ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 11 (November 2026)

Systematic Processes, Requirement Fulfillment, and Organizational Efficiency on Quality Management System of State Universities and Colleges (SUCs): Inputs to Quality Framework

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Date Submitted:
September 21, 2026

Date Accepted:
October 20, 2026

Date Published:
November 27, 2026

DOI:
10.5281/zenodo.24597020

ABSTRACT

Strengthening quality, accountability, and efficiency is essential in Philippine State Universities and Colleges (SUCs), which are mandated to implement quality management systems aligned with national policies and international standards. This study investigated the systematic processes, requirement fulfillment, and organizational efficiency within the ISO 9001:2015 Quality Management Systems (QMS) of selected SUCs as a basis for an intervention measure. A descriptive-correlational design was employed with 474 respondents, composed of top management, internal quality auditors, process owners, and rank-and-file employees, drawn through convenience sampling from a population of 1,585 personnel in five SUCs in Metro Manila. Data were gathered from October 2025 to June 2026 using a validated and pilot-tested researcher-made questionnaire and analyzed using percentage, weighted mean, one-way analysis of variance, Pearson correlation, and the t-test for the significance of the correlation coefficient. The systematic processes within the QMS were rated Highly Evident (grand mean = 4.37), with no significant differences in the assessments of the four respondent groups. Requirement fulfillment was rated Highly Fulfilled (grand mean = 4.30), with internal audits rated highest and training needs analysis lowest, and organizational efficiency was rated Highly Efficient (grand mean = 4.20), with planning rated highest and staffing lowest. Systematic processes and requirement fulfillment were reported to be significantly correlated with organizational efficiency. Challenges relating to systematic processes were rated Encountered (3.43), led by insufficient resource allocation, while those relating to requirement fulfillment (3.25) and organizational efficiency (3.20) were Moderately Encountered. The proposed intervention measure for Academic Years 2027 to 2030 was rated Highly Suitable (4.46), Highly Acceptable (4.48), and Highly Feasible (4.22). The findings indicate that QMS practices are well established in the selected SUCs, while training needs analysis, staffing, coordination, and resource allocation require continued institutional attention.

Keywords: *quality management system, ISO 9001:2015, state universities and colleges, requirement fulfillment, organizational efficiency, public administration*

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International Journal
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INTRODUCTION

Strengthening quality, accountability, and efficiency has become a pressing concern within the public sector, particularly among public higher education institutions that serve as key drivers of national development. Within the Philippine setting, State Universities and Colleges (SUCs) play a vital role in advancing Sustainable Development Goal 4, which underscores inclusive, equitable, and quality education and lifelong learning opportunities for all. Realizing this goal requires institutions to establish sound quality management systems capable of aligning educational objectives with administrative excellence, sustainability, and transparency.

The 1987 Philippine Constitution establishes the State's duty to protect and promote the right of all citizens to quality education. This mandate is reinforced by Republic Act No. 8292, the Higher Education Modernization Act of 1997, which defines the governance of SUCs and holds their boards accountable for the management of public resources (Republic Act No. 8292, 1997). The Commission on Higher Education (CHED) has likewise adopted an outcomes-based and typology-based approach to quality assurance in Philippine higher education (CHED, 2012), while Executive Order No. 605 institutionalized the Government Quality Management Program and directed government agencies to adopt ISO 9001-aligned quality management systems (Executive Order No. 605, 2007). Laws promoting efficient and transparent public service, such as the Anti-Red Tape Act and the Ease of Doing Business and Efficient Government Service Delivery Act, impose further obligations on public institutions concerning documented processes and service standards (Republic Act No. 9485, 2007; Republic Act No. 11032, 2018).

Quality management systems based on ISO 9001:2015 are built on systematic processes that encompass the context of the organization, leadership, planning, support, operation, performance evaluation, and improvement, and they require documented outputs such as quality manuals, quality policies, records of risks and opportunities, competence and training records, internal audit and management review results, and records of corrective action (ISO, 2015). Organizational efficiency, meanwhile, is reflected in the competent performance of the managerial functions of planning, organizing, staffing, directing, coordinating, reporting, and budgeting, which Gulick (1937) summarized as POSDCORB. Despite these mandates, inconsistencies persist in the fulfillment of QMS documentation requirements, along with recurring challenges in internal auditing, risk management, and resource mobilization, and limited research has examined the relationships among systematic processes, requirement fulfillment, and organizational efficiency in SUCs.

This study assessed the systematic processes, requirement fulfillment, and organizational efficiency of the QMS of selected SUCs as a basis for formulating an input to quality review. Specifically, it sought to answer the following questions: (1) How do top management, internal quality auditors, process owners, and rank-and-file employees assess the systematic processes in the QMS in terms of context of the organization, leadership, planning, support, operation, performance evaluation, and improvement? (2) Is there a significant difference in the assessments of the four groups of respondents? (3) What is the level of requirement fulfillment as to the quality management manual, quality policy, risk and opportunity register, training needs analysis, corrective action reports, management review, and internal audits? (4) How do the respondents assess the extent of organizational efficiency in terms of planning, organizing, staffing, directing, coordinating, reporting, and budgeting? (5) Is there a significant relationship among systematic processes, requirement fulfillment, and organizational efficiency? (6) What challenges are encountered by the respondents in relation to these three areas? (7) Based on the findings, what input to quality review may be proposed? (8) How suitable, acceptable, and feasible is the proposed input? The study tested the null hypotheses that there is no significant difference in the assessments of the four respondent groups regarding the systematic processes and that there is no significant relationship among systematic processes, requirement fulfillment, and organizational efficiency.

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Literature Review

Quality Management in the Philippine Public Sector and Higher Education

The adoption of quality management systems in Philippine government agencies is anchored on Executive Order No. 605, which institutionalized the Government Quality Management Program and required agencies to establish ISO 9001-aligned quality management systems in their frontline and support services (Executive Order No. 605, 2007). In public higher education, Republic Act No. 8292 (1997) provides the governance framework of SUCs, while CHED Memorandum Order No. 46, series of 2012, promotes quality assurance through outcomes-based education and institutional typologies (CHED, 2012). ISO 9001:2015 organizes quality management around the process approach, risk-based thinking, and the Plan-Do-Check-Act cycle, with requirements covering the context of the organization, leadership, planning, support, operation, performance evaluation, and improvement (ISO, 2015). Together, these policies and standards establish the expectation that SUCs operate documented, systematic, and continually improving quality management systems.

ISO 9001 Quality Management Systems in Higher Education

Although ISO 9001 was developed for industry, its principles have been applied to higher education. Kamusoko (2020) analyzed the applicability of the standard to higher education institutions and concluded that its philosophy and seven quality management principles are consistent with common approaches to quality assurance in the sector and that it can be tailored to higher education despite the workload it entails. Sustaining such systems, however, requires continuing effort. In a 20-year case study of a university QMS, Ab Wahid (2019) identified four developmental stages, namely initiation, internalization, alignment, and improvement, and found that staff commitment, training, and good communication were key success factors, while gaps in knowledge and skills, poor cooperation, limited resources, and weak communication were the main obstacles.

Quality Management System Practices in Philippine Higher Education Institutions

Studies of Philippine higher education institutions report generally favorable QMS practices alongside recurring implementation challenges. Roque and Ulanday-Lozano (2024) found that private and public higher education institutions in Region XII applied quality management practices at a high and consistent level, with leadership and governance support, policy development, academic support, and data quality management emerging as recurring themes, and they recommended measures related to communication, performance monitoring, stakeholder feedback, accountability, and professional development. In a study of a Philippine institution's pursuit of ISO certification, Reyteran (2021) reported that consultants, trainings, internal audits, management reviews, and ISO-aligned policies supported certification, while low awareness, resistance to change, scheduling conflicts, and limited knowledge of the standard were addressed through orientation, information sharing, resource provision, and top management commitment.

Organizational Efficiency and Managerial Functions

Organizational efficiency in public administration has long been associated with the managerial functions summarized by Gulick (1937) as POSDCORB: planning, organizing, staffing, directing, coordinating, reporting, and budgeting. These functions describe how public organizations translate goals into coordinated action, allocate human and financial resources, and account for results. In the context of a QMS, they correspond to the leadership, planning, support, operational control, and performance evaluation requirements of ISO 9001:2015 (ISO, 2015), suggesting that the quality of systematic processes and documentation may be related to how efficiently institutions perform their managerial functions.

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Theoretical Framework

The study was anchored on Systems Theory, New Public Management (NPM), and Institutional Theory. Systems Theory, developed by von Bertalanffy (1968), holds that an organization is composed of interrelated parts whose interactions determine overall performance, making it a fitting lens for examining the interconnected processes of a QMS. NPM, as described by Hood (1991), emphasizes efficiency, accountability, performance measurement, and results-oriented public service delivered through modern management approaches, principles reflected in Philippine laws mandating streamlined and efficient government services (Republic Act No. 9485, 2007; Republic Act No. 11032, 2018). Institutional Theory, articulated by DiMaggio and Powell (1983), explains that organizations adopt formal structures and management systems in response to coercive, mimetic, and normative pressures in order to gain legitimacy, a perspective whose relevance to public administration research continues to be examined (Aksom & Vakulenko, 2023). Together, these perspectives explain why SUCs adopt ISO 9001:2015 QMS in response to regulatory mandates and how systematic processes, standards compliance, and managerial functions may jointly shape institutional performance.

Research Gap and Conceptual Framework

Existing studies have described QMS practices and implementation challenges in Philippine higher education institutions (Reyteran, 2021; Roque & Ulanday-Lozano, 2024), but limited research has jointly examined systematic processes, requirement fulfillment, and organizational efficiency in SUCs or compared the perspectives of top management, internal quality auditors, process owners, and rank-and-file employees. The study was guided by the Input-Process-Output model shown in Figure 1. The input consisted of the respondents' assessments of the systematic processes, requirement fulfillment, organizational efficiency, and challenges encountered; the process involved survey data collection and statistical analysis; and the output was an intervention measure to strengthen QMS implementation in SUCs, with feedback supporting its continuing refinement.

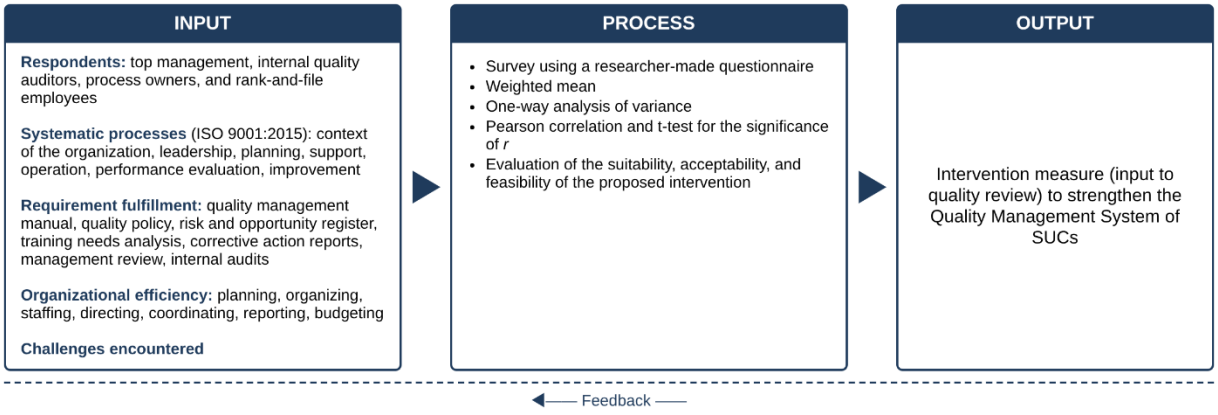

Figure 1. *Research Paradigm of the Study*

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METHODS

Research Design

The study employed a descriptive-correlational research design to describe the systematic processes, requirement fulfillment, and organizational efficiency within the QMS of selected SUCs and to test the relationships among these variables as they naturally occurred (Creswell & Creswell, 2018). The design allowed the researcher to examine how the QMS was implemented and to generate an evidence base for an intervention measure.

Research Locale

The study was conducted in five SUCs in Metro Manila implementing ISO 9001:2015 QMS: the Eulogio "Amang" Rodriguez Institute of Science and Technology (EARIST), Marikina Polytechnic College (MPC), the Philippine Normal University (PNU), the Polytechnic University of the Philippines (PUP), and the Technological University of the Philippines (TUP).

Participants and Sampling Technique

The respondents were 474 personnel directly involved in the implementation, monitoring, and evaluation of the QMS, namely top management, internal quality auditors, process owners, and rank-and-file employees, drawn from a population of 1,585 across the five SUCs (Table 1). Convenience sampling was used, with respondents selected on the basis of their roles, expertise, and accessibility during the data-collection period. The overall sampling rate was 30%, with higher rates among smaller groups such as top management and internal quality auditors and lower rates among rank-and-file employees in larger institutions.

Table 1. *Population and Sample of Respondents by State University and College*

SUC	Top management	Internal quality auditors	Process owners	Rank and file	Total N	Total n (%)
EARIST	9	9	23	31	158	72 (46)
MPC	11	4	9	57	187	81 (43)
PNU	9	3	11	51	201	74 (37)
PUP	3	20	29	90	680	142 (21)
TUP	3	9	23	70	359	105 (29)
Total n	35	65	95	279	1,585	474 (30)

Note. Group columns show the number of respondents sampled. N = population; n = sample.

Research Instrument

A researcher-made questionnaire aligned with the ISO 9001:2015 standard was used. Part I gathered the respondents' profile; Part II assessed the systematic processes, requirement fulfillment, and organizational efficiency; Part III examined the challenges encountered; and Part IV assessed the suitability, acceptability, and feasibility of the proposed intervention measure. Items were rated on five-point scales interpreted as follows: 4.20–5.00, highly evident, highly fulfilled, highly efficient, highly encountered, highly suitable, highly acceptable, or highly feasible; 3.40–4.19, evident, fulfilled, efficient, encountered, suitable, acceptable, or feasible; 2.60–3.39, moderately; 1.80–2.59, least; and 1.00–1.79, not or very least. The instrument was reviewed by the researcher's adviser, two academic panelists, and an external expert in institutional accreditation and QMS implementation, submitted for ethical review, and pilot-tested with 50 respondents with characteristics similar to those of the study population, after which items were revised and internal consistency was examined using Cronbach's alpha.

Data Gathering Procedure

The researcher submitted formal requests to the administrations of the selected SUCs for permission to conduct the study, coordinated with institutional officials to schedule the survey administration, and distributed

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the validated questionnaire to the identified respondents through face-to-face and online modes from October 2025 to June 2026. The completed questionnaires were retrieved, organized, and coded for analysis.

Data Analysis

Frequency and percentage were used to describe the respondents' profile. The weighted mean was used to determine the assessments of the systematic processes, requirement fulfillment, organizational efficiency, challenges encountered, and the suitability, acceptability, and feasibility of the proposed intervention. One-way analysis of variance (ANOVA) was used to test for significant differences among the assessments of the four respondent groups, and the Pearson product-moment correlation coefficient, together with the t-test for the significance of the correlation coefficient, was used to determine the relationships among systematic processes, requirement fulfillment, and organizational efficiency. All tests were conducted at the .05 level of significance.

Ethical Consideration

The study was conducted with the permission of the administrations of the participating SUCs, and the instrument underwent ethical review before data collection. Participation was voluntary, the purpose of the study was explained to the respondents, and the confidentiality of their responses and personal information was safeguarded in accordance with the Data Privacy Act of 2012 (Republic Act No. 10173, 2012).

RESULTS AND DISCUSSION

Profile of the Respondents

Rank-and-file employees formed the largest group of respondents (279, 58.86%), followed by process owners (95, 20.04%), internal quality auditors (65, 13.71%), and top management (35, 7.38%). As shown in Table 2, most respondents were aged 30 to 49 years, were female (61.60%), and were single (58.23%). Respondents were highly educated: 77.14% of top management held a doctorate, internal quality auditors were concentrated among those with doctoral or master's units, and rank-and-file employees most commonly held master's units or a bachelor's degree. Top management generally had long tenure, whereas the largest share of rank-and-file employees (21.51%) had served 1 to 5 years.

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Table 2. *Profile of the Respondents (N = 474)*

Profile	f	%
Age		
60 years and above	31	6.54
50–59 years	92	19.41
40–49 years	126	26.58
30–39 years	136	28.69
20–29 years	89	18.78
Sex		
Female	292	61.60
Male	182	38.40
Civil status		
Single	276	58.23
Married	198	41.77
Educational attainment		
Doctorate degree	90	18.99
Doctorate units earned	118	24.89
Master's degree	86	18.14
Master's units earned	102	21.52
Bachelor's degree	78	16.46

Systematic Processes in the Quality Management System

Table 3 summarizes the assessment of the systematic processes. All seven areas were rated Highly Evident, with a grand mean of 4.37. Context of the organization ranked highest (4.55), followed by leadership (4.45), planning (4.35), support (4.33), performance evaluation (4.32), and improvement (4.31), while operation ranked lowest (4.25). All four respondent groups rated the systematic processes Highly Evident, with internal quality auditors giving the highest grand mean (4.43).

Table 3. *Summary of the Assessment of the Systematic Processes in the Quality Management System*

Area	TM	IQA	PO	RF	Composite	VI	Rank
Context of the organization	4.45	4.72	4.59	4.44	4.55	HE	1
Leadership	4.33	4.67	4.36	4.45	4.45	HE	2
Planning	4.40	4.29	4.35	4.36	4.35	HE	3
Support	4.48	4.32	4.30	4.23	4.33	HE	4
Operation	4.33	4.22	4.22	4.23	4.25	HE	7
Performance evaluation	4.30	4.42	4.23	4.33	4.32	HE	5
Improvement	4.40	4.38	4.24	4.21	4.31	HE	6
Grand mean	4.38	4.43	4.33	4.32	4.37	HE	

Note. TM = top management; IQA = internal quality auditors; PO = process owners; RF = rank-and-file employees; VI = verbal interpretation; HE = Highly Evident (4.20–5.00). All group ratings were Highly Evident.

The high ratings indicate that the ISO 9001:2015 process requirements were well institutionalized in the selected SUCs, with the strongest assessments for understanding the organizational context and for leadership commitment, both of which form the foundation of the standard's process approach (ISO, 2015). This is consistent with Roque and Ulanday-Lozano (2024), who found that Philippine higher education institutions applied quality management practices at a high and steady level with leadership and governance support as a recurring theme. The comparatively lower rating for operation suggests that translating planned processes into consistent unit-level practice remains an area for strengthening.

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Differences in the Assessments of the Respondent Groups

Table 4 presents the results of the one-way ANOVA. The computed F-values for all seven areas, ranging from 0.00187 for planning to 0.02102 for leadership, were well below the critical value of 2.96 at the .05 level. Hence, no significant difference was found among top management, internal quality auditors, process owners, and rank-and-file employees in their assessments of the systematic processes, and the null hypothesis was retained.

Table 4. *Analysis of Variance of the Assessments of the Systematic Processes Among the Four Respondent Groups*

Area	SS between	SS within	df	F	Critical value	Decision
Context of the organization	0.051	40.03	3, 27	0.01519	2.96	Retain H_0
Leadership	0.070	40.03	3, 27	0.02102	2.96	Retain H_0
Planning	0.006	40.06	3, 27	0.00187	2.96	Retain H_0
Support	0.033	40.07	3, 27	0.00988	2.96	Retain H_0
Operation	0.008	40.04	3, 27	0.00251	2.96	Retain H_0
Performance evaluation	0.019	40.04	3, 27	0.00556	2.96	Retain H_0
Improvement	0.027	40.03	3, 27	0.00795	2.96	Retain H_0

Note. Level of significance = .05. No difference was significant.

The absence of significant differences indicates a shared understanding of the QMS across organizational levels. Such consensus is consistent with Systems Theory, which views organizational performance as dependent on the alignment of interrelated parts (von Bertalanffy, 1968), and with the observation that staff commitment and good communication are key factors in sustaining university quality management systems (Ab Wahid, 2019).

Level of Requirement Fulfillment

As shown in Table 5, requirement fulfillment was rated Highly Fulfilled, with a grand mean of 4.30. Internal audits ranked highest (4.40), followed by the quality management manual and the quality policy (4.37 each), management review (4.32), the risk and opportunity register (4.29), and corrective action reports (4.28). Only training needs analysis was rated Fulfilled rather than Highly Fulfilled (4.08). Internal quality auditors gave the highest overall rating (4.38), followed by top management (4.31), while process owners and rank-and-file employees were tied (4.26).

Table 5. *Summary of the Level of Requirement Fulfillment*

Requirement	TM	IQA	PO	RF	Composite	VI	Rank
Quality management manual	4.40	4.45	4.26	4.38	4.37	HF	2.5
Quality policy	4.40	4.39	4.31	4.37	4.37	HF	2.5
Risk and opportunity register	4.25	4.34	4.38	4.18	4.29	HF	5
Training needs analysis	4.28	3.89	4.12	4.04	4.08	F	7
Corrective action reports	4.28	4.43	4.25	4.18	4.28	HF	6
Management review	4.30	4.48	4.21	4.28	4.32	HF	4
Internal audits	4.28	4.65	4.30	4.38	4.40	HF	1
Grand mean	4.31	4.38	4.26	4.26	4.30	HF	

Note. HF = Highly Fulfilled (4.20–5.00); F = Fulfilled (3.40–4.19). Abbreviations for respondent groups as in Table 3.

The results indicate strong compliance with the documented information required by ISO 9001:2015, particularly internal audits, the quality manual, and the quality policy (ISO, 2015). The relatively lower rating for training needs analysis is consistent with findings that gaps in staff knowledge and skills, together with the need for continuous training, are major concerns in sustaining university quality management systems (Ab Wahid, 2019; Reyteran, 2021).

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Extent of Organizational Efficiency

Table 6 shows that organizational efficiency was rated Highly Efficient, with a grand mean of 4.20. Planning ranked highest (4.32), followed by reporting (4.28), organizing (4.27), and budgeting (4.20), all rated Highly Efficient, while directing (4.18), coordinating (4.11), and staffing (4.02) were rated Efficient. Internal quality auditors (4.23) and process owners (4.21) rated organizational efficiency Highly Efficient, while top management (4.18) and rank-and-file employees (4.16) rated it Efficient.

Table 6. *Summary of the Extent of Organizational Efficiency*

Function	TM	IQA	PO	RF	Composite	VI	Rank
Planning	4.28	4.50	4.32	4.17	4.32	HE	1
Organizing	4.40	4.22	4.26	4.21	4.27	HE	3
Staffing	4.15	3.89	3.98	4.07	4.02	E	7
Directing	4.08	4.19	4.23	4.23	4.18	E	5
Coordinating	3.88	4.30	4.18	4.06	4.11	E	6
Reporting	4.25	4.37	4.26	4.24	4.28	HE	2
Budgeting	4.25	4.13	4.27	4.13	4.20	HE	4
Grand mean	4.18	4.23	4.21	4.16	4.20	HE	

Note. HE = Highly Efficient (4.20–5.00); E = Efficient (3.40–4.19). Abbreviations for respondent groups as in Table 3.

The results indicate well-established practices for setting objectives, communicating results, structuring operations, and managing financial resources, while directing, coordinating, and especially staffing leave room for development. Within Gulick's (1937) framework, these functions jointly determine administrative performance, and the lower ratings for staffing and coordination point to human resource and interdepartmental collaboration as priorities for institutional attention.

Relationships Among Systematic Processes, Requirement Fulfillment, and Organizational Efficiency

Table 7 presents the correlation of the systematic processes and requirement fulfillment with organizational efficiency. Each of the seven systematic-process indicators and each of the seven requirement-fulfillment indicators was reported with an r-value of 1.00 and a t-value of approximately 4.24, exceeding the critical value of 1.734 at 18 degrees of freedom. Hence, the null hypothesis of no significant relationship was rejected for all indicators.

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Table 7. *Correlation of Systematic Processes and Requirement Fulfillment with Organizational Efficiency*

Indicator	r	df	t	Critical value	Decision
Systematic processes					
Context of the organization	1.00	18	4.24230	1.734	Reject H_0
Leadership	1.00	18	4.24218	1.734	Reject H_0
Planning	1.00	18	4.24175	1.734	Reject H_0
Support	1.00	18	4.24062	1.734	Reject H_0
Operation	1.00	18	4.24196	1.734	Reject H_0
Performance evaluation	1.00	18	4.24212	1.734	Reject H_0
Improvement	1.00	18	4.24224	1.734	Reject H_0
Requirement fulfillment					
Quality management manual	1.00	18	4.24126	1.734	Reject H_0
Quality policy	1.00	18	4.24186	1.734	Reject H_0
Risk and opportunity register	1.00	18	4.24170	1.734	Reject H_0
Training needs analysis	1.00	18	4.24179	1.734	Reject H_0
Corrective action reports	1.00	18	4.24161	1.734	Reject H_0
Management review	1.00	18	4.24164	1.734	Reject H_0
Internal audits	1.00	18	4.24187	1.734	Reject H_0

Note. Values as reported by the author. Level of significance = .05.

These results indicate that systematic processes and requirement fulfillment were strongly related to organizational efficiency in the selected SUCs, suggesting that institutions that maintain well-implemented processes and complete quality documentation are more likely to perform their managerial functions efficiently. This interdependence is consistent with Systems Theory (von Bertalanffy, 1968) and with NPM's emphasis on linking systematic management practices with performance and accountability (Hood, 1991).

Challenges Encountered

Table 8 summarizes the challenges encountered. Challenges relating to the systematic processes were rated Encountered (3.43), led by insufficient support in allocating resources for QMS implementation (3.60), difficulty establishing measurable quality objectives and integrating them into strategic planning (3.57), and poor communication of roles, responsibilities, and authorities (3.51). Challenges relating to requirement fulfillment were Moderately Encountered (3.25), led by delays or errors in processing corrective action reports (3.37), difficulty communicating and implementing the quality policy (3.31), and limited staff understanding of compliance requirements (3.31). Challenges relating to organizational efficiency were likewise Moderately Encountered (3.20), led by budgetary constraints affecting QMS implementation (3.28) and limited use of standard operating procedures for decision-making (3.25). Across all three areas, top management rated the challenges highest and process owners lowest.

Table 8. *Summary of the Challenges Encountered in the Quality Management System*

Area	TM	IQA	PO	RF	Composite	VI
Systematic processes	4.10	3.58	2.74	3.31	3.43	E
Requirement fulfillment	3.95	3.28	2.73	3.07	3.25	ME
Organizational efficiency	3.63	3.30	2.77	3.10	3.20	ME

Note. E = Encountered (3.40–4.19); ME = Moderately Encountered (2.60–3.39). Each area comprised 10 indicators. Abbreviations for respondent groups as in Table 3.

The prominence of resource allocation, measurable objectives, communication, and budgetary constraints mirrors challenges reported in other higher education settings, where limited resources, weak communication, and gaps in knowledge and skills hindered the sustainability of ISO 9001-based systems (Ab Wahid, 2019) and where

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low awareness and resistance to change had to be addressed through orientation, resource provision, and top management commitment (Reyteran, 2021).

Proposed Intervention Measure and Its Suitability, Acceptability, and Feasibility

Based on the findings, intervention measures covering Academic Years 2027 to 2030 were proposed to strengthen the key result areas of the QMS, specifying objectives, strategies, activities, persons involved, budget and sources, and performance indicators. As shown in Table 9, the proposed intervention was rated Highly Suitable (4.46), with strengthening risk-based thinking and opportunity management rated highest (4.50); Highly Acceptable (4.48), with its perceived benefit in improving organizational efficiency and service quality rated highest (4.51); and Highly Feasible (4.22), with the adequacy of financial resources rated highest (4.31). All four respondent groups rated the intervention Highly Suitable and Highly Acceptable, and all groups except process owners (4.15, Feasible) rated it Highly Feasible.

Table 9. *Suitability, Acceptability, and Feasibility of the Proposed Intervention Measure*

Criterion	TM	IQA	PO	RF	Composite	VI
Suitability	4.75	4.50	4.38	4.21	4.46	Highly Suitable
Acceptability	4.65	4.50	4.48	4.27	4.48	Highly Acceptable
Feasibility	4.25	4.28	4.15	4.21	4.22	Highly Feasible

Note. Each criterion comprised five indicators. Abbreviations for respondent groups as in Table 3.

The favorable ratings suggest strong stakeholder support for the intervention, a condition that Philippine institutions pursuing ISO certification have identified as essential, alongside top management commitment and resource provision (Reyteran, 2021). The comparatively lower feasibility ratings for the availability of competent personnel and the integration of the intervention into existing QMS processes indicate that implementation should be accompanied by capacity building and careful integration with current quality processes.

CONCLUSION

The systematic processes within the QMS of the selected SUCs were strongly and clearly established, indicating that ISO 9001:2015 practices were institutionalized, and top management, internal quality auditors, process owners, and rank-and-file employees assessed these processes in comparable terms, suggesting a shared institution-wide understanding of quality practices. Requirement fulfillment and organizational efficiency were both high, although training needs analysis, staffing, coordination, and directing were comparatively weaker. Systematic processes and requirement fulfillment were significantly related to organizational efficiency, underscoring their interdependence within the QMS. Despite these strengths, challenges in resource allocation, measurable quality objectives, communication, corrective action processing, and budgeting still require institutional attention. The proposed intervention measures for Academic Years 2027 to 2030 were judged highly suitable, acceptable, and feasible, affirming their readiness for institutional adoption.

Recommendation

The executive committees, quality assurance offices, and finance offices of the SUCs may adopt and implement the proposed intervention measures for Academic Years 2027 to 2030, with clear objectives, strategies, timelines, and allocated resources. Top management and quality assurance offices may continue to strengthen the systematic processes of the QMS and promote consistent communication among top management, internal quality auditors, process owners, and rank-and-file employees. Compliance offices and department heads may enhance compliance monitoring, with particular attention to training needs analysis and corrective action processing, while administrative services and human resource development units may implement capacity-building programs to improve staffing, coordination, and directing. Strategic planning committees and quality management teams may

further integrate systematic processes, requirement fulfillment, and organizational efficiency through coordinated planning and performance evaluation, and monitoring and evaluation units may continuously assess the implementation of the intervention. Future researchers may use probability sampling, include SUCs outside Metro Manila, and conduct longitudinal studies to assess the long-term effects of QMS interventions on institutional performance and stakeholder satisfaction.

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