

# Extent of Compliance of a Higher Education Institution with ISO 9001:2015 Quality Management System

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# Abstract

This report discusses the extent of compliance of a higher education institution in Isabela, Philippines with the ISO 9001:2015 Quality Management System. An internal audit for clauses 4 to 9.1 of the OMS was conducted to determine the extent of OMS implementation and to identify areas of conformities, opportunities for improvement, and nonconformities. Out of the 215 findings, 177 are conformities (Cs); 25 are nonconformities (NCs); while 13 are opportunities for improvement (OFIs). The strengths of the organization include its understanding of its context, leadership of the top management, existence of planned actions to address risks and availability of almost all significant documents that support compliance and/or sustain the quality operations. Areas that need to be improved and complied include inadequate manpower for quality activities, unmet targets, and lack of control for externally provided products and services. Actions to address these findings are provided. Thus, the organization is highly recommended to carry out the corrective actions as soon as possible for continual improvement.

**Keywords:** compliance; iso 9001:2015; quality management system; high education

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# **INTRODUCTION**

The quality of an organization may refer to excellence, value, conformance to specifications, and meeting or exceeding customers' expectations (Reeves & Bednar, 1994). For the International Organization for Standardization (ISO), the quality of an organization is defined based on the extent of compliance of the organization with ISO 9001:2015 Quality Management System (QMS). This QMS holds processes designed and executed to meet customer requirements (Reeves & Bednar, 1994) (Trang, 2016) (Tseros, 2015), while it acknowledges the role of quality as organization strategic objective that enhances the organization's competitiveness for customers' loyalty (Alolayan et al., 2014).

The QMS is composed of 10 clauses (Chen et al., 2016). The customer requirements are clearly documented in clauses 4 to 10. Clause 4 requires the organization to determine its internal and external issues including risks and opportunities, and its interested parties with their needs and expectations. Clause 5 checks the leadership and commitment of the top management in implementing the QMS. Clause 6 tasks the organization to plan actions to address the identified risks, and specify its quality objectives with corresponding methodologies, resources, responsible individuals, and date when such will be accomplished. Clause 7 requires supports relating to people, place and procedural aspects of the QMS and their documented information. Clause 8 addresses

both internal and external processes, having sufficient criteria to control these processes, including means to manage planned and unplanned change. These processes are evaluated in Clause 9 through monitoring, internal audit, and management review. Then corrective actions to address areas of noncompliance are provided for Clause 10 so that the organization can continually improve (Masuin et al., 2019).

According to (for Standardization, 2019) the QMS can help an organization to: a) assess its context to enable the organization to clearly state its objectives and specify opportunities; b) prioritize customers by consistently meeting their needs and enhancing their satisfaction; c) work more efficiently since everyone will understand the processes of the organization; d) meet statutory/regulatory requirements; e) multiply linkages since some organizations work only with ISO certified institutions; f) and determine and address the risks related to the organization.

Nevertheless, to determine whether the organization is meeting these QMS requirements, an internal audit must be initiated. According to (Trang, 2016), internal audit is an independent and objective activity of measuring the effectiveness and efficiency of control and governance operations and risks management which helps the organization achieve its objectives. Internal audit entails comparing the activities of the organization with the QMS requirements by looking into evidences of compliance (Goodwin-Stewart & Kent, 2006). Hence, it involves identifying conformities (Cs), opportunities for improvement (OFIs) and nonconformities (NCs) of the organization with the said requirements. Conformity entails compliance with the QMS requirement (Bernik & Sondari, 2017). Nonconformity, on the other hand, is a deviation from the QMS requirements that need immediate action; while existence of OFIs implies requirements that are not completely fulfillewd but do not jeopardize the effectiveness of the management system.

The current study is limited to the internal audit conducted to a higher education institution in Isabela, Philippines whose aims are to determine the extent of the implementation of the QMS and to identify areas of Cs, NCs and/or OFIs from clause 4 to clause 9.1 of the QMS. This study can help the academic institution to continually improve its services to students to meet their expectations and win the loyalty of stakeholders. It also offers significant implications to other educational institutions especially to their accreditation related activities

#### METHODS

The Standard Operational Instructions of the organization's internal audit which is based on a risk-based process was strictly followed. These SOIs include planning the audit, conducting audit, analyzing audit evidences, and communicating audit results.

## **Planning the Audit**

Initially, the audit was planned by the Quality Internal Audit team by crafting an audit plan containing audit schedule and notice to audit. Then the notice to audit and the audit plan were reviewed by the QMR. Upon the approval of the QMR, one week before the planned audit, the notice and schedule of audit were disseminated to all concerned departments through a memorandum.

#### **Conducting the Audit**

On June 5-15, 2018, the audit was conducted to the organization with the general aim to determine the extent to which the organization complied with the QMS requirements. Only clauses 4 to 9.1 were audited since it was the first internal audit that was conducted. Data triangulations were done through document reviews, interview, and ocular inspection. Documents for every clause or sub-clause were reviewed and checked. However, in case of absence of document, the auditees were given chance to provide it until the last scheduled time of audit. Likewise, the auditors told the evidences that must be provided whenever clauses or sub-clauses were not clear to the auditees.

To validate the veracity of the documents, a personal individual interview was conducted to a random sample of 3 students and 3 employees. Assessing their awareness of the quality policy and quality objectives was done by asking them oral questions regarding these quality statements. The interview was facilitated in a manner where the interviewees could freely express themselves e.g.

in any language they are comfortable with. Ocular inspection was also conducted to check the organization environment, properties, plants and equipment, buildings, postings of quality policy and quality objectives, and the like.

#### **Analyzing the Audit Evidences**

Data analysis was conducted after all audit data were consolidated. Data for each sub-clause were grouped together to generate findings. In case specifications were needed, the findings were specified for every concerned process/authority. The findings were compared against the audit criteria (QMS) and were labeled conformities, nonconformities, or opportunities for improvement, accordingly. Then counting was performed to determine the frequency and percent of Cs, NCs, and OFIs per clause and sub-clause, and to tabulate the summary of the findings.

#### **Communicating the Audit Results**

The auditors reviewed the audit findings and prepared an audit report. The QMR reviewed the report and upon her approval, the audit findings were communicated to the organization through a post conference. Request for Actions (RFAs) were provided with all concerned units who were found to have NCs and OFIs. They were asked to act for their NCs and OFIs and comply with the requirements as stated in the RFA on or before the date they have sworn to.

## FINDING AND DISCUSSION

Results showed that out of 215 findings, 177 are conformities; 25 are nonconformities; while 13 are opportunities for improvement (see Table 3). Specifically, out of the 19 audit findings for clause 4, seventeen (17) are conformities while 2 are opportunities for improvement. The conformities support the compliance of the organization to provide a list of internal/external issues, interested parties, and the needs and expectations of the interested parties while the OFIs include the absence of an authority for the identification, documentation and communication of external and internal issues and the needs and expectations of interested parties.

Speaking of leadership and commitment (clause 5), there are twenty (20) conformities, three (3) opportunities for improvement, and no nonconformities. The OFIs include lack of evidence that the quality policy is communicated to interested parties, inability to update organizational charts, and absence of replacement position plan in the absence of an authority or employee.

In terms of planning (clause 6), sixteen (16) are conformities while there is one nonconformity which is the lack of evidence that the quality policy is religiously communicated to interested parties.

For clause 7, four in every 5 findings are conformities. However, there are 5 nonconformities which include the inactive support resources like Facebook account and Campus Webpage which are not even use for communication, lack of evaluation for the effectiveness of trainings, offices without bulletin of information, lack of compliance to the identification of records to be destroyed after a certain period of time, and inadequate manpower to support quality activities. Also, the poor WIFI connectivity in the workplace, absence of Workplace Evaluation Report, and the fact that 1 in every 3 staff members is not aware of the quality objectives, are areas that need to be improved.

Out of 110 findings for clause 8, eighty-seven (87) are conformities; 18 are nonconformities; and 5 are opportunities for improvement. The nonconformities are inclusive of the following: 8 unmet targets, school canteen manager with no sanitary permit, lack of evidence for conducted review of action plans and accomplishment report, no 5S evaluation report, absence of reaction plans for conducted evaluations to Clients' Satisfaction and boarding houses, no evaluation for contractors' and suppliers' services, lack of evidence of the evaluation of extension external providers, and unavailability of logbook to trace the release of products/services. On the other hand, the areas needing improvement includes the lack of updated tracer study, updated placement records, and active Alumni Directory, and the storage of unserviceable facilities and disposable records in identified offices.

Out of 11 findings for clause 9, ten (10) are conformities while 1 is a nonconformity. The area of nonconformity includes the lack of evidence that follow up actions are undertaken after the analysis of the clients' satisfaction survey.

With these findings (see Table 1 and Table 2), the following actions are noteworthy to be undertaken:

#### **Context of the Organization**

The management should assign an incharge for the identification, documentation, and communication of internal/external issues and the needs and expectations of interested parties.

## Leadership and Commitment

- 1. The management should assign a team to communicate the quality policy to the interested parties.
- 2. Each department should ensure updated organizational charts.
- 3. Replacement Position Plan should be provided to facilitate operations in the absence of an authority/employee.

#### Planning

- 1. The management should assign a team for the effective communication of the Quality Objectives to all interested parties most especially to the employees so that they will become more aware of their roles for the attainment of these objectives.
- 2. Since some of the objectives of the organization were not attained, the quality plan must be reviewed thoroughly and the actions to address risks must be strengthened.

#### Support

- 1. Strong internet connectivity in the workplace, active Campus Webpage and Facebook Account and updated Bulletin of Information are necessary facilities/equipment to support the campus operations on researching and communication/information dissemination, accordingly.
- 2. A regular 5S Evaluation Report must be provided to check and upgrade the status of the working environment.
- 3. The management should check the adequacy of personnel to avoid multiple designations and strengthen the campus manpower.
- 4. Each personnel should have an in-depth understanding of the quality objectives.
- 5. Trainings attended and conducted by employees must also be evaluated regularly.
- 6. Records that are required to be destroyed after a period of time must be identified.

## Operation

- 1. The management should regularly check the currency of the sanitary permit of the school canteen managers.
- 2. Each department should document the review of their action plans and accomplishment reports.
- 3. Researchers should conduct tracer study regularly.
- 4. The OSAS chief should always update the Placement Records and upgrade the Alumni Directory.
- 5. The management should devise a method to increase the campus passing rates in licensure exams.
- 6. The management should observe compliance with the ratio of guidance counselor students.
- 7. The OSAS Chief should conduct a regular inspection of boarding houses and provide the results for Boarding Houses for accreditation.
- 8. All departments with external providers should provide a reaction plan after evaluating the performance of their external providers and should communicate the results of the evaluation to these external providers. They should include external service provider evaluation and approval, and acceptance requirement/criteria in their SOIs, and provide evidence of compliance with this procedure. They should also include method and time for sharing results

from the performance assessment with external providers in their respective SOIs, and provide evidence of compliance with this procedure.

- 9. The management should assign personnel to check and monitor the tagging of government properties.
- 10. To maintain a quality environment, the supply management should observe timely disposal of unserviceable properties, plants and equipment and the admission and registration management should observe timely disposal of records.
- 11. The supply management should conduct evaluation of suppliers' and contractors' services regularly.
- 12. Each department should have a logbook for traceability of released products/services.

## **Customer Satisfaction**

1. The management should call for a meeting for the dissemination of the customers' satisfaction survey results and should initiate the follow up actions for improvement

Table 1. List of Opportunities for Improvement				
Clause	Opportunities for Improvement (OFIs)			
4.1.3	No incharge for the identification, documentation and communication of external/internal			
	issues.			
4.2.3	No incharge for the identification and communication of the needs and expectations of			
5.2.2.3	interested parties.			
	No signed evidence that the quality policy has been communicated to interested parties.			
5.3.1	Three identified offices did not update their respective organizational charts.			
5.3.4	Replacement Position Plan is not available.			
7.1.3	Poor WIFI Connectivity in the workplace which affects some important operations.			
7.1.4	5s implementation and evaluation are conducted. However, there is no 5S evaluation report.			
7.3.2	Based on the conducted interview, 2 in every 3 employees are aware of the Quality Objectives.			
7.5.3.1	Three identified offices have no available Bulletin of Information.			
8.3.4.4	Tracer Study is still ongoing.			
8.3.4.4	No Updated Placement Records, No active Alumni Directory.			
8.5.2.4	Some school properties have no government property tag.			
8.5.4.2	Unserviceable facilities and equipment are still stored making the office inadequate.			
8.5.4.2	Disposable documents and records are still kept making the office inadequate.			

Table 2. List of Noncor	firmities
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Clause	Nonconformities
6.2.2	There is no evidence that the flyers containing Quality Objectives are communicated to interested parties.
7.1.4	The Campus Webpage and Facebook Account are not actively used to facilitate important processes.
7.2.1	There is an inadequate manpower for quality activities. Some faculty members have multiple designations.
7.2.4	No evidence that the effectiveness of trainings attended and conducted is evaluated.
7.5.3.1	Three identified offices have no available Bulletin of Information.
7.5.3.7	There is no evidence of that records required to be destroyed after a period of time are identified.
8.2.2.3	The school canteen manager has no updated sanitary permit.
8.3.4.2	There is no evidence that action plans, PPMP, APP and accomplishment reports are reviewed.
8.3.4.4	No 5S Evaluation Report
8.3.5.1	The target to attain a BLEPT passing rate 20% higher than the national passing rate was not met.
8.3.5.1	The target to conduct a tracer study every three (3) years was not met. The last study conducted covered only graduates of years 2010 to 2013.
8.3.5.1	The target to conduct guidance and counseling seminars/training/orientations was not attained since the organization has no Guidance Counselor to facilitate the process.
8.3.5.1	The target to provide at least one invitation seminar/job fair per year was not met.

Clause	Clause Nonconformities		
8.3.5.1	The target to accredit 95% of the boarding houses was not attained. Monitoring was done but		
	no accreditation.		
8.3.5.1	The target to update the sanitary permit of the school canteen manager was not met.		
8.3.5.1	The target to update the Alumni Directory was not met.		
8.3.5.1	The target to inspect buildings and offices monthly is not evident since there is no 5S		
	Evaluation Report.		
8.4.2.3	Evaluation of OJT Host Agencies by Students is available. But there is no reaction plan.		
8.4.2.3	No Contractor/Supplier Evaluation; hence, no reaction plan.		
8.4.2.3	External providers of Extension Office are not evaluated. Hence, there is no reaction plan in its		
	process.		
8.4.2.3	There is an evaluation of Boarding Houses but no reaction plan in case boarding houses have		
	poor performance.		
8.4.3.3	No SOIs defining method and time period for sharing results from the performance assessment		
	with external providers.		
8.5.5.5	No evaluation of Suppliers' and Contractors' services		
8.6.5	Logbook to trace records for release of products is not available in three identified offices.		

9.1.2.3 No evidence of follow up actions for improvement after the Clients' Satisfaction Survey.

Clause	N	С	NC	OFI
4. Context of the Organization				
4.1. Understanding the Organization and Its Context	3	2	0	1
4.2. Needs and Expectations of Interested Parties	3	2	0	1
4.3. Scope of the QMS	3	3	0	0
4.4. QMS and Process	10	10	0	0
Total	19	17	0	2
5. Leadership				
5.1. Leadership and Commitment	9	9	0	0
5.2. Policy	9	8	0	1
5.3. Organizational Roles, Responsibilities and Authorities	5	3	0	2
Total	23	20	0	3
6. Planning				
6.1. Actions to Address Risks and Opportunities	6	6	0	0
6.2. Quality Objectives and Planning to Achieve Them	4	3	1	0
6.3. Planning of Changes	6	6	0	0
Total	16	15	1	0
7. Support				
7.1. Resources	8	5	1	2
7.2. Competence	5	3	2	0
7.3. Awareness	4	3	0	1
7.4. Communication	7	7	0	0
7.5. Documented Information	12	10	2	0
Total	36	28	5	3
8. Operation				
8.1. Operational Planning and Control	3	3	0	0
8.2. Requirements for Products and Services	17	16	1	0
8.3. Design and Development of Products and Services	32	20	10	2
8.4. Control of Externally Provided Products and Services	13	7	4	3
8.5. Production and Service Provision	33	29	1	0
8.6. Release of Products and Services	4	3	1	0
8.7. Control of Nonconforming Outputs	10	9	1	0
Total	110	87	18	5
9. Performance Evaluation				
9.1. Monitoring, Measurement, Analysis and Evaluation	11	10	1	0

# Table 3. Summary of Audit Findings

Overall	215	177	25	13
%	100	82	12	6

Note. N refers to the number of findings; C means Conformity; NC means Nonconformity; OFI means Opportunities for Improvement

#### CONCLUSION

The internal audit found that the organization has 82% compliance with the QMS requirements. The strengths of the organization include its capability to understand its context, leadership of the top management, and availability of planned actions to address risks and significant documents such as quality manual and standard operational procedures. However, there is 18% noncompliance. The major nonconformities are inclusive of inadequate manpower, unmet targets as well as lack of control of externally provided products and services.

This study provides implications to the organization for the enhancement of its operations in meeting the customers' requirements. This study which used internal audit design is a much stronger design than the usual descriptive research design to measure the extent of the implementation of ISO 9001:2015 QMS. Findings offer insights to academic institutions as to what things are required in each QMS element and what evidences must exist to support compliance. Hence, this study may guide internal auditors of academic institutions in their audit undertakings.

Moreover, after the management review and complying with some corrective actions, the next internal audit should encompass already all the QMS requirements from clause 4 to clause 10, inclusive. The organization is also recommended to subject itself for an ISO Certification. Thus, it is advised to benchmark from other academic institutions that have been ISO certified. However, the qualitative research should be conducted to determine how the institution really implements the QMS and how do really clients respond to the services of the organization since the clients' satisfaction survey is measured only by a rating scale and the fact that a very limited encounters with clients and other stakeholders can be done during audit. Furthermore, the research to determine the effectiveness of ISO 9001:2015 QMS in improving the capability of an academic institution to meet students' requirements should be conducted.

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