Quality Circles

Changing Images of People at Work

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Preface

In January 1980 I was given the job of Quality Productivity Training Manager for Hewlett-Packard's Data Systems Division in the Santa Clara Valley of Northern California, with the primary responsibility for establishing quality circles in the division. After achieving this objective, I was promoted to my present job of manufacturing manager of Hewlett-Packard's Systems Re-Marketing Operation. All of the employees in my current organization have been trained in quality circle problem-solving techniques.

My day-to-day experiences with the quality circle process in a high technology, growth-oriented environment and those I learned about from others in a wide range of business areas convinced me that the technique held promise for becoming one of the ways in which America could overcome some of the problems plaguing business today through better utilization of the wealth of human resources lying dormant in the work force. The process is not a cure-all for what ails organizations and workers, but it does represent one viable alternative for managing and working in the eighties that can result in more motivated workers, a healthier work force, and more effective and efficient organizations.

My enthusiasm and involvement with quality circles caused my wife to become immensely interested in the subject. Together we immersed ourselves in study and research of quality circles and of Hewlett-Packard's participative management style, which grew out of the day-to-day experiences of the founders during the last 40 years and most recently has been described by William Ouchi as Theory Z.

The material in this book has been drawn from my firsthand experience, for nearly 12 years, as a Hewlett-Packard manager, as well as from sharing ideas as a college instructor in quality circles and as a board member of the International Association of Quality Circles. Thus my experience has been that of a practitioner, not a consultant or professional trainer.

Teaching the quality circle concepts on various college campuses as well as to professional groups and organizations has broadened my experience and enriched the content of this book. My affiliation with the International Association of Quality Circles has allowed me to keep abreast of quality circle integration in a variety of businesses, including both private and public sector organizations as discussed in local and international meetings as well as in publications.

This book is written in a style for both the general and the professional reader interested in a new approach to human resource development, as well as for people and organizations involved in or thinking about becoming involved in the quality circle process. It has a dual focus and purpose: to document transformations that are taking place in our human work climate and to serve as a practical handbook for those people and organizations interested in implementing quality circles. The book is based on the premise that the quality circle process, in the right environment, can tap and utilize the changes that are taking place in our work force.

Everyone—members, supervisors, managers, and the organization as a whole—benefits from quality circles, and we include numerous examples and descriptions of those benefits in workers' and managers' own words. Because of our close involvement with Hewlett-Packard, and that company's leadership role in implementing quality circles in the United States, many of the book's examples

and quotations are drawn from Hewlett-Packard's literature and experience.

It's a pleasure to mention a few of the individuals who in recent years contributed to my development and helped me to grow as a manager and quality circle instructor. The Hewlett-Packard people who were particularly instrumental in influencing my attitudes and style of managing include, first of all, Alan Seely, my boss and mentor, who for six years exemplified the best of a participative management style. Gaylan Larson, now a Hewlett-Packard division manager, allowed me to devote my full energy to quality circle implementation at Hewlett-Packard. The bosses that followed, Dave Sanders and Lee Ting, supported my interests in quality circles. Ray Price and Fred Riley helped me in the initial phases of getting started.

We appreciate the efforts of Milton Johnson of the Menlo Park Office of Addison-Wesley for guiding us through the process of writing a first book and of Ann Dilworth, publisher in the Reading, Massachusetts, office, for assistance in refining the text. Carol Verburg thoughtfully edited the book, and editorial assistant Beverly Kurth managed the entire process.

A special thanks to Jim Zamagni of Ampex Corporation and Ed von Emster of Hewlett-Packard Company for reviewing the manuscript and making helpful comments.

We want to express gratitude to the following universities and organizations for the opportunity to teach quality circle philosophy and techniques: University of California (Berkeley and Santa Cruz campuses), California State University at Bakersfield, University of Alaska at Anchorage, University of San Francisco, Western Academy of Management, Palo Alto chapter of the American Production and Inventory Control Society, San Jose chapter of the Data Processing Management Association, National Conference of Standards Laboratories, California Association of School Business Officials, Southwest Innovation Group, American Society for Training and Development, International Association of Quality Circles, California State Automobile Association, United Services Automobile Association, Rock-

well International (Collins Transmission Systems Division), Bank of America, Measurex Inc., Synertech (a subsidiary of Honeywell, Inc.), and the City of Salinas, California.

Most of all, we want to express appreciation to our five-year-old daughter, Tara, for her patience during the many hours we spent working on this book and for the joy and laughter she adds to our lives.

Menlo Park, California
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William and Harriet Mohr

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Why Quality Circles?

THE management of organizations began evolving from a phenomenon into a subject of study around the end of the nineteenth century. Early theorists who assessed the organizations produced by the capitalistic system recognized that two of their key principles were bureaucracy and hierarchy. Bureaucracy, which had existed for centuries, derived originally from the social system: each individual was born into a particular social class, and that class largely determined his or her professional and personal expectations. Within the large economic organizations that grew up after the industrial revolution, bureaucracy meant that the functions performed by an organization were similarly compartmentalized. Each employee was responsible only for certain aspects of the organization's work. The people within an organization thus could be conveniently viewed in terms of the functions they performed rather than their relationship to the enterprise as a whole: a coal miner, a seamstress, an accountant, or whatever. When someone left a position, the focus was on finding someone new to fill that specialized job, not on replacing the individual.

Central to bureaucracy is hierarchy: power and authority are vested at the top of the organization and apportioned downward. Looking at it from the bottom up, the occupants of the lower positions are supervised by someone higher up, who in turn is supervised by someone still higher. To gain more authority within an organization, an employee must change positions, moving up through the hierarchy from his or her starting place to one higher on the ladder.

The bureaucratic organization reflected a society in which power over one's work—and life—still related to a great extent to social class. So long as some people were considered to be inherently entitled to more authority than others, it was natural that organizations should take the same shape.

A founding principle of American democracy, however, is that "all men are created equal." By the second third of the twentieth century, many workers were coming to perceive a discrepancy between a social system that stressed ideas like universal education and individual independence and an organizational structure that stressed hierarchic bureaucracy. For one thing, the nature of work itself was changing, partly owing to the growth of technology and automation. The son of a coal miner and the daughter of a seamstress no longer followed automatically in their parents' footsteps. Old positions became obsolete; new ones were burgeoning. To fill these new roles required more education and greater mobility. Specialized knowledge and skills are needed to be a computer programmer or a medical technician; and finding a job, or accepting a promotion, often means moving to a new part of the country. With the rise in workers' educational levels has come not only a rise in their capabilities but in their expectations. With increased mobility has come the erosion of traditional sources of support: the church, the community, the extended family.

No longer are workers willing to spend their days performing a fragmented task and to fill their need for personal ties outside the workplace. To labor in one small corner of a large organization is frustrating and alienating. As one report states, "Dull, repetitive,

seemingly meaningless tasks offering little challenge or authority are causing discontent among workers at all occupational levels."[1] More and more, people are demanding that their jobs provide not merely financial security but personal satisfaction as well. Warde Wheaton has summarized the problem:

> People are more highly educated, the number of professionals in the work force is growing rapidly, and they bring with them a new set of values. They expect a job to offer diversity, flexibility, and challenge. Above all they want to know that what they do makes a difference, both to the company and to their own lives. It follows that to make work more productive, we must first create opportunities for each employee to have a sense of real personal accomplishment and growth.
>
> This task is more difficult than it sounds, for it requires that we overhaul our traditional notions of how managers and employees should work together. Central to this necessary change in our thinking is the recognition that employees must participate in management and be given a sense of personal fulfillment.[2]

Perry Pascarella put it succinctly, "In America, one of the guarantees we cherish most is the right of every person to speak his mind, but until now this right has stopped at the factory gate."[3]

One drawback of the bureaucratic structure is that it is slow and difficult to change. Managers began to realize that the employees they supervised were feeling a strain between themselves and the organization, but how to resolve it appeared difficult. Many managers were either out of touch with the complexities of the human dimension or felt incapable of rectifying the situation.

> The typical American manager today holds forth in a rigid and stratified system that is the organizational equivalent of a multi-story, nineteenth-century factory building. One reason is that it is risky to run experiments that threaten to disrupt the established flow of work and the delicate balance of power that

> determines how an organization performs. Confronted with the need to change something major, most executives will step gingerly around the whole business and concentrate on more manageable risks—switching ad agencies, say, or selling off an operation.[4]

Attitudes and Productivity

What brought home the urgency of the problem to American managers was the impact of these changes in workers' attitudes on the performance of organizations. As the United States moved into the last third of the twentieth century, shifts in the nature of the economy and in workers' attitudes, coupled with the failure of American business to keep pace with these new developments, had brought about a situation that alarmed many observers. An article in *Industry Week* noted:

> Despite the need for more production, American industry has begun to give up ground—not because its problems have been solved, but because they have become overpowering. We are suffering not from a lack of world demand for goods, but from inability to produce them well enough, fast enough, or efficiently enough. We have slipped seriously on the path of productivity improvement.[5]

Secretary of Labor James Donovan remarked in January 1982 that, while the economy's poor productivity performance since the mid-sixties was well known, the downturn had not been reversed. On the contrary, "the situation is rapidly deteriorating." Donovan pointed to a decline in productivity during the third quarter of 1981 of 1.0 percent, a decrease of 0.6 percent from the rate in 1980, which was the third consecutive year in which productivity had declined. "Thus we are no longer talking about a slow-down in productivity growth," Donovan concluded; "we are now experiencing an extended period of absolute decline in our production efficiency."[6]

Finding new ways to meet the needs of the new whole person-worker for increased opportunities for self-expression, responsibility, power, and control over the work and the work environment is critical for organizations wanting to achieve higher productivity levels. In attempting to solve some of the problems plaguing American business today, including the deterioration of our competitiveness and our dismal productivity growth rates and worker discontent and alienation, organizations have been forced to look closely at the attitudes of their workers. They need to focus on establishing new relationships between workers, between workers and management, and between workers and the product and quality. James O'Toole has discussed the impact of the new workers' attitudes on productivity:

> As the American economy becomes more labor-intensive as a result of the shift toward service, clerical, and knowledge work, the *attitudes* of workers become central factors in national productivity. In our mature, postindustrial economy, the success or failure of the national enterprise rests on the willingness of individual workers to take responsibility for the quality and quantity of their work, to take initiative in those increasingly frequent work situations that cannot be routinely handled, to show a real interest in the welfare of customers, suppliers, and fellow workers—in short, to *care* about their work.[7]

The question is, How does an organization foster attitudes among its employees that will enhance productivity? The dilemma is clearly a pressing one; the deterioration of America's competitiveness and our dismal productivity growth are causing concern in every area of business. Although the United States is still the most productive nation in the world, if we continue our current rate of decline, by the end of the decade we will have slipped from first to fifth, behind Japan, France, Germany, and Canada. Given the modern economy, such alternatives as breaking up large bureaucratic organizations and attempting to go backward to a more human-scale

system are impracticable. Yet surveys continue to show that "the overwhelming majority [of workers] believe that if they are more involved in making decisions that affect their jobs, they would work harder and do better."[8]

> As more than 100 studies during the past 20 years show, what workers want most is to become masters of their immediate environment and to feel that their work and they themselves are important—the twin ingredients of self-esteem.[9]

Quality and productivity enhancement develops from a commitment on the part of management to releasing dormant talents and developing potentialities in workers at all levels. When this is combined with increased opportunities for involvement in the decision-making process, ingenuity and creativity are encouraged and lead to improved quality and productivity.

Productivity and Quality

One clue to increased productivity and quality lies in James O'Toole's remarks quoted above: management must find ways to involve workers in responsibility for the *quality* as well as the quantity of their work. This is crucial to workers' self-esteem, as well as to the success of the organizations that employ them. Sparked by mounting competition from foreign businesses, particularly in Japan, American business in the past two decades has witnessed an explosion of quality awareness and a rise in the level of consumers' expectations for goods and services. To survive in the competitive world market, quality must be a central objective of organizations and those who work in them:

> The core of our institutions has to be quality. . . . The military's core has to be quality fighting capacity. The church's core has to be quality transcendental messages. The service occupation's core has to be quality medicine, quality legal services, etc. The automobile industry's core has to be quality transportation.[10]