

## **TQM at Tamkang' s 30th Anniversary: The Past, Present, and Future of Total Quality Management at Tamkang University**

[Keynote Speech] The Key to Sustainable Development of Universities – Total Quality Management

Speaker: Mr. Rick Chen, General Manager of Immediate Talent Development and Management Consulting Company (即戰人才發展管理顧問公司)

In April 2000, I took on the role of TQM (Total Quality Management) Quality Control Engineer at TSMC (Taiwan Semiconductor Manufacturing Company). I came to Tamkang University to share TSMC' s practical approach to TQM, as at that time, I had only been exposed to TQM for 7 years and could only describe the processes based on the book. It was only later that I realized the principles and spirit of TQM system, as well as the efforts put in by the management in setting up the implementation strategies. Implementing TQM is not easy, as it requires adjusting many implementation strategies according to the timing and local conditions.

Today' s presentation will be divided into 3 parts. First, we will clarify what TQM is. Second, we will understand the reasons and results that influence top management' s support for change. Third, we will share practical examples from TSMC and derive key implementation points and recommendations for Tamkang University.

What is TQM?

The core concept of TQM is based on its values: "total employee involvement, continuous improvement, and customer satisfaction." Knowledge tools are used to complete various behavioral activities in order to achieve the goals of TQM philosophy. New knowledge tools and activities that are conducive to implementation will be continuously incorporated into the TQM system.

From the evolution of TQM, it can be observed that the competitiveness of a company primarily relies on the "values" of its employees. Initially, the first goal was to pursue customer satisfaction, which is a concept that has been around since the QC (Quality Control) phase. With increasing competition and the need for continuous improvement in all aspects, companies aim to gain better profit margins, proactively plan to avoid potential issues, and identify better methods. This corresponds to the QA (Quality Assurance) phase, which focuses on waste reduction.

TQM allows all employees to actively participate in QC and QA without the need for constant supervision from supervisors, creating a "culture of quality". This concept was learned from the QA concept in Japan, and was implemented throughout the company with practices such as CWQI (Company-Wide Quality Improvement) and CWQC (Company-Wide Quality Control, the predecessor of TQM), which involved comprehensive quality control and improvement. This approach has helped reduce costs in many areas, enabling Japanese products to surpass those of the United States in competitiveness.

The United States actively learns and improves by incorporating concepts such as internal customers and stakeholders into customer-oriented approaches, and incorporating benchmarking and cross-industry learning into quality management. Regardless of the presence of competitors, continuous improvement is emphasized. Additionally, leadership, governance, and two-way communication are promoted as management philosophies, encouraging proactive participation from all employees and fostering a culture of achievement within the organization, leading to significant reductions in management costs. Therefore, the key difference between CWQI, CWQC, and TQM lies in the participation rate.

The effectiveness of TQM in creating a quality culture lies in the voluntary and proactive participation of employees, which generates cohesion and values. Leadership by direction means "guiding employees" and brings benefits to the sustainable development of the company. TQM creates a culture that drives human behavior through values, resulting in

cohesion or a sense of "shared values." This concept has become more prevalent in recent years, as seen in the rise of ESG (Environmental, Social, and Governance) practices.

From a societal perspective, the spirit of TQM can address the impacts caused by the negligence of others. Take the example of a mailman delivering mail. If the mailman cannot find the intended recipient or address, but uses clues to accurately deliver the mail, it shows that the quality values of each individual can influence others. Errors should not be taken for granted, and zero defects should be achieved through self-awareness. This exemplifies the proactive problem-solving mindset of TQM, as demonstrated by the mailman.

Using the social case of airline overbooking in the United States as an example, it illustrates the importance of system flaws and the significance of TQM. When there are system flaws (such as overbooking of airline seats), if there is a spirit of full employee participation, frontline employees can provide suggestions to solve the problem and improve the system. TQM advocates for employee participation in quality management, rather than turning employees into mere robotic executors of commands. Frontline employees are often the ones who understand the drawbacks of company policies and systems best, and they should be involved in shaping those policies and systems.

From the examples in the economic and social context, the values advocated by TQM, which drive the spirit of full employee participation, are in line with the needs of future development and contribute to the sustainable development of enterprises.

### Criticisms and challenges of TQM

The first challenge is implementation, as many executives may have doubts and find it difficult to execute TQM. Support from top management is crucial for successful implementation of TQM. However, initial commitments

may not necessarily translate into sustained support throughout the entire process.

The second challenge is that employees may have different understandings of TQM. In many cases, multiple activities are organized, but they may be superficial, and employees' understanding of TQM may only be limited to the visible effects of these activities. For example, when a company undergoes ISO certification audits, a group of people may be assigned to work overtime to pass the audit, but without a genuine understanding of the value and significance of TQM, a culture cannot be created. Managers need to recognize that implementing TQM involves changing mindsets, and it's not just about attending training sessions. It requires the practical application of tools and techniques, combined with on-the-ground implementation by employees, to penetrate into the mindset level. The criteria for evaluating the outcomes of TQM activities should focus on employees' ability to apply knowledge and demonstrate the right behavioral attitudes.

The third challenge is dealing with existing management systems. Currently, many management systems are still in the stage of QC and QA, and have not reached the level of TQM. If only a few people are willing to change but other units lack the willingness to cooperate, it can be difficult to implement TQM. Additionally, the current performance evaluation system within the company may prioritize high scores, leading to a conservative mindset among employees, which can hinder progress. Moreover, the focus of training programs is often on managers, without deep involvement of employees, which can create conflicts between management practices and TQM principles.

The fourth challenge is the impact of financial statements on top management support. Senior executives often prioritize visible changes and improvements that can be reflected in financial statements. Many TQM initiatives may not immediately show financial benefits, and top executives may prefer to invest in technologies or activities that yield quick results, without paying sufficient attention to employee attitudes and behaviors. Former Chairman of TSMC, Morris Chang, once said, "If a CEO

performs well, the board of directors won't care about him. By the time mistakes accumulate and become serious, it's already too late." This highlights the risks of management being driven solely by financial values. The cases of Books.com's unfair dismissal of the cleaner and TSMC's improper layoff practices serve as examples. TSMC deleted the "probationary period" policy, which allowed employees with poor performance ratings to be dismissed, using performance evaluations as a pretext for layoffs, which led to employee dissatisfaction and resulted in the immediate removal of the general manager. Such behavior of bullying employees with professional knowledge reflects a deviation in values, where the pursuit of impressive financial figures takes precedence over employee behavior.

Seeing oneself from the perspective of others' experiences

After entering the Chinese market, TSMC was influenced by the culture of authoritarianism, which resulted in employees simply following instructions from their supervisors. As a result, the media often found out about issues before the supervisors did. Upon realizing that their previously strong values were not being passed down, TSMC made a determined effort to actively regain the ability for "all employees to participate, think critically, and solve problems" proactively. In fact, as problems became more complex and response times became shorter, it became necessary for all employees to participate in order to accurately address them.

TSMC has announced that starting from 2022, it will incorporate quality culture training into its new employee training program, aiming to enhance employees' awareness of quality and the company's core values, as well as cultivate foresight among senior executives. TSMC will also integrate ESG with TQM, so that ESG becomes a manifestation of employees' values, rather than just a top-down initiative. In summary, TSMC's focus in TQM can be divided into the following 4 points:

Authorization for Fluid Organization: Allowing Employees to Provide Suggestions for Other Departments.

Empowering Soft Power Enhancement: Improving employees' knowledge and skills to facilitate their participation in management and team collaboration.

Changing Managerial Decision-making Style: Letting go of hierarchical and experiential biases, respecting professional opinions, strengthening preventive management, and reducing ad-hoc decision-making in unexpected events.

By instilling concepts through activities: clarifying employees' doubts, cultivating habits through activities to change their mindset, and adjusting relevant system regulations.

Therefore, achieving the visibility of corporate culture and characteristics among grassroots employees, demonstrating a sense of responsibility and authority, and training the cultivation of mindset and concepts.

When it comes to how universities can apply the principles of TQM to address sustainable development issues, first, it is important to establish core values and define customers, predict and clarify customer needs, and then develop short-, medium-, and long-term plans, formulate strategies, and implement mechanisms for achieving them. Next, universities should strive to have better methods than their competitors, expand their horizons, and be willing to continuously improve in all aspects. At the same time, it is crucial to collaborate with partners throughout the process, such as landlords and local businesses around the university, to achieve consensus, enhance capabilities and participation rates, and make good use of external resources. Finally, addressing the pressure that financial reports may bring to TQM implementation and leveraging the experience gained from implementation and the advantages of academia, low-cost application of TQM for promoting sustainable development in universities remains a significant challenge in the future.

