

Internal Quality Assurance System, ISO 9001:2015 And Organizational Performance In One Continuum-A Case Study

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Abstract—Internal quality assurance system in postgraduate has become a global issue. This research investigated the implementation of internal quality assurance system and ISO 9001:2015 in postgraduate programmes State University Of Surabaya. Quantitative methodology was employed using a questionnaire based on a case study research design. The participants (lecturer, student, and education staff) indicated that the internal quality assurance systems and practices in place in the postgraduate Unesa included areas such as the availability of internal quality assurance policy, teaching and learning processes, curriculum design. It was recommended that postgraduate Unesa should have clear policies and associated quality procedures for the assurance of quality and standards of their programmes is internal quality assurance system and ISO 9001:2015. They should commit themselves explicitly to the development of quality culture and quality awareness by the Law Number (No). 12 of 2012 about implementation internal quality assurance system and external quality assurance system.

Keywords— *Internal quality assurance system, quality procedure, ISO 9001:2015, organization, implementation*

I. INTRODUCTION

Based on Law Number (No). 12 of 2012 about higher education, Quality Assurance System of higher education (higher education SPM) includes Internal Quality Assurance System (SPMI) and External Quality Assurance System (SPME) or better known as the Accreditation. So SPM quality assurance system of higher education that internal and external. Determination of quality assurance (quality assurance) for the whole of the College through the Quality Assurance System of higher education (SPM higher education) has been announced by the Government. With the publication of the Ordinance the Government, i.e., Law No. 12 of 2012 about the Organization of higher education, quality improvement becomes one of the inherent tasks to do in the Organization of higher education. These regulations clarify the importance of a commitment to quality in the management of higher education. Until recently, most colleges more concerned with accreditation or SPME of SPMI unselfish, indeed on certification has always been the goal of improved quality study program or college. After accreditation and accreditation of results out, usually, the institution no longer evaluate quality internally. Whereas the evaluation of the quality of internally needs to be done on an ongoing basis and directional. In Law Number (No). 12 of

2012 about higher education, related to the Quality Assurance System of higher education (SPM of higher education), the process of SPMI College should be done at least every once a year. This is required so that the quality of the College can be maintained. Internal Quality Assurance System (SPMI) is seen as one way to address the issues of higher education in Indonesia. Besides, the SPMI is considered able to answer the challenges of higher education. In General, the sense of quality assurance (quality assurance) of higher education are (1) the process of the determination and fulfillment of the quality standard of education consistently and sustainably so that customer satisfaction and (2) Processes to ensure the quality of graduates in accordance with specified competencies/promised so that quality can be maintained on a consistent basis and improved on an ongoing basis. In other words, the College is said to be certifiable if able to set and realize its vision through the execution of its mission (deductive aspects), as well as being able to meet the needs/satisfies the stakeholders (inductive element), namely, the world community needs work and professional.

To realize it all, necessary normative requirements that must be met by every university. The provisions contained in some fundamental, namely: (1) commitment, (2) Internally driven, (3) the responsibility/oversight attached, (4) the adherence to planning, (5) evaluation, and (6) continuous quality improvement. The purpose of quality assurance is to maintain and improve the quality of higher education in a sustainable way, which is run internally to realize the vision and mission, as well as to meet the needs of stakeholders through the holding of tri dharma university. It can be implemented internally by the university is concerned, controlled and audited through the accreditation activities run by the national accreditation Agency (BAN) College or other institutions externally. So the objectivity assessment of the maintenance and improvement of academic quality on an ongoing basis at a Community College can be realized.

In order to realize a real commitment towards the academic quality of Unesa, then the establishment of institution quality manager starting from the University level, namely the Quality Assurance Center (PPM), faculty and graduate level, Quality Assurance Cluster (GPM), to the the level of the majors/programs of study, namely the Quality Assurance Unit (UPM). Through these institutions, Unesa activities guarantee quality by applying the SPMI and SPME to guarantee "the presence" of quality in all the sides

including Unesa graduate management. SPME implemented by external parties Permenristekdikti Law [1] number (No). 32 of 2016 about the accreditation status of this article 2 Accreditation Quality Assurance system is External as part of the Quality Assurance System of higher education. SPME implemented by BAN-PT, so all the quality documents and instruments developed by the institution. While the SPMI, entirely the responsibility of the Unesa himself. As a guide in the conduct of SPMI, Unesa has developed a quality Manual SPMI Unesa. SPMI Unesa quality manual was compiled for each standard that has been established and given the name of the document to the standard Manual for each standard. Each standard manual contains about: (1) quality policy SPMI Unesa, (2) a statement of quality, (3) the implementing Units, and (4) the procedure for the determination of process Quality, implementation, evaluation, control and improvement of standards. The focus of this research is the quality guarantee system of corporate influence and internal quality management system ISO 9001:2015 on the performance of the Organization at the State University of Surabaya.

Based on the above description, then researched about the application of internal quality assurance system and quality management system of ISO 9001:2015 at the State University of Surabaya, as well as how the two policies that affect the performance of the State University of Surabaya. Therefore, the research questions are as follows: (1) The internal quality assurance system influence on organizational performance at the State University of Surabaya, Indonesia (2) And whether the quality management system of ISO 9001:2015 effect on organizational performance at the State University of Surabaya.

II. THEORY

A. Internal Quality Assurance System (SPMI)

The central objective of the internal quality assurance of the Foundation is the continuous monitoring and, if required, enhancement of internal processes to ensure a qualitative performance of the Foundation's statutory tasks that is simultaneously as efficient as possible. The quality assurance measures also contribute to guaranteeing consistency of the decisions of the Foundation's bodies and committees. Also, the systematic internal quality assurance allows concrete and comprehensive feedback on the performance of the statutory tasks and the expectations of stakeholders toward the Foundation. Internal Quality Assurance assists in this process by fulfilling the following functions:

- sampling assessment procedures and assessors' marking of student work to ensure that the process exemplifies good practice, and is also fair, reliable and consistent;
- observation and standardization of learners work are recorded, to ensure all assessors and assessment decisions are constant (records of learner's practical work must be recorded and, where possible, photographic evidence can be used.)

- providing feedback to assessors and to the course team on the effectiveness of their assessment processes and how they might be further improved;
- providing a key link with the College's Lead Internal Quality Assurer and the Awarding Body's External Verifier/Moderator or Examiner, ensuring that the former's quality assurance requirements are fulfilled.

All teaching staff is responsible for Internal Quality Assurance if they are part of a team delivering any course that involves Internal Quality Assurance. A systematic process of collecting data about student learning goals achievement, reviewing and using it to continuously develop and improve the program.

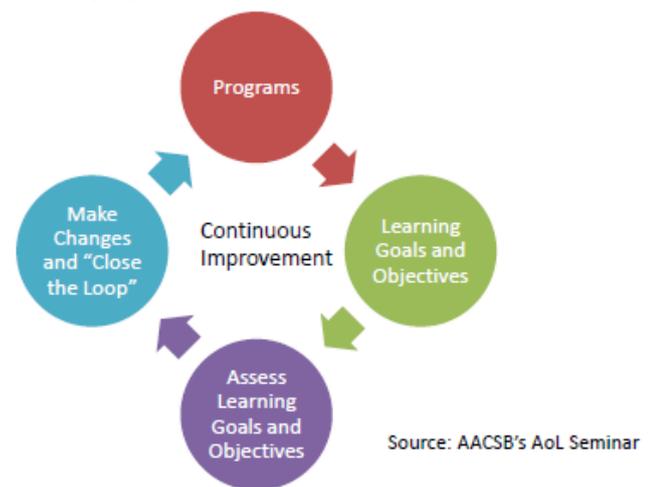


Figure 1. Internal Quality Assurance System (SPMI)

In General, the sense of Quality Assurance (quality assurance) of higher education, namely:

1. The process of the determination and fulfillment of the quality standard of education consistently and sustainably so that customer satisfaction.
2. The process to ensure the quality of graduates under specified competencies/promised so that quality can be maintained on a consistent basis and improved on an ongoing basis.

In other words, the university is said to be certifiable if able to set and realize the vision of the campus through the implementation of its mission (deductive aspects), as well as being able to meet the needs/satisfies the stakeholders (inductive dimension) that the needs of the students, community, the world of work and professional. So, colleges should be able to plan, execute and control a process that ensures the achievement of quality. To realize it all, necessary normative requirements that must be met by each College. The terms are related in some fundamental, namely:

1. Commitment
2. Internally driven
3. Responsibility/oversight attached
4. Compliance with the plan
5. Evaluation
6. Sustainable quality improvement

Implementation policy cornerstone of SPMI in College, namely:

1. Law Number (No). 20 of 2003 SISDIKNAS
2. Higher Education Long-Term Strategy (HELTS) 2003 – 2010
3. Guidelines for Quality Assurance of higher education, 2003
4. Pokja Guarantee quality (Quality Assurance), higher education 2003
5. Government Regulation number 19 the year 2005 about education standards
6. Government Regulation number 17 in 2010 about the management and organization of Education
7. Government Regulation number 66 the year 2010 about changes to the Government Regulation number 17 in 2010 about the management and organization of education.

The purpose of quality assurance is to maintain and improve the quality of higher education in a sustainable way, which is run internally to realize the vision and mission, as well as to meet the needs of stakeholders through the holding of tri dharma University. It can be implemented internally by the university is concerned, controlled and audited through the accreditation activities run by the national accreditation Agency (BAN) College or other institutions externally. So the objectivity assessment of the maintenance and improvement of academic quality on an ongoing basis at a Community College can be realized. SPMI in implementation as well as maintain Continuous Quality Improvement (CQI), university need tools or systems that are reliable in their implementation, so that the process of reporting forms, to measure the performance of the performance of the individual or with the per unit KPIs (Key Performance Indicators) and the process of AMAI (Academic Quality Audit Internal) becomes more comfortable.

B. International Organization For Standardization

The International Organization for Standardization (ISO) is an international organization with its headquarters, the ISO Central Secretariat (ISO/CS), based in Geneva, Switzerland. It is a membership network of 163 national standards bodies (NSBs) as of June 2016, comprising both public and private entities. ISO develops voluntary, consensus-based, market-relevant international standards that support innovation and provide solutions to global challenges. Given that the international standards and other deliverables that it produces are all voluntary, ISO does not consider itself to be a regulator in the traditional sense. However, when governments and industries choose to use ISO standards, this can have the effect of promoting co-operation between countries, facilitating trade, and creating de facto rules and best practices at the international level, which can be considered as promoting international regulatory co-operation (IRC). This case study explores the specificities of ISO and describes how it supports IRC – the context in which it takes place, its main characteristics, its impacts, successes, and challenges.

C. Short history of the development of ISO

It is a common saying that standardization is "as old as the hills". Indeed, even before the word standardization existed, a "de facto standardization" was used going as far back as Antiquity, for example in the field of construction. "Modern standardization" appeared in the 19th Century with industrialization. At the end of the 19th Century, and the very beginning of Globalisation, the need for standards became international. The development of global communication networks was fostered by the creation of international unions such as the International Telecommunication Union⁷ (ITU) in 1865. The International Electrotechnical Commission (IEC), created in 1906,⁸ was the first international organization entirely devoted to standardization. It was followed by the creation in 1930 of the International Standardization Association (ISA), which was the first international standardizing body with general competence. After World War II, the ISA was dissolved, and a new organization was created to take its place – ISO, founded on 23 February 1947.

ISO (International Organization for Standardization) develops and publishes international standards, specifications, guidelines or characteristics that can be used consistently to ensure that materials, products, processes, and services are fit for their purpose.

ISO defines standardization as the "activity of establishing, about actual or potential problems, provisions for common and repeated use, aimed at the achievement of the optimum degree of order in a given context".¹⁰ Nevertheless, standardization is not a trivial notion to explain, and it is often misunderstood and misrepresented. It is easier to have a pragmatic approach to it, as illustrated by this message from the Presidents of IEC and ISO and the Secretary-General of ITU on the occasion of World Standards Day in 1998: While we usually don't think about standards unless their absence causes inconvenience, it would be extremely difficult in fact to imagine daily life without standards. Take any scenario, and you will be amazed just how many standards support that aspect of everyday life. From the moment you wake, throughout the day, standards in some form are helping to shape your day, to make it easier, more comfortable, safer, and just more convenient. Imagine, for example, not being able to withdraw money from an automated telling machine (ATM) because your bank card is too big to fit in the slot; imagine batteries that will not fit any of your electrical. ISO for quality education is to achieve, improve and sustain quality education, to gain the confidence of customers, to encourage creativity, to improve products/services continually, to achieve students' delight, to achieve global competitiveness, Products/services work better and last longer. International Organization of Standardization (ISO) is the specifies requirements for a management system for educational organizations (EOMS) when such an organization:

- a) needs to demonstrate its ability to support the acquisition and development of competence through teaching, learning or research;

b) aims to enhance the satisfaction of learners, other beneficiaries and staff through the effective application of its EOMS, including processes for improvement of the system and assurance of conformity to the requirements of learners and other beneficiaries.

Any eight principles need to apply quality management which aims to improvise the performance of the system for the process to take place with suitable development of sustainable effectiveness. The eighth principle of the management in question is (www.sgs.es): 1) focus on customer 2) Leadership 3) involvement of all those 4) approach to process 5) systems approach to Continuous Improvement management 6) sustainable improvement 7) Approaches the fact as the basis for the taking decision 8) cooperation of mutual benefit with suppliers

D. Management Organization

Organizational performance assessment is a practice-based framework that builds on the synergy between planning and evaluation and results in the discernment of impact and value. In 1996, a brochure announcing a very different kind of library conference made its way to desks throughout research libraries. —Living the Future: Process Improvement & Organizational Change at The University of Arizona Library¹ was the most intriguing conference title in ages. Approximately 130 librarians attended presentations given by more than 60 Arizona staff and consultants who had been responding to this challenge from Dean of Libraries Carla Stoffle: —If we were creating an academic library today, knowing what we know now, how would we organize ourselves and our work activities to ensure that the library is actively contributing to the achievement of institutional goals? [2]. Stoffle and colleagues advocated that: Libraries must ... build into their organizational structures and their approaches to work, the ability to identify, anticipate, and quickly respond to constantly changing customer needs ... they must be ready to abandon formerly successful approaches to work, strategies, processing systems, services, and products that do not continually prove their value to customers. ... A fundamental rethinking of the mission, values, and assumptions under which library personnel work and plan is necessary. [3]. There are organizations in every sector whose long-term performance is better than comparable organizations. These are the organizations that lead the way and where you would, no doubt, like to work. The five major performance organization factors are: Research highlighted that these five factors apply to every country, sector, and type of organization (listed on the stock market, family business, large, small, profit, non-profit, etc.) The performance organization framework Management Quality Openness & Action Orientation Long-Term Orientation Continuous Improvement & Renewal Employee Quality

The performance of the Organization as defined above are influenced by many factors, in which all of these factors should be considered when managing, measuring, modifying and appreciate performance [4,5]:

- 1) Personal factors: personal skills, confidence, motivation, and commitment.
- 2) Factors: the quality of leadership encouragement, direction, and support provided by the Manager and team leader.
- 3) Team factors: the quality of the support given by colleagues.
- 4) Factors the working systems and facilities (labor instruments) provided by the organization.
- 5) Contextual factors (circumstantial): pressure and changes in the internal and external environment.

III. METHOD

In survey research, independent and dependent variables are used to define the scope of the study, but cannot be explicitly controlled by the researcher. Before conducting the survey, the researcher must predicate a model that identifies the expected relationships among these variables. The survey is then constructed to test this model against observations of the phenomena.

A. Sample Selection research

The population of this research are educators and produce educators as well as students in all courses in Graduate, State University of Surabaya. Of the population above the swab with nonprobability sampling technique with a purposive sampling sample determination, i.e., determining the sample based on certain considerations. Particular consideration is the respondents are deemed to understand and be able to translate the Internal Quality Assurance system and quality management system of ISO 9001:2015 — the number of samples in the study as many as 42 respondents. [6] stated that a decent sample size used in the study are between 30 to 500. Therefore, the number of samples specified respondent 42 in this research already eligible feasibility total sample representative, that represents the population in doing further research and analysis is done.

B. Data Collection Techniques

Direct Observation Many researchers prefer systematic, direct observation of behavior as the most accurate and desirable method of recording the behavior of children. Using direct observation, the investigator observes and records the behaviors of the participants rather than relying on reports from parents or teachers. Observational techniques vary on several dimensions. Amount of Detail. This dimension goes from global summary information (such as overall ratings based on the whole session) to moment-by-moment records of the observed behaviors. The questionnaires are designed to answer questions concerning the respondent's understanding about Internal quality assurance system, International Organization of Standardization ISO 9001:2015, and the performance organization in State University of Surabaya. Indicators of Internal Quality Assurance System variables, variable ISO 9001:2015 quality management system and also the variable performance of State University of Surabaya, measured using the ordinal scale according to the Likert with a choice of answers "very not agree "(score 1)," disagree "(score 2)," neutral "(score 3)," agree "(score 4) and" strongly agree "(score 5). Furthermore the choice of answers in a questionnaire given rating on a fifth alternative answers.

C. Analysis Data Techniques

This research data analysis using Partial Least Square approach (PLS). Structural equation model is PLS (SEM) based components or variants (variance). According to [7] is an alternative approach to PLS shifted from SEM-based covariance approach be based variants. SEM kovarian-based General test of causality/theory while PLS more predictive model. Analysis of structural equation modeling (SEM) with a 3.00 version of PLS WARP program used to test the hypothesis. Statistical analysis tool was chosen because it has many advantages [6-9]. First, SEM-PLS according to this research model that uses a variable that cannot be measured directly (latent variables) and has been taking into account the measurement error. Second, the analysis of SEM can simultaneously test multiple dependence as in this research model. Third, component-based SEM (PLS) can be a fairly complex model mengestimasi with small sample size.

IV. RESULTS

From the results of statistical tests show that the direct effect of the model in figure 1. illustration the internal quality assurance system that affects the organizational performance of 0.38 and statistically significant at the 5% level. This means internal quality assurance system of the statistically significant effect on the performance of the Organization, namely the better internal quality assurance system then the organizational performance, the better. The value of the coefficient of determination (R^2) showed that the variance organizational performance could be explained by the internal quality assurance system of variance amounted to 42%. From the results of the test statistics also showed that the quality management System, ISO 9001:2015 effect on organizational performance. On the model of direct effect in the picture below indicates that the quality management system of ISO 9001:2015 effect on the organizational performance of 0.29 and statistically significant at the 5% level. This means the ISO quality management system 9001:2015 statistically significant effect on the performance of the organization that is the better the quality management system of ISO 9001:2015 then the organizational performance the better. The value of the coefficient of determination (R^2) showed that the variance organizational performance could be explained by variance ISO 9001:2015 quality management system amounted to 42%. We can see illustration in figure 2. Explain the results of statistical tests

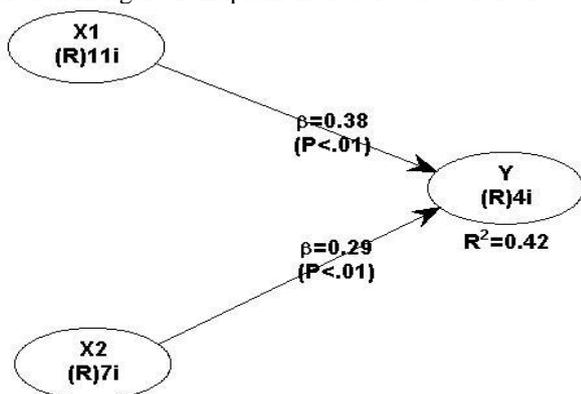


Figure 2. The results of statistical tests

Test result statistics show that Internal Quality Assurance System (SPMI) effect on organizational performance. Internal Quality Assurance System (SPMI) is seen as one of the solutions to address a variety of problems in postgraduate, the University of Surabaya Country in particular and the higher education in Indonesia in General. Also, the SPMI is considered able to answer the challenges of higher education. The purpose of SPMI is maintaining and improving the quality of higher education in a sustainable way, which is run internally to realize the vision and mission, as well as to meet the needs of stakeholders through the holding of tri dharma College. It can be implemented internally by PT is concerned, controlled and audited through the accreditation activities run by the national accreditation Agency (BAN) College or other institutions externally. So the obyektifitas assessment of the maintenance and improvement of academic quality on a regular basis.

V. CONCLUSION

Based on the above exposure then it can be inferred that there is a significant influence over the implementation of Internal Quality Assurance System and quality management system of ISO 9001:2015 Towards organizational performance Graduate, Unesa. Therefore, the required high commitment from the leadership of the institutions that can drive the entire process under its responsibility to Guarantee Systems adapted to the needs and standards of Internal quality processes ISO 9001:2015

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