

Implementation of Quality Management in Arts and Design Education at STDI Bandung

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ABSTRACT

Quality management is essential to determine the sustainability and image of an organization. However, for some organizations or companies, quality management is unfamiliar due to the lack of understanding and knowledge of applying the concept. Quality management in an organization is a new concept for artists or art workers. It requires adaptation to the conditions and capacities in responding to the quality concept, especially for artists mandated to manage administration in the college of art and design. This paper consists of explanations about the quality management concept, the artist's adaptation to the concept, and the implementation of quality management in the art and design college of STDI Bandung to support its vision and mission. This study provides an overview of the role of quality management where artists or art workers in the art and design college can support the accomplishment of their vision and mission and thus improve the institution's image.

Keywords: *Quality management, Artists, Art workers, Art college*

INTRODUCTION

Every person has a relationship with organizations, either in social or work life. Whenever we receive benefits from an organization, we will have our own assessment of the services or outputs of the organization itself. Any form of organization, like companies, institutions, or facilities, has always been a part of our daily personal life in providing goods and services. For example, we will have good thoughts if the food tastes good when eating at fast-food restaurants. Other examples are we prefer to service our vehicle at workshop A because the service and results are promising, or we prefer supermarket A because the price is more affordable than supermarket B. All of those things are our assessment of the company or organization.

The assessment that we have of a company or organization reflects its quality. The concept of quality management has become an essential part of a company or organization to provide customer satisfaction. According to the quality pioneer Feigenbaum (1986), customer satisfaction is paramount. If a company or organization has a concept of making customers the primary goal and looking for ways to satisfy them, it implements the quality management concept. Quality management ensures that an organization, product, assistance, or service is consistent (Umam, 2020). Quality management must be an essential part of a company or organization to achieve its vision and mission. Good quality management can show the value of an item or service compared to others (Fadhli, 2017).

Quality management is an essential part of all fields, including education. Education is a basic need of the society that demands high-quality management to make graduates from higher education master science and skills, which will be achieved if schools or universities are appropriately managed in line with societal changes (Christianingsih, 2011). To meet society's needs, every educational institution, both school and university must apply the concept of quality management in every aspect. Leadership commitment is vital for the ongoing implementation of quality management. Students, teachers, staff, and leaders (principals, chairpersons, or rectors) will undoubtedly get the benefits. Providing good services in education can also improve the image of the school or college itself. Each school or university will compete to improve its quality of education as a form of response to the dominance of other managed schools or universities (Husna, 2014). Schools or universities that have good quality and performance reflected from their commitment and awareness regarding the importance of quality, initiative, and creativity of the educational institution in improving its quality, and the existence of solid leadership factors and support from the academic community, including parents of students (Kuntoro, 2019).

In realizing quality management in educational institutions, the human resource must first understand the vision, mission, goals, objectives, and plans (both strategic and operational) to achieve VMTS in educational institutions and continuously improve quality management. One of the supporting factors is the ability of human resources to respond to changing and evolving situations and conditions. Human resources are essential in a company or organization (Sunyoto and Burhanudin, 2011, p.1). Through Sunyoto and Burhanudin's statement, we should note that the way each individual manages an organization is unique from one another. It is due to different perspectives from each individual's internal and external factors, such as family background, education, competence, ability, skills, etc.

Universities of arts and design are managed by human resources with the same background, and they are art and design workers. Even though they are similar, they also have different characteristics from ordinary society. In other words, these artists/designers have unique personalities. They are called unique under distinct conditions regarding their daily artistic work. Sigmund Freud claims that writers (and creative workers) have great strengths and obstacles, which at the same time, they have a remarkable ability to smoothen and rechannel, stimulating artistic work (Damajanti, 2006, p. 27). What Freud differed about the artist is worth comprehending, specifically in his personality theory. His theory was developed based on aspects of pleasure, dreams, and free association of Neurotic patients (patients with emotional/mental disorders) (Ibid, p. 29). For example, as summarized by Muhammad Idris (2020), Michelangelo Buonarroti is stated as a person who tends to be narcissistic, eccentric, and bohemian. He is also known as a temperamental and perfectionist.

Now, the question is, how can a quality management process that is so complex be managed by art workers/artists/designers who find it challenging to adapt to many rigid regulations? The doubts about whether an artist/art worker can adapt to many rigid rules in the managerial management of an agency, the author is reminded of an event in the course of the Unitary State of the Republic of Indonesia. History records that Jakarta, the previous capital city of Indonesia, was managed by a painter called Hendrik Hermanus Joel Nuntung from 1964 to 1965. Then, the second question is how can artists or art workers (including designers) develop and improve education quality? In Indonesia, the second question is closely related to the accreditation process from the National Accreditation Board for Higher Education. These questions will lead us to the value of understanding quality management and the art worker's adaptation to managing educational institutions. It is not easy for art workers, but it is also not impossible.

The writer is trying to explain how artists and art workers that manage art and design universities can implement quality management, both administratively and managerially. The output of this attempt, which is the continual improvement of the education quality, can be felt, assessed, and become a consideration and evaluation as mandated by The Indonesian Qualification Framework (IQF). The object of this study is a private university, specifically the undergraduate of design, which is the Indonesian School of Design, located at Jalan Wastukencana No. 52, Bandung

LITERATURE REVIEW

Definition of Management

Management is a process of planning, organizing, directing, and supervising the member's responsibilities and existing resources in achieving organizational goals (A.F. Stoner, 1982). Mary Parker Follet (Tisnawati, 2009, p. 5) explains that management is the art of completing work through support from others. Furthermore, Sofyan Assauri (1997, p. 19) explains that management is a term that has the same principles and functions in providing instructions for carrying out systematic actions in accomplishing the plans that have been set in a practical, targeted, and efficient way, where it can be applied in any kind of field that requires the management implementation. From some insight into the definitions of management above, it can be concluded that management is the art of accomplishing work through planning, organizing,

directing, and supervising that is effective and targeted with the support of its own members to achieve the organization's goals.

Definition of Quality

According to Juran (1962), quality matches goals and benefits. Crosby believes that quality follows what is required, which becomes the level for making formulations. Meanwhile, according to Ishikawa, quality control is producing products that meet consumer provisions that involve quality experts. Quality can also be defined as meeting or surpassing customer needs (Srividadi, 2001). According to Supriyono (2002, p. 377), quality is an assessment of the level of good or bad something. From some of the statements above, it can be defined that quality is an assessment of how good or bad a product or service is that was expected to meet the specific requirements, especially customer needs.

Definition of Quality Management

According to Gasperz (2002, p. 10), quality management is a series of processes that have been documented and implemented following established standards to ensure conformity between processes and products produced with the requirements of consumers or companies. Meanwhile, according to Hadari Nawawi, quality management is an approach that is carried out sustainably to improve quality so that the products produced follow quality standards and have qualified for the targeted audience, especially in carrying out public service and community development (Nawawi, 2005, p. 46). From these definitions, it can be concluded that quality management is a structured process in securing that the product or service produced has quality that meets the required standards by customers and has advantages for society in general. The quality management system is designed to ensure that the organization makes satisfactory actions to achieve the quality level based on customer's needs (Patel, 2021).

Definition of Art

From many definitions from art philosophers, the author has chosen several suitable definitions of art for this research. Soedarso Sp. defines art as a human creation that expresses his internal experiences; the internal experience is then formed beautifully or attractively to stimulate the internal experiences of other humans. The birth of art was not driven by the urge to fulfill basic needs but to complete them (Soedarso, 1988, p. 5). Meanwhile, Ki Hajar Dewantara defines art as "human actions that emerge because of his feelings and are beautiful, to stir the soul of other human feelings (Dewantara, 1962, p. 330)." Furthermore, to Miharja, art is considered as spiritual activities of humans that reflect reality in a creation, which, due to its form and content, has the power to stimulate certain experiences in the spiritual realm of the recipient (Miharja, 1961, p. 17).

Oswal Kulpe (Gie, 1976, p. 66) stated there are several things that are included in the art category based on the response of the five human senses: auditory art (art that can be sensed through hearing, such as music, sound art, and literary arts), visual art (art that can be sensed through sight, such as fine art, drama/role art, dance, design, and architecture), audio-visual art (art that can be sensed through hearing and sight such as dance, drama, and music).

Definition of Artist

The writer focused on the definition by Dr. Mikke Susanto, S.Sn., M.A., in his book *Diksirupa* for the definition of artist and art worker. He stated that an artist is someone with artistic talent who has successfully created and exhibited works of art (painter, sculptor, etc.) (Susanto, 2002). It is essential to further explain the theory of an artist's birth, whether an artist is born or created. There are several clashing opinions on this topic. A book by Dr. Mikke Susanto, S.Sn., M.A. noted that Sigmund Freud argues that artists are creatures who are 'born' as geniuses through his psychoanalytic theory. They are stimulated to be creative when immediate sexual needs cannot be met. Basically, Freud wants to indicate that an artist is born. Contrary to Freud, Social Psychology depicts that individuals are strongly influenced by their environment. Gordon Allport and John Dewey argued that the thoughts, feelings, and behavior of a group would influence a person's thoughts, feelings, and actions, including artists. Everyone's behavior does not just arise because of past influences but is consistently changed by the environment.

Howard S. Becker in his book *Art Worlds* classified artists sociologically into four divisions; Maverick Artists (artists that reclusive and rebellious), Integrated Professional Artists (artists/art workers with rules/conventions/cultural norms and aesthetics that are generally accepted and applicable), Folk Artists, and Naive Artists.

From the definitions, theories of origin, and the classification of artists, it can be concluded that each artist is unique in working and living. Every artist is different from one another and cannot be considered the same, especially in communication and interactions.

Definition of Art and Design Education

Art and Design Education is a cultural process to civilize humans and their human traits (Triyanto, 2014). The basis of art and design education are studies of both theory and practice about the art and design concepts; art is a design with a static position in design work; meanwhile, the design itself is an art application that is rational to convey the art intention (Supandi and Suciati, 2008). To conclude, art and design education is a learning process involving culture to tie humans and their human nature to develop art and design studies both in theory and practice, where art and design complement each other.

The Relationship of Quality Management in Higher Education and the Character of Human Resources in this case Artists

There are 10 (ten) factors that determine Integrated Quality Management in higher education in 2004-2005 determined by DIKTI as the manager of the national higher education of the Republic of Indonesia in Latuconsina (2018), which can be explained as follows: (1) Learning Process; (2) Study Program Curriculum; (3) Human Resources; (4) Student Affairs; (5) Infrastructure and Facilities; (6) Academic atmosphere; (7) Finance; (8) Research and Publication; (9) Community Service; (10) Governance. One of the factors related to this study is Human Resources. Every human resource certainly has an important role in carrying out and succeeding quality management in higher education. The human resources involved in higher education are education staff and lecturers. Even though lecturers and education staff are the parties that carry out the educational service process, they are customers too, because if the institution is advanced, they will also benefit (Latuconsina, 2018). However, the character inherent in human resources is an

important part that cannot be separated, not only referring to performance but also being an important part. As in an artist who is entrusted with managing quality management at a college of art and design. Its distinctive character must be adapted to the quality management approach that will be used. Of course adaptation will be carried out but the quality of education is guaranteed with the unique character of the artist in terms of managing the quality of education both administratively and academically. The discovery of a quality management model for human resources who have characters like artists needs to be developed.

RESEARCH METHODOLOGY

For the first phase of the research, the library research method was chosen to understand the concept of quality management further. It starts with searching for references to scientific articles regarding the concept of quality management in general and in education and other studies related to art and design. Researchers also gather additional data about existing conditions at STDI Bandung, which is presented in qualitative and quantitative data. Researchers used keywords related to the research discussion in looking for article references.

The data search started by looking for reference sources from Google Scholar (26 December 2021) by entering the keyword "Quality Control" from 2011 to 2021, which resulted in 1,620,000 articles discovered related to the topic. Researchers then used the different keyword, "Quality Management," which resulted in 97,000 articles being discovered. From these data, the researcher took several articles from the search results, both articles from international and national journals that were relevant to the researched topic.

FINDINGS

The data collection and analysis conducted in the STDI Bandung environment shows that STDI Bandung is a higher education institution that has been engaged in art and design since 1995 and has produced around 250 graduates in design with 2 (two) leading study programs: Interior Design and Visual Communication Design and Fashion Communication Design (a specialization from the Visual Communication Design study program). It has 10 (ten) permanent lecturers that have structural positions and 8 (eight) academic staff helping academic activities in STDI Bandung. Among the existing organizational structures within STDI Bandung, an Internal Quality Assurance Institute or LPMI manages quality management performance. Since 2015, the unit has already developed SPMI (Internal Quality Assurance Standard), which changed and improved even more in 2021 before the Institutional Accreditation by BAN-PT. To ensure internal quality, LPMI evaluates the level of satisfaction of students, lecturers, education staff, and stakeholders through questionnaires distributed at the end of each semester which was then calculated and assessed.

Table 1 Quality Audit Results in the 2019-2020 Academic Year

Quality Audit Cluster	Quality Audit Results	
	Results	Predicate
Learning Process	3.09	Good
Lecturer Performance	3.07	Good
Thesis Supervision	3.32	Good
Facilities and infrastructure	2.72	Enough
Research Performance	1.09	Not enough
Community Service Performance	1.40	Not enough
Financing	2.91	Enough
Performance of Education Personnel	2.93	Enough
Governance, Leadership, and HR management	2.41	Enough
Academic and non-academic services	2.87	Enough
Graduate	3.11	Good
Partnership	3.81	Very good

Source: Results of AIPT STDI Bandung Team 2021

The table above shows that the average of the twelve parameters of the quality audit is 2.73, which means that it has an "enough" predicate. Therefore, it is necessary to improve the quality of the STDI Bandung through quality management, which must be supported by all levels and units at STDI Bandung.

STDI Bandung has been measuring its quality value based on evaluations from LPMI as an internal institution and BAN-PT as an external institution that provides an assessment through the accreditation process. BAN-PT has set 9 (nine) new standards for the institutional accreditation process. For the study program accreditation process, STDI Bandung is still following the 7 (seven) standards that were previously set before changing to 9 (nine) standards. STDI Bandung formed an Ad Hoc team to do the reaccreditation process, which was led by the Head of LPMI and several structural members by filling out accreditation instruments divided according to their field of work.

Table 2 STDI Bandung Accreditation Results

Name	Level	Accreditation Rating	Certificate of Accreditation Number	Accreditation End Date
Institutional Accreditation	PT	Good (260)	480/SK/BAN-PT/Ak-PPJ/PT/V/2021	20 May 2026
Visual communication design	S-1	B (324)	1088/SK/BAN-PT/Akred/S/IV/2019	23 April 2024
Design interior	S-1	B (310)	2459/SK/BAN-PT/Akred/S/IX/2018	4 September 2023

Source: Board of National Accreditation for Higher Education

Based on the accreditation assessment table from BAN-PT, there are several weaknesses or things that need to be improved in the quality of education at STDI Bandung, such as the lack of research by lecturers, many lecturers that do not have a minimum functional lecturer position (Expert Assistant), the building appearance does not represent the campus that focuses on design, the lack of documentation on community service activities, the lack of cooperation between institutions (especially in research), the

inadequate information system infrastructure, and the low number of new students. However, besides these weaknesses, there are also good assessments of STDI Bandung, such as a distinct, unique, and friendly academic atmosphere, a good, unique, and up-to-date art and design curriculum, and qualified and competitive graduates. Through accreditation assessment, STDI Bandung must improve the quality of its education through a quality management approach. A high accreditation value will be a bonus when STDI Bandung has good quality management.

STDI Bandung Management Condition

The composition of human resources in Sekolah Tinggi Desain Indonesia shows that the number of artists/art workers involved in managing the organization is dominant. This unique internal condition will result in differences from other universities in organizational and communication styles. This unique dynamic is not without challenges and threats, and it may even tend to be bigger. It requires special techniques to ensure appropriate coordination and implementation of organizational quality management, starting from the common perception/point of view. Adaptation, communication, and tolerance need to be carried out continuously until it reaches a point of balance. And this is where the commitment between artist leaders and non-artists assistants is required.

It raises the question, "What kind of adaptation, communication, and tolerance needs to link these two different parties?" since it is well known that art workers often avoid formal, strict, and rigid circumstances. They prefer to join into an environment that is fluid, friendly, and full of kinship. The writer notices that the artists use several communication styles to manage the campus and achieve this situation simultaneously. However, the author will only talk about two dominant styles used.

First, non-formal communication styles (they are not restrained by time, place, or circumstances), accompanied by various kinds of treats/snacks, including packs of cigarettes to glasses of coffee. In STDI, even though the coordination and communication are carried out informally, the discussions are still of high quality. They also discuss the organization's vision, mission, goals, objectives, and/or other topics related to the Tri Dharma of Higher Education.

The second is the intertextual communication style (Kristeva, 1980). Intertextuality in the context of management and communication style that the writer means here is that artists use various texts or other aspects in conveying or coordinating something. For example, when students have difficulty paying tuition fees, artists will express it by taking examples/analogies ranging from literary works (whether it is novels, short stories, or poetry), Indonesian Old Comics, music history, philosophy, etc. The second is the intertextual communication style (Kristeva, 1980). Intertextuality in the context of management and communication style that the writer means here is that artists use various texts or other aspects in conveying or coordinating something. For example, when students have difficulty paying tuition fees, artists will express it by taking examples/analogies ranging from literary works (whether it is novels, short stories, or poetry), Indonesian Old Comics, music history, philosophy, etc.

Quality Management Approach – Deming Cycle

From the data, the researchers attempted to design a quality management approach in the STDI Bandung to improve the quality of education and achieve its vision and mission. Besides the quality approach through BAN-PT accreditation, STDI Bandung can use other quality management approaches adapted to their conditions and abilities from the quality concept of the quality pioneers. STDI Bandung can start by following the Shewhart cycle or the PDCA cycle (Plan, Do, Check and Act), which Deming then completed by adding Analyze in Rachman (2020).

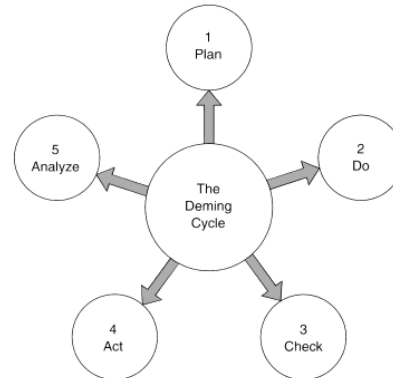


Fig 1 Deming PDCA cycle

Source: Goetsch, David.L & Stanley Davis (2014, p.9)

STDI Bandung can adapt the cycle with several steps : (1) Research the quality of existing education and benchmark of similar universities to evaluate and plan future programs; (2) Develop and socialize the quality improvement program that has been designed; (3) Supervise the improvement program whether it is following what has been designed; (4) Implement the improvement program in every unit and field in the organization; (5) Through LPMI, conduct analysis and evaluation of the results of the quality improvement program.

Quality Management Approach – 10 Juran's Step

Besides applying the Deming cycle, STDI Bandung can take another approach, called Juran's 10 steps (Yarmen, 2016), which explains that quality is related to customer satisfaction and dissatisfaction with the product, which in this case, the educational service provided by STDI Bandung. Juran also believes that quality improvement can start with improving the smallest things in the organization. The researcher has designed steps adapted from Juran's 10 (ten) steps: (1) Encourage leaders and all structural levels to be aware of changes and improvements in art and design education quality at STDI Bandung; (2) Determine the objectives of quality improvement; (3) Coordinate to achieve goals; (4) Provide training to improve understanding of quality and quality improvement concepts to every human resource; (5) Study cases on problems that often occur to find solutions; (6) Conduct evaluations in the form of measurable reports; (7) Give appreciation for every improvement and progress; (8) Publish the results of the improvement; (9) Calculate the assessment results; (10) Make a continuous quality improvement program every year to be a routine program.

Quality Management Approach – Total Quality Control Feigenbaum

LPMI STDI Bandung can evaluate and improve the existing SPMI to be compiled and improved furthermore following Feigenbaum's concept of Total Quality Control, where the concept has a management tool with 4 (four) steps to adapt: setting SPMI standards that have been compiled and improved, assess the institution performance following the SPMI standards, evaluates the institution performance if it is not following the standards, and finally plans to improve the standard.

Quality Management Approach – Crosby's Quality Vaccine

Another approach that can be adapted is Crosby's Quality Vaccine, initiated by quality pioneer Philip Bayard Crosby (Rahman, 2020), which consists of determination, education, and implementation. In the STDI Bandung determination process, it is possible to filter or select the things that might be the inhibiting factors for quality improvement. To implement Crosby's Quality Vaccine, according to Crosby, the organization must provide 5 (five) elements: integrity (the STDI Bandung leaders firmly maintain quality improvement in all parties), system (a series of activity procedures or SOPs that are prepared and understood by all STDI Bandung human resources through education or training), communication (with the same understanding of the concept and essence of quality, the communication will be sufficient), operations (routine activities for the sustainability of the organization), and policies (the STDI Bandung leaders conduct direction and coordination in improving quality education firmly and without hesitation).

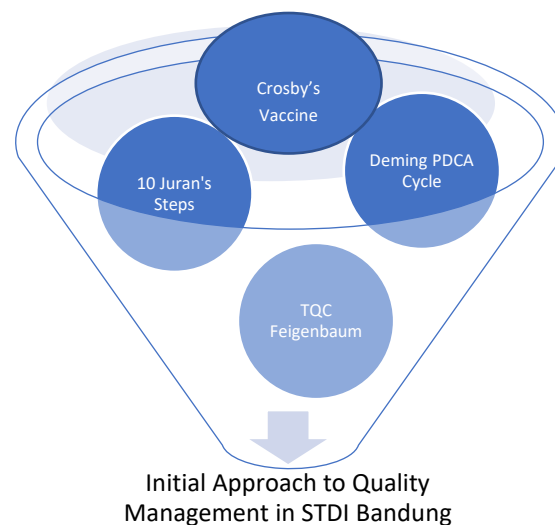


Fig 2 Initial Approach to Quality Management in STDI Bandung

Source: Results of of Quality Management Approach Adaptation

Quality Management Approach – ISO 9000 Seri

After STDI Bandung successfully applies the quality management concept, they can measure the quality through approaches such as ISO 9000, Total Quality Management, Six Sigma, etc. A study by Zakiyah (2005) concerning Sustainable Growth with ISO 9000 Quality Management System in Improving

Industrial Competitiveness explained that ISO 9000 is the most popular quality system standard published by the International Organization for Standardization (ISO) in Switzerland, which was developed to support organizations of all types and sizes for effective quality management. The study also explains that the ISO 9000: 2000 can be used consists of 3 documents with different functions: (1) ISO 9000/SNI19-9000 is a quality management system consisting of basics and vocabulary related to quality management; (2) ISO 9001/SNI 19-9001 is a quality management system that contains requirements where an organization can prove its competence by meeting the required requirements by following the customer's needs and the applicable rules to increase customer satisfaction; (3) ISO 9004/SNI 19-9004 is a quality management system with guidelines for performance improvement that focuses on the effectiveness and efficiency of the quality management system through improving organizational performance, customer satisfaction, and other parties.

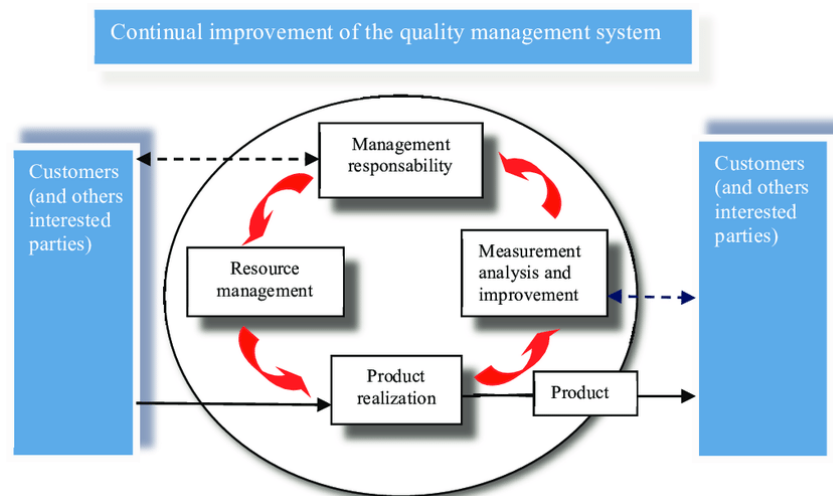


Fig 3 ISO 9000 Quality Management Approach

Source: International Organization for Standardization, 2011, The ISO 9000 family – core standards, in Pavel & Sarbu (2014)

Based on the three documents, STDI Bandung should learn all the requirements and systems in the ISO 9000 and adjust them to their own conditions and capabilities. STDI Bandung must be aware of the implementation of ISO 9000 since the number of companies that have received ISO 9000 series certification is increasing (Fitri & Ismanto, 2018).

Quality Management Approach – Total Quality Management

TQM (Total Quality Management), according to the International Organization for Standardization or IOS (Kurniawaty, 2012), is a management approach implemented in an organization with the main focus on quality backed by the participation of members of the organization to achieve long-term success with customer satisfaction and benefits for the organization and society. According to Tjijtono (1995, p. 4), TQM is a quality approach to running an organization or company by maximizing the organization's competitiveness with continuous improvement programs in products, services, people, processes, and environment. Based on the previous statements, TQM is a quality management system approach that requires the support and participation of all elements and members of the organization to achieve organizational goals by focusing on customer satisfaction and organizational competitiveness, and

continuous improvement processes. TQM has 8 (eight) main elements based on accurate.id (Ismail, 2020): (1) Focusing on Customers, customers are parties as determinants in assessing a product or service to achieve the needs and the expected level of quality; (2) Overall Employee Engagement, employees are an essential part of the company's or organization's resources to achieve the organization's goals; (3) Focusing on Process, the process must also be the priority which starts from the input (supplier) to be processed and becomes the output sent to the customer; (4) Integrated System, an integrated system is needed to link the vision, mission, goals, and policies and be understood by all HR in the organization or company. (5) Strategic and Systematic Approach, this approach is essential in carrying out strategic planning or strategic management to achieve the company's vision and mission that focuses on the concept of quality for all parties in the organization; (6) Continuous Improvement, these activities are carried out to analyze and evaluate to improve in achieving company goals and meeting the expectations of all parties; (7) Decisions based on Facts, the process of data analysis and retrieval must be carried out continuously so that the decisions and actions taken are correct; (8) Communication, communication must be built, and every progress and change must be communicated to everyone to stimulate enthusiasm and increase motivation in the company's progress.

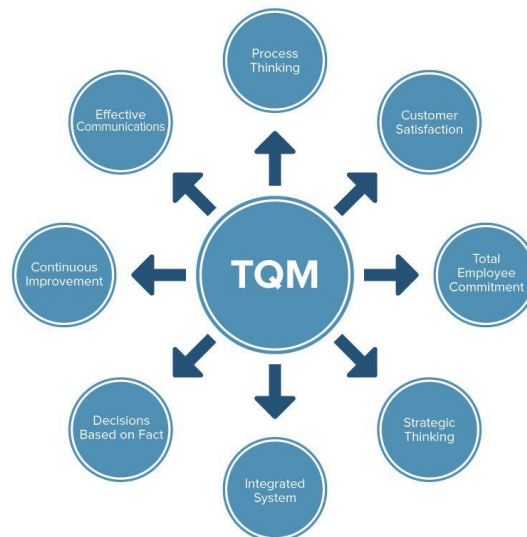


Fig 4 Total Quality Management

Source: <https://kledo.com/>

STDI Bandung can implement TQM that has helped improve the quality of education in Indonesia and is able to compete internationally with changes in service quality, more motivated educational staff, increased productivity of educational institutions, and quickly resolved problems (Nilhuda et al., 2019). Management support is essential in implementing TQM, where management must make policies and programs more effective to improve the organization's HR quality and performance following the indicators of TQM itself (Anam, 2014). The success of TQM implementation can be demonstrated by three aspects, the design of quality improvement goals, implementation of TQM principles, and other supporting components in the Quality Management System (Supriyanto, 2011).

Quality Management Approach – Six Sigma

Another approach that STDI Bandung can use is Six Sigma, a comprehensive and flexible framework for continuous improvement with a uniqueness where the customer's need controls the system (Samadhi et al., 2008). Six Sigma has a DMAIC cycle that is based on *accurate.id* consists of Define, Measure, Analyze, Improve, Control (Ismail, 2020). (1) Define (plan goals, purposes, and processes); (2) Measure (assess the problem and evaluate the measurement method); (3) Analyze (analyze the efficiency and effectiveness of the process in achieving the goal); (4) Improve (identify the improvement process and develop it); (5) Control (measure the performance of the strategies that were previously implemented)

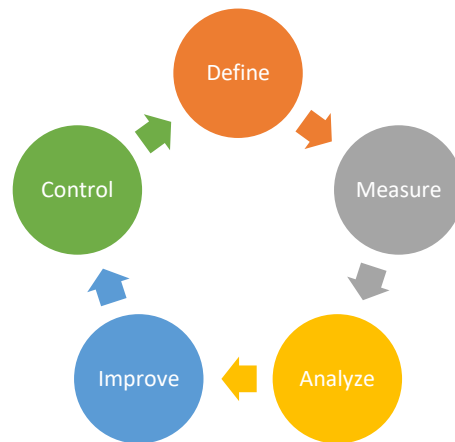


Fig 5 Six Sigma Model

Source: Six Sigma Model Adaptation Results

Discussion

Various approaches of quality management designed to be applied in the arts and design education of STDI Bandung added value in improving the quality of education apart from existing quality management tools for education, the APT 3.0 and APS 4.0 instruments from BAN-PT. Instruments and their indicators from BAN-PT should be the leading compass in improving the quality of education through the accreditation process. For example, in the AIPT instrument, there are indicators in standard 1 related to the Vision, Mission, Goals, and Targets. Management must adjust these indicators with the assessment criteria by BAN-PT to increase the accreditation score. The vision must have its uniqueness and characteristics compared to other universities, the mission must have proper and directed steps, and the goals and objectives must follow the vision and mission. This example, in the end, becomes an additional value for the quality assessment of the STDI Bandung.

The concept of the quality management approach that has been described can be adapted to the dominant arts and design fields seen in the STDI Bandung environment. For example, the application of the PDCA principle can focus on improving the quality of art and design education through updating the curriculum in accordance with the current development of the art and design atmosphere, the application of Juran's 10 steps principle can be developed in the educational services provided by STDI Bandung through average teaching staff. Usually dominated by artists and designers by teaching art and design better, applying Total Quality Feigenbaum and TQM on the external aspects or outputs of works produced by

students and lecturers with meaningful and valuable quality, the application of Crosby's Quality Vaccine can be applied on improving and updating standard procedures that exist in the STDI Bandung environment, such as the procedure for lecturers to carry out research activities in the fields of art and design or procedures for students to complete their final assignments, while the application of ISO can be combined with the BAN-PT instrument to assess your competence. That's both in terms of art and design education as well as other things within the scope of the institution. The approach through Six Sigma can be done in accordance with the style of the leadership character of STDI Bandung but still pays attention to the essence of the process of implementing Six Sigma and setting improvement goals to be achieved both in terms of organization and quality of education in the STDI Bandung environment.

Other quality management approaches have been adapted and have helped the improvement of STDI Bandung. Approaches are applied gradually and adjusted to the situations and capabilities. Implementing a quality management approach is not easy to do in a short time; however, it results from the support of various parties, from structural leaders to staff (Prihatmaji, 2014). The quality management approach also significantly influences HR performance and employee satisfaction (Juana, 2016), where HR is also an essential part of the organization.

The formulated quality management approaches are often used by companies or organizations in general. However, technology has started to become a part of the quality management approach, such as identifying quality-related problems using a quality control system based on intelligent condition monitoring (Albers et al., 2016). There are more quality management approaches based on the latest technology. In biology, for example, mass spectrometry-based proteomics combined with liquid chromatography, which is ready to be an automated technology with high throughput that produces several gigabytes of data per instrument each day, so that automated quality control (QC) and quality analysis (QA) is capable of detecting measurement bias, verifying consistency, and avoiding dispersion of errors, all of that is important to the operators and scientists for the final analysis (Bielow et al., 2016). In the manufacturing sector, the systematic use of 7 QC tools can improve the quality of the manufacturing process, where these tools can collect data, analyze data, identify root causes, and calculate results; these tools are associated with processing numerical data that can provide powerful process tracking and analysis to make quality improvements easier to see, implement, and track; this approach improves the characteristics of the people involved, their ability to think, generate ideas, solve problems, and implement the plan; it also indirectly shows human development to be further used to improve the internal environment of a company or organization (Magar and Shinde, 2014). Another example is crowdsourcing, which has a new technique for assessing user mobility patterns and the quality of contributions from the past to estimate user credibility (Mashhadi and Capra, 2011).

In improving the quality of education in the STDI Bandung environment, leaders can develop components of the quality of education which consist of (1) human resources; (2) curriculum; (3) facilities and infrastructure; (4) academic atmosphere; (5) quality of learning (6) network of cooperation; (7) students (8) monitoring and evaluating learning (Karwanto, et al, 2020). Of course, design and art education is a little different from other education because both educators and students have unique characters, therefore, the components of the quality of education can be adapted to the development of the art and design world as well as the academic atmosphere which depends on the character of human resources and organizations involved. owned. The quality of art and design education does not entirely depend on how students can

graduate well and on time, but how these students can go through the process of learning and produce works that are extraordinary and have deep meaning and are useful to the public.

Research specifically on the concept of quality management in the world of art and design education is still difficult to find, but a deeper discussion can be carried out on education quality management, namely that in the implementation of education so that it is in accordance with what is to be achieved, education quality assurance must refer to indicators such as accreditation, curriculum, learning process, assessment, educators, education staff, facilities and infrastructure, management, and financing (Umam, 2020). Other indicators that portray the quality of the school or college are government support, the leadership of the head of the institution, good teaching performance, up-to-date curriculum, graduates quality, effective organizational culture, and support from the community and parents of students (Fadhli, 2017). Other researchers mention that the main principles in quality management are the goals and management of education, such as customer satisfaction, respect for every party, management that is based on facts, and continuous improvement (Kuntoro, 2019). Other research mentions explicitly that visionary leadership and lecturer performance have a positive and significant influence on the quality of education in higher education (Christianingsih, 2011). The positive values that schools or universities have owned must be maintained through quality control (Husna, 2014).

The data acquired from the evaluation results of the quality of STDI Bandung should be used for further improvement. The function of these data is special attention to be developed further. These data provide recommendations for follow-up, such as increasing customer satisfaction; in this case, STDI Bandung has an excellent approach to the academic community that increases innovation and creativity in art and design education and the development through methods that can match its competitors (Wijayanti, 2016).

Since the human resources on STDI Bandung are artists with unique characters, a culture-based approach to art and design education is needed to improve students comprehensively starting from a small scale (Triyanto, 2014) while still paying attention to the quality of education. The pedagogic knowledge can be used to understand the quality management at STDI Bandung through a social constructivism approach that adapts to its conditions. That constructivist approach is derived from several stages, such as presenting the quality management concept through team building programs and personal and mentoring approaches. This approach is suitable for the character of the artist or art worker at STDI Bandung, who prefer to work without being restrained by space, boundaries, and time.

The implementation of quality management by STDI Bandung is solely to achieve the expected results following the strategic objectives of the STDI Strategic Plan for 2019-2023 (Sukarno, 2019), which are independence and organizational health in 2023, achieving accreditation of both study programs with "Reach (Unggul)" predicate in 2023, and achieving "Very Good (Sangat Baik)" predicate for institutional accreditation in 2027.

CONCLUSION

Artists or art workers who are given a mandate, especially in the management of universities based on art and design, must understand the concept of quality management. All information regarding quality management is a provision for them to carry out the management and execution of education within STDI Bandung as a private university in art and design. The character of the artist or art worker is not an obstacle to developing the capacity for quality management execution. Moreover, the continuance of the adaptation and learning process ensures that the artist or art worker improves the university they manage. Not only do they produce works of art, but artists can also successfully manage universities following the specified quality. In this case, BAN-PT becomes the university's main quality evaluator along with other quality management measuring tools.

Implementing quality management in the arts and design education environment significantly impacts the entire academic community, from students, lecturers, staff, alumni, and even stakeholders collaborating with the university. The implementation carried out step by step will bring the university to a better quality. Of course, it takes a long time to achieve the quality expected by universities, especially in art and design, which have a different character than other scientific fields. Through quality management, adjusting the characteristics of art and design education will be accomplished if every individual in the institution realizes the importance of quality management.

In order to improve the quality of higher education in art and design, further research needs to be conducted on other quality management measuring tools through pre-implementation, implementation, and post-implementation, which can be measured through quantitative research.

ETHICS STATEMENTS

This study is the author's own work and has not been published anywhere else. This study is the result of thoughts and research that is reflected through the author's analysis properly and correctly.

AUTHOR STATEMENTS

Rizki Maulana Rachman explained the background, quality management literature review, research results, conclusions. Ferri Agustian explained his background in art and literature studies on art and design. Rasto and Nani Imaniyati provide guidance on the concept of quality management.

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DECLARATION OF INTERESTS

The authors do not have any direct or indirect personal or financial interest that could create or conflict in their work with what is reported in this study.

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