Continuous Quality Improvement Management Models at Private Higher Education

Silmi Amrullah, Amalia Octavianty, Nur Aedi
Educational Departemen, School of Post Graduates
Universitas Pendidikan Indonesia
Bandung, Indonesia
silmi.amrullah@upi.edu, amelia_octavianty@yahoo.co.id, nuraedi@upi.edu

Abstract—This research entitled "Continuous Quality Improvement Management Models at Private Higher Education" is aimed to introduce a model of sustainable quality education which lies on higher education databases that are used as a source of information and a data base-based management system. This qualitative descriptive approach applied research and development (R & D) as an approach and strengthening of the cases studied. The data were gained from private universities under the auspices of the coordinator of regional IV private universities (Kopertis) which were based on some considerations, the working area, experience and the expertise of the participants. The results of this study indicate that the governance system in private universities under the coordinator of private institutions (Kopertis) still needs improvement, especially in the management of data and information for the process of continuous quality improvement.

Keywords—continuous quality; improvement; higher education

I. INTRODUCTION

Higher education governance is a systematic activity in planning, structuring, reforming and developing higher education towards independence in policy making that has experienced significant and perceived obstacles both by higher education managers as direct policy makers and by the coordinator of higher education as coordination. In the development of higher education. As for the constraints are: (1) weak data information system by universities; (2) less systemic institutional coordination; (3) the low motivation to make significant changes by both institutions of higher education and coordination of private universities (Kopertis). The impact of the existence of the problem, then caused an error in communication related to the improvement of the quality management of higher education in question. This research is considered as something new because it presents a research model that seeks to combine individual database software of web-based Private Higher Education (PTS) organizations that are integrated with individual private universities web with consideration of the discovery of several thoughts as research products, including: (a) The policy model in thinking about the governance system for the continuous improvement of the quality of PTS organizations based on database; (b) Policy Model in the thought of implementing sustainable quality improvements at the PTS level of the organization as a sub-system of sustainable quality improvement governance at the Kopertis level; (c) Web-based database software / continuous quality database design model integrated with the web PTS as a support system (G-CQISO Software); (d) Implementation of a sustainable quality improvement governance system at PTS organizations at the level of coordination of private universities (Kopertis).

As stipulated in the higher education law, institutions of the level of coordination of private universities (Kopertis) have an obligation to supervise, evaluate, and provide assistance in the form of facilities, advice, direction, and / or guidance to higher education units or programs according its authority in education quality assurance. In an effort to realize higher education legislation, education providers at the Kopertis level in West Java still feel the need to have an accurate data and information in determining long-term planning that can be a reference in the process of improving the quality of education on an ongoing basis or for program implementation. higher education program which is the target area.

The data and information are expected to provide convenience in all levels of Kopertis Region IV West Java in achieving its goals by arranging programs and activities in an integrated, directed and measurable manner. In addition, a benchmark and base line is needed to improve the quality of sustainable education from year to year [1].

The problem that occurs at this time is that there is a gap between data and information provided by PTS organizations to Kopertis with real conditions in the PTS organization itself, so that in this Chase it requires an active action from the organizers of higher education, especially in the field of quality improvement. It will greatly affect the quality of related higher education. This phenomenon often occurs due to several reasons, including: 1) Many PTS who want to look superior from other PTS so that they provide information that sometimes does not in accordance to the real conditions; 2) Kopertis may only monitor certain conditions of the PTS. If the PTS is superior in several fields then the conclusion is superior to other fields; 3) Monitoring conducted by Kopertis on PTS may not be done periodically; 4) The information reported by PTS to Kopertis may be sufficient so that there is no data checking; and 5) Maybe there is no integrated system for processing data and information in a PTS.
With the problems of data and information that are not appropriate at the level of the institution mentioned above, it is certain that planning for quality improvement in private higher education will experience significant obstacles, especially in policy making by the two related institutions, namely universities and the coordination of private universities as higher education management body.

According to Murdick in Gaol it is said that “information consists of data that has been retrieved, processed, or otherwise used for information or inference purposes, arguments, or as a basis for forecasting or decision making” [2]. Which means that information consists of data that has been obtained, processed / processed, or otherwise used for the purpose of explanation / explanation, description, or as a basis for making predictions or making decisions. This shows that the position of information is very important in an organization, including in higher education, but back to the information system organizers, if they convey information in real time without any manipulation, the decision making becomes in accordance to the needs, and vice versa.

With the aforementioned problems, it can also be ascertained that the level of fulfillment of the National Education Standards (SNP) by universities as evidenced by the PTS accreditation results are still needed a review to remove the gap with the real conditions of the PTS organization.

The general purpose of this study is to create a formulation that is useful to build a system of governance of sustainable quality improvement in universities that are the responsibility of education providers with individual database software web-based higher education organizations that are integrated with the web of higher education units with the coordination of private universities (Kopertis). While the specific purpose of this study is to obtain some findings which include:

- Governance system in private universities in West Java.
- Quality management at private universities in West Java.
- Management Information System at private universities in West Java.
- Governance Model for Improving the Sustainable Quality of Private Universities by coordinating private universities (Kopertis) in West Java.

Based on the above problems, there are some crucial needs, especially in efforts to improve the quality of education that is sustainable in the Kopertis region of West Java, namely: First, the existence of governance conducted by Kopertis in guaranteeing and obtaining accurate data and information. Secondly, the existence of an information system that can record the development of each data and information that has been pursued by its accuracy as the basis for further planning which is a manifestation of the continuous improvement of the quality of higher education.

Referring to these needs, then what will be examined in this paper is the need for a governance model that can integrate efforts made by Kopertis Region IV West Java and national development goals with efforts made by PTS organizations in the process of continuous quality improvement as an embodiment of the implementation of the education quality assurance system.

II. METHOD

The method used in this study is qualitative and quantitative methods with the technique of research and development (R & D) approach or development research. In line with the opinion of Sugiyono argues that “research and development methods are research methods used to produce certain products, and test the effectiveness of these products” [3].

This research is to produce a product in the form of a model that will be offered to private universities by using needs analysis and testing its effectiveness in order to function in the user community, especially private universities in West Java.

Data sources in this study consisted of primary data sources and secondary data sources. The data source is all components in private universities in West Java. Starting from the chancellor, the chancellor's assistant, the dean, the dean assistant to the staff or administrative staff and students who are in private universities in West Java.

III. RESULT AND DISCUSSION

A. Result

After extracting data in a representative and systemic manner, here are some findings that the researchers got in the field:

1) Governance system in private universities in West Java:
Private university governance is a system to maintain the effectiveness of the role of constituents in policy development, decision making, and the organization of an independent university. Good governance is clearly visible from five criteria, namely credibility, transparency, accountability, responsibility and fairness. In this study, we must first know the definition of Governance in education, namely the formation of higher education into: (1) education-by-laws, (2) rules and regulations, (3) strategic plan, (4) organizational design, (5) institutional system of management, (6) leadership, and (7) decision making system. Governance is the system by which companies are directed and controlled [4].

Governance is a management system based on tasks and responsibilities, stakeholders’ needs, justice, transparency, accountability and supervision. The governance system runs effectively through mutually agreed mechanisms, and can maintain and accommodate all elements, functions and roles in an organization [5].

In the education system there is an administrative activity called management or management. Management is not only focused on small activities that are only done once, but also management is of a great nature where the leaders or policy holders must have planning as a basis for organizing education programs. In tertiary institutions, a governance is a structure and process that is made based on the decisions of higher education institutions, including the role of certain groups in
the institution and concerning decision-making practices. Higher education as an educational institution is given autonomy to organize the Tridharma of higher education which includes the organization of education, research and community service. The existence of autonomy is a trust given to universities to be more independent in its management, the existence of good governance is also a good feedback from the community.

In an organization, especially Private Higher Education (PTS) organizations, governance is supported by an organizational culture which is reflected in the existence and upholding of rules, procedures for selecting leaders, ethics of educators and education personnel, student ethics, reward and sanction systems as well as service guidelines and procedures (administration, library, laboratory and studio). The governance system (inputs, processes, outputs and outcomes as well as the external environment that guarantees the implementation of good governance) must be formulated, socialized, implemented, monitored and evaluated with clear rules and procedures and accurate data recording in order to be able to accurately map quality at every level or stakeholder in educational organizations [6].

PTS organizational governance should reflect the implementation of good organization governance and accommodate all values, norms, structures, roles, functions and stakeholders' aspirations in the continuous improvement of PTS organizations. PTS organizational leadership must effectively give direction, motivation and inspiration to realize the vision, carry out missions, achieve goals and objectives through a developed strategy [7].

In the governance system of private tertiary institutions in West Java, the field review reflects that in general, the private university governance system in West Java needs to be directed more seriously so as to facilitate universities in conducting innovation and policy making by referring to accurate data information systems. Based on this, it is necessary that governance is not only administrative but develops a responsive attitude in solving problems and high sensitivity to the internal and external environment [8].

2) Quality management at private universities in West Java: Quality management relates to two important things namely quality assurance and quality improvement, quality assurance in the process related to two things, namely quality design and quality assurance while quality improvement is related to two important things, namely audit or assessment and the work team, thus forming a cycle which is called a continuous quality improvement system [9].

Educational quality assurance in the context of higher education is a systemic and integrated activity by educational units or programs, educational unit or program providers, local governments, the Government, and the community to raise the level of intelligence of the nation's life through education. The Education Quality Assurance System, hereinafter referred to as SFMP, is a subsystem of the National Education System whose main function is to improve the quality of education [10].

While the quality improvement (Quality Improvement) is more directed to review and change of design and things that have been planned, so the existence of timework in a system must have the same direction, so quality management is a cycle that moves and moves to continuously make improvements to the highest level of performance. While quality assurance is as generally applicable is a very important thing in quality management where the quality is made and planned and then maintained its consistency to arrive at the customer's hands. The linkages of each element in the chart are quality management as a driver, quality system as a means of transport and then each element [11].

Regarding quality management at private universities in West Java, field data shows that most private universities in West Java have commitments and quality assurance programs and continuous quality improvement programs in the implementation of their education. However, the decision making made in private universities in West Java in supporting these programs is a repeated and routine decision. With this nature, it is feared that it will hamper quality assurance and continuous quality improvement which at the stage of decision making must be supported by accurate environmental analysis.

3) Management information system at private universities in West Java: The Information System in quality assurance of education in Higher Education can use and adapt the development of technology very rapidly, information technology is a field of science whose development is growing rapidly from year to year. Information technology covers the field of informatics engineering which is a science that covers various things such as: computer-based management information systems, LANs (Local Area Networks), MANs (Metropolitan Area Networks), WANs (Wide Area Networks), and the internet.

The implementation of informatics techniques in the field of education is usually related to the use of LAN, WAN, and internet for educational purposes, such as: Siakad (academic information system), Sikeu (financial information system), and others. In general, the implementation of informatics techniques is directly related to the management information system (SIM). The management information system is a computer-based system that provides information to some users with the desired needs of Sagitova [12].

Regarding to the Management Information system at private universities in West Java, the results of the study indicate that most private universities in West Java have management information systems that support the implementation of education in the relevant tertiary institutions. However, in practice this management information system experienced a number of obstacles, including the lack of adequate infrastructure and material design due to lack of funds in its procurement. Besides that, the problem of the culture of "internet blindness" still exists in some academics in private universities in West Java.

B. Discussion

The discussion that will be presented in this study refers to the findings contained in the field, namely about 1) the system of private university management in West Java; (2) quality management of private universities in West Java; (3)
management information systems for private universities in West Java; and (4) governance models for sustainable quality improvement of private universities in West Java.

1) Governance system in private universities in West Java: Paul Morrissey divides Governance into education into [13]: (1) education by laws, (2) rules and regulations, (3) strategic plan, (4) organizational design, (5) institutional system of management, (6) leadership, and (7) decision making system. This is one of the theories that all of its components are the basis for analyzing good governance on the process of improving the quality of education in a sustainable manner.

a) First: that education governance must be based on strong education by laws and apply to the jurisdiction, with this principle we understand the existence of a clear legal basis regarding the obligations of education providers in the process of continuous quality improvement.

Thus the legal basis of good governance in sustainable quality improvement carried out by Kopertis on PTS organizations is a demand that has not been implemented, so in this case the need for a governance system model formulation that can integrate the efforts made by those in the process of continuous quality improvement at the Kopertis level, especially with the system approach, because each implementer of the quality assurance process is a component of the national quality assurance system.

b) Second: that education governance must have clear rules and or regulations and or policies as a process of the stages of each educational obligation at each level, thus the need for a regulation or policy of higher education institutions in regulating the process of continuous quality improvement in a comprehensive system perspective.

Rules or regulations are fundamental to serve as guidelines in carrying out all activities within the institution, with the existence of such rules or regulations as a guide for them to carry out a continuous quality improvement process. Without rules or regulations, it will be difficult for them to carry out every step of the process of continuous quality improvement. As a result, the process of continuous quality improvement will only be done when the awareness of education providers emerges after seeing the quality that must be improved, this will not be done continuously because it is not a work program from PTS.

c) Third: that education governance must have a clear implementation strategy in order to become a benchmark and / or indicator in the process of achieving the objectives, the existence of policies regarding sustainable quality improvement directly requires an implementation strategy of the policy specifically programmable, measurable, and can be done in a system perspective.

d) Fourth: Education governance has the characteristic that the implementing organization / education organizer must be an organization that carries out a clear scenario to achieve a goal of continuous quality improvement or in other words through organizational design stages, in reality PTS organizations have weak organizational designs even the results of the authors' preliminary study and some general research results indicate that there are still many PTS organizations that have less feasible organizational designs and are not even feasible.

As a leader or policy holders must have the awareness to make a clear organizational design stage. This is a guide for them to control all the activities of the institution so that it does not come out of the planned plan. The existence of a weak organizational design that is even unfit will make them difficult in seeing and evaluating programs to support the goals that have been planned in advance. 1) there needs to be a sustainable and integrated quality improvement process policy carried out by Kopertis and carried out jointly, 2) special attention in the form of coaching, training, mentoring, observation, and / or factual joint efforts in designing PTS organizations, 3) the PTS organizational design is describing the quality profile, quality improvement design and the basis for the quality mapping process in the local government.

e) Fifth: private higher education governance must have an education management system (institutional system of management), which specifically focuses on continuous quality improvement. This is important when all efforts made by all elements in the education system lead to the quality of education, but in reality the elements directly responsible for quality improvement have a weak system. So that in this model formulation Kopertis need to formulate a policy that regulates the existence of an implementing team for continuous quality improvement that can integrate the efforts of organizing coordination of private universities (Kopertis) with the education unit level so as to produce accurate data as the basis for improving institutional quality.

f) Sixth: governance of private higher education will be very dependent on leadership in building a good system. This dependence is how a leader in implementing a good governance system so that it can be implemented as a real effort in the process of continuous quality improvement. A leader is very influential in his subordinates in carrying out each task, many found subordinates who are careless or incompetent on duty because the leaders do not have an attitude that cares about their performance.

g) Seventh: private higher education governance must have a decision making system (decision making system), decision making will be strongly influenced by the data obtained from each education provider at each level, if the data is taken or processed as a basis Continuous quality improvement planning is factual, so the continuous quality improvement efforts will have a real impact, but if the plan is based on data that is not in accordance with real conditions, the sustainable quality improvement plan implemented will not feel the difference.

Thus, it is necessary to have a support system for data collection that can raise the real conditions of the conditions of each education provider at each level, in addition to this, it is important to ignite the existing education class, which is also very important in the process of taking decisions that are part of the decision making system. In this case it should be emphasized that the decision-making system is very important by referring to the system approach (input, process, output and
outcome) both in the support system and in the decision-making system, for example in the process of drafting a strategic plan for either KOPERTIS or PTS organizations will refer on data which is the result of joint analysis and carried out together so that it can produce the same increase data which then becomes feedback at the next quality mapping. The benefits derived from the system approach are 1) Integration and alignment of the process will achieve the best results than desired, 2) The ability to focus on the efforts in key processes, 3) Provide confidence to interested parties, such as consistency, effectiveness, and efficiency of the organization. In addition, the use of the principle of a system approach will lead to: 1) Structuring the system towards achieving goals more efficiently and effectively, 2) Understanding the interrelation of the process with the system, 3) A structured approach that can harmonize and integrate processes, 4) Understand organizational capabilities and first make limited resources to be followed up, 5) Target and define how activities are in accordance with the system that must be operated, 6) Continuous improvement through measurement and evaluation.

2) Quality management at private universities in West Java: As explained in the discussion section on quality management, quality management is related to two important things, namely quality assurance and quality improvement, quality assurance in the process related to two things, namely quality design and quality control while quality improvement is related to two important things, namely audit or assessment and work team, thus forming a cycle called a continuous quality improvement system. Based on the findings above, the writer analyzes that the quality management system is very much in a clash, there is an audit or assessment but there is no design and control, or there is a team but the audit and control of quality is done by manipulation or no system it is clear about recording the quality improvement track of a PTS organization. We will be very difficult if we want to know the data that causes the different quality of the output of the year so many years, even if there is an answer based on perceptions, the incident will be very compatible if it occurs in the world of health or in the world of aviation, eating in the future will be very dangerous again if the thing is practiced in the world of education.

The principle of quality management must be applied comprehensively, so as to bring about a real cycle that can be real advantage not even kamuflase or we know that the truth is not good but sometimes proud of the lies, there are several benefits of the application of the principle of continuous improvement, namely 1) The existence of beneficial performance in improving organizational capabilities, 2) Flexible and fast in responding to relationships to change the market or customer needs and expectations, 3) Optimizing the costs and data sources that use leads to a) Organizing a consistent organizational approach to apply continual improvement to organizational performance, b) Providing training and education in the methods and tools used, 4) Making continual improvements in outputs and outcomes, processes and systems as targets for each individual in the organization, 5) Make goals as guidelines and measurements for track continual improvement, 6) Give awards for improvement.

3) Management information system at private universities in West Java: Analysis of Management Information Systems in Good Governance and ICT to be able to develop, the Quality Improvement Team must also adapt and apply the principles of good governance, namely always paying attention to aspects such as: transparency, accountability, responsibility, independency and fairness. Therefore, every quality assurance implementer at the provincial level and at the education unit level must have access to data and information that is fast and appropriate to support performance indicators or performance of education providers in the concept of good governance. Fast and accurate data and information can only be obtained if the education provider utilizes the advantages of ICT in its management system so as to facilitate leaders in the decision-making process (utilization of management information systems).

The role of good governance and the implementation of ICT in decentralized National Education Standards (SNP) is very necessary because with a clean government, decentralization will work well. ICT implementation is also very much needed in all aspects of life including the world of education. ICT implementation is very helpful in education in terms of speed and accuracy, attractive designs, and others. ICT-based learning processes are usually more interesting and more quickly accessed by students, such as: the use of e-learning, learning media, internet use, and others.

In this Chase, the information system model developed in the connection to the process of continuous quality improvement in PTS organizations in the province of West Java is a model formulation that integrates PTS organization data or education units as well as being a data base in private tertiary coordinator (Kopertis) as supporting data in the decision making process and or in the process of mapping the quality of higher education in the relevant region.

Besides that, all PTS organizations can share with other PTS in several required things, recommended and / or handed over to PTS organizations regarding anything other than the required and recommended. In addition, there are some data that are directly connected or directly input from PTS organizations or education units in the continuous quality improvement data processing sub-systems which include 1) PTS Self-Evaluation Data (EDS), 2) EMIS Data, 3) RKS Data, RKT, RKAT, 4) Data concerning the fulfillment of 8 SNPs, 5) Data on Accreditation Results, 6) Data on organization in PTS organizations.

The data input at KOPERTIS level is about 1) Provincial Self-Evaluation, 2) Kopertis Strategic Plan, Quality Improvement Plan, 3) MOPD Results, 4) G-CQISO Team Monitoring Results, 5) Results of PTS Organizational Feasibility Assessment. Furthermore, there are input media for the general public or the public, namely inputs that can be posted specifically for the intended agency and cannot be accessed by other parties except by the adviser and by the agency given the suggestion, this is an important component as
a questionnaire for certain agencies in the process of continuous quality improvement.

4) The governance model for improving the sustainable quality of private universities in West Java: This formulation of a continuous quality improvement governance model is based on studies and analyzes of the governance of the education quality assurance system in the Kopertis environment in the IV region of West Java. The results of the analysis are associated with the management information system so that it can formulate a model of sustainable quality improvement governance in the perspective of educational innovation based on the PTS organization's individual database as follows.

The outline of the stages in this model formulation is the formulation of the PTS organizational quality improvement plan which is prepared based on the pillars of the Ministry of National Education's Strategic Plan Renstra, namely: Increased access and equity of education, Improved quality, relevance and national competitiveness, governance, accountability, and public imaging. The thought policy model in the implementation phase of sustainable quality improvement formulated in this model are 1) the establishment of the CQISO Team as the implementation of sustainable quality improvement governance at the provincial level, 2) Preparation of Quality Improvement Planning in a Kopertis environment, 3) Preparation of Higher Education Strategic Plan, 4) Guidance, training, mentoring, and G-CQISO team observation by Education Specialists / Education Consultants and Educational Academics and or to PTS organizations, 5) Conduct Public Tests and / or assessment of planning feasibility by kopertis, 6) Conducting performance appraisal of Kopertis, 7) Carrying out coaching, training, observation and assistance to the implementers of education quality assurance at PTS, 8) Assessing the feasibility of PTS (institutional self-assessment) organizations, so that the following can be understood as a visualization of the model thoughts in the sustainable quality improvement governance policy.

Output that can be seen by the public on the web are 1) PTS ranking, 2) Accreditation results, 3) PTS achievements, 4) PTS organizational improvement plans; 5) Best practice the process of continuous quality improvement, 6) Satisfaction of web stakeholders and visitors, 7) Coaching activities for continuous quality improvement, 8) Organizational activities guided by continuous quality improvement, 9) The development of continuous quality improvement at each level. Thus, in the interest of the integration process of the three activities formulated in this model, it is necessary to have socialization, training, coaching and assistance in the use of sustainable quality improvement management information system software at PTS organizations in the Kopertis environment.

IV. CONCLUSION

Based on the concepts, theories, critical studies and analysis of the quality management system as mentioned above, it can be concluded that in the formulation of governance models of organizational quality improvement PTS at the provincial level emphasizes the following main points:

- The governance system in private universities in West Java in general needs to make improvements that lead to good, detailed and documentaries governance.
- Quality management at private universities in West Java has largely had commitments and quality assurance programs and continuous quality improvement programs in the implementation of their education. However, in making decisions made at private universities in West Java in support of sustainable quality improvement programs are repeated and routine decisions.
- Management Information Systems in private universities in West Java, most of them already have a management information system that supports the implementation of education in the tertiary institutions concerned, although improvements in infrastructure and material design must continue to be carried out, in addition to the improvement of the “internet blind” culture problem.

The Governance Model for Sustainable Quality Improvement of Private Universities in West Java can be implemented with the support of appropriate socialization, training, coaching and mentoring in the use of sustainable quality improvement management information system software at the PTS organizations in the Kopertis region IV West Java.

REFERENCES
