and should do is exercise vigorous leadership, including cheer-leading and facilitating implementation, in company-wide total quality improvement.

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#### Endnotes

<sup>1</sup> Michael Barrier, "A New Sense of Service," *Nation's Business*, June 1991, 16-24.

<sup>2</sup> Richard J. Schonberger, *Japanese Manufacturing Techniques: Nine Hidden Lessons in Simplicity* (New York: The Free Press, 1982).

<sup>3</sup> Jeffrey L. Funk, "Development Discipline: One Japanese Business's Approach to Product Development," unpublished, June 1991, p. 13.

<sup>4</sup> Jeffrey L. Funk, Unpublished book manuscript, June 1991, Chapter 6, 8-9, 14.

<sup>5</sup> Bill Richards, "Customers Had a Hand in New Plane's Design," *Seattle Post-Intelligencer*, October 16, 1990, 1, 14.

<sup>6</sup> Karen Bemowski, "Three Electronics Firms Win 1991 Baldrige Award," *Quality Progress*, November 1991, 39-41.

<sup>7</sup> Steve Kaufman, "Quest for Quality," *Business Month*, May 1989, 61-65.

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#### About The Author

Richard J. Schonberger is president of Schonberger & Associates, Inc., of Seattle, providing seminars and advisory services to industrial and services organizations worldwide; he is also an affiliate professor at the University of Washington. His current activities (and this article) are closely related to the content of two of his books: *Building a Chain of Customers: Linking Business Functions to Create the World Class Company* (1990), and *World Class Manufacturing: The Lessons of Simplicity Applied* (1986), both published by The Free Press, New York.

Dr. Schonberger formerly was George Cook Distinguished Professor at the University of Nebraska, where he taught for 14 years. Prior to that, he was a practicing industrial engineer in various Department of Defense industrial and support facilities (Navy, Air Force, and Army). He was awarded the British Institution of Production Engineers' 1990 International Award for an "Outstanding Contribution to the Advancement of Production Engineering Technology or Manufacturing Management." He is author of more than 100 articles, plus several books translated into 10 languages.