

ISO Certification Process among Selected Government Agencies in Zamboanga Peninsula

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ARTICLE INFO	ABSTRACT
Received: 01 Nov 2024 Revised: 17 Dec 2024 Accepted: 29 Dec 2024	This study investigated the implementation of the ISO 9001:2015 Quality Management System within the public sector of the Zamboanga Peninsula, Philippines, focusing on both National Government Agencies (NGAs) and State Universities and Colleges (SUCs). It aimed to deepen the understanding of quality management practices in public administration by identifying key challenges and notable best practices associated with ISO 9001:2015 certification. A qualitative research design using descriptive surveys and semi-structured interviews was employed, gathering data from 15 institutions across Region IX. Findings revealed that both NGAs and SUCs share common challenges, particularly in ensuring consistent documentation. However, distinct issues emerged, NGAs primarily struggled with limited financial resources and employee resistance to change, while SUCs encountered difficulties in aligning processes and addressing organizational culture shifts. Despite these challenges, each sector adopted context-specific best practices: NGAs leveraged structured leadership, 5S/7S workplace practices, and internal competency frameworks, whereas SUCs emphasized forming dedicated quality management teams, thorough documentation, and customized implementation plans. The study provides a comparative analysis that underscores the importance of tailoring ISO strategies to institutional settings. It highlights the role of leadership, staff involvement, and continuous improvement in achieving effective ISO 9001:2015 compliance. Ultimately, the research offers actionable recommendations to enhance quality assurance frameworks, promote stakeholder engagement, and support sustainable public sector development through improved and context-sensitive ISO implementation in the Zamboanga Peninsula. Keywords: ISO 9001:2015; Quality Management System; ISO Certification; Public Sector; National Government Agencies; State Universities and Colleges; Quality Assurance; Zamboanga Peninsula.

Introduction

Customer satisfaction, organizational efficiency, and long-term sustainability are increasingly dependent on the delivery of high-quality products and services. As global markets evolve, so too do customer expectations—becoming more demanding in terms of quality, consistency, and reliability. In response, many organizations have adopted formal quality management systems (QMS) as strategic tools to drive continual improvement and maintain competitive advantage. Among these systems, the ISO 9001 standard has emerged as one of the most widely adopted frameworks for ensuring quality in both private and public sectors (Kagumba & George, 2013).

For government agencies and academic institutions alike, ISO 9001 certification offers a structured approach to improving the quality of services, enhancing accountability, and fostering public trust. However, while the adoption of ISO 9001 has proven beneficial in many settings, its implementation also poses unique challenges. These include aligning existing processes with ISO requirements, securing organizational buy-in, ensuring sustained compliance,

and managing the costs associated with certification (Kaziliunas, 2010). Despite these challenges, many organizations have developed effective mechanisms and best practices to navigate the certification process successfully.

Government agencies are now under increasing pressure to gain and maintain the trust and confidence of the citizenry by ensuring efficient and quality public service delivery. One significant roadblock, historically, has been the varying interpretations of “quality” across sectors and nations. The establishment of the International Organization for Standardization (ISO) sought to resolve this by providing a unified, globally recognized quality standard (Kaziliunas, 2010).

ISO 9001, a standard under the ISO 9000 family, outlines the criteria for a quality management system and is based on several quality management principles, including a strong customer focus, the involvement of top management, a process-based approach, and continual improvement (ISO, 2015). Achieving ISO 9001 certification signifies that an organization not only adheres to these principles but also fulfills statutory, regulatory, and customer requirements while maintaining comprehensive documentation (Kagumba & George, 2013).

In the academe, ISO 9001 has been utilized to enhance institutional effectiveness, optimize administrative systems, and ensure consistent educational service delivery (Heras-Saizarbitoria & Boiral, 2013). While some academic institutions report improved performance and stakeholder satisfaction post-certification, others encounter resistance to change and challenges in contextualizing ISO within educational settings.

Thus, the study aimed to explore and document the challenges and best practices associated with the ISO 9001 certification process in both government agencies and academic institutions. Specifically, it seeks empirical evidence to better understand how these sectors navigate the certification journey, what barriers they face, and what strategies contribute to successful and sustainable ISO 9001 implementation.

Theoretical Review

ISO is an independent, non-governmental international organization with a membership of 162 national standards bodies. QMS is an ISO standard that comprises activities by which the organization identifies its objectives and determines the processes and resources required to achieve desired results. Provides the means to identify actions to address identified and unintended consequences in providing products and services. Manages the interacting processes and resources required to provide value and realize results for relevant interested parties. Enables top management to optimize the use of resources considering the long and short-term consequences of their decision.

Former President of the Republic of the Philippines, Rodrigo Roa Duterte, issued a call to move that is consistent with his platforms of good governance and anti-corruption. This strengthens the implementation of Executive Order No. 605 series of 2007, an earlier directive to all government agencies under the executive branch as well as all GOCCs and GFIs to subscribe to the Quality Management System (QMS) standards set forth in ISO 9001:2015 and which encourages other government institutions including the legislative, the judiciary and state-run universities to follow suit.

In this sense, the Philippines’ experience on public sector reform shows that sustaining efforts is among the difficulties that the government has always had (Mangahas & Leyesa, 2003). Hence, the more important question is not whether public sector organizations can adopt ISO 9001 but whether they can sustain it.

ISO 9001 is a widely recognized standard for quality management that enhances process efficiency and customer satisfaction, offering businesses a competitive edge and increased sales. However, implementing ISO 9001 can be challenging, especially when transitioning from an existing quality management system to one that meets the standard's requirements. Difficulties often arise depending on the business's nature and size. This article explores common issues businesses may encounter during the ISO 9001 certification process.

Achieving ISO 9001 certification requires strong leadership support, careful planning, and active participation across the organization. Leadership must commit resources and drive the process, starting with a gap analysis to identify areas needing improvement (Goetsch & Davis, 2016). A clear project scope should outline tasks, timelines, roles, and costs (ISO, 2015). Developing a Quality Management System (QMS) and manual is essential, detailing procedures,

responsibilities, and continuous improvement policies (Hoyle, 2017). Effective communication ensures employees understand and follow the QMS, with training for both existing staff and new hires (Russell, 2017). Creating audit plans and role assignments promotes accountability and prepares the organization for evaluation (American Society for Quality [ASQ], 2020). Regular internal audits help refine the system, address issues, and build readiness for the external audit (ISO, 2015). Finally, after a thorough internal review, the organization can apply for the Stage 1 audit and prepare staff for the external audit, where transparency and understanding of processes are key to success (ASQ, 2020).

The ISO 9001 certification process is guided by key quality management principles that help organizations meet customer expectations and improve overall performance. These include customer focus, where the goal is to meet or exceed customer needs to build trust and loyalty (Juran & Godfrey, 1999; ISO, 2016); strong leadership, which is essential for setting direction and ensuring commitment to the Quality Management System (QMS); and engaging people at all levels to enhance the organization's capacity to create value (ISO, 2016). A process approach ensures that interrelated activities are well-managed and consistently produce expected results. Continuous improvement, supported by regular audits and corrective actions, helps organizations remain competitive. Evidence-based decision-making uses accurate data to guide actions rather than assumptions. Relationship management emphasizes collaboration with customers, suppliers, and stakeholders to improve service and gain feedback (Pekovic & Rolland, 2012). Auditors—whether internal or external—are essential in verifying compliance and supporting continuous improvement. In the Philippines, ISO 9001 aligns with national efforts under the Philippine Development Plan 2040 to enhance public service delivery. Certification provides third-party assurance that an organization follows international standards and has an effective system for continuous quality improvement (ISO, 2016).

This study explores the ISO 9001 certification journey of national government agencies and State Universities and Colleges (SUCs), emphasizing the importance of continuous improvement through the Deming Cycle or PDCA (Plan-Do-Check-Act). Although a standard certification process exists, these agencies face unique challenges due to statutory and regulatory requirements from institutions such as the Department of Budget and Management (DBM), the Anti-Red Tape Authority (ARTA), and the Procurement Law (RA 9184). ISO 9001:2015 is not merely a compliance tool but is intended as a strategic management framework, grounded in seven quality principles: customer focus, leadership, engagement of people, process approach, improvement, evidence-based decision-making, and relationship management. The 2015 revision of the standard, now structured into ten clauses and aligned with the PDCA model, reflects its evolution into a full management system standard (Illés, 2017).

Methodology

This study employed a qualitative research design employing a descriptive survey method through interviews, to investigate the challenges, mechanisms, and best practices during the ISO implementation. The use of qualitative research was based on the premise of determining the experiences of key informants from agencies and institutions who are directly involved in ISO. The gathered information was determined through the codes, patterns, and emerging themes to generalize insightful data.

Qualitative research methods are designed in a manner that helps reveal the behavior and perception of a target audience concerning a particular topic. In this sense, the qualitative research methods allow for in-depth and further probing and questioning of respondents based on their responses (Romo, 2022).

Research Locale And Respondents

This study was conducted in the Zamboanga Peninsula (Region IX), targeting national government agencies (NGAs) and state universities and colleges (SUCs) with ISO 9001 certification for the Academic Year 2022–2023. A total of fifteen (15) institutions were purposively selected, comprising eleven NGAs and four SUCs, all of which had at least one ISO-certified unit, program, or process, regardless of the number of years certified. These agencies span a diverse range of government functions, including science and technology, trade and industry, labor and employment, environmental management, education, statistics, cooperative development, agrarian reform, public health, and

economic zones. Each agency contributes to public service delivery and national development and operates under statutory and regulatory frameworks relevant to ISO compliance.

The four SUCs selected represent major public higher education institutions in the region. These universities and colleges are mandated to provide technical and professional instruction and training, promote research and extension services, and advance academic leadership in key fields such as education, engineering, fisheries, and the arts and sciences. Each institution is recognized by law and has undergone transformations through Republic Acts or Presidential Decrees, signifying their importance in the educational landscape of Mindanao.

Participants were identified based on inclusion and exclusion criteria, also known as eligibility criteria, which allow for the selection of a relatively homogenous group suited to the study's objectives (Nikolopoulou, 2022). The key informants were the Quality Management Representatives (QMRs) of each agency or SUC. These individuals were chosen because of their extensive knowledge, roles, and experience in the ISO 9001 implementation within their respective institutions. Due to the limited number of certified organizations within the scope, purposive sampling was employed, relying on the researcher's judgment to ensure relevance and depth in data collection.

Method Of Data Collection

The researcher sought approval for the study's data collection from all fifteen (15) government agencies/institutions across Region IX. Following the permission of the higher authorities, the participants or key informants from various agencies and institutions were informed. The safety and health protocols were also considered during the conduct.

In collecting the data, the researcher administered the survey questionnaire personally to the participants who serves as the key informants of the selected agencies or institutions. Moreover, the researcher discussed the purpose and objective of the study as well as to focus on the important and apropos information that is relative to the study using narratives/transcripts.

Data Analysis

The researcher utilized descriptive statistics to describe the status of government agencies and institutions concerning the ISO implementation. Moreover, to effectively explore and describe the challenges, mechanisms, and best practices of the government agencies and institutions, an interview was conducted with a semi-structured interview guide.

The thematic analysis was used to determine and show patterns with respect to the challenges, mechanisms, and best practices in ISO implementation. In addition, in-vivo will facilitate to enhance the discussion and give in-depth analysis, while comparative analysis will determine the differences and similarities between government agencies and institutions in the ISO certification process.

Results And Discussions

The results and discussion of data gathered are presented systematically according to the research problems posited in this study.

The first research problem that this study sought to answer was, **“What are the challenges and best practices associated with the ISO 9001 certification process of the government agency?”**

Notable Challenges Faced by NGAs During ISO 9001 Certification Process

The interviews and focus-group discussions were conducted through the use of open-ended guide questions. The researcher followed the qualitative method of the research protocol on how to present the data gathered during the interview and focus-grouped discussions. The following themes were conceptualized based on the similar comments and responses of the participants, these were grouped using the thematic approach:

Theme 1: **No Proper Documentation/Lack of Evidence**

Theme 2: **Limited Financial Resources/Resource Constraints**

Theme 3: **Resistance of Officials and Employees to Change**

Theme 1: No Proper Documentation/Lack of Evidence

Based on the conducted interview, a major challenge faced by national government agencies (NGAs) in implementing ISO 9001 is the lack of proper documentation. Documentation is essential for demonstrating compliance with quality standards, enabling agencies to monitor, evaluate, and improve their processes. Without it, internal consistency, accountability, and certification readiness are significantly compromised (ISO, 2015).

ISO 9001:2015 Clause 7.5 mandates organizations to maintain a documented Quality Management System (QMS), emphasizing control over the legibility, retrieval, and protection of information. When documentation is missing or poorly managed, it undermines quality assurance and the organization's ability to demonstrate compliance, leading to certification failures.

Scholars such as Toffel (2005) and Mughal (2006) highlight how inadequate documentation and verification systems are major obstacles to ISO certification, particularly in the public sector. These deficiencies create information asymmetries and hinder the certification process by failing to provide clear, auditable records of quality procedures.

The root causes often lie in organizational weaknesses, such as unclear responsibilities, limited ISO training, and outdated or manual documentation systems. Employees may not recognize the importance of proper record-keeping, resulting in traceability issues and audit nonconformities (Chiarini, 2013; Sampaio et al., 2009).

To address this, agencies must implement capacity-building programs and adopt digital document management systems to improve accessibility, version control, and efficiency. Leadership must also foster a culture that values documentation as a core function of quality, not just an administrative task (Fonseca, 2015; Psomas & Jaca, 2016). Strengthening documentation practices is vital for sustaining ISO 9001 compliance and ensuring long-term performance improvement. Improvements, and leadership engagement, agencies can align with ISO 9001:2015 requirements and improve their chances of certification and sustained excellence in public service delivery.

Theme 2: Limited Financial Resources/Resource Constraints

Financial limitations represent a significant barrier for national government agencies (NGAs) seeking to obtain ISO 9001 certification. The certification process entails various cost-intensive activities, such as training of personnel, hiring of consultants, upgrading infrastructure and technology, and conducting internal and external audits. For many NGAs, limited budgetary allocations can hinder their ability to meet these requirements, thereby delaying or derailing the certification process altogether. ISO 9001 implementation is not merely a procedural shift but often requires a structural transformation that demands substantial financial support (Maru, 2018).

Clause 7.1 of ISO 9001:2015 underscores the necessity of resource availability—both financial and human—as a prerequisite for establishing, implementing, maintaining, and continually improving the quality management system (ISO, 2015). Without appropriate funding, agencies may find it difficult to provide adequate training, engage consultants for technical guidance, or invest in quality-related infrastructure. These financial limitations not only reduce the speed and scope of ISO implementation but also compromise the long-term sustainability of quality management systems.

Several studies support the claim that resource constraints, particularly financial limitations, are a major obstacle in the public sector's efforts to comply with ISO 9001. Maru (2018) and Korir (2013) both highlight the importance of sufficient financial resources in enabling the successful adoption of ISO 9001:2008 in government ministries. Maru, for instance, recommends strategic planning for resource allocation as a critical component of certification success. While Korir's study on the Higher Education Loans Board in Kenya reported that financial constraints were not

perceived as a major barrier, this points to possible variations in institutional priorities or external funding support across agencies and contexts.

Naftali (2011) also identifies financial resource limitations as a key hindrance in ISO 9001:2008 implementation, especially when external support is unavailable. Similarly, Alhaj (2016), in his study of government departments in the United Arab Emirates, emphasizes that limited budgets, particularly for quality-related investments, significantly impair progress toward certification. These findings are echoed in the private sector, where companies with insufficient capital often struggle to finance consultant services and internal audit mechanisms essential to ISO compliance (Quality Assurance Associates, n.d.).

Financial constraints may also lead to a reliance on in-house capabilities that are insufficiently prepared for the complexities of ISO implementation. Without expert guidance, some NGAs may engage in piecemeal compliance efforts, potentially leading to failed audits or superficial adoption of quality management principles. Moreover, inadequate funding often results in the reallocation of internal resources—time, manpower, and materials—which can disrupt regular operations and affect overall organizational performance (Chiarini, 2013).

Financial resource limitations remain a significant challenge in the pursuit of ISO 9001 certification for national government agencies. While some institutions may be able to overcome this through strategic resource management or external support, for many others, the lack of adequate funding undermines the quality and sustainability of their certification efforts. Addressing these constraints requires systemic planning, leadership support, and an acknowledgment that quality improvement is a long-term investment rather than a one-time expense.

Theme 3: Resistance Of Officials And Employees To Change

Resistance to change is a widely recognized and persistent challenge in the implementation of ISO 9001 within national government agencies (NGAs). Employees and even supervisors often perceive quality management reforms as disruptive, threatening established routines, roles, and systems of control. This resistance may stem from fear of the unknown, a perceived increase in workload, loss of autonomy, or a general skepticism about the benefits of quality management systems (QMS) (Boiral, 2003). In public institutions where hierarchical structures and procedural norms are deeply entrenched, resistance is often intensified by the slower pace of reform and a lack of immediate incentives for adaptation (Alhaj, 2016).

Organizational change linked to ISO implementation requires individuals to adopt new processes, documentation practices, and performance accountability measures—transformations that are not always readily welcomed. According to Certification Europe (2023), resistance often arises because stagnation is falsely equated with stability. For many senior decision-makers and operational staff, quality initiatives are perceived as administrative burdens or as threats to existing systems. As such, overcoming resistance must go beyond technical training and include structured change management strategies, effective communication, and leadership support that reinforce the long-term value of the transition.

Studies also reveal that resistance may be exacerbated when ISO 9001 is implemented in a compliance-oriented manner rather than as a tool for continuous improvement. Love (2000) criticized some organizations for using ISO certification for external validation or marketing rather than for genuine internal quality enhancement. This misalignment can lead to skepticism among staff and contribute to passive or active resistance. Furthermore, Oliveira (2009) highlights the importance of stakeholder buy-in during the early stages of ISO 9001 implementation. He notes that clearly communicating the purpose, benefits, and expectations of the QMS can reduce resistance and promote ownership of the quality processes.

Addressing resistance requires an inclusive and participatory approach. Engaging employees from all levels in the planning and implementation phases can increase their sense of ownership and reduce resistance to change. Training sessions that emphasize the practical benefits of ISO—such as reduced rework, clearer processes, and improved service delivery—can help reshape negative perceptions. Additionally, leadership plays a pivotal role in shaping organizational culture; when top management actively models support for the ISO process, it signals the importance of quality as an institutional value (Psomas & Jaca, 2016).

In public-sector contexts, resistance may also come from external stakeholders, such as partner agencies, suppliers, or service beneficiaries, who are affected by changes in documentation or workflow. As noted by Boiral (2003), managing such resistance involves not only internal transformation but also external engagement and communication. It is essential for NGAs to develop feedback loops and mechanisms for continuous consultation with all stakeholders involved in or impacted by the ISO system. National government agencies (NGAs) face several key challenges in implementing ISO 9001. One major issue is the lack of proper documentation, which impedes their ability to demonstrate compliance with quality management standards. Without accurate and consistent records, agencies struggle with process monitoring, traceability, and continuous improvement, often resulting in audit nonconformities. Another significant challenge is limited financial resources, which restricts the agencies' capacity to invest in critical areas such as training, consultancy, and infrastructure needed for ISO compliance. Budget constraints can delay or even prevent the certification process. Additionally, resistance to change among employees and stakeholders poses a substantial barrier. Fear of disruption, unfamiliarity with ISO principles, and attachment to existing routines contribute to reluctance in embracing new procedures. Overcoming these challenges requires a combination of strategic leadership, effective communication, staff training, and adequate resource allocation to foster a culture of quality and ensure successful certification.

Notable Best Practices For Iso 9001 Certification In Government Agencies

The identification of best practices implemented by government agencies in the ISO 9001 certification process was accomplished through qualitative research methods. In-depth interviews and focus group discussions (FGDs) were conducted using open-ended guide questions to encourage detailed and reflective responses from participants. The researcher adhered to established qualitative protocols for data collection and analysis. Using a thematic approach, the data were analyzed by identifying recurring ideas, patterns, and experiences shared by the respondents. Similar responses were clustered into major themes, which encapsulate the best practices consistently observed across various agencies. These themes highlight the proactive and strategic initiatives that have contributed to the successful attainment and maintenance of ISO 9001 certification within the government sector.

Theme 1: Practicing and Maintaining 5S and 7S in the Workplace

Theme 2: Establishing Competency Framework and Internal Pool of Experts

Theme 3: Top Management/Leadership Support

Theme 1: Practicing And Maintaining 5s And 7s In The Workplace

A critical best practice observed in the successful ISO 9001 implementation among national government agencies (NGAs) is the adoption and consistent maintenance of 5S and 7S workplace methodologies. These systems promote efficiency, cleanliness, and discipline, forming a strong foundation for quality management systems (QMS) by creating an organized and standardized work environment conducive to productivity and compliance.

The 5S framework—comprising Sort, Set in Order, Shine, Standardize, and Sustain—is a well-established tool used in quality-driven organizations to enhance operational efficiency and workplace safety. When effectively implemented, 5S enables organizations to eliminate waste, reduce process variation, and improve overall workflow (Doğan, 2014). This methodology not only contributes to a more organized physical workspace but also reinforces employee accountability, process consistency, and preparedness for audits—essential elements for ISO 9001 certification.

Expanding on 5S, the 7S methodology incorporates three additional principles: Safety, Security, and Spirit. These elements are particularly relevant in public institutions, where service delivery often involves multiple stakeholders and safety risks. Incorporating these principles strengthens organizational culture and helps foster a sense of ownership and collective responsibility among employees (Gapp, Fisher, & Kobayashi, 2008). Safety and security ensure a hazard-free work environment, while the "Spirit" component promotes teamwork and morale, supporting long-term adherence to quality practices.

Research supports the integration of 5S and 7S practices as effective in enhancing the alignment between day-to-day operations and quality management standards. Mahzan (2015) found that the application of 5S in private organizations led to improved resource adequacy, staff performance, and reporting quality—factors that directly support ISO compliance. Similarly, Pheng and Shang (2001) emphasized that integrating 5S with ISO 9001 moves organizations toward total quality management (TQM), particularly in sectors where process control and employee discipline are critical. In educational and governmental settings, where resource optimization and process clarity are essential, the alignment of 5S principles with ISO 9001 has shown tangible benefits. Nurcahyo et al. (2019) demonstrated that the synergy between 5S and ISO 9001 in higher education institutions contributed to improved service delivery, internal audit performance, and stakeholder satisfaction. These findings reinforce the relevance of 5S/7S not only as operational tools but as strategic drivers of a quality culture.

For NGAs, the institutionalization of 5S and 7S can also aid in change management and employee engagement. These systems make quality standards more accessible and actionable, particularly for employees unfamiliar with formal QMS concepts. By introducing quality at the level of everyday tasks—such as workspace organization, cleanliness, and safety—5S and 7S serve as effective entry points into broader ISO 9001 practices.

The sustained application of 5S and 7S methodologies creates a structured and disciplined environment that aligns closely with ISO 9001 requirements. These practices support operational efficiency, safety, and quality consciousness among staff, thereby facilitating smoother certification processes and stronger long-term adherence to quality standards.

Theme 2: Establishing A Competency Framework And Internal Pool Of Experts

One effective strategy in the ISO 9001 implementation process for national government agencies (NGAs) is the creation of competency frameworks and the development of an internal pool of ISO experts. These initiatives ensure that personnel are equipped with the essential skills and knowledge to meet ISO standards, reducing dependency on external consultants and promoting long-term organizational capability (Leung et al., 2006).

Competency frameworks provide a systematic approach to human resource development by defining the specific abilities required for ISO compliance. They help identify skill gaps and structure targeted training programs, ensuring that staff involved in audits, documentation, and quality planning can perform effectively (Sampaio et al., 2009). This approach enhances both individual accountability and institutional alignment with quality objectives.

The formation of an internal pool of ISO experts is equally critical. These trained professionals serve as in-house advisers and facilitators of quality initiatives, guiding implementation, supporting audits, and mentoring colleagues. Their presence strengthens internal consistency, supports continuous improvement, and ensures smoother certification and recertification processes (Rina, 2009).

Research shows that internal capacity-building contributes significantly to the sustainability of ISO systems. According to Al-Najem et al. (2012), organizations with strong internal competencies achieve better performance outcomes and quality culture adoption. In the public sector, this approach enhances service delivery and supports the efficient management of quality-related tasks.

Research shows that ISO 9001 adoption improves service quality, employee performance, and operational efficiency when supported by internal capability-building (Kothari, 2011; Al-Najem et al., 2012). Investing in staff competence is thus essential for effective and sustainable quality management in the public sector.

Theme 3: Top Management/Leadership Support

Top management support is a fundamental driver in the successful implementation of ISO 9001 within national government agencies (NGAs). Effective leadership plays a strategic role in initiating, sustaining, and institutionalizing quality management systems. When leaders demonstrate commitment to ISO certification, it signals organizational prioritization and motivates employees to engage in quality initiatives.

Leadership support ensures the allocation of critical resources—including funding, personnel, and infrastructure—necessary for compliance with ISO standards. It also reinforces policy alignment and embeds quality objectives into the organization's strategic direction. Without top-level buy-in, quality initiatives may struggle to gain momentum or institutional legitimacy (Kimutai, 2014).

Research confirms that leadership involvement positively influences the effectiveness of ISO implementation across sectors. Tan (2014) found that leadership commitment in construction organizations improved the adoption of quality practices, while Maru (2018) observed a similar impact in government ministries. These findings emphasize that leadership not only facilitates operational compliance but also shapes organizational attitudes toward change and accountability.

Moreover, engaged leadership cultivates a culture of continuous improvement by fostering open communication, performance monitoring, and shared accountability. This culture encourages innovation, supports staff empowerment, and enhances responsiveness to audit feedback (Montano, 2016). Without leadership modeling quality behaviors, staff may resist changes or fail to fully engage with ISO systems.

The three notable best practices in ISO 9001 implementation among national government agencies include: practicing and maintaining 5S and 7S workplace methodologies, which promote cleanliness, order, safety, and employee discipline essential for quality management; establishing competency frameworks and an internal pool of ISO experts, which ensures that staff possess the necessary skills and knowledge to sustain ISO standards; and ensuring strong top management and leadership support, which drives resource allocation, strategic direction, and fosters a culture of continuous improvement. Together, these practices create a solid foundation for effective, sustainable, and organization-wide ISO 9001 compliance.

The second research problem that this study sought to answer was, **“What are the challenges and best practices associated with the ISO 9001 certification process of the academe?”**

Notable Challenges Faced by SUCs During ISO 9001 Certification Process

Theme 1: **Consistency of Documentation**

Theme 2: **Changes to Existing Processes and Organizational Culture**

Theme 3: **Addressing Audit Findings and Non-Conformities**

Theme 1: Consistency Of Documentation

A prominent challenge encountered by State Universities and Colleges (SUCs) during ISO 9001 certification is the inconsistency in documentation across various academic and administrative units. This issue arises from the decentralized nature of SUCs, where different departments may follow distinct formats or procedures for documentation. Such inconsistencies undermine the integrity and reliability of the Quality Management System (QMS), making it difficult to achieve standardized practices across the institution (Karapetrovic, 1998; Nurdin, 2017).

Reyteran (2021) noted that inconsistencies in documentation often result from a lack of alignment between institutional processes and ISO requirements. These gaps become more evident during external audits, revealing weaknesses in compliance and preparedness. Moreover, insufficient coordination and communication between departments further exacerbate the issue. Without a unified system, monitoring, evaluation, and continual improvement become fragmented and ineffective (Păunescu, 2005).

Efforts to address documentation inconsistencies commonly involve capacity-building initiatives such as faculty and staff training, engagement of external consultants, and the development of ISO-aligned policies. These strategies help establish shared understanding and commitment to standardized documentation practices (Reyteran, 2021). Furthermore, the involvement of top management plays a vital role in enforcing uniform documentation protocols and ensuring institutional accountability (Păunescu, 2005).

Karapetrovic (1998) emphasized the importance of a systems approach in implementing ISO 9001 in higher education. Viewing the university as a production system allows for clearer delineation of inputs, processes, and outputs, facilitating consistency in documentation and quality assurance. Through this lens, every unit contributes to the institutional QMS in a harmonized manner.

While documentation consistency poses a considerable challenge for SUCs in achieving ISO 9001 certification, strategic interventions and strong leadership can mitigate these issues. Ensuring alignment across departments, enhancing awareness, and institutionalizing best practices are critical steps toward sustaining a robust and effective QMS.

Theme 2: Changes To Existing Processes And Organizational Culture

Implementing ISO 9001 standards in State Universities and Colleges (SUCs) often necessitates a fundamental shift in institutional processes, workflows, and organizational culture. These changes are not merely technical but involve rethinking the ways services are delivered, decisions are made, and accountability is maintained. According to Nurdin (2017), the transition to ISO standards requires the restructuring of traditional practices, which can lead to resistance if not managed effectively.

Organizational culture plays a critical role in the success or failure of quality management initiatives. As noted by Sampaio, Saraiva, and Rodrigues (2009), institutions with rigid or hierarchical structures may struggle to adapt to ISO's emphasis on continual improvement and process-based management. In SUCs, aligning academic, research, and administrative processes with ISO guidelines demands collaborative leadership and a shift toward a more quality-focused mindset among faculty and staff.

Moreover, the change process can be disruptive, particularly when it affects long-standing practices and routines. This disruption underscores the importance of comprehensive planning, capacity building, and open communication. Toma and Petcu (2014) emphasize that successful ISO adoption in higher education requires proactive stakeholder engagement to foster buy-in and minimize resistance to change.

In addition, aligning internal systems such as research protocols, student services, and administrative operations with ISO 9001 calls for specialized expertise and interdepartmental cooperation. Reyteran (2021) observed that SUCs must invest in training programs and develop internal quality assurance units to ensure the coherence and sustainability of changes. Without such support, inconsistencies and gaps in implementation may emerge.

Adopting ISO 9001 within SUCs is a transformative endeavor that demands both structural and cultural shifts. With strong leadership, inclusive participation, and continuous professional development, institutions can manage this change effectively and embed a culture of quality that supports academic excellence and operational efficiency.

Theme 3: Addressing Audit Findings And Non-Conformities

One of the critical challenges faced by State Universities and Colleges (SUCs) in the ISO 9001 certification process is ensuring preparedness for internal and external audits, particularly in addressing non-conformities. These non-conformities often highlight discrepancies between actual practices and documented quality procedures, requiring swift and coordinated corrective actions. The audit process demands detailed documentation, cross-functional collaboration, and timely response to findings to maintain compliance and prevent recurrence.

Addressing audit findings is not merely a technical task but a strategic function that reflects the maturity of the institution's Quality Management System (QMS). According to Chumba (2019), ISO-certified institutions demonstrate a notable reduction in the number of non-conformities during audits, largely due to institutionalized corrective and preventive measures. However, achieving this level of audit readiness necessitates regular internal quality audits, root cause analysis, and corrective action tracking.

SUCs often face significant challenges such as limited resources, inadequate training, and varying levels of commitment across departments. Naftali (2011) underscores the importance of resource allocation and staff involvement in sustaining ISO standards. In many cases, staff capacity and awareness determine how effectively audit

findings are addressed. Without sufficient training and support, even minor non-conformities can become recurring issues that threaten certification.

The role of leadership is also vital in fostering a culture of accountability and continuous improvement. Reyteran (2021) notes that while ISO certification enhances institutional reputation and customer satisfaction, it requires consistent top-management support to overcome barriers such as resistance to change and lack of awareness. Leaders must reinforce the value of audits not as punitive exercises but as tools for institutional growth and quality assurance.

Addressing audit findings and non-conformities in SUCs is a comprehensive process involving people, systems, and leadership. By cultivating a responsive and quality-oriented culture, supported by adequate resources and training, SUCs can turn audit challenges into opportunities for improvement and sustained compliance with ISO 9001 standards.

State Universities and Colleges (SUCs) face several key challenges in implementing ISO 9001, beginning with inconsistencies in documentation. Due to their decentralized structures, SUCs often struggle to standardize records across various departments and units, leading to discrepancies that hinder compliance with ISO requirements. Addressing this issue requires aligned policies, intensive training, and strong leadership to promote a unified quality management system. A systems approach, as suggested by Karapetrovic (1998), can help harmonize documentation processes and improve internal coordination.

Another major challenge is the need to change existing processes and organizational culture, which often disrupts traditional workflows. Implementing ISO standards requires SUCs to redesign procedures across administrative, academic, and research functions. This transformation demands effective planning, communication, and stakeholder engagement to minimize resistance and foster buy-in. Additionally, responding to audit findings and addressing non-conformities pose continuous hurdles, particularly when resources, awareness, or technical capacities are limited. Successful navigation of these challenges depends on proactive leadership, continuous capacity building, and the institutionalization of quality assurance practices.

Notable Themes on the Best Practices for ISO 9001 Certification in SUCs

Theme 1: **Forming a Dedicated Quality Management Team**

Theme 2: **Developing a Customized Implementation Plan**

Theme 3: **Documenting Processes, Procedures, Policies, and Records**

Theme 1: Forming A Dedicated Quality Management Team

One of the most notable best practices among State Universities and Colleges (SUCs) pursuing ISO 9001 certification is the formation of a dedicated Quality Management Team (QMT). This specialized team plays a central role in coordinating and overseeing the entire certification process, from planning to implementation and maintenance. A well-structured QMT ensures that ISO-aligned policies and procedures are consistently applied across academic and administrative functions (Reyteran, 2021).

The team typically comprises representatives from key departments, led by an experienced quality manager with deep knowledge of ISO standards and their application in higher education. This multidisciplinary approach promotes inclusivity, allowing various sectors of the institution to contribute to quality assurance efforts. According to Simkin (2023), aligning the QMT with national and international models, such as ISO 9000 and ENQA, strengthens institutional compliance and recognition.

Training is another vital component. SUCs that invest in building the competence of their QMT report better coordination, fewer implementation errors, and greater staff engagement. Sandeep (2022) emphasizes that equipping the team with updated knowledge on ISO 9001 requirements and strategies for change management helps overcome institutional resistance and ensures smoother transitions to quality-driven systems.

Top management support is also essential to the success of the QMT. Endorsement from institutional leaders not only legitimizes the team's authority but also fosters a culture of quality and accountability across all levels of the organization. This commitment enables the QMT to implement continuous improvement cycles effectively and address internal gaps in documentation, service delivery, and process efficiency (Ibarrientos, 2022).

Forming a dedicated and trained Quality Management Team is a foundational best practice in ISO 9001 implementation among SUCs. Through strong leadership, targeted training, and inclusive representation, the QMT drives the institution toward certification readiness, improved service quality, and enhanced national and international credibility.

Theme 2: Developing A Customized Implementation Plan

A key best practice among State Universities and Colleges (SUCs) in pursuing ISO 9001 certification is the development of a customized implementation plan. Rather than adopting a one-size-fits-all model, SUCs benefit from tailoring their ISO 9001 strategies to suit their unique institutional goals, operational structures, and existing challenges. This contextualized approach ensures that ISO standards are integrated meaningfully into academic, administrative, and support processes, enhancing their applicability and effectiveness (Santos, 2021).

Customization of ISO implementation enables institutions to align the quality management system (QMS) with their mission and vision, improving coherence and stakeholder buy-in. As Reyteran (2021) highlights, adapting ISO-aligned policies through training and local consultations helps institutions navigate challenges such as limited resources and resistance to change. A well-crafted plan also sets realistic timelines, assigns clear responsibilities, and prioritizes high-impact areas for intervention.

Utilizing national and international frameworks, such as ISO 9000 and ENQA, can serve as foundational references in developing a customized QMS. Simkin (2023) stresses the importance of integrating these models into institutional processes to ensure both compliance and relevance. This approach not only strengthens audit readiness but also supports long-term institutional development.

Moreover, effective implementation plans account for internal readiness by incorporating capacity-building initiatives. These include seminars, workshops, and consultation with ISO experts, which prepare staff for their roles in maintaining quality processes. Customization ensures that every phase—from planning to monitoring—is aligned with institutional context, making the transition to ISO standards smoother and more sustainable.

Developing a customized ISO 9001 implementation plan is a strategic best practice that empowers SUCs to align quality standards with their institutional identity. Through targeted planning, stakeholder engagement, and contextual adaptation, SUCs can maximize the benefits of ISO certification, including improved service delivery, operational efficiency, and institutional credibility.

Theme 3: Documenting Processes, Procedures, Policies, And Records

An essential best practice in the ISO 9001 certification journey of State Universities and Colleges (SUCs) is the comprehensive documentation of institutional processes, procedures, policies, and records. Proper documentation not only supports transparency and accountability but also provides a consistent reference for operational and academic functions. It ensures traceability, which is vital in evaluating institutional performance, identifying gaps, and implementing continuous improvement strategies (Reyteran, 2021).

Clear and well-maintained documentation facilitates alignment with ISO 9001 requirements by defining responsibilities, standardizing workflows, and establishing a clear audit trail. According to Urdaneta (2020), documentation enhances internal control and helps institutions demonstrate compliance during audits. This systematic approach is particularly important in complex institutions like SUCs, where consistency across diverse departments can otherwise be difficult to achieve.

The significance of documentation extends beyond compliance—it also contributes to the quality and efficiency of services. Avruscio (2022), in the context of healthcare, found that standardized documentation improved operational

outcomes and client satisfaction. When applied to educational institutions, this principle similarly enhances service delivery in areas such as enrollment, instruction, research, and student support systems.

Furthermore, documentation supports knowledge retention and institutional memory. In academic settings where staff turnover and leadership transitions are common, having clear and updated records ensures continuity of operations. Ernawati (2023) emphasized that the availability of documented procedures plays a vital role in improving the quality of outputs and reducing variability in performance.

Systematic documentation is a cornerstone of effective ISO 9001 implementation in SUCs. It reinforces compliance, enables data-driven decision-making, and enhances institutional efficiency and credibility. By institutionalizing documentation practices, SUCs build a strong foundation for quality assurance and long-term organizational improvement.

State Universities and Colleges (SUCs) pursuing ISO 9001 certification have identified several best practices that contribute to successful implementation. First, forming a dedicated Quality Management Team (QMT) ensures that the certification process is well-coordinated and consistently guided by trained and knowledgeable personnel. This team fosters interdepartmental collaboration, drives ISO-aligned initiatives, and addresses implementation challenges effectively. The presence of committed leadership and institutional support further strengthens the team's role in maintaining a culture of quality and continuous improvement.

Second, developing a customized implementation plan and ensuring thorough documentation of processes, procedures, policies, and records are equally critical. Tailoring ISO strategies to fit institutional contexts allows SUCs to integrate quality standards more effectively across academic and administrative functions. Additionally, maintaining comprehensive documentation ensures transparency, accountability, and audit readiness. Together, these practices promote consistency, enhance service quality, and position SUCs for both national and international recognition in quality assurance.

The third research problem that this study sought to answer was, **“What are the differences in the ISO 9001 certification process between government agencies and the academe?”**

Table 1 presents the Notable Challenges Faced by NGAs and SUCs During ISO 9001 Certification Process.

TABLE 1 Notable Challenges Faced by NGAs and SUCs During ISO 9001 Certification Process

Themes	National Government Agencies (NGAs)	State Universities and Colleges (SUCs)
<i>No Proper Documentation/Lack of Evidence/ Consistency of Documentation</i>	✓	✓
<i>Limited Financial Resources/Resource Constraints/ Struggle to Allocate Funds</i>	✓	-
<i>Resistance of Officials and Employees to Change/ Resistance to Change</i>	✓	-
<i>Difficulty in Aligning Existing Processes and Procedures/ Changes to Existing Processes and Organizational Culture</i>	-	✓
<i>Addressing Audit Findings and Non-Conformities</i>	-	✓

The comparative analysis of challenges faced by National Government Agencies (NGAs) and State Universities and Colleges (SUCs) during ISO 9001 certification reveals important distinctions tied to organizational context and operational structure. Both NGAs and SUCs reported difficulties related to documentation—specifically the lack of proper documentation, evidence, and consistency across departments. This common challenge highlights the critical role of standardizing records and ensuring traceability for effective quality management. As noted by Karapetrovic (1998), consistent documentation is central to the success of ISO implementation, as it supports transparency and compliance during audits and evaluations. However, the data in Table 1 underscores a divergence when it comes to financial and human resource-related issues. NGAs notably struggle with limited financial resources, constraints in fund allocation, and resistance to change among officials and employees. These constraints are often rooted in bureaucratic systems and rigid organizational hierarchies, which make innovation and quality reforms more difficult to implement (Naftali, 2011). In contrast, SUCs do not report these as prominent challenges, potentially due to their greater academic autonomy and flexibility in resource utilization or staff mobilization during quality assurance activities.

On the other hand, SUCs face distinct challenges in aligning existing processes and managing organizational change. The process of transforming academic, research, and administrative functions to meet ISO standards demands careful planning and stakeholder engagement. This institutional shift requires adjustments in both mindset and operations, a process that can be complex and time-consuming in educational settings (Sampaio et al., 2009). SUCs must address these difficulties through inclusive quality management planning, professional development programs, and adaptive leadership to overcome structural and cultural barriers.

Another challenge unique to SUCs is the effort required to address audit findings and non-conformities. Managing these non-conformities effectively is essential for maintaining ISO certification and achieving long-term quality objectives. Reyteran (2021) emphasizes that audit preparedness and timely corrective actions are indicators of an institution's maturity in its quality management system. These processes are often more decentralized in higher education institutions, necessitating consistent follow-through and interdepartmental cooperation. Overall, while both sectors encounter documentation issues, the distinctions in other challenge areas reflect the specific operational realities of NGAs and SUCs.

Table 2 presents the **Best Practices for ISO 9001 Certification in National Government Agencies and State Universities and Colleges**

TABLE 2 Best Practices For ISO 9001 Certification In National Government Agencies And State Universities And Colleges

<i>Best Practices</i>	National Government Agencies (NGAs)	State Universities and Colleges (SUCs)
<i>Practicing and Maintaining 5S and 7S in the Workplace</i>	✓	-
<i>Establishing Competency Framework and Internal Pool of Experts</i>	✓	-
<i>Top Management/Leadership Support/ Active Participation of Top Management</i>	✓	-
<i>Creation of ISO 9001 TWGs/ Forming a Dedicated Quality Management Team</i>	-	✓

<i>Consistent Monitoring of Stock Cards and Property Inventory/ Documenting Processes, Procedures, Policies, and Records</i>	-	✓
<i>Developing a Customized Implementation Plan</i>	-	✓

The table on best practices for ISO 9001 certification highlights key differences between National Government Agencies (NGAs) and State Universities and Colleges (SUCs) in their approach to implementing quality management systems. NGAs tend to emphasize operational discipline and technical capacity-building, as seen in their consistent application of workplace organization tools like 5S and 7S, the establishment of a competency framework, and the active participation of top leadership. These practices are aligned with the bureaucratic and procedural nature of government institutions, which benefit from structured processes and leadership-driven mandates (Sampaio et al., 2009).

NGAs also demonstrate strength in mobilizing internal expertise and leadership to sustain ISO efforts. The presence of a competency framework and expert pools reflects a capacity to institutionalize ISO knowledge and reduce dependency on external consultants. Moreover, the leadership support reported among NGAs reinforces quality culture from the top down, ensuring that quality objectives align with the organization's overall mission (Naftali, 2011). These practices are essential in overcoming resistance and embedding ISO principles in daily government operations.

In contrast, SUCs showcase best practices that lean toward adaptability and institutional customization. The formation of dedicated Quality Management Teams (QMTs) allows for targeted implementation and continuous coordination across academic and administrative units. SUCs also excel in documenting institutional processes and maintaining proper records—critical for ensuring audit readiness and promoting transparency (Reyteran, 2021). These documentation efforts are especially important in higher education, where decentralized structures require standardized systems to ensure consistency across various functions.

Lastly, SUCs are noted for their ability to develop customized implementation plans tailored to their specific organizational needs. This flexibility allows SUCs to integrate ISO standards in a way that complements their educational goals and operational contexts. Unlike NGAs that follow more rigid structures, SUCs benefit from autonomy in designing responsive quality systems that foster sustainability and innovation. As highlighted by Simkin (2023), customized ISO frameworks in higher education enhance institutional alignment and long-term improvement.

Conclusions

The findings of this study reveal significant insights into the challenges and best practices associated with ISO 9001 certification in both National Government Agencies (NGAs) and State Universities and Colleges (SUCs). First, both NGAs and SUCs encounter difficulties related to documentation, which underscores the critical importance of establishing consistent and well-maintained records to ensure compliance and audit readiness. However, the challenges diverge in key areas—NGAs grapple with financial constraints and employee resistance to change, while SUCs face internal issues such as aligning existing processes and managing organizational transformation.

Second, SUCs have developed effective best practices tailored to their academic and operational contexts. These include forming dedicated quality management teams, systematically documenting procedures, and customizing implementation plans. These practices demonstrate that flexible, inclusive, and context-sensitive approaches are essential in academic environments, where decentralized structures require collaborative and adaptive quality management strategies.

Third, the comparative analysis highlights the distinct paths taken by NGAs and SUCs in achieving ISO 9001 certification. NGAs rely on structured leadership, internal competency frameworks, and standardized workplace

systems like 5S/7S, reflecting their bureaucratic nature. In contrast, SUCs leverage institutional autonomy to develop context-specific quality management practices, prioritizing team formation, documentation, and planning. Despite these differences, both sectors illustrate the value of top-level commitment, staff engagement, and continuous improvement.

Ultimately, the study affirms that ISO 9001 implementation, while universally guided by quality principles, must be approached with strategies aligned to the institution's unique structure, culture, and resources. Whether in the public sector or academe, successful certification depends on strong leadership, effective planning, and the institutionalization of a quality-driven mindset.

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