

IMPLEMENTATION OF TOTAL QUALITY MANAGEMENT (TQM) IN EFFORTS TO IMPROVE THE QUALITY OF HIGHER EDUCATION (CASE STUDY AT GORONTALO STATE UNIVERSITY)

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ABSTRACT

The study entitled Implementation of Total Quality Management (TQM) in Efforts to Improve the Quality of Higher Education (Case Study at Gorontalo State University) aims to describe (1) the stages of implementing TQM in universities; (2) the quality of Gorontalo State University. The method of this research is qualitative with the type of case study research. Data collection is done by in-depth interviewing techniques to informants and documentation studies. Data analysis techniques through data reduction, data presentation, verification and conclusion. The results of the study were: (1) the implementation of TQM at Gorontalo State University was carried out systematically through the stages of preparation, planning and implementation. In the preparatory stage, universities carry out initial design or internal reinforcement to recognize the potential of Gorontalo State University. Higher education has prepared well to carry out TQM implementation well. At the planning stage, the university has developed a long-term plan for effective management, using the PDCA cycle, namely the plan (plan preparation), do (plan implementation), check (review and evaluation), and act (follow-up completion). At the implementation stage, management or university leaders have realized strategies and policies into action through the activation of the team and the implementation of quality management projects properly. Higher education has established a pillar or acceleration of quality improvement well; (2) the quality of Gorontalo State University as the ability of tertiary institutions to implement the tri dharma of higher education has jumps in quality achievement. The rector of Gorontalo State University has prioritized acceleration of accreditation to support the acceleration of the realization of Leading University. The quality of tertiary institutions has achieved a lot of strategic goals and consistent achievement has been marked by obtaining institutional accreditation (University Accreditation 2018) with A grades, human resources acceleration and increasing professors and doctors, assessment of governance through the ranking of tertiary institutions at 47th rank collaboration with the world's best universities that work together in research, community service, natural resource management, and cultural promotion.

Keywords: Total Quality Management, Quality, Higher Education.

Introduction

In this globalization era, there is a paradigm shift for higher education, from its seminars between universities in making countries between universities among countries. This is among other things the implications of globalization with the free education services, as the driving force. Obtained from universities to be a means to increase competitiveness, the ministry of technology research and higher education has separate targets so that universities in Indonesia can compete with other universities in the world. The breakthrough is to encourage existing universities to meet the qualifications of a World Class University.

Gorontalo State University as one of the leading and leading universities in the East Indonesia region has enormous potential to become one of the universities that have an international reputation (international standards). Gorontalo State University has several conditions that allow it to go international. These conditions include decent human resources. The requirement is not enough, and there are still some things needed such as an international standard curriculum, a standard laboratory, a representative library and other educational facilities. The strategic position of Gorontalo State University towards the World Class University is the ideal of the academicians. Badu (2014) summarizes the vision and mission of the program to make Gorontalo State University the Leading University in the Southeast Asia region in 2035, with one of the stages, namely increasing the capacity of the organization and management of the Public Service Agency. Gorontalo State University adheres to a value system that guarantees adaptive-creative self-development towards insightful versatility. This system is the pillar and commitment to progress in quality.

Based on University Rankings in Indonesia Umetrics Version January 2015 it was announced that for 256 universities, Gorontalo State University was ranked second for the Sulawesi region. UMetrics is created by the Learning Center for World Class University. Meanwhile according to Webometrics, Gorontalo State University includes 47 Indonesian Universities that enter World Class Universities. The results of the ranking are not the only main goal or orientation. The ranking is only a reference, which is one of the international category benchmarks, to assess the extent to which Gorontalo State University has made efforts to internationalize. Similar benchmarks from other ranking institutions can also be used to assess the relative position of Gorontalo State University towards other universities in Indonesia and in the world in terms of internationalization of their education. The achievement of Gorontalo State University has not been separated from the hard work and joint commitment of all the academic community at Gorontalo State University. However, in line with increasingly intense competition between universities, and in its efforts to strengthen the strategic position of Gorontalo State University towards a World Class University, Gorontalo State University is faced with the main challenges in the world of education in Indonesia in the form of the rapidly growing need for management (management) systems. Gorontalo State University is required to continue to develop and improve the quality of the implementation of tri dharma tertiary institutions through the implementation of a planned, directed, intensive, effective and efficient Quality Management (TQM), so as not to compete in the era of globalization.

Theoretical Review

Total Quality Management

The definition of Total Quality Management (TQM) can be described from the three words it has, namely: Integrated (whole); Quality (quality, degree / level of excellence of goods or services); Management (actions, art, how to handle, control, direction). The third series of words gives the meaning of MMT as a management system oriented to customer satisfaction with right first time activities, through continuous improvement and motivating employees (Kit Sadgrove, 1995 in Yamit, 2014).

Yamit (2014: 61) states that, TQM is a management system to improve overall quality towards achieving competitive advantage oriented to customer satisfaction by involving all (total) members of the organization. Whereas according to Salis (1993, p.33) TQM is as a philosophy and a methodology to help manage change, and the core of TQM is a cultural change from the culprit. Furthermore Slamet (2004, p.51) asserts that TQM is a procedure where everyone strives continuously to improve the road to success. TQM is not a set of rules and regulations that are rigid, but are processes and procedures to improve performance. Meanwhile, according to Pulungan (2011, p.7), TQM is one of the organizational

management patterns that contains a set of procedures that can be used by everyone in an effort to improve performance continuously.

ISO 8402: TQM is a management approach in an organization, focusing on quality and based on participation from all human resources and aimed at long-term success through customer satisfaction and providing benefits to members of the organization (human resources) and society. According to Tjiptono and Anastasia (2010, p.4), TQM is an approach in running a business that tries to maximize the competitiveness of an organization through continuous improvement of products, services, people, processes and environment. Sularso (2004, p.23) translates TQM as a customer-oriented approach that introduces systematic management changes and continuous improvement of an organization's processes, products, and services. The process has specific inputs (desires, needs, and expectations of customers), transforms (processes) inputs in the organization to produce goods or services which in turn provide satisfaction to the customer (output). The main goal is continuous service quality improvement.

Total Quality Management in this study is: "a set of stages, processes and procedures for managing the quality of higher education in an integrated and systematic manner in an effort to improve performance continuously with the aim of providing satisfaction to college service users".

The Importance of TQM Implementation in Higher Education

In an effort to reach a strategic position of higher education towards a World Class University, education must be carried out that refers to sustainable quality. For this reason, a management pattern that is based on autonomy is needed, but accompanied by adequate accountability. This will only be achieved if a tertiary institution conducts a self-evaluation regularly before being evaluated by a third party externally, namely accreditation. Regular evaluations in the form of internal audits, followed by "management system reviews" will guarantee that a college can continuously carry out quality improvements, in anticipation of increasingly fierce competition for graduates in pursuing careers in the world of work. In order to carry out continuous quality improvement (continuous), TQM is the right approach. TQM is an activity of thoughts (attitudes, ideas) and practical activities (methods, procedures, techniques) that encourage continuous improvement. TQM as a concept that seeks to implement a world-class quality management system, for that requires a large change in culture and the university's value system.

The Stages of TQM Implementation in Higher Education

The implementation of TQM in higher education is not an approach that is straightforward or the results are obtained in an instant. What's more, the implementation of TQM was systematically directed at establishing the position of higher education as a World Class University. Rivai and Sagala (2009, p.120) state that the TQM system will not occur overnight, but rather the evolution of cultural processes. Because the best way is to start small, build support and record success. Meanwhile Goetsch and Davis (2004, p.233) classify the stages of TQM implementation in more detailed and systematic. The TQM implementation phase is grouped into three stages, namely the preparation, planning, and implementation stages. Each stage consists of several steps, where the time needed for each step depends on the college that implements it. At the preparation stage requires full commitment from top management for the time and resources needed. The preparatory steps consist of: forming a Total-Quality Steering Committee, forming a team, TQM training, compiling a statement of vision and principles as guidelines, compiling general objectives, communication and publications, identifying strengths and weaknesses, identifying supporters and rejecters, estimating employee attitudes, measuring customer satisfaction. At

the planning stage consists of steps to plan the implementation approach, then use the plan / do / check / adjust cycle, project identification, team composition, team training. In the implementation phase it consists of team activation steps, feedback to workers' bodies, customer feedback, employee feedback, modifying infrastructure.

Research Methods

Research Approaches and Types

The approach of this research is qualitative research and the type of case study research that intends to understand the stages of TQM implementation in higher education and the quality of higher education holistically, and is expected to have methodological and applicative functions and can be a solution as an effort to improve the quality of higher education.

Time and Location of Research

The research was conducted for four months, from July to October 2018. The research location at Gorontalo State University taking into account that Gorontalo State University is the leading and largest public university in Gorontalo Province with an A accreditation score.

Research Design

The design of this study is part of research planning that shows the efforts of researchers in seeing whether planned research has internal validity and comprehensive external validity. This qualitative research uses case study research design in the sense that research is focused on one phenomenon that is chosen and wants to be understood in depth in the form of integrated quality management (TQM) in an effort to improve the quality of higher education. Therefore, it requires careful planning to determine the place, participants, and start data collection. This plan is emergent or changes and develops according to changes in findings in the field. The design of this study is presented according to the stages, namely (1) the pre-field stage, consisting of (a) drafting a research study, (b) preparing for research logistics; (2) the stage of field activities, consisting of: (a) conducting data collection, (b) conducting research data analysis and (3) post-field stage, consisting of: (a) conducting research results, (b) writing research reports, (c) publish research results.

Informants and Interview Models

Informants are people who provide information about everything related in research, in this study consisted of key informants and supporting informants. Key informants were the rector of Gorontalo State University for the period 2014-2018, supporting informants, namely the Head of the Learning Development Institute and Quality Assurance. The interview model in this study is interviewing researchers with informants conducted in a directed, free and in-depth manner that was asked to informants and had been prepared in advance by the interviewer as the researcher.

Data Collection

The technique of collecting data in this study was through interviews and documentation studies. The interview technique was conducted to obtain information relating to the problem under study. In this case the researcher wants to know things from the rector of Gorontalo State University and the Head of the Learning Development Institute and Quality Assurance in more depth. The researcher conducts interviews as an effort to get information face-to-face physically and ask questions with the informant. With this technique, researchers act as well as data collection tools. Another case for documentary techniques is the secondary technique in collecting research data, needed to trace Gorontalo State University official documents relating to research problems. Documentation is in the form of writing or notes relating to the problems discussed in the research, namely written

material or objects that are related to certain events or activities. Can be in the form of recording or written documentation such as archives, photos and bulletins / Newspapers / magazines Gorontalo State University.

Data Analysis

Analysis of the data obtained through this research activity was carried out by data reduction, data presentation and conclusion/verification. Data collected at the stage of data collection is so much that data reduction has been done as a selection process, focusing on simplifying, abstracting and transforming crude data into field notes with the aim of sharpening, classifying, directing, removing unnecessary, and organizing data. Thus, researchers can draw final conclusions and verify.

The presentation of the data in this study is a set of information structures about the implementation of total quality management (TQM) in an effort to improve the quality of higher education institutions which gives the possibility of drawing conclusions and taking action. The researcher displays and makes the relationship between variables into a data arrangement that is relevant to the focus of the study. The arrangement of data into information that is concluded and has certain meanings, so that other researchers or readers of research reports understand what has happened and what needs to be followed up to achieve the research objectives. Drawing conclusions is the withdrawal of some information in the form of keywords from each part of the research question, so that researchers find answers to the research questions.

Data Validity

Doubts about the results of the study were overcome by checking the validity of the research data through credibility and transferability. The degree of trust (credibility) is done through (1) triangulation of data sources, (2) checking through discussion, (3) adequacy of references, while the degree of transferability is an attempt to provide an explanation to the reader by explaining the results of the study with detailed explanations, it is clear, logical and rational about the context and focus of research, so that it is easily accepted by others.

Results and Discussion

1. Stages of implementing TQM in universities

The results of the study based on interviews with SQB obtained the following information.

"Our higher education quality assurance or quality assurance is related to the process of defining and fulfilling education quality standards consistently and continuously so that customers get satisfaction. In addition, it is a process to ensure that the quality of graduates is in accordance with the competencies set or promised so that quality can be maintained consistently and continuously improved. In other words, higher education is said to be qualified if it is able to establish and realize the vision of the campus through the implementation of its mission, and is able to meet the needs or satisfy stakeholders, namely the needs of students, the community, the workforce and professionals. Therefore, Gorontalo State University must be able to plan, implement and control a process that guarantees quality achievement. In this context, integrated quality management in higher education is needed for the sustainability of quality maintenance ". (Source: Transcript of interview with SQB in September 2018).

Based on interviews with KM, information was obtained as follows:

"Higher education quality assurance is a systematic activity to improve the quality of higher education in a planned and sustainable manner, preparation, formulation of policies, facilities, implementation, monitoring and evaluation, and reporting of quality

assurance activities at Gorontalo State University. To ensure the realization of the vision, the implementation of the mission and the achievement of Gorontalo State University goals and objectives, it is carried out in the stages of achievement through quality management. In the initial stages of preparation as initial design or internal reinforcement (2010-2014); that is the stage of recognizing the potential of Gorontalo State University. Some of the potential strengths are such as the establishment of an Academic Quality Assurance Agency whose role is increased every time in implementing the Internal Quality Assurance System. Permanent lecturers of professors owned by Gorontalo State University in 2014 amounted to 26 people, 129 total doctors and 464 masters. The infrastructure of academic activities continues to be improved such as Information Technology, lecture facilities, practice and laboratories. At the planning stage, universities have developed long-term plans for effective management, planning through Strategic Plans using the PDCA cycle, namely plan (plan preparation), do (implementation plan), check (review and evaluation), and act (follow up settlement). Through the 2015-2019 Strategic Plan, Gorontalo State University has and will play itself as an agent of culture, knowledge and technology transfer so that it is expected to contribute to the development of culture and the transfer of knowledge and technology to the public and the industrial world. In the end in 2035 Gorontalo State University is expected to be able to act as an agent of economic development. At the implementation stage, management or university leaders have realized strategies and policies into action through the activation of the team and the implementation of quality management projects properly. Higher education institutions have established pillars or accelerated improvements in quality, including the formation and functioning of study study groups in scientific fields in each study program ". (Source: Transcript of interview with KM in September 2018).

The results of the interviews above are reinforced by a review of documentation showing various documents such as the Gorontalo State University Master Plan for Development and the 2017 Gorontalo State University accreditation form where on one of the points in the implementation stage is the quality management of Gorontalo State University.

Based on the findings of the above research it can be seen that in Gorontalo State University the implementation of TQM was carried out systematically through the stages of preparation, planning and implementation. In the preparatory stage, universities carry out initial design or internal reinforcement to recognize the potential of Gorontalo State University. Higher education has prepared well to carry out TQM implementation well. At the planning stage, the university has developed a long-term plan for effective management, using the PDCA cycle, namely the plan (plan preparation), do (plan implementation), check (review and evaluation), and act (follow-up completion) . At the implementation stage, management or university leaders have realized strategies and policies into action through the activation of the team and the implementation of quality management projects properly. Higher education has established pillars or accelerated quality improvement.

The findings above show that the preparation stage, planning stage and implementation phase of TQM implementation are important factors in improving the quality of Gorontalo State University. By preparing thoroughly the implementation of TQM implementation as a management concept in order to improve the quality of higher education institutions, it will improve the ability of Gorontalo State University in carrying out its main tasks and functions to organize quality tri dharma of higher education. In the face of increasingly fierce competition in universities, Gorontalo State University is

required to prepare itself carefully especially in implementing the TQM implementation as a management model that is the reference. At this early stage Gorontalo State University needed a strong commitment from top leaders to strengthen the position of UNG to become Leading University in the Southeast Asia Region. Besides that, it also requires a full commitment from all elements of Gorontalo State University to support the development of Gorontalo State University to become Leading University in the Southeast Asia Region through improving quality, customer orientation, and continuous improvement. At this stage also the preparation of Gorontalo State University vision and principle statements as guidelines that determine the direction of university activities; arrange general goals; communication and publication; identify strengths and weaknesses; identify supporters and rejecters of the implementation of quality management; estimate the attitude of the academic community; and measuring customer satisfaction.

Aside from the preparation stage for TQM implementation, the TQM implementation planning stage is a determining factor for improving the quality of higher education. By developing a long-term plan for effective management, then using the PDCA cycle, namely the plan (plan), do (implement the plan), check (review and evaluate), and act (follow-up completion), it will contribute to improving the ability of universities in carrying out their main duties and functions to carry out tri dharma in higher education. Some important aspects at the planning stage that must be considered by Gorontalo State University management are the identification / selection of the initial project of quality management that is based on the strengths and weaknesses of Gorontalo State University, the personnel involved, the vision and goals, and the possibility of success. Besides that, it is necessary to develop teams whose composition consists of various work units and scientific disciplines.

Meanwhile, the implementation phase of TQM is a process where Gorontalo State University management or leaders realize strategies and policies into action through team activation and the implementation of quality management projects. At this stage an evaluation and control process must be carried out where various activities and performance of Gorontalo State University are monitored, then actual performance is compared with planned performance. At the stage of implementation, TQM requires feedback from the teams responsible for implementing TQM implementation projects to top management, as well as feedback from customers and academics to the implementation team. The most important aspect at this stage is modifying higher education infrastructure such as repairing and changing procedures and processes, organizational structures, recognition programs and achievement awards, and others.

The three stages of the implementation of TQM in the Gorontalo State University mentioned above, are directed as an effort to continually improve the ability of higher education institutions to conduct quality tri dharma of higher education.

1. Quality of college

The results of the study based on interviews with SQB obtained the following information.

"Various future challenges such as the formation of the ASEAN community which have implications for increasing competition among ASEAN countries require Gorontalo State University to produce graduates who are competitive at the ASEAN level and innovative works capable of driving the economy. This challenge encourages Gorontalo State University to continue to improve so that it can compete at the global level. The journey of changing Gorontalo State University institutions shows a tendency for increasing trust of society towards Gorontalo State University, by making Gorontalo State University one

of the chosen universities to gain knowledge for people in Gorontalo Province and other provinces in Eastern Indonesia, such as North Sulawesi, Central Sulawesi, Southeast Sulawesi, Maluku, North Maluku and Papua. In addition to the rapid improvement of institutional aspects, various track records of Gorontalo State University excellence in self-development include: (a) leap in university accreditation status and number of study program accreditation, (b) recognition of research institute performance as evidenced by the status of collage from the trained collage to main collage, (c) the implementation of national strategic collaboration in the 7 in 1 project, (d) the initiator of north-north cooperation, (e) a significant increase in the number of professors and (f) the construction of mosques that function as Islamic broadcasting spots that characterize the Gorontalo Province and its surroundings". (Source: Transcript of interview with SQB in September 2018).

While the information obtained from KM is as follows:

"The step-by-step jump in quality achievement in this case the rector of Gorontalo State University has prioritized acceleration of accreditation to support the acceleration of the realization of Leading University. Although this stage is still ongoing, in the past one and a half years many have successfully achieved strategic goals. Achievements that are consistent with the momatoo stage are, among others, marked by the obtaining of institutional accreditation in 2018 with an A rating. This achievement is also followed by 8 (eight) study programs achieving A accreditation, and UNG Central Library which successfully obtained A accreditation no accreditation A). One of Gorontalo State University the leaps and bounds being carried out to oversee accreditation is the establishment of the 2015 Accreditation and Accreditation Improvement Agency which has succeeded in providing assistance in form preparation and self-evaluation of study programs. As a result, in addition to the ones mentioned above, the number of B accredited study programs from 25 study program to 58 study program, and the number of accredited study program from 26 study program drastically reduced to 1 study program, the number of non-accredited from 7 study program to 0. Increased human resources professors and doctors. In 2017 there were 34 professors, 163 doctors and 457 masters. For the assessment of governance, study program succeeded in showing brilliant achievements through the ranking of universities by the Kemristekdikti from 108 in 2015 to 47 in 2016. Other study program achievements at this stage were creating a partnership with the world's best universities, one of which is Ehime University Japan which collaborates in research, community service, natural resource management, and cultural promotion ". (Source: Transcript of interview with KM in September 2018).

Based on the findings of the above research it can be seen that the ability of higher education institutions in implementing the tri dharma of higher education has jumps in quality achievement. The rector of Gorontalo State University has prioritized acceleration of accreditation to support the acceleration of the realization of Leading University. The quality of tertiary institutions has achieved a lot of strategic goals and consistent achievement has been marked by obtaining institutional accreditation 2018 with A grades, human resources acceleration and increasing professors and doctors, collaboration with the world's best universities that work together in research, community service, natural resource management, and cultural promotion.

Noting the findings of the above research, it can be understood that the implementation of TQM at Gorontalo State University is a systematic process to improve the quality of universities. In this case, the stages of implementing TQM are the efforts of Gorontalo State University to achieve an increase in the quality of higher education. The

strategy implemented by Gorontalo State University ultimately improved performance, productivity, profitability and competitiveness significantly. This view provides a clarity that the implementation of TQM at Gorontalo State University aims to improve the quality of universities. The quality of Gorontalo State University in the implementation of Tri Dharma Higher Education is very important in achieving the strategic position of Gorontalo State University as one of the best world-class universities. The development of Gorontalo State University is very dependent on the quality and productivity of tri dharma colleges.

Conclusion

Based on the findings and discussion of the research that has been carried out, found answers to the main problems that have been described, the conclusion can be drawn as follows:

1. The implementation of TQM at Gorontalo State University was carried out systematically through the stages of preparation, planning and implementation. In the preparatory stage, universities carry out initial design or internal reinforcement to recognize the potential of Gorontalo State University. Higher education has prepared well to carry out TQM implementation well. At the planning stage, the university has developed a long-term plan for effective management, using the PDCA cycle, namely the plan (plan preparation), do (plan implementation), check (review and evaluation), and act (follow-up completion) . At the implementation stage, management or university leaders have realized strategies and policies into action through the activation of the team and the implementation of quality management projects properly. Higher education has established pillars or accelerated quality improvement.
2. The ability of tertiary institutions to carry out tri dharma of higher education has a leap in quality performance. The rector of Gorontalo State University has prioritized acceleration of accreditation to support the acceleration of the realization of Leading University. The quality of tertiary institutions has achieved a lot of strategic goals and consistent achievement has been marked by obtaining institutional accreditation (2018) with A grades, human resources acceleration and increasing professors and doctors, assessment of governance through the ranking of tertiary institutions at 47th rank collaboration with the world's best universities that work together in research, community service, natural resource management, and cultural promotion.

Recommendations

The focus of achievement on the implementation of TQM in Gorontalo State University is to increase competitiveness at the international level. The key indicators that are the focus of achievement at this stage include study programs that receive international recognition / accreditation such as AUN-QA, ABET and ISO certificates, and QS ratings. Therefore, it is expected that the rektor as the head of higher education and the entire academic community will continue to make efforts to strengthen cultural development, network development and main research cooperation with the best universities in Southeast Asia that have an impact on increasing the percentage of joint research so that the research results can increase publications in national and international accredited journals. This joint research should continue to involve students who are directed at developing Gorontalo cultural studies and local wisdom to be introduced globally and sharpen lecturers' innovations in their tridharmanas.

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