

# Aligning Reward Practices in Support of Total Quality Management

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**T**he rise of Total Quality Management represents one of the biggest changes of the past two decades in the way companies are managed. It has become known by various names—TQM, continuous improvement, total quality, process improvement. A survey by Lawler, Mohrman, and Ledford (1995) of the 1,000 largest U.S. companies reports that nearly 75 percent were using TQM practices to manage the organization and 78 percent planned to increase their use of them in the near future.

Many studies have found that, in general, TQM has had positive effects on company performance. Yet reports of failure are surprisingly common in the press. *Newsweek*, the *Wall Street Journal*, and *Fortune* have all deemed TQM only a partial success or a passing fad. Many firms have tried it, experienced less than positive results, and decided to abandon it. Yet TQM clearly cannot be dead if three-quarters of America's largest corporations continue to embrace it.

The study of organizational development, says Kilmann (1989), suggests that alignment of a company's system of rewards is a critical ingredient in successful organizational change. We decided to investigate whether anyone has ever taken a close look at the relationship between reward practices and TQM. After a review of the existing literature, we concluded that while some people have pointed out the importance of using reward practices that support TQM, and others have provided anecdotal examples, no one has yet conducted a careful, scientific examination of the topic. So we undertook a survey of a broad range of companies with the goal of determining which reward practices are most appropriate for them to use in support of TQM programs. Our findings suggest that certain practices do play a

key role in supporting TQM, and that the use of the proper ones can help make TQM more effective at improving company performance.

We reported the results of this study in a very technical format to the academic community (Allen and Kilmann 2001). Our purpose here is to share the findings and implications with a more practitioner-oriented community of managers and decision-makers. The major contribution, we hope, is that they will learn how to tailor their reward systems in support of a TQM-based strategy. They should then be able to make reward practice decisions based on the results of a scientific study rather than relying simply on intuition, experience, or trial and error. Some examples from firms will help illustrate the exemplary use of effective reward practices.

## The Study

We administered our survey to 100 members of a wide variety of organizations. The positions they held included senior manager (3 percent), middle manager (14 percent), front-line manager (31 percent), and nonmanagerial, professional/technical (52 percent). Their average length of employment at their respective firm was 33 months, and none had less than six months of experience. Sixty-one

*Q: Why aren't TQM practices as effective as they could be?*

*A: Reward system—the missing link that motivates managers and employees to “walk the talk” and use TQM to the fullest.*

percent of the firms were located in the United States and 39 percent were from abroad. The sample ranged widely by type of firm—61 percent were from the service sector, 23 percent from the manufacturing sector, and 16 percent in the government/nonprofit sector. Almost a quarter of them were unionized, and the mean number of employees was 6,733. Overall, the sample was quite diverse and representative of the current business environment, which helps bolster the generalizability of the findings.

Our survey was designed to measure three variables: TQM, reward practices, and company performance. We decided to measure TQM in two ways. First, we asked respondents to indicate the level to which quality-related language is used in official strategic statements (vision, mission, business plans, policies) and in meetings and informal discussions. This was targeted at measuring how much a firm uses TQM rhetoric—how well it “talks the talk.” Second, we developed a scale to rate how much the firms actually use TQM business practices. We used Lawler, Mohrman, and Ledford’s survey to identify the core business practices used with TQM, including quality improvement teams, quality councils, cross-functional planning, direct exposure to customers, work simplification, process reengineering, and customer satisfaction monitoring. Respondents were asked to estimate the percentage of employees who work in departments or units using each of these core practices. A sample survey item is shown in **Figure 1**.

Responses to all seven questions were added to derive an overall TQM index score for each firm. The mean score for the sample was 25.4, with broad variability in the extent to which the firms practiced TQM (the index ranged from 9 to 45 with a standard deviation of 8.71). So we were confident we had captured a good range of TQM use in our sample—from introductory to extensive levels of implementation.

We chose to use this indirect method of ascertaining the extent to which a firm is practicing TQM because it is considered more reliable and valid than directly asking whether the firm uses TQM or not. This is largely because of the variety of names and definitions that have grown up around it. One firm may claim to practice TQM

but does not really apply its classic business practices; another firm may use the business practices but not call the approach TQM. What is known as TQM in one firm may be called continuous improvement or process improvement in another.

Because a previously designed instrument for measuring the reward system was not available, we identified 24 different reward practices from the literature, developed items for these practices, and included them in the survey. Respondents were asked to estimate the percentage of employees in their firms who were eligible for the various rewards.

We measured company performance using a widely accepted scale originally developed by Gupta and Govindarajan (1984). Sixteen performance indicators, such as net profit and revenue growth, the quality of goods or services, and customer satisfaction, were combined to form an overall index ranging from a company performance high of +2 to a low of -2. We also included a second performance scale originally developed by Dess and Robinson (1984) as a reliability and validity check. The two scales had a strong correlation, thus lending support for our performance scale. Finally, using regression analysis, we statistically analyzed the survey responses to help answer the following research questions: How well did TQM work at the firms we sampled? Did those firms making more extensive use of the TQM practices report higher levels of organizational performance? Did reward practices exhibit any effect? Do certain reward practices work together with TQM to produce even higher performance levels? Our results are discussed in the following sections.

### CAN'T WE JUST TALK THE TALK?

Most senior executives and managers involved with implementing TQM instinctively recognize the importance of “talking the TQM talk.” They typically mention quality in their vision and mission statements, in strategic and business plans, and at meetings. Many reinforce quality in their memos and letters to employees, or in their group or face-to-face encounters with front-line workers. It has become common in companies to see posters, plaques, and wall hangings espousing quality values.

Executives logically assume that all this talk about quality sends the message to the firm that quality is important to management. Senior managers often assume that employees will then translate the message into action and transform the corporate culture into one with values that reinforce quality improvement. Extending this logic, management presumes that the firm should eventually realize all the benefits associated with superior quality, such as fewer errors and less

**Figure 1**  
**Survey Sample**

	NONE (0%)	ALMOST NONE (1–20%)	SOME (21–40%)	ABOUT HALF (41–60%)	MOST (61–80%)	ALMOST ALL (81–99%)	ALL (100%)
Quality Improvement Teams...	1	2	3	4	5	6	7

rework, lower costs, increased customer satisfaction and market share, and ultimately improvements in bottom-line profitability.

Our findings, however, do not support this assumption. In fact, we found that companies are unlikely to show improvements in their performance just by talking the TQM talk.

### **You Have to “Walk the Talk”**

An adage long espoused by such TQM gurus as W. Edwards Deming and Joseph Juran holds that management must “walk the talk” if TQM is to be effective. We found support for this notion that firms must actually put into place key TQM practices in order to reap the benefits. Managers cannot be content merely to espouse the rhetoric and hope that employees will make it a reality.

More specifically, our findings suggest that companies making more extensive use of the core TQM practices were much more apt to report higher levels of performance than those that stopped at the rhetoric stage. Firms that used more of these practices reported statistically significant higher results on the performance index.

One such key practice is the use of a cross-functional planning approach when developing strategic plans. Critical business processes tend to cut across functional boundaries, so it is important for managers to think cross-functionally when developing strategic plans and setting company priorities. Quality must be specifically considered during formulation of these plans and integrated into the resulting business strategy.

Another important practice is the use of quality councils. Typically, these are groups of middle managers who meet regularly to link the firm’s operational activities with the strategic quality plan developed by senior management and help ensure that the plan is truly enacted throughout the firm. This is accomplished most effectively by using the existing management structure to enact the plan, rather than using a stand-alone committee that circumvents the existing chain of command. If managers in the chain of command are not included in the strategy implementation process, they are less likely to understand it, buy into it, or cooperate with it.

A third critical TQM practice includes the use of teams. Effective companies typically use a combination of both work simplification and process reengineering to improve quality. This normally includes the chartering and training of teams of workers. If the process being addressed crosses functional boundaries, these teams are typically composed of workers from the involved functions. Quality improvement teams use their intimate knowledge of the process and their influence to help solve business problems, improve existing work processes, or invent radically new

ways to perform current work processes. They help ensure that quality plans and rhetoric are translated into action at an operational level.

Customer satisfaction is the hallmark of an effective TQM program. So it is also important for all employees to have the opportunities for direct exposure to customers in order to gain a clearer understanding of customer needs. Getting to know one’s customers (internal or external) and their needs is another critical practice that helps a firm achieve total quality.

Finally, it is vital to measure internal and external customer satisfaction in order to provide feedback to all levels of the firm on the achievement of strategic quality plans and goals. Goal-setting combined with prompt and accurate feedback has consistently been shown to be an effective way to increase performance. This management tenet holds true for TQM as well.

The findings of this portion of our study should come as no surprise to most TQM experts. It is fairly widely accepted that TQM, done right, will improve results. However, these findings add further support to the notion that TQM rhetoric from organizational leaders, by itself, cannot inspire employees to produce the hoped-for results. Companies must go the extra mile and implement the core practices associated with a quality approach if they are to reap the benefits. But what can companies do to make TQM even more effective? We decided to take a closer look.

### **MAKING TQM EVEN MORE EFFECTIVE**

**T**he use of quality practices is fairly widespread. Most firms that make a serious attempt to implement TQM realize that they must enact those practices if they expect to reap positive results. So we decided to explore the next logical question: “Is there anything else managers commonly neglect or forget to address when implementing TQM that could prevent them from gaining even better results?” Our experience with organizational change efforts led us to believe that managers may often be reluctant to make changes to the reward system in support of TQM implementation. Reward systems are typically “sticky.” Managers know that any changes are apt to evoke a loud response from workers. An old adage we have often heard is: “If you mess with people’s pay and benefits, you get their attention very quickly.”

But what manager wants to take the political risk of experimenting with changes to such a controversial aspect of corporate life? Even operational-level managers who realize the importance of rewards often feel their hands are tied because many of the compensation and benefit decisions are made at a corporate rather than operational level. At the corporate level, the Human Re-

sources department is often not the same department that is charged with facilitating TQM implementation, so it is not always easy to coordinate HR practices with TQM implementation.

The result of this reluctance or perceived inability to change reward practices may cause many firms to hold on to traditional systems that do not logically support a quality-based culture. Traditional pay-for-performance schemes typically focus on individual performance. They are often based on productivity goals, rather than quality or customer satisfaction. Such reward practices do not logically seem to support the development of a TQM culture based on quality, teamwork, and customer focus.

What should a firm do *from a reward standpoint* to be even more effective with TQM? Our results indicate that certain practices can have a positive moderating effect on TQM and company performance. In other words, the use of these practices *in conjunction with TQM* was associated with significantly higher performance levels.

We used a statistical technique known as factor analysis to determine that the various reward practices naturally fall into two groups, monetary and nonmonetary. Our results suggest

that the use of the proper kinds of rewards, at the right time, will have a positive effect on a company's performance.

### Nonmonetary Rewards

Typically, rewards that involve things other than money or pay-related issues often invoke feelings of accomplishment or self-worth from employees who have done a quality job. Reward practices comprising this nonmonetary category are summarized in **Figure 2**.

Most firms implementing TQM have traditionally relied heavily on nonmonetary rewards. For example, it is common for them to reward employees for their quality efforts with certificates, letters of appreciation, or merchandise, often in conjunction with celebrations like luncheons or special quality-related events. It is also typical for them to have some sort of system for employees to make quality improvement suggestions. Managers are often instructed to reward employees with praise and "pats on the back" to acknowledge quality accomplishments. Some firms have changed their performance appraisal systems to include feedback from coworkers and customers

and to focus on developing employees to perform better in the future. Quality accomplishments are even considered in promotion decisions.

We combined the responses to the seven nonmonetary reward survey items to derive an overall nonmonetary reward index for each firm in our sample. The index had a potential range of 7 to 49 since each item could range from 1 (no employees covered by that type of reward) to 7 (all employees covered). Regression analysis using this index found that these sorts of practices were associated with statistically significant higher levels of corporate performance in firms that also made more extensive use of quality-related language in their official strategic statements. These results are illustrated in **Table 1**, which compares the differences in performance between the firms making the most extensive use of nonmonetary rewards with those using them the least. (The actual names of the firms are not published because we promised anonymity to survey respondents.) As you can see, the firms making more extensive use of the nonmonetary rewards reported higher performance levels than those at the op-

**Figure 2**  
**Nonmonetary Reward Practices**

<i>Practice</i>	<i>Such as...</i>
Nonmonetary forms of recognition to acknowledge achievement of quality improvement goals	Merchandise, certificates, letters, complimentary tickets, etc.
Celebrations to acknowledge achievement of quality improvement goals	Lunches, dinners, special events, etc.
Regular expressions of appreciation by managers/leaders to employees to acknowledge achievement of quality improvement goals	Praise, "pat on the back"
360° performance appraisals	Those incorporating feedback from coworkers (other than immediate supervisor), subordinates, and/or customers
Formal suggestion system available for individuals to make quality improvement suggestions	A suggestion box
Development-based performance appraisals	Appraisals used primarily for <i>developing</i> employees to perform better in the future rather than for <i>evaluating</i> past accomplishments and failures
Quality-based promotions	Promotions based primarily on the achievement of <i>quality</i> -based goals rather than <i>quantity</i> -based goals

posite end of the spectrum (0.56 versus 0.21). Keep in mind that the performance index can range from +2 to -2.

Because this relationship was observed in firms in the early stages of introducing TQM (they were using the rhetoric but not necessarily the business practices), we concluded that non-monetary rewards are appropriate for firms just getting started with TQM. These firms are typically still at the "talking the talk" stage and such rewards can be useful in getting the momentum of organizational change started.

But what happens once the introductory stages are completed? Many TQM programs begin to stagnate, then ultimately fizzle out and die. Can anything be done to keep the momentum going and reach even higher levels of performance? The answer seems to lie with the other type of reward practices—monetary.

### Monetary Rewards

Our research uncovered six monetary reward practices associated with more effective TQM implementation. Typically related to pay or compensation issues, they are summarized in **Figure 3**. We combined the responses on these six practices to form a monetary rewards index for each firm. The index had a potential range of 6 to 42 since each item could range from 1 (no employees covered by that type of reward) to 7 (all employees covered). Our analysis found that monetary rewards had an even stronger effect on organizational performance than did the non-monetary practices. In fact, a regression analysis of these rewards demonstrated that they significantly moderate the relationship between TQM and performance. In other words, firms that used the TQM practices *and* more of the monetary reward practices reported better performance than firms using similar levels of TQM practices but with lower levels of monetary rewards.

Indeed, it does appear that when it comes to TQM, the "power of the pocketbook" is even more important than the "power of praise." This relationship is illustrated in **Table 2** on the next page, which compares the performance scores between the firms making the most extensive and least extensive use of monetary rewards. The firms were also above the mean in TQM practice implementation. Again, keeping in mind that the company performance index can range from +2

**Table 1**  
**Comparison of Nonmonetary Rewards and Company Performance<sup>1</sup>**

Firms Using Nonmonetary Rewards Most			Firms Using Nonmonetary Rewards Least		
<i>Firm</i>	<i>Nonmonetary Rewards Index<sup>2</sup></i>	<i>Company Performance Index<sup>3</sup></i>	<i>Firm</i>	<i>Nonmonetary Rewards Index<sup>2</sup></i>	<i>Company Performance Index<sup>3</sup></i>
A	46	1.32	O	16	-0.10
B	43	-0.15	P	16	-0.03
C	42	0.44	Q	16	0.09
D	40	1.28	R	16	1.20
E	36	0.94	S	15	-1.68
F	36	0.60	T	15	-0.01
G	36	0.11	U	15	0.42
H	35	0.33	V	15	0.57
I	35	0.84	W	14	0.74
J	34	-0.06	X	14	1.12
K	33	0.23	Y	14	0.59
L	33	0.86	Z	11	-0.39
Average		<b>0.56</b>	Average		<b>0.21</b>

<sup>1</sup>Includes firms above the mean on the use of TQM language in their official strategic statements.

<sup>2</sup>Index can range from 7 to 49 based on combining responses of the 7 items.

<sup>3</sup>Index can range from a low of -2 to a high of +2.

**Figure 3**  
**Monetary Reward Practices**

<i>Practice</i>	<i>Such as...</i>
Profit sharing	Firm shares some portion of corporate profits with employees.
Gainsharing	Portions of individual work unit gains in productivity, quality, cost effectiveness, or other performance improvements are shared with employees in the form of bonuses based on a predetermined formula.
Employment security	A corporate policy or union contract is designed to prevent layoffs.
Comp time	Workers are given the option to be compensated for overtime hours worked in the form of additional time off rather than additional pay.
Individual-based performance system	Performance appraisals and pay raises are based primarily on <i>individual</i> achievements rather than work group/team accomplishments.
Quantity-based performance appraisals	Performance appraisals are based mainly on achieving <i>quantity</i> -related goals (e.g., number of units produced or serviced) rather than <i>quality</i> -related goals.

to -2, you can see that firms using higher levels of monetary rewards to support TQM efforts reported significantly better performance than those using lower levels (an average of 1.05 versus 0.09).

Managers in firms that have completed the initial stages of TQM implementation should seriously consider using the monetary reward prac-

tices summarized in Table 2 if they want to reap the greatest positive impact from the program. Aligning monetary rewards to support TQM can serve to “refreeze” the firm after the initial cultural changes enabled by the nonmonetary reward practices have been realized. The TQM philosophy can then truly become a way of life for the firm. Conversely, if changes to the monetary reward system are neglected, the firm risks sliding back into the old culture, declining performance, and the bigger likelihood that TQM will be abandoned.

Interestingly, the single monetary reward practice that showed the strongest relationship with performance was the use of performance appraisals with quantitative goals. This practice certainly runs counter to the generally accepted TQM wisdom espoused by Deming and other gurus. But in reality, quantity-based performance appraisals are actually compatible with TQM. We shall cover this in the following section, as well as discuss monetary practices in more detail and present some cases of firms that illustrate how these practices can be used in support of TQM.

#### Examples of Using Monetary Rewards

It is well known that many winners of the Malcolm Baldrige National Quality Award, such as Cadillac and Federal Express, use profit sharing and gainsharing plans in support of their quality programs. Although plaques and praise can motivate people to a certain extent, these companies recognize the greater power of financial incentives when it comes to TQM. Their rationale is

that employees must share monetarily in the savings and extra profits derived from TQM if they are to be fully motivated to continue contributing and implementing improvement ideas.

Other lesser-known examples illustrate this approach as well. The Volvo GM Heavy Truck Corporation Assembly Plant in Orrville, Ohio provides a case in point of a company using gainsharing in support of its TQM program. After three years of program implementation, Volvo GM realized the importance of using rewards to reinforce the cultural changes it was trying to make. So managers decided to introduce a gain-sharing program based on four key principles: involvement, identity, equity, and commitment. All full-time employees participate, and the plan—based on the ratio of direct labor, material, and overhead to net revenue—is kept simple enough for all to understand. The company uses its suggestion system for employees to suggest improvements to this ratio. Any performance improvements are split between the corporation and the employees. Results are posted monthly and payouts are made quarterly so as to limit the time between performance and rewards.

Job security also plays a critical role in establishing a climate of trust necessary for effective TQM. Workers must feel comfortable that any improvements they make to their work processes will not end up costing them or their coworkers jobs. Companies such as Lincoln Electric and GM’s Saturn and NUMMI plants, realizing the importance of job security in employee motivation, have enacted no-layoff policies or contract stipulations.

Case studies by Edwards, Collinson, and Rees (1998) of six British companies support the conclusion that job security is a necessary condition for TQM success. Acceptance of TQM by British Steel employees was quite high compared to other firms studied. A major contributing factor was the fact that British Steel had in place a climate of high job security during the period the study was conducted. Employment levels were stable at the plant after a period of major reorganization and reinvestment. Similarly, according to Delery and Doty (1996), a study of the financial performance of 192 banks found a significant relationship between employment security and return on assets.

Time, rather than money, is proving to be another important motivator for more and more workers. Faced with ever growing work loads and low levels of unemployment brought on by a robust economy, many individuals would rather receive comp time—being “paid” with time off rather than money for overtime work.

**Table 2**  
**Comparison of Monetary Rewards and Company Performance<sup>1</sup>**

Firms Using Monetary Rewards Most			Firms Using Monetary Rewards Least		
Firm	Monetary Rewards Index <sup>2</sup>	Company Performance Index <sup>3</sup>	Firm	Monetary Rewards Index <sup>2</sup>	Company Performance Index <sup>3</sup>
A	36	1.06	O	14	0.07
B	33	1.32	P	14	0.10
C	29	0.44	Q	14	0.70
D	29	1.04	R	13	-0.03
E	26	0.33	S	12	1.28
F	25	1.57	T	12	-0.68
G	25	0.98	U	11	0.60
H	25	1.36	V	11	-0.18
I	24	1.75	W	10	0.10
J	24	0.89	X	6	-0.12
K	24	0.31	Y	6	-0.66
L	23	1.53	Z	6	-0.07
Average		<b>1.05</b>	Average		<b>0.09</b>

<sup>1</sup>Includes firms above the mean on TQM implementation.

<sup>2</sup>Index can range from 6 to 42 based on combining responses of the 6 items.

<sup>3</sup>Index can range from a low of -2 to a high of +2.

Warner (1997) indicates that 75 percent of the working public favors having a choice between comp time and overtime pay. Legislation has been introduced in Congress to change the Fair Labor Standards Act of 1938 requiring nonexempt employees to be paid for overtime with money rather than time off. Federal employees have had this option since 1978, and state and local employees since 1986.

Comp time has become common at private sector companies in the information technology (IT) sector. According to Mohan (1998), Jean Hollands, CEO of the Growth & Leadership Center, estimates that at least 25 percent of the CEOs in Silicon Valley are either currently using or seriously considering offering comp time for their exempt employees. The undersupply of technical people in the sector has made this an important issue with IT professionals. Comp time is also extremely popular with working mothers. Clearly, it has become a salient reward that any TQM program should seriously consider offering as an indirect form of monetary compensation.

At first glance, the final two monetary reward practices seem to be at odds with a successful TQM program. The use of an individual-based performance system in which performance appraisals and pay increases are based on individual achievements rather than strictly team or group accomplishments seems to run counter to the creation of a team-oriented culture. Likewise, the use of *quantity-related* goals in performance appraisals, instead of strictly quality-related goals, seems to be incongruent with a quality-focused company. Yet our research showed both of these practices were positively related to higher performance levels at TQM firms. In fact, a performance appraisal system incorporating quantifiable goals had a higher correlation with company performance than any other reward practice. How can this apparent contradiction be explained?

The resolution seems to be related to balance and focus. American culture is very individualistic, and its people value personal contributions highly. As such, a reward system that is totally team-based runs counter to the very fabric of U.S. society. Americans seem to be more comfortable knowing that at least some portion of their performance appraisal will be based on how they perform as individuals. Likewise, it seems that people are also more comfortable with being evaluated on objective rather than subjective goals. They prefer their goals to be based on concrete and easily measurable factors. Purely quality goals in general tend to be more subjective than quantity goals. Indeed, decades of research on goal-setting have shown it to be one of the strongest and most effective motivators available to managers. If realistic, specific goals are set (preferably by participation) and employ-

ees are given timely feedback, they will be motivated to achieve them.

Although TQM gurus suggest that it is the right thing to do, the total abandonment of traditional individual performance management based on quantifiable goals may thus be too radical a departure for most firms to consider realistically. A viable solution is to refocus a traditional system to include more of an emphasis on TQM-related skills and accomplishments.

According to Thornburg (1992), Steve Gross of the Hay Group recommends a system in which individuals are evaluated for base pay on such variables as ability to communicate, customer focus, dealing with change, ability to work on a team, and professional and technical knowledge. Managers in this type of system are rated on employee development, group productivity, and leadership. Variable pay for both managers and employees is based on actual accomplishments of these TQM-related goals.

Another illustrative example of a company updating a traditional pay-for-performance plan to support a quality environment is evidenced by the General Motors New United Motors Manufacturing Inc. (NUMMI) experience. Sarin (1993) reports that this GM plant in Fremont, California was originally organized as a traditional assembly line. In terms of productivity and quality, it had a reputation as one of the worst GM plants in the world. Things got so bad that the plant was closed in 1982. Reopened in 1983 as part of a joint venture with Toyota, its managers began to use modern quality management techniques. Although traditional work standards and production quotas were still in effect, the new plant used a very different approach to establish these standards. All the time-and-motion studies, job design, and standard-setting are now done by the workers themselves instead of industrial engineers. Such direct involvement in goal-setting empowers employees to rate themselves and has had a positive effect on motivation. The NUMMI plant has been a successful turnaround for GM.

Poole et al. (1993) report another case that demonstrates how a traditional performance management system can be modified to support quality. At PQ Corporation, a chemical manufacturer based in Valley Forge, Pennsylvania, employees meet annually with their supervisors to reach agreement on objectives for the upcoming year, similar to a traditional management by objectives (MBO) system. For each work process, they identify their product or service and their customer (internal or external), then set improvement objectives for their products or services. But PQ objectives encompass more than just individual goals. All PQ employees are expected to develop group-based objectives as well. This is especially important for work processes that ex-

tend beyond their individual span of control. Such a hybrid of individual and group-based objectives helps broaden the focus of a traditional MBO system to encourage teamwork, group problem-solving, and cross-functional process improvement.

**O**ur research findings have important implications for senior managers as well as any manager responsible for implementing total quality management. Once again, managers cannot be satisfied to just talk the talk when it comes to a TQM program. Bottom-line effects require them to walk it as well. This includes not only the implementation of TQM business practices but also the alignment of the company's reward system.

The commonly held wisdom of supporting TQM with only nonmonetary rewards is not enough. Yes, managers should continue their use of such rewards with TQM—especially during the introductory stages. This exhibits a positive relationship with performance at the talking stage. But if managers really want better performance from TQM, they must implement supportive monetary reward practices. Firms with such practices in place report stronger organizational performance. Interestingly, some of these monetary practices actually fly in the face of conventionally held TQM wisdom.

Now would be a good time for managers or other employees responsible for the continuing implementation of total quality management to take inventory of their reward system to see how compatible it is with the TQM program. When it comes to total quality, it literally pays to remember rewards. □

## References

- R.S. Allen and R.H. Kilmann, "The Role of the Reward System for a Total Quality Management-based Strategy," *Journal of Organizational Change Management*, April 2001 (in press).
- J.E. Delery and D.H. Doty, "Modes of Theorizing in Strategic Human Resource Management: Tests of Universalistic, Contingency, and Configurational Performance Predictions," *Academy of Management Journal*, August 1996, pp. 802-835.
- G.G. Dess and R.B. Robinson, "Measuring Organizational Performance in the Absence of Objective Measures," *Strategic Management Journal*, July-September 1984, pp. 265-273.

P. Edwards, M. Collinson, and C. Rees, "The Determinants of Employee Responses to Total Quality Management: Six Case Studies," *Organization Studies*, 19, 3 (1998): 449-475.

A.K. Gupta and V. Govindarajan, "Business Unit Strategy, Managerial Characteristics, and Business Unit Effectiveness at Strategy Implementation," *Academy of Management Journal*, March 1984, pp. 25-41.

J.R. Hackman and R. Wageman, "Total Quality Management: Empirical, Conceptual and Practical Issues," *Administrative Science Quarterly*, June 1995, pp. 309-342.

R.H. Kilmann, *Managing Beyond the Quick Fix* (San Francisco: Jossey-Bass, 1989).

E.E. Lawler III, S.A. Mohrman, and G.E. Ledford, *Creating High Performance Organizations: Practices and Results of Employee Involvement and Total Quality Management in Fortune 1000 Companies* (San Francisco: Jossey-Bass, 1995).

L. McAninch, "Gainsharing Creates an Environment that Supports TQM," *Management Accounting*, November 1995, pp. 38-39.

S. Mohan, "Balance Brings Benefits," *InfoWorld*, September 28, 1998, pp. 99-101.

J. Pfeffer, "Seven Practices of Successful Organizations," *California Management Review*, Winter 1998, pp. 96-124.

J.C. Poole, W.F. Rathgeber III, and S.W. Silverman, "Paying for Performance in a TQM Environment," *HRMagazine*, November 1993, pp. 68-74.

S. Sarin, "Can Work Measurement and TQM Get Along?" *Industrial Engineering*, October 1993, pp. 14+.

L. Thornburg, "Pay for Performance: What You Should Know (Part 1)," *HRMagazine*, June 1992, pp. 58-61.

D. Warner, "Workers' Desire for Time Off," *Nation's Business*, December 1997, p. 34.

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