



Research Paper

## Readiness of Local Educational Institution for ISO 9001:2015 Quality Management System Certification: A Comprehensive Analysis

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### Abstract

*Business certifications and accreditations are increasingly crucial for organizations, especially in educational institutions, to demonstrate service quality and gain a competitive edge. Quality management systems (QMS) will support these objectives and enhance product and service quality. This study specifically examines the readiness of local educational institution for ISO 9001 Quality Management System certification. It also evaluated the degree of impact among the respondents in terms of compliance with the QMS standard clauses. Additionally, the study identified the challenges faced by local educational institutions in obtaining ISO certification. The research design employed a descriptive approach and a survey questionnaire. Stratified random sampling was used to select a sample of 215 administration and academic personnel. The findings indicated that the assessment level for ISO 9001 is ready. However, among independent variables, leadership is the most important factor in demonstrating a high level of readiness for ISO certification. It emphasizes the importance of adhering to quality management requirements. Furthermore, the assessment differed when respondents were grouped according to their profiles. In addition, the respondents identified moderate issues related to resistance to change and a lack of proper organizational structure. Therefore, local educational institution must view certification as an ongoing commitment rather than a one-time project. They should establish routine processes to maintain the ISO standard, improve the institution's image, and raise employees' awareness of the QMS in their day-to-day operations.*

**Keywords:** Certification and Accreditation, ISO 9001:2015, Quality Management System, Taguig City University

### INTRODUCTION

The intensity of competition among business industries has escalated compared with the past decades. Businesses distinguish themselves with top offers, efficient structures, and excellent services. However, the competitors claim to have the suggestions as mentioned above as well. As a result, customers might think that all products are the same, considering the industry's services. Business certifications and accreditations are now issued to support the company's service quality against competitors. Accreditation and certification serve as a reference that specific requirements are respected; they are quality management processes used to mitigate individuals' information and trustworthiness (Bergh et al., 2019). Quality management processes make things work. It delineates top-tier standards for commodities, amenities, and frameworks, thereby ensuring excellence, security, and efficacy. These standards play a pivotal role in accelerating global commerce. Consequently, grasping quality as a strategic facet of business and perpetually enhancing it have emerged as imperative and decisive elements in ascertaining the holistic endurance and success of enterprises. Academic scholars asserted that quality improvement is a high-priority issue at all system levels (Abrampah et al., 2018).

ISO 9001 is the only criterion in the category that can be specialized and lays down the quality management system (QMS) criteria. It can be used by several organizations, large or small,

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regardless of size or industry. Within the realm of education, educators find themselves under considerable duress due to the dynamic shifts within the global landscape and the advent of trade liberalization. It is incumbent upon them to align with the requisites of industry and assorted stakeholders, thereby cultivating a more proficient and adept labor pool. In this context, educational establishments aspire to attain ISO 9001 certification and/or endorsements from accrediting entities. This inclination is rooted in factors such as navigating competitive forces (Sadi et al., 2020), garnering public validation, and affixing a hallmark of excellence to their endeavors. However, few local universities and colleges in the country are not yet ISO certified.

ISO 9001:2015 outlines the requirements for a quality management system (QMS). One of the key changes in the revision is the inclusion of the "Context of the organization" clause, which requires organizations to consider both internal and external issues that can impact their strategic objectives and how they plan their QMS. Implementing a QMS can help organizations identify and eliminate inefficiencies in their processes, leading to improved productivity and cost savings. A QMS can help organizations ensure that their products and services consistently meet customer requirements and expectations, leading to increased customer satisfaction and loyalty. By considering internal and external issues that can impact their strategic objectives, organizations can identify and manage risks more effectively. Additionally, by considering internal and external issues that can impact their strategic objectives, organizations can identify and manage risks more effectively.

The necessity to furnish information of high caliber, coupled with a local governmental framework that is both receptive and responsible, has been established through the implementation of a quality management system (QMS) driven by the principle of decentralization. LGUs with sufficient financial resources and capabilities such as Taguig City, incorporated in their local development plans can establish post-secondary schools to provide access in quality higher education for their local constituents. The LGUs made it their responsibility to look after their local schools' needs to fulfill their mandates to access higher quality education. For instance, Taguig City University (TCU) is a higher education institution mandated to provide central direction and leadership and formulating policies and programs to support the local government's idealism and commitment to inclusive quality education. Most of their accomplishments are as follows: TCU received CHED recognition of all academic programs from 2016 to 2020; passed level 1 status by ALCU-COA in 2019-2020; accredited TCU College of Hospitality and Tourism Management (CHTM) as Center of Excellence in 2019; and partnered with Asia Pacific Consortium of Researchers and Educators (APCoRE) in 2019. Inspired by such remarkable achievements, one can infer that TCU can further strengthen the University's vision to be an eminent center of excellent higher education through ISO 9001:2015.

The main thrust of tertiary education through the Commission on Higher Education is toward quality and excellence. For an institution to achieve this level, it should conform to the standards through certification and accreditation. Due to its commitment to continually innovate and improve its systems and services, local educational institutions accreditation from accrediting bodies as encouraged by the government to institutionalize the performance excellence of education through a quality management system and be at par with ISO-certified universities. This study investigates the relationship between ISO 9001 Quality Management System certification and customer satisfaction of local educational institutions.

## **LITERATURE REVIEW**

### **Context of the organization**

ISO 9001:2015 is a standard that outlines the requirements for a quality management system (QMS). The "Context of the Organization" is a new clause in the ISO 9001:2015 revision,

which emphasizes the importance of understanding the internal and external context of an organization. A study reviewed the literature on the relationship between quality approach and organization performance. The study found that the implementation of a quality approach, such as ISO 9001, can lead to improved organizational performance (Saida & Taibi, 2021). A research paper highlighted the relevance of the geographical context, organization size, and sector for successful adoption of ISO 9001:2015. The paper found that the adoption of ISO 9001:2015 is influenced by the geographical context, organization size, and sector (da Fonseca et al., 2019). A study aimed to identify what an organization needs to do to incorporate the new ISO 9001:2015 certification. The study found that the organization needs to perform a current state analysis, identify gaps, and develop an implementation plan (Berglund & Jonsson, 2016).

### **Leadership**

ISO 9001:2015 is a quality management standard that outlines requirements for organizations to ensure that their products and services consistently meet customer requirements and enhance customer satisfaction. The standard emphasizes the importance of leadership in the implementation and management of the ISO 9001:2015 system (Wolniak & Politechnika Śląska, 2019). A literature review of ISO 9001:2015 and leadership reveals that leaders at all levels of an organization play a critical role in setting the purpose and direction of the organization, creating conditions for staff involvement, and ensuring compliance with the standard (Saida & Taibi, 2021). The study also shows that top management must be fully engaged with the quality system to remain compliant. Clause 9 of the ISO 9001:2015 standard outlines several required performance evaluation activities, including risk analysis, internal audits, and regular intervals for evaluating data. These activities are key to ensuring leadership engagement and compliance with the standard.

### **Planning**

The planning of ISO 9001:2015 involves following the PDCA cycle, which stands for Plan, Do, Check, and Act. The ISO Quality Approach and Performance Literature Review discusses the PDCA cycle and how it is used in ISO 9001:2015 planning (Saida & Taibi, 2021). In the paper "A literature review on lean, Six Sigma, and ISO 9001:2015. The manufacturing industry to improve process performance", the authors compare the three methodologies to improve process performance in the manufacturing industry. The paper concludes that all three methodologies have their own strengths and weaknesses, and that a combination of the three can lead to the most effective results (Veena & Prabhushankar, 2019). Lean manufacturing focuses on reducing waste and improving efficiency, while Six Sigma methodology is data-driven and focuses on reducing defects and associated costs. ISO 9001:2015 QMS outlines the requirements for a quality management system and follows the PDCA cycle. The paper suggests that implementing all three methodologies can lead to faster, better quality outputs, reduced costs, increased customer satisfaction, and continual improvement for the organization. The paper also suggests that Six Sigma and Lean methods can be utilized to provide improvements to increase speed, minimize defects, and reduce waste associated with product and service delivery, enabling the achievement of the established objectives and fulfillment of the goals defined in the strategic plan.

### **Support**

Gopal and Attri (2017) explained that the goal of ISO is to encourage the development of standardization and related world activities with an objective of facilitating international exchange of goods. Its objectives should be measurable, consistent with the quality policy, and relevant to product and service conformity. The academic paper by Brachnata and Wening (2021) presents a case study analysis of how ISO 9001:2015 implementation has influenced organizational support processes. The study shows that the implementation of ISO 9001:2015 has a positive impact on various business sectors, including operational performance, financial performance, customer

satisfaction, and positive impact on society and the environment. Implementation of ISO 9001:2015 also enhances organizational communication, shareholder satisfaction, and overall efficiency (Ozkan, 2021). However, the study also reveals that organizations face challenges in the effective implementation of ISO 9001:2015, including a lack of qualified personnel, inadequate training, employee resistance, and lack of commitment among top-level management executives (Nurcahyo et al., 2021). To improve their support processes in the context of ISO 9001:2015, organizations can define and manage processes and their interactions systematically and maintain vital information on how the processes should work. It ensures that adequate resources are provided for effective implementation of the Quality Management System, and reviews their process-based management system to ensure that it captures elements from Clause 4.1 and 4.2 (Saraf, 2019).

### **Operation**

ISO 9001:2015 is a quality management system that aims to improve organizational processes and performance. Implementation of ISO 9001:2015 has been found to have a significant positive impact on operational and business performance in manufacturing industries in developing countries (Bakhtiar et al., 2023). A study by Martin and Thawabieh (2018) examined the effect of ISO 9001 to Buraima University College Operational Performance in Oman. The results revealed that the implementation of ISO 9001 is beneficial in terms of improving the operational performance. It is also clear that an increase in organizational performance is greatly influenced by ISO 9001 implementation and a quality culture. Furthermore, empirical studies have tested the model of the different aspects of the ISO 9001:2015 standard implementation with a focus on operational performance (Saraf, 2019).

### **Performance Evaluation**

This section focuses on evaluation and measurement processes which are vital for adherence and progress. Data-driven decisions are emphasized over estimations, enhancing managerial approach (Cardoni et al., 2020). Customer perception alignment and numerical output scrutiny are key. Various methodologies, including statistics, gather empirical evidence for making decisions (Lemieux et al., 2018). Internal audits assess system efficacy, while managerial reviews cover diverse topics from customer satisfaction to resource needs (Manz, 2019). A growing number of schools are now implementing quality management systems (QMS), including ISO 9001, to assess the impact on teaching and learning processes. The adoption of the ISO 9001 standard can lead to improve the performance of educational systems (Kuncoro, 2013).

## **RESEARCH METHOD**

The study utilized the descriptive research method to comprehensively describe the characteristics of the employees at local educational institutions, especially Taguig City University in Taguig City. The research focused on both teaching and non-teaching personnel, who were selected as respondents due to their full-time engagement with the university and involvement in ISO 9001 certification preparation. The total number of respondents as of March 11, 2020, was 486. However, due to time constraints during the pandemic, the researcher employed stratified random sampling using Slovin's formula to determine an appropriate sample size. This technique ensured that 215 respondents, comprising 121 teaching personnel and 94 non-teaching personnel, adequately represented the population.

The research mechanism employed in this study was a survey questionnaire based on the ISO 9001 International Standards, which are widely employed by colleges and universities in the Philippines. The questionnaire, adapted from ISO 9001 and the SGS Group instrument, targeted university officials, deans, directors/heads, faculty, and staff who possess in-depth knowledge of

the institution's quality assurance management. An online survey format using Google Docs was employed and analyzed in collaboration with a statistician. Statistical measures such as frequency distributions, weighted mean, and analysis of variance were used to interpret the data.

**Table 1.** Socio-Demographic Profile

Socio-Demographic		F	%
Highest Educational Attainment	Graduate of 4 or 5 year course	64	29.77
	MA/MS Graduate	53	24.65
	with MA/MS units	51	23.72
	PhD/Doc. Graduate	15	6.98
Length of Service	with PhD/Doc. units	32	14.88
	1 year and below	42	19.53
	2 years to 4 years	59	27.44
	5 years to 7 years	48	22.33
	8 years to 10 years	29	13.49
Work Assignment	11 years and above	37	17.21
	Teaching Personnel	121	56.28
Department	Non-Teaching Personnel	94	43.72
	Administration	78	36.28
	Academic	137	63.72

As indicated in Table 1, the offered demographic profile details the survey or research study participants in many categories, including highest educational attainment, length of service, work assignment, and department. Based on the findings, the majority of respondents have completed a 4 or 5-year course (29.77%), with a significant number also holding master's degrees or having completed some units towards a master's degree (48.37%). The respondents' length of service varies, with a significant number having worked for 2 to 7 years with 49.77%. The majority of respondents are teaching personnel with 56.28%, and a higher percentage work in academic departments with 63.72% compared to the administration department. These socio-demographic characteristics provide insight into the composition of the respondent group and may have implications for data analysis and interpretation within the context of the study.

## FINDINGS AND DISCUSSION

**Table 2.** Readiness of the University for ISO 9001:2015 Certification in terms of the Context of the Organization

	Context of the Organization	M	SD	VI
1	External and internal context issues of TCU	2.83	2.39	R
2	The products and services offered by TCU	2.96	2.50	R
3	Identify, monitor and review the relevant internal and external TCU issues to establish whether any changes to them will affect the quality management	2.95	2.49	R
4	It is identifying what requirements these interested parties themselves have which are relevant to TCU quality management	2.96	2.50	R
5	Adopting a process approach when developing, implementing, and improving the effectiveness of TCU quality management	2.93	2.49	R
	Overall Mean	2.93		R

Legend: 1.00-1.49=Not Ready (NR); 1.50-2.49=Partly Ready (PR); 2.50-3.49=Ready (R); 3.50-4.00=Extremely Ready (ER)

Table 2 assesses the readiness of the University for ISO 9001:2015 certification, specifically

focusing on its understanding of the "Context of the Organization". Based on the results, the product and services offered and identifying what requirements these interested parties themselves have that are relevant to TCU quality management got the highest mean score of 2.96. It implies that these aspects perceived as critically important to the university's quality management system. Understanding it is fundamental to meeting their needs and expectations. The "Overall Mean" gives the average readiness level for all aspects combined. In this case, the university's readiness for ISO 9001:2015 certification in terms of understanding the context of the organization is categorized as "Ready (R)". [Makolov \(2019\)](#) emphasizes that universities need to consider external/internal factors influencing their quality management system. [Barbadia and Haguisan III \(2020\)](#) found a Grade School Department to be well-prepared and aware of school operations in relation to the ISO 9001:2015 standard.

**Table 3.** Readiness of the University for ISO 9001:2015 Certification in terms of Leadership

	Leadership	M	SD	VI
1	TCU top management is involved in the quality management preparation and continued review	3.13	2.67	R
2	The Quality policy is communicated within TCU and to relevant parties	3.07	2.62	R
3	Responsibilities and authorities are assigned and communicated by TCU top management	3.10	2.65	R
4	TCU top management demonstrated that they have taken responsibility for emphasizing the importance of conforming to quality management requirements	3.16	2.70	R
5	TCU top management demonstrate that they ensure that the quality management achieves its intended results and drives continual improvement within the organization	3.15	2.68	R
	Overall Mean	3.12		R

*Legend: 1.00-1.49=Not Ready (NR); 1.50-2.49=Partly Ready (PR); 2.50-3.49=Ready (R); 3.50-4.00=Extremely Ready (ER)*

Table 3 assesses the university's readiness for ISO 9001:2015 certification, specifically in the domain of "Leadership." In ISO 9001:2015, leadership plays a pivotal role in setting the direction and tone for an organization's commitment to quality management. Based on the table, institutional top management demonstrated accountability by emphasizing adherence to quality management, as indicated by the highest mean score of 3.16 (SD = 2.70). This indicates that the university's top management has demonstrated a high level of readiness emphasizing the importance of adhering to quality management requirements. However, transferring responsibilities and authorities receives a lower mean score of 3.10 (SD = 2.65). Overall, the leadership assessment level for ISO 9001 is "Ready" (mean score 3.12). This indicates that, on average, the university is well-prepared to demonstrate effective leadership commitment to quality management, in accordance with ISO 9001:2015 standards. [Istriani and Rahardja \(2019\)](#) found that a Vocational High School in Indonesia's top management encouraged quality services and supported the quality management structure. [Walaszczyk and Sopinska \(2020\)](#) highlight cohesive leadership across hierarchies that fosters goal alignment, while [Shannon \(2018\)](#) stresses proficient management, communication, and vision articulation as vital components of effective leadership.

**Table 4.** Readiness of the University for ISO 9001:2015 Certification in terms of Planning

	Planning	M	SD	VI
1	TCU established measurable quality objectives at relevant functions and levels	3.07	2.61	R
2	TCU established for relevant processes and to the enhancement of customer satisfaction (students)	3.05	2.59	R
3	TCU's quality management is maintained when any changes to it are planned and implemented	2.97	2.53	R
4	in conducting out the changes, is consideration is taken into account of why the change is being made and any potential consequence of those changes	2.98	2.53	R
5	TCU identified that there are resources necessary to perform the changes	3.04	2.59	R
	Overall Mean	3.02		R

Legend: 1.00-1.49=Not Ready (NR); 1.50-2.49=Partly Ready (PR); 2.50-3.49=Ready (R); 3.50-4.00=Extremely Ready (ER)

The readiness of the University for ISO 9001:2015 certification in terms of planning is assessed on the basis of several key indicators as shown in Table 4. Based on the results, institutions have established measurable quality objectives across functions and levels, reflected in a mean score of 3.07 (SD = 2.61). This indicates that TCU may have a culture of continuous improvement where objectives are regularly reviewed, updated, and improved. This proactive approach aligns with the ISO 9001:2015 principles and can lead to a higher score. Quality management during planned changes, indicated by a mean score of 2.97 (SD = 2.53), reflects processes for managing changes and ensuring continuity. The overall mean score for all the planning indicators is 3.02, suggesting that, on average, the university's planning readiness for ISO 9001:2015 Certification is reasonably ready. [Barbadia and Haguisan III's study \(2020\)](#) of a private educational institution in Southern Negros Occidental highlighted readiness for ISO certification, with teaching and non-teaching staff prepared. Teachers interact directly with stakeholders ([Bambaeroo and Shokrpour, 2017](#)), while non-teaching staff ensure successful service implementation through planning ([Jagtap, 2016](#)).

**Table 5.** Readiness of University for ISO 9001:2015 Certification in terms of Support

	Support	M	SD	VI
1	TCU determined and provided the resources needed for the establishment, implementation, maintenance, and continual improvement of the quality management (including people, infrastructure, and environment for the operation of processes)	3.04	2.59	R
2	TCU determined and provided the resources required to ensure valid and reliable results	3.02	2.57	R
3	TCU determined, provided, and maintained the infrastructure necessary for operating processes and to achieve conforming products or services	2.99	2.57	R
4	TCU determined the knowledge necessary for the operation of its processes and the achievement of conformity of products and services	3.05	2.58	R
5	TCU ensured that people doing work under their control know the quality policy and objectives, their contribution to these, and the implications of not conforming	3.06	2.60	R
	Overall Mean	3.03		R

Legend: 1.00-1.49=Not Ready (NR); 1.50-2.49=Partly Ready (PR); 2.50-3.49=Ready (R); 3.50-4.00=Extremely Ready (ER)

Table 5 evaluates the readiness of the University for ISO 9001:2015 certification in terms of Support aspect. Based on the results, institutions ensured staff understanding of quality policy,

objectives, and consequences of non-conformance, scoring a highest mean of 3.06 (SD = 2.60). This shows their commitment to connecting staff with quality significance and non-conformance implications. Indicator 3 ("Infrastructure provision for processes and conforming products/services") scored the lowest mean of 2.99 (SD = 2.57). The overall mean score for all support-related indicators is 3.03, indicating that the university demonstrated a strong level of readiness in terms of support for ISO 9001:2015 certification. Western Mindanao State University's quality manual (2018) emphasizes resource commitment for QMS, including personnel, infrastructure, and knowledge. The University of Northern Philippines (2016) allocates resources judiciously, considering internal capacities and external procurement, managed through annual planning and budgeting.

**Table 6.** Readiness of the University for ISO 9001:2015 Certification in terms of Operation

	Operation	M	SD	VI
1	There are defined processes for providing products and services that meet the specified requirements for the products and services	3.00	2.55	R
2	When changes are planned, they are carried out in a controlled way and actions taken to mitigate any adverse effects	2.95	2.50	R
3	There is a process for reviewing and communicating with customers regarding products and services, inquiries, or contracts	3.02	2.57	R
4	A review is conducted before TCU's commitment to supply products and services	2.99	2.53	R
5	TCU designs and develops products or services. Processes are established and implemented in line with the Standard requirements	3.01	2.55	R
	Overall Mean	2.99		R

Legend: 1.00-1.49=Not Ready (NR); 1.50-2.49=Partly Ready (PR); 2.50-3.49=Ready (R); 3.50-4.00=Extremely Ready (ER)

Table 6 assesses the readiness of universities for ISO 9001:2015 certification in the Operation dimension. The results revealed that a structured process is evident for customer interactions, scoring an average of 3.02 (SD = 2.57), highlighting the institution's commitment to customer input and efficient communication. The university places a strong emphasis on understanding and meeting customer needs and expectations, which is a fundamental principle of ISO 9001:2015. This clarity in customer focus contributes to the structured process for customer interactions. While implementing planned changes, a regulated approach is observed, with proactive measures to mitigate adverse effects, reflected by the lowest mean score of 2.95 (SD = 2.50). Overall, the Operation assessment level for ISO 9001 Certification is "Ready" (mean score 2.99), reflecting personnel's agreement on assessment. Liu et al., (2020) found quality certification linked to improved quality education at the operational level. Basir et al., (2017) surveyed Malaysian universities, observed improved operations following quality certification, mainly in the form of expanded opportunities. ISO certification requires significant investment but aims to enhance educational quality and operational efficiency. Universities that adopt quality frameworks and engage stakeholders tend to excel (Irsyada et al., 2018).

**Table 7.** Readiness of the University for ISO 9001:2015 Certification in terms of Performance Evaluation

	Performance Evaluation	M	SD	VI
1	TCU determined what needs to be monitored and measured and the methods for monitoring, measurement, analysis, and needed evaluation to ensure valid results	3.03	2.58	R



2	TCU established the results from monitoring and measurement shall be analyzed and evaluated	3.00	2.56	R
3	Methods of monitoring customer perceptions of the degree to which their needs and expectations have been fulfilled and been established by TCU	3.02	2.57	R
4	TCU determined the need or opportunities for improvements within the quality management and how these will be fed into management reviews	2.99	2.54	R
5	An approach to perform management reviews have been established and implemented	2.96	2.51	R
Overall Mean		3.00		R

*Legend: 1.00-1.49=Not Ready (NR); 1.50-2.49=Partly Ready (PR); 2.50-3.49=Ready (R); 3.50-4.00=Extremely Ready (ER)*

Table 7 evaluates the readiness of the universities for ISO 9001:2015 certification in terms of Performance Evaluation. Based on the results, the institution systematically identified monitoring requirements and established structured methodologies for monitoring, measurement, analysis, and evaluation, with the highest mean score of 3.03 (SD = 2.58). The university appears to be highly committed to quality management, as evidenced by its systematic approach to identifying what needs to be monitored and measured. This reflects a strong dedication to ensuring the quality of its processes and services, which aligns with ISO 9001:2015 standards. However, developing and executing a method for management reviews received a lower mean score of 2.96 (SD = 2.51), suggesting room for improvement. The overall mean score for all performance evaluation indicators is 3.00, indicating that, on average, the university exhibits a reasonable level of readiness in terms of performance evaluation for ISO 9001:2015 Certification. [Bichi \(2017\)](#) highlights the importance performance of effective performance evaluation for teaching and non-teaching personnel. [Smith and Benavot \(2019\)](#) note both instructional and non-instructional staff's responsibility for educational quality, making evaluations a means of oversight and enforcement. Data from evaluations aid local educational institutions in defining improvement opportunities through quality management.

**Table 8.** Readiness of University for ISO 9001:2015 Certification in terms of Improvement

	Improvement	M	SD	VI
1	TCU determined and selected opportunities for improvement and implemented the necessary actions to meet customer requirements and enhance customer satisfaction	3.13	2.66	R
2	TCU appropriated processes for managing nonconformity and the related corrective actions	3.02	2.56	R
3	TCU decided how it will address the requirement to continually improve the suitability, adequacy, and effectiveness of the quality management	3.04	2.58	R
Overall Mean		3.06		R

*Legend: 1.00-1.49=Not Ready (NR); 1.50-2.49=Partly Ready (PR); 2.50-3.49=Ready (R); 3.50-4.00=Extremely Ready (ER)*

The readiness of the University for ISO 9001:2015 Certification in terms of improvement is shown in Table 8. According to the result, the institution identifies and implements avenues for enhancement, achieving customer satisfaction with the highest mean score of 3.13 (SD = 2.66). It implies that the institution has adopted a customer-centric approach, where the satisfaction of customers is a top priority. This approach is in alignment with ISO 9001:2015 principles, which emphasize meeting customer requirements and enhancing satisfaction. Moreover, they actively align processes with customer needs, addressing nonconformities with the lowest mean score of 3.02 (SD = 2.56). The results for these improvement-related indicators are represented with mean scores, standard deviations, and a validation index. The overall mean score for all improvement indicators is 3.06, highlighting the university's strong readiness for ISO 9001:2015 Certification in

terms of improvement. Scholars, including [Khan et al. \(2019\)](#), emphasize continual quality improvement's significance for organizational viability. Partially adopting quality principles leads to missed benefits of a comprehensive Quality Management System (QMS). Educational institutions should prioritize perpetual, process-oriented improvement anchored in customer focus, staff involvement, and adept leadership ([Smith & Baker, 2017](#)). This integrated approach anticipates stakeholder needs, emphasizing proactive, systemic improvement.

**Table 9.** Regression Analysis

Profile	F-value	p-value	Decision	Interpretation
Highest Educational Attainment	0.659	0.621	Accept Ho	Not Significant
Length of Service	1.966	0.101	Accept Ho	Not Significant
Work Assignment	1.081	0.300	Accept Ho	Not Significant
Department	0.793	0.374	Accept Ho	Not Significant

$\alpha = 0.05$ ; if  $p \leq 0.05$ , reject  $H_0$

Table 9 presents results from one-way ANOVA analysis. The p-values exceed the significance threshold of 0.05, supporting the null hypothesis. Therefore, there is no significant difference in assessment levels for ISO certification based on respondent profiles. Educational attainment, length of service, work assignment, and department do not influence opinions. Respondents assess university readiness for ISO certification similarly across Context of the Organization, Leadership, Planning, Support, Operation, and Performance Evaluation. [Aslam and Bilal \(2021\)](#) argue that certification should be integrated into regular operations, with managerial commitment being vital, especially for ISO-certified organizations. Top management's commitment is crucial. The approach to quality varies based on strategy and departmental context. Leveraging ISO standards via quality management systems is a feasible avenue for enhancing education quality ([Herath et al., 2023](#)).

**Table 10.** Possible problems that may hinder TCU in acquiring ISO certification

Problems	M	VI
1 Lack of top management commitment, involvement, leadership and support	2.83	MoP
2 No government financial support to organization to implement this system	2.96	MoP
3 There is a lack of training programs relating to quality management system	2.95	MoP
4 Employees did resist change to the existing system in the organization	2.97	MoP
5 Lack of understanding of the purposes and benefits of ISO 9001: 2015 certification	2.93	MoP
6 Ineffective communication and cooperation between departments and organization	2.83	MoP
7 Insufficient technology and poor-quality management practices in the organization	2.96	MoP
8 There is a shortage of providing necessary documents from department to help the organization in seeking the certification	2.95	MoP
9 No proper organizational structure developed	2.97	MoP
10 There is a lack of periodic management review	2.93	MoP
Overall Mean	2.93	MoP

Legend: 1.00-1.49=Not a Problem (NP); 1.50-2.49=Minor Problem (MiP); 2.50-3.49=Moderate Problem (MoP); 3.50-4.00=Serious Problem (SP)

Table 10 presents potential problems hindering ISO certification for the institution. Items 4 ("Employee resistance to change") and 9 ("Lack of proper organizational structure") have the highest mean (M = 2.97) and are interpreted as "Moderate Problem." Items 1 ("Lack of top management commitment") and 6 ("Ineffective communication and cooperation between departments") have the lowest mean (M = 2.83), also interpreted as a "Moderate Problem." Overall mean is 2.93, indicating a "Moderate Problem." Teaching and non-teaching personnel perceive

these hindrances as moderate problems to acquiring ISO certification. Most barriers are organizational, except for communication-related technical challenges. Resistance to change is a significant obstacle, aligned with prior studies (Al-Alawi et al., 2019). A lack of clear organizational framework for the Quality Management System (QMS) also emerges, tied to deficient job descriptions and roles lacking QMS management. Addressing these issues requires cultivating understanding and involvement, particularly involving both instructional and non-instructional staff. Additionally, establishing harmonious organizational structures can foster effective coordination. These problems, related to Context of the Organization, Leadership, Planning, Support, Operation, and Performance Evaluation, exhibit a significant difference in assessing the institution for ISO certification.

## **CONCLUSIONS**

The readiness of the University for ISO certification in terms of context of the organization, leadership, planning, support, operation, and performance evaluation are rated ready. Among the independent variable, leadership highlighting the university's strong readiness for ISO 9001:2015 Certification. Since the university's top management is accountable for the organization's quality management system. They not only endorse the quality management system but also actively participate in and endorse its preparation and ongoing review. They are committed to ensuring that all members of the organization understand and adhere to the quality management requirements. This includes not only compliance with ISO standards but also the university's own quality policies and objectives. Based on the study, the high score reflects a culture within the institution that places a strong emphasis on quality and compliance. This cultural emphasis is often set by top leadership, and it influences the behaviors and attitudes of staff at all levels. Further, the top management is providing strong support to ensure that the organization adheres to quality management requirements. This support may include allocating resources, implementing necessary training, and creating processes for compliance monitoring. The role of management goes beyond compliance to a commitment to driving continual improvement. It means they are not only concerned with meeting the minimum standards but actively seek opportunities to make the quality management system more effective and efficient.

The standard deviation of 2.70, although indicating some variability in responses, does not diminish the significance of the mean score. It suggests that while there may be some diversity in perception, the overall readiness of the university's top management in emphasizing adherence to quality management requirements is consistently strong, as indicated by the mean score. After analyzing data related to ISO certification preparedness within the institution, there was no significant difference in the assessment when employees were grouped based on several factors, such as their highest educational attainment, length of service, work assignment, and department. In other words, the readiness for ISO certification appeared to be consistent across these different employee groups. This observation led to the acceptance of the null hypothesis, which essentially means that there is not enough evidence to suggest a significant difference in ISO certification readiness based on these employee characteristics. However, despite this finding, there is a potential problem within the institution that could hinder its ISO certification efforts. This issue relates to employee resistance to changes in the current organizational system. The absence of a duly structured organizational framework suggests that employees may be resistant to adopting the necessary changes and processes required for ISO certification.

## **LIMITATION & FURTHER RESEARCH**

The study shows the institution's readiness assessment for certification, with a recognized importance, but incomplete implementation of a Quality Management System (QMS). Employee

resistance to changes in ISO requirements is a significant challenge, typical in certification efforts. Concerns arise about potential biases from sampling methods and reliance on self-reported data. The study lacks a dynamic perspective, failing to track the institution's evolving readiness over time.

In future research, it's essential to track the long-term evolution of the university's readiness for certification, not just focusing on immediate readiness. This allows for a thorough assessment of the sustainability and effectiveness of the readiness efforts. Industry-wise comparisons can provide valuable insights by examining how the university's readiness stacks up against other educational institutions or organizations in the same industry, offering benchmarks for improvement. The use of qualitative research methods, such as in-depth interviews and open-ended surveys, enables a deeper exploration of individuals' experiences and motivations within the university, resulting in richer insights. Employee engagement should be a central focus, as engaged employees are more likely to support and actively contribute to readiness efforts. It's important to examine how the level of employee engagement impacts readiness and identify strategies to enhance it.

Additionally, evaluating the effectiveness of feedback mechanisms within the university is essential. This evaluation helps in understanding how well the institution collects, analyzes, and acts on feedback from employees and stakeholders, which, in turn, drives continuous improvement. Organizational culture plays a significant role in readiness, and research should investigate how the university's culture influences its preparedness for certification. A culture that values quality, adaptability, and innovation is more likely to succeed in achieving and maintaining certification. Lastly, in a global context, it's crucial to consider international and cultural factors that can impact readiness, especially in institutions with international students and collaborations. Understanding how international standards and cultural elements influence readiness is vital for effective certification efforts.

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