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**TOTAL QUALITY MANAGEMENT AND
EMPLOYEE INVOLVEMENT:
SIMILARITIES, DIFFERENCES, AND
FUTURE DIRECTIONS**

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Total Quality Management (TQM) programs are an increasingly popular approach to management. With the creation of the Baldrige award and the competitiveness challenges which many corporations face, they have become extremely popular in the United States during the last decade.¹ Most large corporations have a program that incorporates some of the practices and principles of total quality management. One of the most important principles of total quality management concerns employee involvement or, as it is often called, empowerment. It is common for TQM programs to state that employee involvement is an important part of any successful TQM program.

There is a long history of research and writing on employee involvement and how it can affect organizational performance.² It, too, is becoming increasingly popular. One possibility, as suggested by TQM programs, is that employee involvement is best thought of as an activity which supports a TQM program. The alternative possibility is that TQM practices are best used in support of employee involvement programs. Is the difference between TQM as a part of involvement and involvement as a part of TQM more than just a difference in phrasing? Does the choice between these two alternatives have important implications for the way an organization is actually managed and structured? In order to answer these important questions we need to look briefly at the history of both TQM programs and employee involvement programs.

Total Quality Management

There is no single theoretical formulation of the Total Quality Management approach nor any definitive short list of practices that are associated with it. It is the product of the work of such American quality gurus as Deming, Juran, and Crosby and the work of an important Japanese writer, Ishikawa.³ The writings of these individuals as well as the application of their ideas in many Japanese companies and some American companies, however, do allow us to identify some characteristics that are typical of most TQM programs.

Total Quality Management can best be seen as a philosophy of management which combines the teachings of Deming and Juran on statistical process control and group problem solving processes with

Japanese values concerned with quality and continuous improvement.⁴ Total Quality Management started to become popular in Japan during the 1950s as it tried to recover from World War II. During the 1980s it has become increasingly popular in the United States and Europe most likely as a result of the success of Japanese firms in a number of global markets.

Total Quality Management focuses very heavily on quality and the definition of what constitutes quality in all the functions and activities that an organization undertakes. It typically regards customer reactions as the best measure of quality. It uses the idea of internal customers to substitute for external customers in measuring the quality of many of the operations in the organization. TQM regards focusing on quality as a way to gain competitive advantage. It is often argued that if quality is improved, costs will drop and organizations will respond more quickly and effectively to customer requests.

Total Quality Management programs emphasize the importance of top management acting as the main driver of TQM activities. The reasons for this are multiple, but the most important focus on the view that TQM is a culture, not just a program. Top management support is felt to be necessary in order to assure that the right priorities are set and that commitment to the principles of TQM exist throughout the organization. Total Quality Management proponents go on to emphasize the strong role which management throughout the organization must play.

According to such TQM gurus as Deming, most quality program problems are caused by management and the systems that they create and operate. Employees are seen as having good ideas on how to improve quality and as wanting to do a good job. In TQM programs they are asked to contribute their ideas and are often given responsibility for monitoring quality. Managers, on the other hand, are seen as being responsible for the management systems and production systems in organizations. They are asked to improve these so that the organization produces quality products and services. Estimates of the proportion of quality issues that can be traced to worker performance problems, range from 25% to less than 10%. Most quality problems are seen primarily as management problems that need to be addressed through the management hierarchy.

Most TQM gurus emphasize that quality problems most often are the result of poor horizontal or lateral relationships within the organization. That is, different functions do not properly relate to each other and different employees do not properly relate to each other. One of the most obvious manifestations of TQM are quality circles and the other improvement groups that are created. Often they work on problems of lateral coordination and, at times, of course, make suggestions about how to improve managerial systems, work methods, and work procedures.

A very visible element of many TQM programs are the technologies used to support both quality measurement and quality improvement. A typical program includes techniques that aid issue identification and problem solving. Most employees are trained in their use. They include statistical process control methods, measures of non-conformance, cost of quality, cause and effect analysis, and various group decision making methods. These methods typically focus on creating and using accurate production and quality information and on the precise measurement and quantification of problems.

Total Quality Management programs place great emphasis on including all employees in the TQM culture. This is where employee involvement comes in. Employees are expected to take responsibility for quality in two important respects. They are expected to call attention to quality problems as they do their normal work. Perhaps more importantly, they are expected to accept the continuous improvement culture and to look for ways that they can do their work better. They are also expected to look for ways that the overall operations of the organization can be improved. To do this, of course, they need skills and information as well as vehicles that allow them to produce change in the organization.

Quality circles and improvement groups are the major vehicles that are used to allow employees to make suggestions and to change work processes. In some cases, employees are also encouraged to meet in their natural work groups to look for ways to talk about improved approaches and new work methods. Also, typically, there is a substantial amount of quality information given to employees in TQM programs. In many instances, this may be the first time that employees have had training and valid information about quality. Also new may be the chance to influence work methods and work procedures that influence

quality. It almost always is the first time that they have had a chance to monitor their own quality and to make decisions about its adequacy.

Employee Involvement

Just as is true with TQM, there is no single authoritative source or theory to support employee involvement as a management approach. It has a long history dating back to early research work which was done on democratic leadership in work organizations. That research work, which started in the 1930s, emphasized the consequences of employees being involved in decision making. It shows that under certain conditions employees are more committed to decisions and that better decisions are made if they are involved.

Another important part of the work on employee involvement concerns work design and its impact on intrinsic motivation and job satisfaction. The work on individual job enrichment, as well as the work on self-managing work teams and sociotech work systems, forms a critical part of the historical thinking that has been combined to develop management approaches that stress employee involvement.⁶

Perhaps the most important overall focus in the work on employee involvement concerns pushing decisions to the lowest level in the organization. The approach consistently advocates a "bottoms up" approach to management. Jobs or work at the lowest level is thought of as designed best when individuals or teams do a whole and complete part of an organization's work process. In addition, it is argued that the individuals or teams should be given the power, information, and knowledge they need to work autonomously or independently of management control and direction. The job of management is seen as one of preparing the individuals or teams to function in an autonomous manner. Management is an enabler, culture setter, and supporter rather than a director of employee action.

Some of the writings on employee involvement place a strong emphasis on reward systems. They suggest combining participation in decision making and democratic supervision with rewards for skill acquisition and for organizational performance.⁷ The Scanlon Plan, profit sharing plans, and employee ownerships are important reward system practices which are associated with employee involvement efforts.

The writings on employee involvement give a considerable amount of attention to organizational change. They stress "bottom up" change and, in most cases, start with retraining supervisors and redesigning work relationships at the first level of the organization. In many respects, employee involvement does not argue for a continuous improvement approach so much as discontinuous change because it talks of substantial gains in organizational effectiveness as a result of moving to completely new work structures and new ways of organizing work.

The logical evolution of employee involvement programs is toward a substantial flattening of the organization and, in many cases, the elimination of substantial amounts of staff work and support work. This work is often seen as moving either out of the organization or being done at lower and lower levels in the organization. Employee involvement programs stress that substantial amounts of the work that is done by managers is unnecessary because it simply supports a command and control approach to management which is not needed when employees are involved in their work and are capable of self-managing.

Differences Between Employee Involvement and Total Quality Management

There are some obvious overlaps between the writings on TQM and employee involvement. Both see new roles for employees. They see employees taking much more responsibility, being more skilled, and getting more and better information. Both also emphasize the need for improvements and changes in the systems that organizations use and the need for managers to dramatically change their behavior and their role. They both also emphasize the importance of culture and that organizations are best viewed as complex, inter-related systems rather than combinations of independent pieces.

The differences between TQM and employee involvement are as striking as are the similarities. The differences begin with the type of outcomes on which they focus. There is nothing comparable in employee involvement to the focus of TQM programs on quality as an outcome. The work on employee involvement talks about possible improvements in cost, speed, quality, and employee well-being and suggests that the type of gains sought in a particular situation can and should be a result of the organization's strategy and its technology. In TQM programs, quality is front and center. Total Quality Management

programs emphasize that the other advantages such as improvements in costs and speed are derived largely through improvements in quality.

Total Quality Management programs place relatively little emphasis on rewards. The writings do sometimes emphasize the importance of eliminating individual rewards, pay-for-performance systems, and management by objective systems. There is also the suggestion that there should be greater use of recognition rewards. Typically it is argued that these should be given in return for group accomplishments or, perhaps, the development of new work methods and new procedures. In contrast to TQM programs, many employee involvement programs place pay system change in a much more prominent position. Instead of simply trying to get pay as a reward out of the picture so that it does not get in the way, new programs are suggested. Gainsharing, employee ownership, and skill based pay are used to increase the amount of knowledge, information, and decision making which exists at the lowest level of the organization.

Particularly in the case of gainsharing, the argument is often made that reward system changes are fundamental to producing an effective relationship between an individual and an organization. Traditional job based hierarchical reward systems are seen as canceling out or making difficult almost any substantial effort at employee involvement.

Employee involvement programs emphasize changing job designs and the use of team structures at the lowest level of the organization. In one sense they try to undermine the hierarchy of the organization by making it unnecessary at the lowest level of the organization. The self-managing team concept which comes out of literature on sociotech work design often leads to the creation of work groups which need little direct supervision. Thus, the first level of supervision is often eliminated leading to structures in which several teams report to an area manager. Some advocates of self-managing teams argue that it is desirable that a team control a whole business process. In the ultimate extension of employee involvement, a single team deals with a supplier and a customer so that there is no need for the concept of internal customers. Carried to extreme, the image of employee involvement leads to an organization that is made up of many small autonomous teams, each of which has its own bottom line profit responsibility.⁸

The writings on employee involvement talk of dramatic reductions in the number of management levels. They also argue for much larger spans of control in order to give employees the opportunity to be self managing and a valid sense of responsibility for their performance. This ties directly into the idea of employees being responsible for performance and customer satisfaction. The employee involvement approach typically seems to argue that individual employees or small groups of employees should face external customers and external suppliers and be held accountable for satisfying them.

Total Quality Management programs, on the other hand, more typically seem to accept the existing hierarchy and try to use it to produce system improvements. They place more emphasis on internal customer relationships and place much less emphasis on restructuring work and work situations in order to make individuals and work teams more autonomous and more individually responsible for dealing with customers. They do not focus on work redesign in order to improve motivation. Sometimes work may be changed in a TQM program, rather than being enriched it is usually simplified in order to have fewer steps in the work process, as well as fewer employees. Some levels of management, as well as staff personnel, may also be eliminated, but this does not appear to be a major focus in most TQM programs and writings on TQM.

Total Quality Management programs place substantial emphasis on parallel problem solving activities. That is, they use quality circles and other improvement processes to identify how work methods and work procedures can be changed. Because the TQM approach emphasizes parallel problem solving it often ends up requiring the organization to add staff and support personnel. These support personnel are used to facilitate problem solving groups, to train them and, generally, to support this extra curricular activity. For this reason they sometimes add to the overhead structure in an organization rather than reduce it. This has caused problems in some TQM oriented companies. Employee involvement advocates suggest that improvement often can best be done by natural work teams if they are given the authority, information, and knowledge to make improvements in the work process and, of course, if they are responsible for a major portion of the production or service process.

A good contrast between the TQM and involvement approaches is provided by the newest approach that is used by Volvo to manufacture cars, and the TQM approach that is used by Toyota, Honda, and Nissan. In the Japanese approach, teams on the assembly line are responsible for several steps in the production process. The teams are responsible for their own quality, are cross trained, and in some cases can stop the assembly line process if there is a problem in their work area.⁹ They also are responsible for continuous improvement of the work process, but must get management approval before they can make changes in work methods. In the much praised Toyota Lean Production System, the team members are cross trained on all the tasks to be performed by the team, are asked to work in a just-in-time inventory environment, and participate in quality circle activities. In the Volvo approach, self-managing teams are responsible for building entire cars and interacting with customers. The teams get feedback from customers on how well their car performs. They control membership in their team, determine their own work pace, and are responsible for work methods and work procedures.

Both the TQM approach and the employee involvement approach emphasize the importance of managerial behavior and leadership. Nevertheless, there is a difference between what is expected of a senior manager in the employee involvement approach and what is expected in a TQM approach. The TQM approach seems to place much more emphasis on managers engaging in typical managerial behavior such as monitoring performance, improving work methods and work procedures, receiving input, processing suggestions, and facilitating the implementation of suggestions. Employee involvement programs, on the other hand, emphasize more the leadership aspect of the manager's job. They stress vision, moving power to individuals lower in the organization, and acting as a facilitator of the work of others.

There is no counter part in employee involvement for many of the statistical and problem analysis approaches that are present in the TQM approach. Most employee involvement programs do not place an emphasis on statistical process control, cost of quality measures, and the other indices of quality that are so central to the TQM programs. On the other hand, brainstorming, group decision making, and participative decision making are commonly suggested approaches by both TQM and employee involvement programs. Finally, most employee involvement programs do not focus as much on customer satisfaction and customer

expectations in the measurement of organizational performance as do total quality approaches. The change strategy in TQM programs is clearly different than it is in employee involvement, the emphasis is on management leading the change and putting in place the right information and control systems to improve quality. They are, of course, expected to find out about these by listening to suggestions and reacting to the inputs from lower level employees.

TQM or Employee Involvement

There can be little doubt that both employee involvement and TQM represent substantial departures from the traditional, bureaucratic approach to managing organizations. There is also growing evidence that both can lead to substantial improvements over traditional bureaucratic management in a number of respects. It does not follow, however, that they are necessarily interchangeable or even compatible. Indeed, although they share some common themes and place a common emphasis on giving employees more responsibility, power, information, and knowledge, they are different in so many important ways that they are not interchangeable. Because they recommend different approaches to rewards, leadership, work structure, organization structure, and even a different emphasis on the kinds of outcomes that are to be maximized in the organization, they are incompatible in some important respects.

There is little systematic theory or research which suggests whether the TQM approach or the employee involvement approach is the best starting point for an organization that is thinking about changing its approach to management. It is unlikely that either one is always the superior approach to management. Rather, it is likely that the relative effectiveness of each may be a function of factors such as technology, cultural values, and business strategy.

The success of the Japanese in using the TQM approach suggests that it may be particularly effective in their culture because in Japan there are a number of cultural conditions that favor it. These conditions include a homogeneous set of values that place an emphasis on quality, attention to detail, and discipline, as well as an acceptance of hierarchy and seniority. The United States, with its emphasis on

democracy and individual rights, but with little emphasis on attention to detail and quality, presents quite a different scene and one in which the TQM approach, particularly in its pure form, appears to fit less well.

Perhaps the key issues, however, in determining the relative fit of TQM and employee involvement are the type of work the organization does and the type of environment in which it operates. There is a considerable amount of research which argues that the TQM approach works particularly well in high volume production situations.¹⁰ The employee involvement approach, however, has often been used in continuous, process production situations that are capital intensive and that require relatively complex coordination activities.

Employee involvement also seems to work well in rather small organizational units which are created to produce entire products and to serve a particular customer base. TQM processes, on the other hand, tend to fit situations where large numbers of employees are required to service a customer or produce a product.

It seems likely that the employee involvement approach may be superior in situations where the work to be done is primarily creative and where the organization faces an extremely rapidly changing environment. Often, in these environments, continuous improvement is not needed so much as major breakthroughs in innovation and speed. Often, accomplishing these objectives requires giving small groups of individuals high amounts of autonomy and direct external customer demands so that they can be very attuned to the market and very quick in their responses.

The employee involvement approach may be particularly appropriate where the organization's business strategy calls for organizational behavior that is a particularly complex combination of combining quick responses to customers with cost effective performance and quality. The emphasis on quality in TQM is often quite functional, but it can be dysfunctional if it diverts attention from the importance of speed in decision making and the costs of operating many of the quality improvement processes which are inherent in TQM programs. It can lead to extensive bureaucratic measurement and support systems and to parallel participation systems. These systems, in turn, can raise the cost of the organization to the point

where it fails to achieve the cost quality performance parameters that will position the organization's products or services well in the market.

One final point is suggested by the discussion so far. Where orders of magnitude change are needed in performance, employee involvement may be the best choice since it stresses radical change rather than continuous improvement. It also suggests organization and work design approaches that are more likely to be outside of the organization's current way of thinking about how work should be done.

Management in the Future

Total Quality Management and employee involvement represent important, but somewhat different, alternatives to the traditional management paradigm that has been dominant in the United States and throughout the world for most of the twentieth century. It may end up that neither TQM nor employee involvement becomes the dominant paradigm for the next century. Our analysis suggests that may be the best outcome. What is needed is a contingent view of what constitutes the best management approach. Depending upon the organization's condition, strategic organization, the kind of work it needs to do, and where it operates, the best management approach may be either one of these in its pure form or an approach that modifies each to take advantage of certain elements in the other.¹¹ Even when a relatively pure version of these is called for, it still seems likely that it can be enhanced by adopting some of the most appropriate elements of the other approach. It seems obvious that employee involvement efforts can be enhanced by using some of the statistical process control, problem solving, and work simplification processes that are an important part of the TQM efforts. It is also quite possible that problem solving teams and quality circles can be used to advantage in combination with the self-managing work teams and the job enrichment approaches that are part of employee involvement efforts.

Similarly, it is quite possible that some of the reward system practices which are advocated by employee involvement programs can improve TQM efforts. Skill based pay can encourage and reward the type of skill growth that is needed in order for TQM programs to be effective. Gain sharing plans, profit sharing plans, and employee ownership can provide employees with a strong motivation for making

suggestions that can contribute to the kind of quality and customer satisfaction oriented culture that is necessary for TQM programs to be successful. Indeed, TQM programs seem to put far too much faith in the ability of senior managers to change their organizations and to get employees to commit to improved quality. They also, perhaps, over rate the impact of recognition type rewards in cultures where financial rewards play an important role in influencing individual behavior.

Some evidence in support of the view that parts of TQM and employee involvement can be compatible is provided by a study of large corporations.¹² It found the most effective organizations to be ones that had integrated or coordinated TQM and employee involvement programs. The challenge is to design organizations that utilize the right ideas and techniques from TQM and employee involvement. Doing this requires a well developed business strategy and a good understanding of both approaches and how appropriate they are in different business settings.

Footnotes

1. Data on its popularity can be found in Lawler, E. E., Ledford, G. E., and Mohrman, S. A., Employee Involvement in America. Houston, TX: American Productivity Center, 1989 and Lawler, E. E., Mohrman, S. A. and Ledford, G. E. Employee Involvement and Total Quality Management: Practices and Results in Fortune 1000 Companies. San Francisco, CA: Jossey- Bass, 1992.
2. Reviews of this history are found in Lawler, E. E. High Involvement Management. San Francisco, CA: Jossey-Bass, 1987 and Weisbord, M. R. Productive Workplaces: Organizing and Managing for Dignity, Meaning and Community. San Francisco, CA: Jossey-Bass, 1987.
3. Major works in the field on quality include Deming, W. E. Out of the Crisis. Cambridge, MA: MIT Press, 1986 and Juran, J. M. Juran on Leadership for Quality. New York, NY: Free Press, 1989.
4. See Sullivan, J. J. "Japanese Management Philosophies From the Vacuous to the Brilliant", California Management Review, 1992, 34 (2), 66-87.
5. For a recent review see Lawler, E. E. The Ultimate Advantage. San Francisco, CA: Jossey- Bass, 1992.
6. A good overview of this work can be found in Hackman, J. R. and Oldham, G. R. Work Redesign. Reading, MA: Addison-Wesley, 1980.
7. See Lawler, E. E. Strategic Pay. San Francisco, CA: Jossey-Bass, 1990.
8. See Mills, D. Q. Rebirth of the Corporation. New York, NY: Wiley, 1991.
9. This approach is highly praised by Womack, J. P., Jones, D. T. and Roos, D. The Machine That Changed the World. New York, NY: Macmillan, 1990.
10. The previously mentioned book, The Machine that Changed the World, provides considerable data.
11. The following article presents an example of this type of contingency thinking. Bowen, D. E. and Lawler, E. E. "The Empowerment of Service Workers: What, Why, How and When." Sloan Management Review, 1992, 33 (3), 31-40.
12. Lawler, E. E., Mohrman, S. A. and Ledford, G. E. Employee Involvement and Total Quality Management: Practices and Results in Fortune 1000 Companies. San Francisco, CA: Jossey- Bass, 1992.