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5-10-1 Sendagaya, Shibuya-ku, Tokyo 151-0051 JAPAN

A MANIFESTO OF TQM (2)

— **Quest for a Respectable Organizational Presence** —

The TQM Committee

Union of Japanese Scientists and Engineers

2. TQC as it has been

The Essentials of TQC (Basic Concepts)

- Quality
- Total Employee Involvement
- Continuous Improvement

TQC had three essentials (or basic concepts): Quality, Total Employee Involvement, and Continuous Improvement. These concepts were unique to TQC as other systematic management improvement methods did not include them explicitly. TQC has been effective in improving management systems in an organized manner.

TQC pointed out repeatedly the importance of quality in business management. Companies survive by payment from their customers for the products and services they provide. Companies cannot go very far, unless customers are willing to buy their products and services. As companies need to satisfy their customers not for a short time but for a long time, quality, including price, of their products and services is important. Quality, has always meant "customer acceptance" and "customer-orientation," and has been an integral part of the TQC philosophy from the beginning.

TQC also pointed out the importance of quality in terms of "quality losses." Quality losses are classified by the following categories: "internal losses" vs. "external losses" and "visible losses" vs. "hidden losses." What should be specially noted are hidden losses. An example of hidden internal loss would be an opportunity loss due to rework. A typical example of hidden external losses is reduced sales. It is better to have customer complaints than to not have them and gradually lose sales. In this vein, understanding quality in these terms is important.

Additionally, TQC recognized that quality problems are often buried under the problems seemingly unrelated to quality. For example, in new product development, people often identify their main problems to be their long man-hours and high costs to develop new products. However, a lack of ability in achieving planned quality levels often results in driving man-hours up forcing employees to repeat trial and error until achieving these levels. It also can result in increasing costs from applying more costly measures. Also, a failure to grasp customer requirements correctly from the beginning often results in a need to add functions and performance improvements to the original product later on or a shorter life cycle of the product than initially intended.

To achieve quality as discussed above, TQC encourages total employee involvement. When the product and service quality of a company is recognized as a reflection of the aggregate quality characteristics of that organization, it becomes obvious that the involvement of all its members is not only necessary but also efficient for achieving quality.

In this regard, TQC has advocated the efforts to uplift employees through education and training, morale enhancement, and proper feedback mechanisms to their resulting work.

Unless a system has a built-in subsystem to improve itself, it is not a good system. TQC emphasized problem solving. It emphasized the importance of continuous improvement on products, processes, and systems, but not in dwelling on past failures. This is based on the notion that technologies and systems can never be perfect, and thus require constant efforts to improve. TQC encouraged such efforts through total employee involvement.

Total employee involvement is a noteworthy management methodology, and TQC had practical structures to promote it effectively. Above all, the QC Circle activity played an important role in total employee involvement as it provided first-line supervisors and employees with a platform where they could carry out improvements involving their circle members. By embodying total employee involvement through QC Circle activities, everyone experienced being "a manager of his/her own work." Employees enhanced their sense of ownership toward their jobs and processes. QC Circles' workplace improvements resulted in higher quality and productivity and enhanced pride in jobs.

Reasons for TQC's High Reputation

- Pointed to the importance of a business management based on the concept of "customers" (quality concept).
- Presented important management concepts.
- Proved the effectiveness of improvement through total employee involvement.
- Provided not only the philosophy but its practical methods.
- Provided a common language for articulating quality management.
- Presented activities that involved top management.
- Contributed to securing long-term profits by establishing a management system for producing better products at lower cost.
- Provided infrastructures of TQC promotion for those companies that wanted to apply TQC.

Up until 1980s, TQC was highly recognized especially among manufacturing companies in Japan. This was because TQC met the requirements of the times. In the process of industrial development in Japan, it was effective for manufacturing companies to have business strategies centering around product quality. TQC provided these companies with various concepts and methodologies that supported their activities.

It is not so easy to gain a true understanding of the concept of customers or quality, and the importance of quality in business management. In explaining both the theory and practice of TQC, as well as its methodologies and techniques, TQC often pointed out the difficulty in mastering TQC even after having understood it as ideas. Nevertheless, through successful case examples from those companies that trusted TQC and implemented it, TQC proved its effectiveness.

"Management" does not mean merely to supervise or to control. TQC introduced these concepts and methodologies to "manage" organizations and proved to be very effective: PDCA Cycle, Process Management, Management by Facts, Priority Thinking, Upstream Management, and Prevention by Prediction. In a way, TQC was a philosophical revolution in management theory.

TQC discussed the importance of "improvement" through "total employee involvement" and fully confirmed its effectiveness. This was also a philosophical revolution in management theory. QC Circles were a vehicle to materialize this revolution.

In addition to the philosophies of "quality" and "management," TQC was equipped with the "tools" to materialize the philosophies. Philosophies, concepts, and theories alone cannot be effective enough to practice. By developing QC techniques and by introducing successful applications, TQC contributed to product, process, and system improvements.

It is often said that TQC has many jargons, which could be both merits and demerits. On the positive side, the terms that articulated important concepts of "quality management" served well as a common language among those who wanted to practice TQC and facilitated their implementation.

In any organization, top management leadership is a necessary condition to improve and transform its management systems. TQC is a method to materialize high organizational ideals through top management leadership and total employee involvement. TQC was an activity that involved top management. This was another reason why TQC was successful when it was applied to organizations.

The reasons for the success of TQC in the past was because those features discussed above met with the needs of the times. In other words, TQC was a methodology that could contribute greatly to companies' establishing their management systems to produce "better products at lower cost" and building the foundation for "long-term profits."

Even if TQC was intrinsically effective, it would not have been popular unless it was friendly to those companies that wanted to use it. TQC was also characterized by its various structures that facilitated its application. The Deming Prize, QC Circles, and various QC conferences enabled TQC user companies to mutually learn from their experience in implementing and advancing TQC, and thus provided "the infrastructures for TQC promotion."

Strengths of TQC (Identity)

- Education and popularization of quality concepts
- Widespread practice of management concepts

In short, the contributions of TQC can be summarized with "education and popularization of quality concepts" and "widespread practice of management concepts."

Managing quality company-wide requires an organization to have lofty ideals and methodologies. TQC translated these ideals and methodologies into practical implementation methods and popularized them. History shows that TQC contributed greatly to business management as a result of its meeting organizations' values and methodologies needed during times of economic growth and market expansion.

3. TQM as it should be

Environmental Changes Prompting TQM Transformation

- Evolution of business management needs
To provide products and services ⇒ To maximize quality and efficiency ⇒ To pursue a respectable organizational presence.
- Further development of business management infrastructures
Reduction of constraints from time and physical distances as a result of progress in information technology and distribution technology
- Changes in social systems
Organizational challenges of higher transparency, maintaining fairness and accountability, countering liability, and responding to deregulation
- Changes in labor environment and consciousness
Changing views toward humanity and labor as well as individuals' behavior, involvement, and roles within groups
- Increasing uncertainty
Speed of political, economical, social, and technological changes, as well as the expectations of an advanced nation

Before identifying what will be expected of TQM tomorrow, we need to consider what are the expectations of companies and organizations tomorrow, which will put their hopes on TQM. Though difficult to articulate the current business environment succinctly, the list above attempts to summarize it.

Both the expectations of business management and the needs of management are changing. As Japan's economy and society matures, management needs have shifted from merely providing products and services to maximizing quality and efficiency and to pursuing a respectable organizational presence. TQC contributed to improvements of products' physical qualities and efficiency of systems that produced such qualities. However, as economy and society has matured, the market has grown to demand higher and more diverse quality of products. As for organizational entities, their missions and respectable presence have become questioned.

Progress in information technology and distribution technology has strengthened organizations' business management infrastructures (social and economical foundation). Constraints from time and physical distances have been significantly reduced worldwide; thus economies have become more global, borderless, and international. In order to secure management resources such as people, materials, information, and technology and to effectively utilize them in this new environment, management transformation is essential.

As society and economy matures, expectations toward organizations have changed. Along with deregulation, companies today are faced with the challenges of higher transparency, maintaining fairness and accountability, and countering liability. It is not enough for companies today to gain profits; they are expected to behave responsibly while fulfilling their reasons for existence.

In today's society, changes have occurred in people's views toward humanity and labor as well as their behavior, involvement, and roles within groups. These issues need to be properly addressed in managing an organization.

The speed of political, economical, social, and technological changes has accelerated worldwide. Additionally, Japan has become one of the advanced nations. These situations demand leadership and proper management in taking speedy, courageous, and appropriate actions even in an uncertain environment.

Restructuring of TQM

- Goals of TQM
 - "Respectable presence" of products' and organizations'
 - "Sound relations" with customers, employees, society, suppliers, and stockholders
 - "Organizational powers" based on core technology, speed, and vitality
- Higher, more diverse, and comprehensive quality concepts
 - More sophisticated and mature customer needs
 - Diverse customers
 - Comprehensive quality
- More sophisticated management
 - Expansion of management (vision, strategy, transformation, speed, and prevention)
 - People and information as important management resources

In this chapter, we have considered what to anticipate for upcoming environmental changes and the expectations of organizations in their quality management for meeting these changes. This understanding leads us to identify what is expected of TQM in the future. Though difficult to articulate succinctly, the list above attempts to summarize it.

Respectable presence: TQM should aim to establish a respectable organizational presence. TQM should be an effective management tool enabling companies to build an organization with a respectable presence as well as providing products with a respectable presence. In other words, companies today are not expected to simply produce better products at lower cost. They are expected to fulfill their organizational missions and maintain their integrity as responsible corporate citizens. Organizations with a respectable presence must have solid reasons for existence, and they must be worthy for these reasons. TQM should be an effective management tool for establishing, maintaining, and improving such reasons and worthiness in the eyes of their stakeholders.

Relations: To become an organization with a respectable presence, a company must have excellent relations with all stakeholders. Having customer satisfaction of products and services at its core, the organization must possess sound relations with its employees, society, suppliers, and stockholders. Organizations today face challenges such as changes in labor environment and consciousness; the increasing view of people as important management resources; greater social responsibilities including higher transparency and maintaining fairness; and appropriate missions as members of the international community as the world becomes increasingly globalized and borderless. TQM tomorrow must enhance its users' ability to build sound relations with stakeholders not only through products and services, but by responding to the changes discussed above.

Organizational powers: What make up the organizational powers on which excellent relations can be built are core technology, speed, and vitality. Every organization needs to have its core technology, which is the foundation for its existence. Such a technology should be strong enough to make the organization's presence prominent. Speed is another necessary ingredient for organizations today. In the environment where the speed of political, economical, social, and technological changes are accelerating and uncertainty is increasing, organizations in an advanced nation, in particular, need speed in their activities. Additionally, organizations must have vitality necessary at each level of the organization. Upper management needs an entrepreneur spirit, middle management must be full of challenging spirit, and first-line employees are required to have high morale. TQM tomorrow must present the concepts and methodology that can contribute to organizations' efforts in building up these powers, the source of organizational strength.

More sophisticated needs: TQM should be able to address a need for higher, more diverse, and comprehensive concepts of quality. Customer needs are becoming more sophisticated and mature. TQM must present methodologies for product planning that can satisfy these needs. TQM also needs to introduce guidelines for more sophisticated and mature quality objectives.

Customer diversity: We must pay attention to the fact that customers become more diverse. As society matures, markets progressively subdivide. TQM must present methodologies for product planning that can economically satisfy diverse customer needs. So far, the main concern in quality has been satisfying customers who are the recipients of products and services. But quality is becoming the concern of many other people beyond the conventional definition of customers. This expanded concern of quality includes that of employees' in companies and organizations that provide the products and services. TQM must address this extension of quality concepts.

Comprehensive quality: As for "quality" in terms of aggregate product features, TQM tomorrow must explicitly present a concept of "comprehensive quality," or product values including price, timing, and services. Especially in the area of new product development, TQM must develop and present methodologies for total management and assurance of Q, C, and D (quality, cost, and delivery).

Expansion of management: TQM must address increasing sophistication of management. First of all, TQM must address expanding concept of management. Considering uncertainty in business environment, vigorous changes, and extended areas to be covered, discussions of management must include topics such as vision, strategy, speed, and prevention. An increasingly important role is also placed by planning, as the concept of "control" shifts toward "management" and further moves toward "strategy and vision." Future plans may require radical changes that exceed the extrapolation from the past, and thus the quality of planning must improve. Above all, speed and flexibility in an uncertain and unpredictable environment will be necessary. TQM must present basic concepts and their implementation methodologies for management in a much broader sense, which can no longer be discussed simply by such concepts as "rotating PDCA (plan do check act).

People and information: The second aspect of addressing sophistication of management rests in the recognition of people and information as important management resources. Reflecting changing times in the past, the importance of "people" in management has been discussed from various angles. While the labor environment and people's views of labor are changing, today's jobs are becoming more sophisticated, thus requiring improved intellectual productivity. Therefore, the concerns are focused on how to secure capable employees, develop them, and retain them while they work in a high morale. TQM must present guidelines for such issues. Management systems are essentially information systems for decision making. As information technology progresses, tasks previously thought difficult, such as networks, individual management information systems, and information sharing, become possible and less expensive. Thus, the speed of business has accelerated remarkably. TQM must present guidelines for effective use of information technology with regard to quality management.

