TOTAL QUALITY MANAGEMENT INFLUENCING SUSTAINABLE ORGANIZATION DEVELOPMENT OF THAI UNIVERSITIES

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ABSTRACT

The purposes of this research were to study the influence of Total Quality Management on sustainable organization development of Thai universities. A quantitative research methodology was applied in this study. The samples used in this study were 350 university personnel working in Thai universities in Bangkok. A research questionnaire was used as the instrument to collect data. Statistics used in this study consisted of percentage, mean, standard deviation and Stepwise Multiple Regression Analysis. The research results showed that Total Quality Management had an influence on sustainable organization development of Thai universities at 89.5 percent (Adjusted R^2 = .895). In particular, continuous improvement had the highest influence on sustainable organization development of Thai universities (Beta = .597, p < .01), followed by customer focus (Beta = .446, p < .01), employee involvement (Beta = .338, p < .01) and process management (Beta = .249, p < .01). This study recommended that Thai universities should apply Total Quality Management to increase sustainable development in terms of economic development, social development and environmental development.

Keywords: Total Quality Management, Economic Sustainability, Sustainable Society, Environmental Sustainability, Quality Education

INTRODUCTION

The universities are institutions of higher education that focus on both teaching and research, offering academic degrees in various disciplines. They are responsible for managing and advancing educational opportunities for students while also providing academic services to the broader public. The effectiveness of these institutions largely depends on their personnel; employees with extensive knowledge, skills, talents, and capabilities can significantly enhance institutional performance and contribute to achieving optimal outcomes. The primary responsibilities of universities and colleges include managing internal affairs, delivering high-quality teaching, and conducting rigorous research to guide and influence both society and the nation (Ghasemy et al., 2018).

Nowadays, universities are facing heightened competition due to a declining student population alongside the expansion of both domestic and international universities operating within the country. Globalization and the emergence of a borderless education market have provided students with a broader range of options for pursuing higher education. Consequently, Thai higher education institutions must adopt Total Quality Management (TQM) as a strategic framework to attain academic excellence, enhance their competitive advantage, and secure long-term sustainability. The implementation of TQM would enable continuous improvement in teaching, research, and academic service delivery, thereby strengthening institutional reputation and student enrollment.

According to Sirathanakul et al. (2023) higher education institutions are tasked with developing students' knowledge, skills, wisdom, ethics, self-responsibility, social responsibility, and adaptability to function effectively in dynamic environments. However, as Damrongsiri et al. (2022) and Markmit (2007) observed, the rapid evolution

of educational management systems and the increasing number of universities have increased a high competition among higher education institutions. In order to survive and accomplish organizational goals, university staff must work diligently to enhance academic reputation and attract a greater number of students. Bangbon et al. (2024) defined Total Quality Management as a holistic management strategy aimed at achieving sustainable success through customer satisfaction. This approach requires continuous quality improvement across all organizational processes, with active participation and involvement from all members in refining work procedures, production, and service delivery.

Thai universities have four core missions: producing graduates, conducting research, providing academic services to society, and preserving Thai arts and culture. Accordingly, the integration of TQM into university operations is essential to ensure that these missions are carried out effectively and consistently. Snongtaweeporn et al. (2020) described TQM as a contemporary and widely adopted management approach designed to improve efficiency and effectiveness within the organizations. Originating from the manufacturing sector, the concept initially emphasized continuous improvement, effective management processes, customer orientation, personnel engagement, and stringent quality control. Historically, quality checks must be performed, which involved proactive quality control measures focused on monitoring production processes, identifying operational errors, and implementing corrective actions.

The researchers considered that Total Quality Management is the key factor that can be applied to drive Thai universities to reach sustainable organization development in terms of economic development, social development and environmental development. Therefore, the researchers are thus motivated to undertake this study.

Research Objectives
1. To study Total Quality Management of Thai universities
2. To study sustainable organization development of Thai universities
3. To study Total Quality Management affecting sustainable organization development of Thai universities

Research Hypotheses
H1: Process management has an influence on sustainable organization development of Thai universities in Bangkok
H2: Customer focus has an influence on sustainable organization development of Thai universities in Bangkok
H3: Employee involvement has an influence on sustainable organization development of Thai universities in Bangkok
H4: Continuous improvement has an influence on sustainable organization development of Thai universities in Bangkok

LITERATURE REVIEW

Total Quality Management focused on historical foundations, principles, and sustainable development. Juran (1989) advanced the concept of Total Quality Management (TQM), emphasizing the role of teamwork in achieving organizational excellence. His framework consisted of ten essential steps.1. Encourage employees to recognize the necessity of improving quality. 2.Establish clear and ongoing quality objectives.3. Develop quality management teams with appropriate tools.4. Ensure continuous and comprehensive training. 5. Implement quality practices organization-wide.6. Monitor and report the progress.7. Cultivate ongoing quality awareness and responsibility.8. Disseminate quality results through accessible media. 9 Record operational data systematically, and 10. Design integrated processes which promote cross-departmental collaboration. Ishikawa (1985) expanded upon the principles of Juran and Deming, playing a pivotal role in popularizing TQM in Japan. A graduate of the University of Tokyo (1939) and later professor (1960), Ishikawa was recognized as the "Father of Quality Circles" for fostering employee participation in quality initiatives. His work significantly contributed to Japan's adoption of TQM practices during the 1960s.

Deming's statistical approach (1982), credited as the first American to introduce quality improvement to Japan in 1950, reframed quality as an organization-wide responsibility rather than a task for specialized departments. According to statistical methods, he articulated 14 principles for successful TQM implementation, including the quality goals aligned with organizational needs, fostered openness to new management methods, maintained confidence in quality systems. This showed continuous improvement cycles (PDCA), promoted teamwork, removed non-value-adding practices, and invested in long-term education and training. Crosby's Zero Defects Philosophy (1987), in Quality is Free, promoted defect prevention through the "Zero Defects" concept and the principle of "doing it right the first time." His 14-step model emphasized leadership commitment, measurement systems, employee involvement, error prevention, and institutionalized quality awareness.

Feigenbaum and the Customer-Centric Model (1983) conceptualized TQM as a customer-driven approach in which both internal and external feedback inform process and product value. He advocated for environmentally sustainable design, continuous improvement, and total employee participation. Oakland (2011), David (2011), Tenner & Detoro (2013), and Cascio (2012) reinforced this view, highlighting leadership engagement, systematic problem-solving, employee satisfaction, and sustained customer focus as core elements. Heizer & Barry (2010) identified four operational pillars for TQM success.1. organizational practices namely,

leadership, mission, procedures. 2. Quality principles were customer focus, continuous improvement and benchmarking. 3.Employee fulfillment was empowerment, commitment and satisfaction. 4. Customer satisfaction consisting of customer responsiveness and promoting loyalty.

Tenner & Detoto (2013) identified six key components crucial for the success of Total Quality Management: (1) Leadership: High-level management should lead by example and utilize quality images, techniques, and tools for decision-making. They must be committed to continuous improvement and long-term results, focusing on developing personnel and various performance aspects. (2) Learning and Training: Providing understanding of the organization's vision, mission, policies, and concepts to all employees, along with developing necessary knowledge and skills for producing products or services according to specified standards or quality. (3) Organizational Structure: Transforming the organizational structure from a vertically hierarchical organization to a flatter one, with external consultancy, advisory, and support staff units. (4) Communication: Ensuring widespread understanding and dissemination of information within the organization through memos, newsletters, bulletin boards, suggestion boxes, or examples of quality improvement initiatives to enhance customer satisfaction. (5) Rewarding: Recognizing and rewarding employees who contribute positively, whether through commendations, praise, or promotion, to incentivize and support the overall quality management system. (6) Performance Appraisal: Implementing clear performance indicators or metrics to evaluate individual or team performance and measuring customer satisfaction levels.

The National Quality Awards Office (2012) has established criteria for overall quality assessment, consisting of 7 criteria as follows:

1. Leadership: This criterion evaluates whether the top leadership of the organization has conducted operations in line with values and expectations regarding operational outcomes, including customer focus and involvement, decision-making authority, innovation, organizational learning, as well as ethical leadership, ethical performance review, and support for important communities.

2. Strategic Planning: This criterion evaluates whether the organization has defined strategic objectives, strategies, and operational plans, and how it implements selected strategic objectives and plans, and measures progress. It includes processes for strategic planning and strategic objective setting, implementation of strategies, action planning, implementation of plans, and performance forecasting.

3. Customer Focus and Market: This criterion evaluates how the organization determines customer needs, expectations, and preferences, as well as how it operates to create customer importance, define key factors that attract customers, generate satisfaction and loyalty, leading to business expansion. It includes knowledge of customers and market, customer relationship management, and customer satisfaction assessment.

4. Measurement, Analysis, and Knowledge Management: This criterion evaluates how the organization selects, collects, analyzes, manages, and improves data, information, and knowledge assets. It includes measuring and analyzing organizational operations, managing information and knowledge readiness, and utilizing data and information effectively.

5. Focus on Human Resources: This criterion evaluates how the organization's learning system and motivation-building help employees develop themselves and utilize their full potential to align with the organization's overall objectives and plans. It includes assessing attention, creating and maintaining a conducive work environment, fostering employee engagement, leading to excellent performance outcomes and employee and organizational advancement. It encompasses managing and administering employee performance evaluation systems, hiring and career advancement, employee learning and motivation, including education, training, and development, employee motivation, and career advancement, as well as employee satisfaction and progress assessment.

6. Process Focus: This criterion assesses various important aspects of process management, including products, services, and critical business processes that contribute value to customers and the organization. It also evaluates various important supporting processes.

7. Results: This criterion evaluates the organization's operational performance and improvements in various areas, including customer satisfaction, product and service outcomes, financial and marketing performance, human resource outcomes, work practices and ethics, and social responsibility. Additionally, it compares the organization's performance with competitors in terms of customer focus, product and service outcomes, financial and marketing outcomes, resource outcomes, organizational efficiency, ethics and social responsibility.

Crosby (1987), in his seminal work Quality is Free, advanced a philosophy of Total Quality Management (TQM) centered on teamwork, defect prevention through the "Zero Defects" principle, and the maxim of "doing it right the first time." He proposed a 14-step framework, beginning with management's commitment to quality and the establishment of a dedicated TQM team, followed by the implementation of measurement systems, evaluation of quality value, and fostering employee awareness. Additional steps include encouraging self-inspection, minimizing errors, providing ongoing training, organizing "Zero Defects" days, setting quality goals, utilizing factual data for decision-making, promoting employee participation, and cultivating team-based confidence in achieving quality outcomes.

For TQM and Organizational Sustainability, James & William (2011) positioned TQM as an evidence-based management approach requiring continuous improvement, customer and employee focus, and process management. In the context of sustainability, TQM aligns with Corporate Sustainability—a strategic orientation addressing

economic, social, and environmental performance (Asif et al., 2010; Eweje, 2011). Sustainable organizations adopt the Triple Bottom Line (TBL) framework—Profit, People, Planet—emphasizing economic viability, social equity, and environmental stewardship (Elkington, 1994; Fisher, 2010).

Similarly, the National Quality Awards Office (2012) identified seven criteria for comprehensive quality assessment.1. Leadership, which evaluated the alignment of top management's actions with organizational values, customer focus, innovation, and ethical standards.2. Strategic Planning assessed the formulation, implementation, and monitoring of strategic objectives.3. Customer Focus and Market examined customer needs identification, satisfaction, and loyalty.4. Measurement, Analysis, and Knowledge Management focused on data collection, analysis, and utilization.5. Human Resource Focus emphasized employee development, engagement, and performance.6. Process Focus assessed the management of core and support processes.7. Results were evaluated by outcomes in customer satisfaction, financial performance, human resources, processes, and social responsibility.

Total Quality Management is broadly defined as a management approach that integrates customer feedback into organizational processes to enhance product and service value while minimizing environmental impact. It requires the engagement of all personnel and is supported by five core activities: continuous improvement, customer focus, employee focus, process management, and evidence-based decision-making (James & William, 2011). The integration of TQM with organizational sustainability aligned with the principles of Corporate Sustainability, a business philosophy emphasizing economic, social, and environmental balance for long-term success (Asif et al., 2010; Eweje, 2011). Sustainable business practiced not only pursue profitability but also addressed environmental conservation, social equity, income distribution, and the adoption of environmentally friendly technologies (Elkington, 1994). This perspective reflected the Triple Bottom Line (TBL) framework. People, Planet, and Profit which underscores the interconnectedness of social well-being, environmental stewardship, and economic viability (Hyunkee & Richard, 2011).

Sustainable business development has been growing since the mid-1900s. Research focusing on sustainable development aims to prevent human population existence and protect the environment from polluting activities and resource degradation. Reports on sustainable development in the mid-1990s identified methods for businesses to manage and maintain the balance of production processes for goods, as well as conduct business operations that sustain environmental systems, the environment, and communities simultaneously (Melville, 2012; Lubin & Esty, 2010). Over the past two decades, studies on sustainable business development have emphasized environmental systems, business ethics, and corporate social responsibility. It is believed that these principles will lead to long-term business advancement (Azapagic, 2003; Hart & Dowell, 2010). Seeking organizational sustainability ultimately translates into economically viable companies in the long term and sustainable competitiveness (Elkington, 1994). Developing a sustainable organization requires considering interconnected economic, social, and environmental dimensions, which can be evaluated using the Triple Bottom Line (TBL) approach, also known as Profit-People-Planet (Hyunkee & Richard, 2011). Sustainable business practices must address the three key components of the TBL: environmental, economic, and social issues. Understanding these components is essential, but it is equally crucial to integrate them into business policies, strategies, operational plans, and decision-making processes.

Sustainable organizational development, which emerged in the mid-20th century, focused on preventing environmental degradation and ensuring balanced resource use (Melville, 2012; Lubin & Esty, 2010). Over recent decades, research had increasingly highlighted business ethics and corporate social responsibility with sustainability seen as integral to competitive advantage (Azapagic, 2003; Hart & Dowell, 2010). Although the term "corporate sustainability" was often used interchangeably with "sustainable development," its definition remains contested (Aras & Crowther, 2009; Ameer & Othman, 2012; Dilling, 2010). Notably, Brockett and Rezaee (2012) described sustainability as meeting present needs without compromising future generations. Carroll and Shabana (2010) viewed sustainability as achieving economic, social, and environmental capabilities concurrently. Hyunkee and Richard (2011) frame was a dynamic process, requiring equal prioritization of these dimensions for long-term organizational success.

From a literature survey, it can be concluded that Total Quality Management consisting of process management, customer focus, employee involvement and continuous improvement can be applied to create sustainable organization development of Thai universities. Therefore, the research framework of this study was proposed (Figure 1).
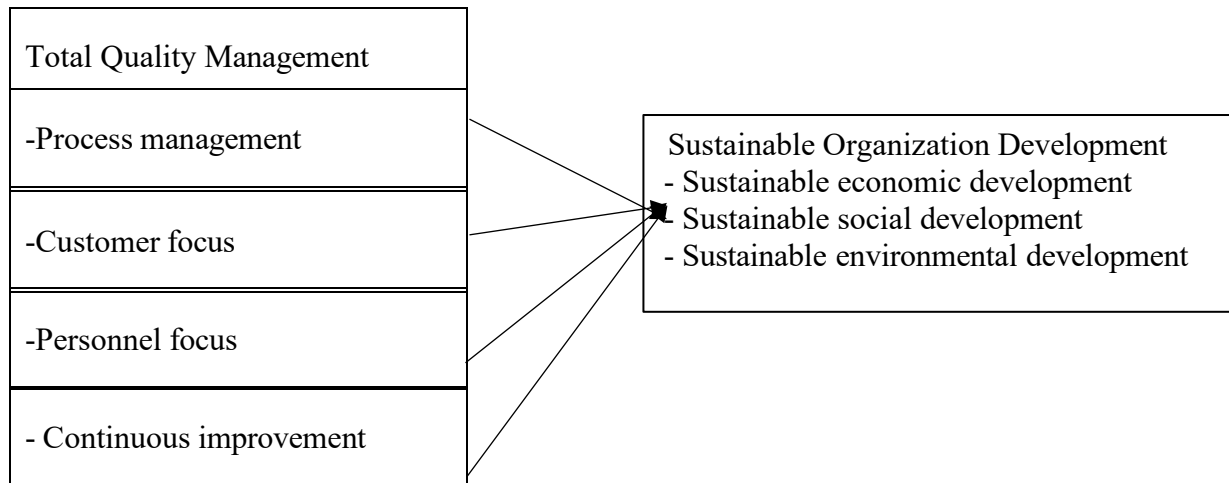
Figure 1 Research Framework

RESEARCH METHODOLOGY

This study applied a quantitative research methodology. The researchers used a research questionnaire to collect data with the following steps:

Populations and Samples
The populations and samples used in this study were university personnel working in Thai universities in Bangkok with the amount of 6,015 persons. The researchers calculated the sample sizes using the formula of Taro Yamane, and 375 samples were obtained.

Variables Used in this Study
The variables used in this study consisted of independent and dependent variable. Independent variable is Total Quality Management consisting of process management (PM), customer focus (CF), employee involvement (EI) and continuous improvement (CI); and dependent variable is sustainable organization development consisting of sustainable economic development (SECD), sustainable social development (SSOD) and sustainable environmental development (SEND).

Instrument Used to Collect Data
A research questionnaire was used as a tool to collect data. The researchers studied concepts and theories about Total Quality Management and sustainable organization development from researches, articles and texts in order to develop the conceptual framework and research questionnaire. The structure of the questionnaire was divided into three parts: Part one was a research questionnaire containing six questions with regard to personal information of participants i.e. gender, age, marital status, educational level, monthly income and work experience. Part two was a research questionnaire containing 14 questions with regard to Total Quality Management consisting of process management (PM), customer focus (CF), employee involvement (EI) and continuous improvement (CI). Part three was a research questionnaire containing 12 questions with regard to sustainable organization development: sustainable economic development (SECD), sustainable social development (SSOD) and sustainable environmental development (SEND).

Criteria Used to Interpret the Data
The researchers analyzed quantitative data obtained from the Likert Scale questionnaire. The criteria used for interpreting the questionnaire are as follows: 5: Strongly Agree; 4: Agree; 3: Neutral; 2: Disagree; and 1: Strongly Disagree
The criteria used to interpret the mean value were as follows: 4.21-5.00 = Strongly agree; 3.41-4.20 = Agree; 2.61-3.40 = Neutral; 1.81-2.60 = Disagree; and 1.00-1.80 = Strongly Disagree

Content Validity and Reliability Test
The research questionnaire was verified by five research experts to find the content validity using Item Objective Congruence Index (IOC), and the IOC value of .93 was obtained. The researchers had distributed the research questionnaire to 30 employees who had the same personal characteristics, but were not the samples in this study, in order to test the reliability, and the reliability value of 0.95 was obtained.

Data collection
The researchers distributed the questionnaire to 375 samples during February 1 to April 30, 2025, and received 350 questionnaires in return which can be calculated as 93 percent.

Statistics Used to Analyze Data

Descriptive statistics consisting of frequency, percentage, mean and standard deviation, and inferential statistics consisting Stepwise Multiple Regression Analysis were used in this study. Frequency and percentage were used to analyze personal information of participants. Mean and standard deviation were used to analyze the level of Total Quality Management and sustainable organization development. Stepwise Multiple Regression Analysis (MRA) was used to analyze the effect on Total Quality Management on sustainable organization development of Thai universities.

RESEARCH RESULTS

In this section, the researchers presented the research results in the following four parts:

Part 1: Demographic Files of Participants

The respondents' demographic profile revealed that the majority were male at 60.26 percent, while females accounted for 39.74 percent. In terms of age, the largest group was between 36–45 years at 39.74 percent, followed by 46–55 years at 19.87 percent, 26–35 years at 16.56 percent, over 56 years at 13.90percent, and below 25 years at 9.95 percent. Regarding marital status, 49.67 percent were single, 43.05 percent were married, 3.97 percent were widowed, and 3.31 percent were divorced. Educational attainment indicated that 43.05 percent of respondents held a bachelor's degree, 36.42 percent had qualifications below a bachelor's degree, 13.25 percent held a master's degree, and 7.28 percent had a doctoral degree. Work experience distribution showed that 33.11 percent had 5–15 years of experience, 23.18 percent had less than 5 years, 19.87 percent had 16 – 25 years, 13.25 percent had 26–35 years, and 10.60 percent had gained more than 36 years of experience. In terms of monthly income, the majority earned between 25,001–35,000 baht at 46.36 percent, followed by 15,001–25,000 baht at 23.19percent, 5,000–15,000 baht at 16.56 percent, 35,001–45,000 baht at 9.93 percent, and over 45,000 baht at 3.97 percent.

Part 2: The Results of Analysis on Total Quality Management of Thai Universities

In this part, we analyzed Total Quality Management of Thai universities. The research results showed that Total Quality Management, in total, was perceived at a high level (M = 4.15, SD = 0.15). In particular, continuous improvement was perceived at a high level (M = 4.18, SD = 0.10), followed by process management (M = 4.17, SD = 0.14), customer focus (M = 4.16, SD = 0.16) and employee involvement (M = 4.10, SD = 0.20) respectively (Table 1).

Table 1 Mean and Standard Deviation of the Total Quality Management of Thai universities

Total Quality Management	M	SD	Level	Ranking
1. Process management	4.17	0.14	High	2
2. Customer focus	4.16	0.16	High	3
3. Employee involvement	4.10	0.20	High	4
4. Continuous improvement	4.18	0.10	High	1
Total Average	4.15	0.15	High	

Part 3: The Results of Analysis on Sustainable Organization Development of Thai Universities

In this part, we analyzed sustainable organization development of Thai universities. The research results showed that sustainable organization development of Thai universities, in total, was perceived at a high level (M = 4.18, SD = 0.14). In particular, sustainable economic development had the highest mean value (M = 4.20, SD = 0.13), followed by sustainable social development (M = 4.18, SD = 0.15), and sustainable environmental development (M = 4.15, SD = 0.16) respectively (Table 2).

Table 2 Mean and standard deviation of sustainable organization development of Thai universities

Sustainable organization development	M	SD	Level	Ranking
1. Sustainable economic development	4.20	0.13	High	1
2. Sustainable social development	4.18	0.15	High	2
3. Sustainable environmental development	4.15	0.16	High	3
Total Average	4.18	0.14	High	

Part 4: Total Quality Management Influencing Sustainable Organization Development of Thai Universities

In this part, the researchers analyzed Total Quality Management influencing on sustainable organization development of Thai universities. The results of Stepwise Multiple Regression Analysis showed that Total Quality Management had an influence on sustainable organization development of Thai universities with statistical significance at 0.01 level. The forecasting equation from Stepwise Multiple Regression Analysis showed that Total Quality Management had an influence on sustainable organization development at 89.5 percent (Adjusted R^2 =

.895), whereas 10.5 percent was the result of other variables which were not studied in this research. In particular, continuous improvement (CI) had the highest influence on sustainable organization development of Thai universities (Beta = .597, p < .01), followed by process management (PM) (Beta = .446, p < .01), customer focus (Beta = .338, p < .01), and employee involvement (Beta = .249, p < .01) (Table 3).

Table 3 Total Quality Management Influencing Sustainable Organization Development of Thai Universities

Independent Variables	Unstandardized Coefficients		Standardized Coefficients		
	b	SE	β	t	p
(Constant) (a)	.307	.036		13.726**	.000
Continuous improvement (CI)	.566	.017	.597	12.824**	.000
Process management (PM)	.476	.026	.446	15.523**	.000
Customer focus (CF)	.328	.029	.338	16.513**	.000
Employee involvement (EI)	.243	.040	.249	17.417**	.000
	R^2 = .897				F = 5.328
	Adjusted R^2 = .895		S E = .736		p = .000

** p < .01

DISCUSSION

The findings indicated that the overall perception of Total Quality Management (TQM) among respondents was at a high level. Among its components, continuous improvement received the highest rating, followed by process management, customer focus, and employee involvement respectively. These results align with Choenram (2020) and Kenikasamanworakhun et al. (2025) who emphasized that TQM enhances organizational performance, teamwork, systematic thinking, knowledge sharing, and employee adaptability, thereby fostering sustainable growth and development. In support of this, Damrongsiri et al. (2020) argued that continuous improvement should be implemented across all departments to raise quality standards and enhance operational processes, production, and service delivery. TQM processes require active employee involvement, decentralized decision-making, leadership development, skills enhancement, and cultural transformation. Vinet and Lajoie (2023) highlighted that the primary goal of continuous improvement is to analyze data and processes to identify opportunities for enhancement, evaluate implemented changes, and ensure progressive organizational advancement. Similarly, Pansuwong et al. (2023) stated that the objective of process management is to improve efficiency by reducing costs, enhancing product quality, increasing profitability, and strengthening customer satisfaction and brand loyalty.

The study also revealed that the overall perception of sustainable organizational development in Thai universities was high. Within this framework, sustainable economic development achieved the highest mean score, followed by sustainable social development and sustainable environmental development. These findings are consistent with Tongboonchoo (2014), who found that organizations often prioritize economic sustainability, which can be enhanced through customer engagement, social responsibility, social development, community well-being, and environmental protection. Brockett and Rezaee (2012) and Christofi et al. (2012) further stressed that achieving sustainable development requires balancing profitability with social responsibility, noting that community stability and safety facilitate smooth business operations.

The Stepwise Multiple Regression Analysis indicated that TQM significantly influenced the sustainable organizational development of Thai universities (p < 0.01), explaining 89.5% of the variance (Adjusted R^2 = 0.895), with the remaining 10.5% attributed to unexamined variables. Among the TQM components, continuous improvement exerted the greatest influence, followed by process management, customer focus and employee involvement. These results are consistent with the study of Tenner and DeToro (2013) who found that TQM contributes to sustainable growth and profitability, with continuous improvement serving as a mechanism for enhancing work quality, organizational performance, efficiency, and effectiveness. Porter et al. (2016) likewise demonstrated that continuous improvement can be applied to optimize all internal processes to achieve desired outcomes. Sirathanakul et al. (2023) observed that TQM enhances organizational standards across all functions—from product and service delivery to customer satisfaction and employee commitment. In the context of higher education, Thai universities can apply TQM principles to improve teaching and learning, research, academic services, and cultural preservation. In addition, Heizer and Barry (2010) stated that TQM entails managing the entire organization to ensure that products and services consistently meet customer expectations, thereby serving as both a quality control mechanism and a management philosophy. Sin et al. (2025) found that focusing on continuous improvement and defect prevention, organizations can meet strategic objectives, foster trust, and maintain high manufacturing and service standards. In addition, this study revealed that there is a positive relationship between corporate network and organizational performance. James and William (2011) summarized TQM into three core principles.1. Customer and Stakeholders Focus recognized that customers are the ultimate judges of quality, necessitating close engagement to understand their needs, while also valuing employees and contractors who contribute to satisfaction.2. Employee engagement and teamwork ensure that all employees are actively involved in

achieving and sustaining quality objectives.3. The sustained quality revealed improvements and customer satisfaction. Process focused with continuous improvement and learning arose from ongoing learning and process development.

CONCLUSION

An implementation of Total Quality Management (TQM) in universities offers multiple benefits, as follows enhancing the quality of teaching and learning, improving the quality of research, and increasing student satisfaction and loyalty. Furthermore, TQM can contribute to cost reduction while simultaneously fostering employee morale and engagement. In the broader context of sustainability, successful organizations extend their focus beyond products and prioritize the well-being of all living beings. This includes environmental conservation, the promotion of ecological systems, equitable income distribution to communities and societies, and the adoption of non-toxic, environmentally friendly production technologies. Sustainable operations represent a contemporary management paradigm that requires institutional leaders to reassess and adapt their approaches. This shift necessitates careful consideration of the environmental, social, and economic consequences of organizational activities, ensuring that such actions contribute positively to the welfare of future generations.

RECOMMENDATIONS

1. This study was limited to employees of Thai universities in Bangkok; therefore, the results may not be fully generalizable to universities located in other regions of Thailand. Future research should extend the scope to include employees from universities in other geographical areas to provide a more comprehensive understanding of TQM and sustainable organizational development across the country.

2. Based on the findings, it is recommended that Thai universities adopt Total Quality Management (TQM) practices to enhance customer satisfaction, strengthen employee participation and teamwork, and establish continuous internal processes aimed at reducing and eliminating operational errors.

3. As this study focused exclusively on TQM, future investigations should explore additional management approaches—such as leadership, organizational culture and structure, learning organizations, strategic management, and the balanced scorecard—to examine their potential impact on sustainable organizational development.

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