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Level Of Awareness Of ISO 9001:2015 QMS And Process Owners' Work Motivation

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Abstract

The study aimed to ascertain the level of awareness ISO 900:2015 Quality Management System (QMS) and process owners' work motivation of Bohol Island State University. Specifically, it is directed to: 1. determine the profile of the respondents in terms of: age, sex, highest educational attainment, position/designation, number of years in the position, and number of related QMS trainings, seminars, workshops and conferences attended; 2. assess the level of awareness of ISO 9001:2015 Quality Management System of the university in terms of context of the organization, leadership, planning, support, operation, performance evaluation, and improvement; and 3. determine the significant relationship between profile of the respondents and the level of awareness of ISO 9001:2015 quality management system of the university and the process owners' work motivation. This study employed descriptive survey design comprising the six different campuses of BISU as the locale with three hundred thirty-two (332) process owners as respondents. The study utilized Chi-Square test using R software. Findings revealed that process owners were very well-informed to the major requirements of the QMS in the University, except clause 6, planning; clause 7, support and clause 8, operation. In addition, notwithstanding additional work loads, process owners were highly motivated. Moreover, the study concludes that their sex, educational attainment, position/designation, and number of relevant trainings/seminars/workshops attended are contributing factors to their level of awareness of ISO 9001:2015 QMS. Likewise, full awareness of the standards can increase work motivation among employees in the University's compliance to ISO 9001:2015 QMS.

I. INTRODUCTION

The International Organization for Standardization (ISO) certification is regarded as the most significant contemporary phenomenon in the growth of quality management and globalization. ISO 9001:2015 is the most recent international standard for Quality Management Systems (QMS), outlining a framework for quality improvement and a vocabulary of understanding for any organization seeking to provide products and services that consistently meet the requirements and expectations of customers and other relevant interested parties in the most efficient manner possible. It also provides the guiding principles that can be utilized to generate efficiencies by aligning and streamlining processes across the firm, with the goal of lowering costs, creating new opportunities, meeting regulatory requirements, and assisting organizations in expanding into new markets. Deming's (1950) plan-do-check-act (PDCA) cycle, which allows an organization to plan its processes and their interactions; and Deming's (1903) total quality management model, which emphasizes the principles of customer satisfaction, employee

involvement, and continuous process improvement for achieving high levels of process performance and quality, are significant models used in this standard.

However, according to Archaya etRay (2000), as cited by Khan & Farooquie (2016), whether ISO-Quality Management System (QMS) has been achieving the desired results or has been turned into a documented system that is merely a cosmetic treatment of existing procedures/practices, awareness and implementation are significant factors. Several studies have found that enterprises, including educational institutions, use the ISO 9001 standard at various levels. (Manders, 2014: Boiral, 2011; Heras-Saizarbitoria, 2011; Sandholtz, 2012).

According to Neyestani (2016), 1,609,294 ISO certifications were granted, with the majority of them belonging to the QMS standard, or 1,138,155 ISO 9001 certificates issued that met the standards of QMS under third-party or Certification Body external audit (UNIDO, 2012). By 2014, the Philippines has received over 1,600 ISO 9001 certificates for various industries. Further, in 2017, Department of Budget and Management (DBM) and Government Quality Management Committee (GQMC) awarded a recognition to 52 entities from the National Government Agencies (NGAs) which brings to fore about 633 ISO 9001 certified QMS processes in the public sector since 2004 including 10 State Universities and Colleges in Luzon, Visayas and Mindanao (DBM, 2017). With the 436 state colleges and universities in the Philippines including satellite campuses and with the given number of SUCs have ISO certification., this means that there are still many SUCs in the country that are not yet ISO certified.

In the Philippines, Executive Order No. 605 required all government offices most particularly all departments and agencies of the Executive to adopt ISO-Quality Management Systems as part of the implementation of a government-wide quality management program. Furthermore, Administrative Order No. 161 s. 2006, Institutionalizing Quality Management System in Government; and CMO 46, S 2012 Policy Standard to Enhance Quality Assurance (QA) in Philippine Higher Education Through an Outcomes-Based and Typology-Based QA, state universities and colleges (SUCs) are likewise enjoined to establish ISO-QMS and be certified accordingly. With this, SUCs are trying to cope with the different applicable statutory and legal requirements and ISO-QMS standard requirements to improve its management; and core and support services for the delight of its interested parties. As such, Bohol Island State University has recently acquired its ISO 9001:2015 certification from TUV Rheinland on its scope of admission and registration of higher and graduate entrants and students. However, due to its new implementation, observations noted that employees concerned are experiencing the difficulty in understanding the standards in the effective delivery of its services considering the administrative and academic pressures, time constraints, and awareness problems.

Meanwhile, Froseca et al. (2018) revealed that internal motivations for ISO 9001 implementation can foster organizational and process improvements, which may contribute to better quality and customer satisfaction, leading to improved financial performance and competitive position. exterior motivation helps with market access and image enhancement, but if no internal adjustments are made, the exterior gains

may not last. Furthermore, the research demonstrated that ISO 9001:2015 improves both internal and external organizational challenges. According to the respondents' comments, firms that claimed external reasons were the primary drivers of ISO 9001:2015 implementation frequently rated higher on all advantages when compared to those that claimed internal incentives.

In this perspective, the researcher would like to look into the determination of these gaps in Bohol Island State University. The findings of the study will be beneficial to the administration, particularly its quality assurance office, employees and its internal and external interested parties. Further, this will give them insights and serves as an eye opener to enhance its Quality Management System effective implementation.

The study aimed to ascertain the level of awareness ISO 900:2015 Quality Management System (QMS) and process owners' work motivation of Bohol Island State University. Specifically, it is directed to: 1. determine the profile of the respondents in terms of: age, sex, highest educational attainment, position/designation, number of years in the position, and number of related QMS trainings, seminars, workshops and conferences attended; 2. assess the level of awareness of ISO 9001:2015 Quality Management System of the university in terms of context of the organization, leadership, planning, support, operation, performance evaluation, and improvement; and 3. determine the significant relationship between profile of the respondents and the level of awareness of ISO 9001:2015 quality management system of the university and the process owners' work motivation.

II. METHODOLOGY

Design and Instruments

This study is quantitative in nature which deals with interpretation of the research findings based on deductive process that encapsulates numerical data in order to find out answer of the research which makes use of questionnaire as data-gathering tool. Further, the study employed descriptive survey design. With the descriptive method of research, the normative survey will be employed in gathering factual information relevant to this particular study.

The study used a standardized survey on ISO-QMS Awareness and Implementation utilized by Khan & Farooquie (2016) and was modified by the researcher aligning the recent standard requirements of the university. The study also utilized the standardized instrument on Employees' Work Motivation and Attitudes by MySkillsProfile (2017). Pilot test was conducted to check the reliability and validity of the questionnaires used in the study. The researcher gathered the data using the questionnaires online via Google form. The data then were summarized using weighted mean as the primary tools for the analysis. To determine the significant relationship, the data were analyzed using the Chi-Square Test as the main statistical treatment and coded in R statistical package.

Environment and Respondents

The locale of the study was the six campuses of Bohol Island State University. This includes Main Campus in Tagbilaran City and other satellite campuses; Balilihan Campus, in Magsija, Balilihan, Bilar Campus in Zamora, Bilar;

Candijay Campus in Cogtong, Candijay; Calape Campus in Calunasan, Calape; Clarin Campus in Poblacion, Clarin.

Distribution of Respondents

N=332

Campus	No. of Respondents/Process Owners			Total
	Core	Top Management	Support	
Main	21	25	32	78
Bilar	21	21	26	68
Candijay	20	21	29	70
Calape	15	16	25	56
Clarin	10	12	13	35
Balilihan	5	8	12	25
TOTAL	**92**	**103**	**137**	**332**

The respondents of the study were the total population of the identified process owners and its staff involved in the scope of ISO 9001:2015 standards of the university. Process owners focused in this study are those from the top management, administrative and support staff, and faculty members with designated positions involving the implementation of the Quality Management System of the university.

III. RESULTS AND DISCUSSION

1. Profile of the Respondents. Table 1 illustrates the profile of the respondents including age, civil status, sex, highest educational attainment, designated position, number of years in the position, and relevant QMS trainings, seminars, workshops and conferences attended. It is reflected in the table that as to age, the highest frequency percentage of 47.90% was ranging from 31-40 years old. For civil status, married employees outnumbered single and widow/widower employees with a frequency percentage of 66.30%. Moreover, the population had more female respondents (68.20%) than male respondents, and PhD/EdD/DM Degree holders got the highest number of 32% of the total respondents. As to designation, the highest number of frequencies was campus level position with a frequency percentage of 36.10% while a large number (51.20%) of respondents had an experience of 1-5 years. And lastly, majority of 82.22% had attended Seminar-Workshop on Quality Management Systems and other relevant trainings and seminar-workshops.

Table 1 Profile of the Respondents

N=76

1.1 Age	**Frequency**	**Percentage (%)**	**Rank**
20-30 years old	44	13.30	3
31-40 years old	159	47.90	1
41-50 years old	85	25.60	2
51-60 years old	35	10.50	4
61-65 years old	9	2.70	5
1.2 Civil Status			

Single	100	30.10	2
Married	220	66.30	1
Widow/Widower	12	3.60	3
1.3 Sex			
Male	104	31.30	2
Female	228	68.70	1
1.4 Highest Educational Attainment			
Non-Baccalaureate Degree	4	1.20	9
Baccalaureate Degree	45	13.50	4
MA/MS with units only	28	8.40	5
MA/MS/DFT(CAR)	21	5.70	8
MA/MS/MAN Degree	52	15.60	2.5
PhD/EdD/DM with units only	52	15.60	2.5
PhD/EdD/DM (CAR, CAN)	25	7.53	6
PhD/EdD/DM Degree	107	32.00	1
1.5 Designation			
Committee/Team Level Position	25	7.50	6
Unit/Office Level Position	51	15.40	2
Department Level Position	40	12.00	4
College Level Position	34	10.20	5
Campus Level Position	120	36.10	1
University Level Position	14	4.20	7
NA (Not applicable)	48	14.50	3
1.6 No. of Years in the Designated Position			
less than 1 year	30	9.00	4
1-5 years	170	51.20	1
6-10 years	69	20.70	2
11-15 years	43	13.00	3
16-20 years	6	1.80	7
21-25 years	7	2.10	5.5
26 years and above	7	2.10	5.5
1.7 Relevant QMS Trainings, Seminars, Workshops and Conferences Attended			
Quality Management Systems ISO 9001:2015	273	82.22	1
Internal/External Auditing Course, Process and Internal Quality Audit Report Writing	59	17.78	3
ISO 9001:2015 Quality Management System: Risk and Opportunity	75	22.59	2
None	14	4.2	4
Total			

2. Level of Awareness of ISO 9001:2015 QMS. As to level of awareness, it was found out that the respondents had a very high level of awareness with an overall rating of Very Much Aware (VMA) with an average weighted mean of 3.31. The following clauses according to ranks which were rated as Very Much Aware (VMA) are leadership (clause 5), and improvement (clause 10), performance evaluation (clause 9) and context of the organization (clause 10). Other clauses were rated only as Much Aware

(MA) which include operation (clause 8), planning (clause 6) and support (clause 7).

Based on the study of Ahmudi & Handayani (2018), it was revealed that in the implementation of ISO 9001:2015, there are some work procedures not yet executed but other requirements run well. Some of the constraints in running the quality management system ISO 9001: 2015 are less control from management representative regarding quality management system implementation (Clause 4), focus on improving customer satisfaction has not been maintained well besides quality policy not fully understood until operator level (clause 5), the desired outcomes are not in accordance with the target (clause 6), and worker's competence to job specialization has not been well defined (clause 7).

Table 2 Level of Awareness of ISO 9001:2015 QMS as Perceived by the Process Owners

N = 76

Items	Level of Awareness		
	WM	**DI**	**Rank**
1. Context of the organization	3.26	VMA	4
2. Leadership	3.33	VMA	1
3. Planning	3.22	MA	6.5
4. Support	3.22	MA	6.5
5. Operation	3.23	MA	5
6. Performance evaluation	3.29	VMA	3
7. Improvement	3.31	VMA	2
Overall Average	**3.31**	**VMA**	

Legend:

Rating Scale	**Level of Awareness**	**Level of Implementation**	**Interpretation**
3.25 – 4.00	Very Much Aware (VMA)	Very Much Implemented (VMI)	Very High
2.50 – 3.24	Moderately Aware (MA)	Moderately Implemented (MI)	High
1.75 – 2.49	Slightly Aware (SA)	Slightly Implemented (SI)	Medium
1.00 – 1.74	Not Aware (NA)	Not Implemented (NI)	Low

3. Work Motivation of the Process Owners. The work motivation of the respondents includes autonomy, related factor, competence, commitment and job security.

Generally, the overall average mean of 3.36 or Strongly Agree (SA) manifests that the respondents are highly motivated in all aspects as to according to ranks: commitment, job security, related factor, autonomy, and competence which were all rated as Strongly Agree (SA).

Table 3 Perception of the Process Owners on their Work Motivation

N = 332

Items	**WM**	**DI**	**Rank**
a. Autonomy	3.31	SA	4
b. Related Factor	3.33	SA	3
c. Competence	3.30	SA	5
d. Commitment	3.45	SA	1

e. Job security	3.42	SA	2
Overall Average mean	**3.36**	**SA**	

4. Table 4 displays the relationship between respondents' profile and their level of awareness of ISO 9001:2015 QMS of the university. Using Chi-Square Test and Pearson Correlation Coefficient, the results revealed that there is no significant relationship between the respondents' profile as to age, X2=2.507, p=5. 99ga1, and civil status, X2=5.604, p=5.991 and their level of awareness of ISO 9001:2015 QMS, thus failed to reject the null hypothesis. This denotes that their level of awareness of the QMS does not associated by their age and civil status. However, the results also show that there is significant relationship between profile of the respondents as to sex, X^2=12.695, p=5.991, highest educational attainment, X^2=94.188, p=9.488 and position/designation, X^2=133.379, p=9.488, and number of relevant trainings/seminars/workshops attended, thus reject the hypothesis. This further infers that their sex, educational attainment, position/designation, and number of relevant trainings/seminars/workshops attended are contributing factors to their level of awareness of ISO 9001:2015 QMS.

The findings are consistent with the findings of Balahadia, Daligdog, and Cabiente (2021), who discovered a "no significant relationship" between respondent profile and level of awareness and challenges in the implementation of ISO 9001: 2015 at Laguna State Polytechnic University (LSPU). They came to the conclusion that, while LSPU personnel are generally aware of the university's quality management system's major tasks, they disagree on the challenges of its execution. Information should be disseminated on a regular basis.

Table 4 Relationship between Respondents' Profile and their Level of Awareness of ISO 9001:2015 QMS of the University

Profile as to	**Chi-square Test Value**	**Chi-square Critical Value**	**Decision**	**Interpretation**
Age	2.507	5.991	Insignificant, Ho: Accepted	Not Related
Civil Status	5.604	5.991	Insignificant, Ho: Accepted	Not Related
Sex	12.695	5.991	Significant, Ho: Rejected	Related
Highest Educational Attainment	94.188	9.488	Significant, Ho: Rejected	Related
Position/ Designation	133.379	9.488	Significant, Ho: Rejected	Related
	Pearson Correlation Coefficient	**p-value**	**Decision**	**Interpretation**
Number of Relevant Trainings/Seminars/ Workshops Attended	0.466	$< 2.2 \times 10^{-16}$	Significant, Ho: Rejected	Related

Conclusion

Based on the findings, the study concludes that sex, civil status, educational attainment, designation, and number of relevant trainings/seminars/workshops attended of the process owners were considered as influences and of great help in the pursuit of their further awareness of ISO 9001:2015 QMS of the University. Likewise, full awareness of the standards can increase work motivation among employees in the University's compliance to ISO 9001:2015 QMS. The Quality Assurance Office may provide a thorough re-orientation of the standards to all process owners with emphasis on clause 6, planning; clause 7, support; clause 4, context of the organization; and clause 10, improvement to increase awareness and enhnce work motivation among process owners of the university.

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