

# Management of quality assurance and development of the quality culture of higher education in Indonesia



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**Abstract** This study aims to analyze quality assurance management in the development of quality culture in higher education institutions in Indonesia. This study method is a literature review. The results of the study show that in the quality assurance policies of higher education institutions in Indonesia, there are two quality assurance systems for higher education institutions, namely, the external and internal quality assurance systems. The effectiveness of external and internal quality assurance depends on internal quality assurance management aimed at building a higher education quality culture. Higher education institutions that are managed effectively and efficiently have a high-quality culture. The quality culture of higher education in Indonesia is unique and different from other organizational cultures. This uniqueness can be seen in the quality of academic services, the productivity of scientific work and community service.

**Keywords:** quality assurance management, higher education quality culture, external and internal quality assurance systems

## 1. Introduction

In the current global era, education quality assurance is urgently needed for continuity, continuation and accountability to the public for implementing education in tertiary institutions. Only universities with a good reputation and high competitiveness can exist amid increasingly competitive global competition.

Higher education institutions in Indonesia in the current global era are expected to become high-quality nonprofit organizations but can be managed like business organizations by implementing an integrated quality management model that can guarantee quality for all stakeholders; even to meet global demands, quality assurance standards continue to be adjusted to international standards and endeavor to achieve and exceed international standards (Myna et al., 2016).

Ad Scientific Index data for 2022 show that Indonesia is in third place out of eight countries with the most tertiary institutions in the world (1<sup>st</sup> India, 2<sup>nd</sup> the United States, 3<sup>rd</sup> Indonesia, 4<sup>th</sup> China, 5<sup>th</sup> Brazil, 6<sup>th</sup> Mexico, 7<sup>th</sup> Japan, and 8<sup>th</sup> Russia). (<https://dataindonesia.id/ragam/detail/nomor-universitas-di-indonesia-terbaik-tiga-di-dunia>) However, on the list of countries that produce the world's best scientists, Indonesia is not yet one of the countries producing the world's best scientists. However, on the list of countries that produce the world's best scientists, Indonesia still needs to be one of the countries producing the world's best scientists.

Data on ranking results from international institutions such as THE WUR, QS WUR, and Uni Rank in 2022 for universities in Indonesia can be seen in the table 1.

**Table 1** Ranking of the Top Ten Best Universities in Indonesia.

THE WUR	Version QS WUR	Uni Rank
1. Universitas Indonesia	1. Universitas Gadjah Mada	1. Universitas Indonesia
2. Institut Teknologi Bandung	2. Universitas Indonesia	2. Universitas Gadjah Mada
3. Universitas Pendidikan Indonesia	3. Institut Teknologi Bandung	3. Universitas Brawijaya
4. Universitas Air Langga	4. Universitas Air Langga	4. Institut Teknologi Bandung
5. Bina Nusantara University	5. Institut Pertanian Bogor	5. Universitas Airlangga
6. Universitas Brawijaya	6. Institut Teknologi Sepuluh Nopember	6. Universitas Bina Nusantara
7. Universitas Diponegoro	7. Universitas Padjadjaran	7. Universitas Padjadjaran
8. Universitas Gadjah Mada	8. Bina Nusantara University	8. Universitas Sebelas Maret
9. Universitas Hassannudin	9. Universitas Diponegoro	9. Universitas Diponegoro
10. Institut Pertanian Bogor	10. Telkom University	10. Institut Pertanian Bogor

Source: Kompas (2022).



The rankings appear to be different because the indicators used are different, but the results are similar; for example, the University of Indonesia and Gadjah Mada University are still on the list of the best universities in Indonesia. There are 3115 tertiary institutions under the Ministry of Education, Culture, Research and Technology, and 842 universities under the Ministry of Religion of the Republic of Indonesia. In total, there are 3957 universities.

The complaints that arise in preparing data for accreditation still seem to be an obligation that burdens tertiary institutions that have not yet built a quality culture (Indrajit & Djokopranoto, 2006). Complaints about the lack of data to complement each of the existing standards in the accreditation assessment are a reflection of weak higher education quality management (planning, organizing, implementing, supervising and monitoring, as well as evaluating the implementation of tertiary institutions); there are even those who blame one another, such as the difficulty in collecting data on lecturer performance and in increasing lecturer work productivity.

In highlighting the problem of education management, Tilaar (2003) argues that "the process of education in Indonesia has shifted to a routine without management". To change this condition, a revolutionary step is needed so that the educational process, even up to the learning process in the classroom, can take place in a management pattern those places students as the main focus in the learning process.

The results of research conducted by Ghafur (2008) found that there were three factors causing the ineffectiveness and nonoptimal performance of higher education quality assurance policies: (1) at the strategic quality planning level, (2) at the quality assurance policy level, and (3) at the level of policy implementation in the field.

Efforts to carry out quality assurance are urgently needed to increase the accountability of tertiary institutions that gain the trust of the community and the government to administer higher education. However, these urgent needs cannot be met according to the standards. There are obstacles in the process of quality assurance in tertiary institutions. The first obstacle can be traced to policies and their implementation, especially management (Ghafur, 2008); the second obstacle is the institutional scope (Elassy, 2015; Ghafur, 2008); the three instruments used and the implementation of both external and internal resources; and the strategies and targets set (Liba, 2009).

In addition to the issue of policy inconsistency, the Indonesian government, since the beginning of independence, has been faced with dilemmatic choices, namely, whether to prioritize improvement and quality improvement or increase community participation in formal education. The compulsory education program is one of the realizations of government policies to increase community participation in formal education (Ghafur, 2008; Haris, 2013; Liba, 2009).

Community participation in entering schools and tertiary institutions has increased dramatically since the introduction of 6-year compulsory education in 1984, and continued with 9-year compulsory education 1994. Because of that, many schools were founded, including colleges (Manan, 2015). However, the various efforts that have been made have had inadequate results due to poor management of education and limited budget allocations (Hanief Saha Ghafar, 2010).

Community participation in higher education is increasing yearly, but the quality of college graduates is the next problem that needs to be solved. Even though there has been an increase in the number of university graduates, data on the low quality of human resources in Indonesia still raise concerns, especially for universities as institutions providing higher education (Logli, 2016).

An exciting but concerning phenomenon occurred in Indonesia's beginning of the 21st century, when international standard education units were established, from elementary schools and secondary schools to tertiary institutions. However, in the implementation of international standard education, it turns out that there are many educational units with only "international labels", while the implementation is not following international standards (Logli, 2016; Manan, 2015; Wicaksono & Friawan, 2011).

The next phenomenon is the establishment of world-class (international) universities that can only be reached by the upper class, who can afford to pay high fees. Such universities become exclusive. There is an impression that the implementation of quality management in higher education requires high costs. The higher the quality of the higher education institutions is, the higher the costs (Zoya Febrina Sumampow & Widdy Rorimpandey, 2019). The question arises whether it is fair if quality education can only be reached by a group of upper-class society.

The application of business management principles in the field of education is a "fad" or something that is temporary (Tilaar, 2003). This happens when everyone is "amazed" to see the success of managers in managing a profit-oriented business. This is happening not only in developed countries but also in developing countries. Fad is something that is popular but only temporary, like a popular fashion, loved but then just disappears. However, the application of management principles in education continues in different and context-adaptive contexts.

Data on the quality of human resources were based on the results of the Indonesian Human Development Index (HDI) 2021, which was posted on September 8, 2022. Indonesia, with a value of 0.705, is ranked 114 out of 195 countries in the world that were surveyed. Compared with Switzerland (ranked 1st), with a value of 0.962. Therefore, even though Indonesia is in the High Human Development Category (ranked 67-115), it is actually less significant because it still tends to be very close to the Medium Human Development category (ranked 116-159). (Resce, 2021). Note the range of values in each category (Table 2).

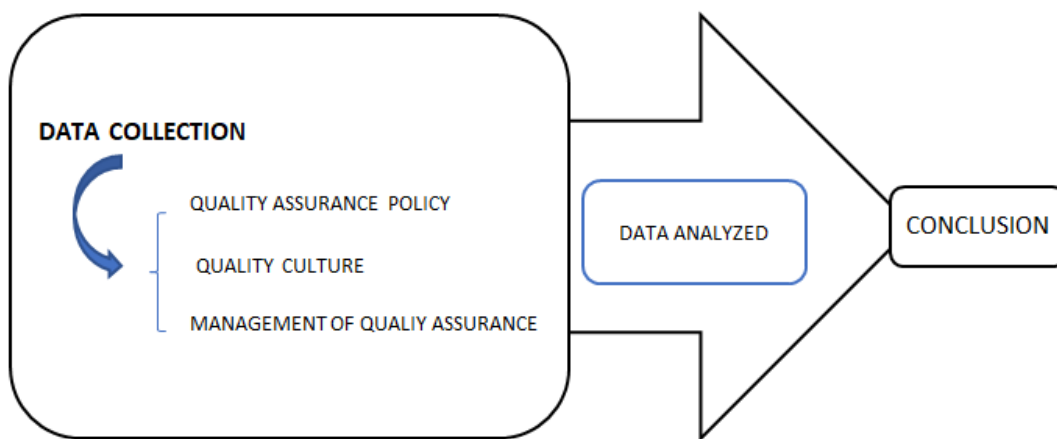
**Table 2** Summary of HDI 2021- Rank and Category.

No.	Category	Rank	Value Score Range	Description
1.	Very High Human Development	1-66	0.962-0.800	Rank: 1: Sitzerland; 66: Thailand
2.	High Human Development	67-115	0.796 – 0.703	Rank: 66: Albania; 115: Vietnam
3.	Medium Human Development	116-159	0.699-0.550	Rank: 116: Phillipines; 159: Cote devoire
4.	Low Human Development	160-191	0.699- 0.549	Rank: 160: Tanzania; 191: South Sudan

Source: HDI 2021.

**2. Method**

The method used is the descriptive analysis method through a literature study on the contents of written documents originating from writings in scientific journals, books and magazines that have authenticity and credibility. Authenticity is intended to assess the authenticity of all written data sources, and credibility is intended to assess whether the contents of the writing are correct and can be trusted for use in the study of quality assurance management and quality culture development.



**Figure 1** Process of Study.

**3. The results and Discussion**

*3.1. Higher Education Quality and Quality Assurance Policy*

The concept of educational quality has been adopted from the best practice of achieving goals in the economics and business, and is then applied in the education sector. Although, at first, the concept of quality was difficult to define, experts later saw that quality could be understood from two sides, namely, absolute quality and relative quality. Sallies argued that quality can be understood from two concepts, namely, the concept of absolute quality and the concept of relative quality (Sallis, 2014). Absolute quality is the highest standard that cannot be exceeded or the best measure. The manufacturer sets this standard, while the concept of relative quality is to provide specification sizes, according to or adapted to customer requirements/needs; Quality improvement is carried out by producers following increasing standards or the best size to meet customer needs; quality control is carried out so that the standards set by the manufacturer are always following customer requirements; and quality assurance is carried out so that customer increasingly believe the credibility of the products/services provided by producers (Ryan, 2015).

The concept of absolute quality can be used in the context of quality assurance, stipulated in the National Education Standards, including the standards in Accreditation; and then in formulating of standards for internal quality assurance. Quality can be used as a relative concept in total quality management, which views quality not as a product/service attribute but as something ascribed to the product or service. In this context, quality products/services or products/services are original, reasonable and familiar. Therefore, quality must do what it should and what the customer wants. Quality products can always meet customer needs, while service quality is excellent and exceeds what customers perceive and expect. It can be understood that although quality can be seen from two absolute and relative concepts, they are related, complement each other and cannot be separated. There is a need to achieve high standards to meet customer needs and expectations (Leisyte & Westerheijden, 2014; Stensaker et al., 2011; Williams & Harvey, 2015).

In the context of quality assurance, the standards set by the National Accreditation Board for Higher Education have become a reference for quality to ensure accountability for the quality of tertiary institutions. If the standard follows public expectations, it includes the elaborating the concept of quality in relative and absolute terms (Sallis, 2014).



Likewise, when a tertiary institution determines quality in absolute terms by setting certain standards that positively impact meeting community needs and implementing them in the form of excellent academic services, it is considered to have defined the concept of quality in absolute and relative terms. The standard setting is a quality concept in absolute terms, while meeting needs and expectations based on these standards is a relative quality concept (Dill, 2007).

Quality must be understood in a particular context, especially in system thinking, where each component is interdependent (interrelated and influences one another). Quality education is organized based on specific criteria and standards (absolute quality), and the process and results of fulfilling these criteria and achieving these standards create educational outputs that can provide services and meet the needs and expectations of stakeholders (relative quality) (Sallis & Jones, 2013).

The concept of quality relies heavily on two patterns of thinking. First, an understanding of Total Quality Management (TQM); and second, a thorough understanding of the system built within an organization. Quality in the context of TQM is a philosophy and methodology that can help institutions plan for change and set the agenda for that change (Sallis & Jones, 2013). Therefore, in the world of quality education, it can be used as a philosophy and methodology to help the development and progress of education. Philosophy and methodology are ideas that underlie implementing quality assurance policies to build a quality culture successfully. Human resources are important factors in implementing TQM in education (Karakhanyan & Stensaker, 2020; Leisyte & Westerheijden, 2014; Williams & Harvey, 2015).

Based on the overall description of quality, quality is a concept that contains various meanings according to the context of its use. This diversity can be seen in the diversity of perspectives on quality; the first is from the producer's point of view (in the education sector, namely, the education provider and education quality guarantor); the second is from the point of view of consumers as users/customers (educational stakeholders); and the third is from a scientific point of view as a philosophy and methodology for developing education to achieve quality educational goals.

Suppose quality is used as a standard for assessing a product or service set by the manufacturer. In that case, quality is the highest standard used as a reference for comparing it with other products/services. Excellence is the main criterion. If quality is used as a standard for assessing a product or service received by consumers/clients/customers, fulfillment of customer needs, expectations and satisfaction is the standard for achieving quality.

Based on these two points of view, quality has always been a dynamic idea that needs to be continuously studied both in terms of products/services, their application by producers and the suitability of their use by customers at a particular time and space. Quality becomes a philosophy and methodology for creating change, continuous improvement and improvement toward progress. Therefore, in the application and use of products/services to achieve quality, especially in the field of education, it is necessary to identify the context of the application. Who is the producer of quality and who receives quality service? Conformity between the standards used by manufacturers with the needs, expectations and customer satisfaction is paramount to understand and agree.

In Indonesia's education field, absolute quality is seen in the National Education Standards formulated in the Law of the Republic of Indonesia Number 20 of 2003 article 35 (paragraph 1). Explicitly in paragraph (2), it has been stated that national education standards are used as a reference for curriculum development, educational staff, facilities, infrastructure, management and financing. Specifically, higher education has been regulated in Law Number 12 of 2012 concerning higher education and several government regulations, the Minister and the National Accreditation Board for Higher Education related to higher education quality assurance.

The quality of higher education can be interpreted as achieving the goals of a university, which generally includes three obligations (*tri-dharma*) higher education in Indonesia, and the measurement is carried out with an exceptional approach. The measurement of the exceptional approach is based on Porter's opinion that the measurement of the exceptional approach has three variations: (1) quality as something that is distinctive, (2) quality as something that is excellence, and (3) quality as something that meets the minimum standard limits or conformance to standard (Veithzal & Murni, 2010).

There are five quality principles in integrated quality management: (1) Management commitment (leadership); (2) Focus on customers and employees; (3) Focus on facts; (4) Continuous improvement; and (5) Everyone's participation. The similarities that can be identified from all these principles are (1) commitment to achieving goals; (2) focusing on students; (3) continuous improvement; (4) there is a process; and (5) active participation of all parties (Dahlggaard et al., 2008).

For educational organizations, the adaptation of TQM can be said to be successful if it shows the following things:

1. Provision of increasingly excellent services.
2. Mistakes that cause dissatisfaction and complaints from the people served are decreasing.
3. Time discipline and work discipline are increasing.
4. Organizational asset inventory is organized and recorded in an orderly manner.
5. Control takes place effectively.
6. Waste of funds and time at work can be prevented.

7. Improving work skills and expertise is continuously carried out so that the method or way of working is always able to adapt changes and developments in science and technology, as the most effective, efficient and productive way of working, so that the quality of products and public services continues to increase.

TQM as a philosophy and methodology turns out that in its application in various educational institutions, including higher education, there are many variations. Depending on the mission and objectives of organizing education in each institution (Sushree Sangita Ray & Shruti Tripathi, 2017).

### 3.2. Management of Higher Education Quality Assurance

Higher education quality assurance in Indonesia is carried out through planning, determining, implementing, evaluating, controlling and improving the quality of higher education. Quality assurance objectives are the main focus that must be achieved, while quality assurance standards or references are the main criteria for measuring the achievement of objectives. Both efforts to achieve goals and references to measure their achievement must be managed in integrated education quality management. Education quality management is the main philosophy, methodology and guidelines that must be designed and realized by all parties involved in the implementing education.

Quality assurance is the fulfillment of product specifications that are always good from the start. Quality assurance emphasizes the workforce's responsibility compared to inspection and quality control, although inspection also has a role in quality assurance. Good quality of goods or services is guaranteed by a system known as a quality assurance system that positions exactly how production should function according to standards. Existing procedures govern quality standards in the quality assurance system (Ghafur, 2008).

Quality assurance is all the planned and systematic actions that enhance confidence in a product or service and will satisfy given requirements for quality (Maran & Radja, 2005). The essence of quality assurance is all planned and systematic actions aimed at providing assurance that the product or service can be trusted and meets quality (Ghafur, 2008; Mehta & Degi, 2019; Myna et al., 2016).

Higher education quality assurance is based on a quality system (Total Quality System). The integrated quality system can be further elaborated into an integrated quality policy (total quality policy) and integrated quality management. The quality of education is one of the most important factors in the development of a quality culture, especially in the implementation of total quality management (Bishnoi, 2018). To realize public accountability, universities must actively build an internal quality assurance system. To prove that the internal quality assurance system has been properly implemented, the university must be accredited by an external quality assurance agency. Likewise, with a good and correct quality assurance system, universities will be able to improve quality, uphold autonomy, and develop themselves as organizers of academic/professional activities in accordance with the fields of study they manage.

Accreditation results are a reflection of internal quality assurance. The better the internal quality assurance, the better the accreditation results by the external quality assurance agency. The quality assurance policy for tertiary institutions in Indonesia is related to the policy for improving the quality of education in general. There are two important sides of an integrated quality system that can be used as spearheads to improve quality, namely, policy and management. Policy and management are the two spearheads that can be the main drivers of an organization's success (Ghafur, 2008) (Hanief Saha Ghafar, 2010).

In the context of higher education quality assurance, quality policy and management play an essential role and even become the main drivers of the success of higher education organizations. Therefore, knowledge of quality policy and management forms the basis for quality assurance programs and the implementation of accreditation. Without knowledge of quality policy and management, the realization of the quality assurance program will encounter many obstacles and even be difficult to achieve. If the quality assurance is weak, the accreditation results will be low. The involvement of all parties and all components in accordance with their respective roles and functions is very important because if one party or a certain component does not function, there will be an imbalance in realizing the education quality assurance system (Elassy, 2015; Haris, 2013).

In the context of ensuring the quality of education, the application of integrated quality management in the management of tertiary institutions has actually been implemented by various universities in developed countries, and for Indonesia, this is a revolutionary step if it can be said that way in the context of improving and enhancing the quality of education. Steps such as this can be used as a strong "foothold" as a new step to reinforce the role of higher education institutions as nonprofit organizations that need to be managed in a modern way. Integrated quality management, which initially succeeded in creating success in the world of business and industry, can actually be applied intelligently, creatively, innovatively and adaptively to the management of higher education institutions (Coleman & Bush, 2000; Sallis, 2014).

From the micro perspective, the dominant factor that influences and contributes greatly to the quality of education is professional and prosperous teaching staff. Therefore, to support and strengthen the guarantee and development of a quality culture, it is necessary to strengthen the quality of the performance of teaching staff. Professional educators are the spearhead of determining and guaranteeing the quality of education. No matter how well the policies are made, no matter

how well the facilities and infrastructure are built, and all other components are implemented, all of them should be aimed at preparing professional educators in their classes. Educators who are truly professional will develop a culture of quality in carrying out their duties so that the realization of quality assurance can be maximized (Sallis & Jones, 2013).

Implementing TQM in educational organizations, especially state universities, is not easy. There are obstacles in the work culture and performance of lecturers and employees who only work to meet the requirements set by the tertiary institution, often even those that are violated for various unprofessional reasons. It cannot be denied that the work culture, performance and discipline of lecturers and staff of employees with civil servant status in Indonesia still need to be improved. Based on the conditions that occur in Indonesia, it is certainly interesting to pay attention to the results of a study about TQM, and quality assurance management (Karakhanyan & Stensaker, 2020; Leisyte & Westerheijden, 2014; Logli, 2016; Manan, 2015; Ray & Tripathi, 2017; Resce, 2021; Ryan, 2015; Stensaker et al., 2011; Wicaksono & Friawan, 2011; Williams & Harvey, 2015), that TQM is actually a management policy that can be applied according to the expectations of every tertiary institution.

Thus, in the framework of quality improvement and quality assurance in tertiary institutions, quality assurance management is urgently needed, which is built on the principles of quality. Quality principles are many assumptions assessed and believed to have the power to realize quality.

### 3.3. Development of Higher Education Quality Culture

Understanding the concept of quality culture must be built from a combination of the concept of culture in general and then organizational culture, and quality management because quality culture is part of organizational culture and quality assurance management. The quality culture approach is closely related to the concept of organizational culture. Therefore, the concept of higher education quality culture is related to the concept of higher education organizational culture, quality management and higher education quality assurance management (Dzimińska et al., 2018; Ehlers, 2009; Sattler & Sonntag, 2018).

Various definitions of culture have emerged because of the various approaches used in studying culture. Cultural studies in the context of anthropology will certainly be different from management. However, in general, sociologists assert that culture has an impact on the formation of behavior in society and within organizations. Culture consists of values, norms, attitudes, behaviors, customs, beliefs, and habits that are shared by members of society. Culture can be learned and changed (Haag et al., 2010; Sattler & Sonntag, 2018). The same thing was also stated by (Haag et al., 2010) : "culture determines behavior in all areas of life (culture determines behavior in all areas of life). Therefore, the quality culture of an organization will determine the behavior of each individual involved in the organization. The culture of higher education quality determines the pattern of organizational behavior (academicians) in higher education (Haag et al., 2010; Sattler & Sonntag, 2018; Wani & Mehraj, 2014).

Quality culture has a reciprocal relationship with quality assurance. Quality assurance can build a quality culture; on the other hand, quality culture can determine the actions or behavior of higher education institutions, starting from the university level, faculties, and departments to study programs, including research institutes, community service and other technical service units, as a unit or team. work that works to provide excellent service while at the same time guaranteeing that tertiary institutions have and will continue to carry out quality educational activities. Quality culture refers to an organizational culture that aims to permanently improve quality and is characterized by two clear elements, namely, (1) shared values, beliefs, and expectations and (2) commitment to quality.

Basically, quality culture is related to integrated quality management. Principal TQM can be seen as a totally quality culture that includes (1) commitment and examples from top management regarding quality, (2) awareness of the cost of quality, (3) understanding of the importance of specifications and satisfaction from consumers, (4) continuous improvement, and (5) everyone having responsibility for achieving quality (Veithzal & Murni, 2010).

Thus, in the creation of a total quality culture, integrated quality management can be considered a method for realizing a higher education quality culture. If the principles of integrated quality management are known and become knowledge, values, views, and organizational philosophies of tertiary institutions that are carried out continuously, then they will become a culture of quality in tertiary institutions, but national culture in certain cases becomes a barrier to the implementation of total quality management. Something that has become a culture will not be difficult to implement, let alone become a heavy burden, but on the contrary, if it is not implemented, it will directly burden the members of the organization. Every member of the organization will feel burdened if they do not behave and act in accordance with quality principles. Likewise, leaders will always try to innovate to maintain a quality culture in their organizational environment.

In explaining corporate (organizational) culture and its application in tertiary institutions, something that has become a culture will not become a burden but something that naturally flows and lives on (Indrajit & Djokopranoto, 2006). Openness, discipline, accountability and so on that are not yet entrenched are often an additional burden, even a threat to balance, so their development should be rejected or hindered.

Quality culture values can be used to build a successful quality culture, namely, (1) togetherness in the organization; (2) no discrimination; (3) openness; (4) everyone has an opportunity for all information and operations; (5) focus on process;

and (6) learning through experience (Dzimińska et al., 2018; Ehlers, 2009; Sattler & Sonntag, 2018). Organizational culture refers to a system of shared meaning held by members that distinguishes the organization from other organizations. The shared meaning system is a set of key characteristics valued by the organization (Stephen P. Robbins, 2002).

Organizationally, the process of creating culture occurs in three ways. First, founders only hire and retain employees who think and feel the way they do. Second, they indoctrinate and socialize these employees with their way of thinking and feeling. Finally, the behavior of the founders acts as a role model that encourages employees to identify with them. When the organization is successful, the founder's vision becomes seen as a key determinant of success. At this point, the founder's entire personality becomes embedded into the organizational culture. Furthermore, there are three forces that play an important role in maintaining culture, namely, practice, selection of top management actions, and methods of socialization.

Organizational culture has a number of important characteristics, some of which are as follows:

1. Philosophy, there are policies that shape organizational beliefs regarding how employees and/or customers are treated.
2. Values
3. Norms and Rules
4. Strict guidelines relating to organizational achievements.
5. Organizational climate, physical setting, way of interacting, way of dealing with customers and outside individuals. Commitment and awareness are needed in making changes to higher education management (Dzimińska et al., 2018; Ehlers, 2009; Sattler & Sonntag, 2018).

Quality higher education organizations have rules, norms, values, philosophies, and strategies to create a conducive climate that always focuses on stakeholders, continuous improvement, and the participation of all parties to achieve common goals. Universities need to apply the principles and functions of quality management, and this is an urgent need to be fulfilled. If, thus far, the implementation of education has only been routine in nature without management, then through the implementation of a quality assurance policy, universities need to apply the principles of quality. The principle of quality is the basis for the administration of higher education (Bendermacher et al., 2017).

Indonesia is still in a transitional period to change the old pattern, which focuses on increasing the quantity of university graduates. There are so many universities in Indonesia. Indonesia is one of the countries with most significant number of tertiary institutions globally and is currently in third place. The problems of improving education quality and educational organizations' quality culture have gradually begun to be solved. In 2003, with the enactment of Law Number 20 concerning the national education system, a national education standard was established to regulate education quality and quality. This arrangement was then confirmed by Law Number 12 of 2012 concerning higher education, and after that, it was followed by a number of government regulations, ministerial regulations and others.

Since the beginning of the 21st century, at the macro level, the understanding of higher education quality assurance management has been adequately understood and elaborated in the objectives set out in the tertiary quality assurance policy. However, there are still variations in understanding and implementation at educational unit level. The concepts of quality, quality assurance and quality management are already visible in policies but cannot be realized, let alone built into a higher education quality culture. Limited knowledge and understanding of quality and quality assurance management is one of the obstacles to realizing quality improvement in higher education. Managerial capacity building regarding higher education quality assurance needs to be carried out continuously (Elassy, 2015; Ghafur, 2008; Liba, 2009).

Efforts to realize quality assurance have not become part of a shared responsibility, and the orientation of quality assurance is more focused on fulfilling administrative requirements listed in accreditation where the participation of educators and educational staff (administrative staff, librarians, technicians, and task force) is still low. Other, even though quality assurance is the result of joint performance involving high participation from all parties in tertiary institutions.

The existing sources of quality are very basic because they depend on the condition of the top management, who always faces the possibility of replacement after a certain period. In this regard, the realization of total quality management should not depend on certain individuals as a source of quality because the attitudes and behavior of individuals toward quality can be different. In other words, this source of quality must be transformed into a philosophy of sustainable quality in realizing total quality management.

All sources of quality within the higher education organization are potential but also obstacles in the implementation of quality assurance and integrated quality management in the education sector. As integrated quality management has the potential to be applied in the education sector, the same can be applied in the implementation of quality assurance policies in the higher education environment.

Total Quality Management or Integrated Quality Management in the field of education aims to improve the quality and competitiveness of students with indicators of good intellectual competence, attitudes and high skills. To achieve these results, the implementation of total quality management in higher education quality assurance needs to be carried out seriously.

The implementation of total quality management in educational organizations, especially state universities, is not easy. There are obstacles in the culture of quality and performance from lecturers and employees who only work to fulfill the requirements set by the institution, and often these are violated for various unprofessional reasons, which greatly affects the improvement of the quality of education. Undoubtedly, the work culture, performance and discipline of civil servants in Indonesia still need to be improved (Cummings & Kasenda, 1989; Pratama et al., 2015; Tamsah et al., 2020).

In this context, the first thing to be corrected is the culture of quality and performance of quality assurance implementers (heads of higher education institutions, lecturers and staff). Everything is necessary to be able to view students (students) as "customers", who must be served as well as possible for the fulfillment of their learning needs and learning satisfaction. Therefore, all higher education administrators are always eager to move forward and to continue to improve their abilities and skills to improve the quality of work.

Higher education accountability demands require tertiary institutions to carry out quality assurance (quality assurance) to the community. In this way, each tertiary institution can guarantee that the trust placed by the public can be accounted for through the provision of quality education. Guaranteeing quality shows the responsibility of the university to the people who have entrusted the university to carry out the noble task of building the nation's civilization (Lonto & Umbase, 2022).

Universities that have integrity can guarantee that when people obtain academic services at these tertiary institutions, they will not be disappointed because what is needed can be fulfilled even beyond what is expected.

The new paradigm in the implementation of education in the current global era views the existence of educational institutions as dynamic institutions that must continuously improve their progress in accordance with the "movement of the times", capable of responding to the needs of the local, national, regional and international community.

As a response to highly competitive global challenges, efforts to improve quality and competitiveness are urgently needed. In the current global era, the implementation of education is faced with formidable challenges, and internal and external environmental conditions are very uncertain, requiring a higher education organizational management strategy that can truly face challenges that occur differently at any time (Cummings & Kasenda, 1989).

Failure to meet challenges can lead to destruction; conversely, the ability to overcome challenges can bring progress after progress. The ability needed to progress is the ability to change, adapt and develop. In fact, universities have a very important and strategic role in creating various innovations and expertise in utilizing information and communication technology to produce quality education that is affordable to the community. Then, it can have an impact on society. Communities can take advantage of these innovations to improve their quality of life. Universities play an important role in social mobility (Dzimińska et al., 2018; Ehlers, 2009; Sattler & Sonntag, 2018).

Actually all the people can study at tertiary institutions and obtain higher education and income (Haveman & Smeeding, 2006). However, the problem of managing quality tertiary institutions that are accessible to the community in Indonesia, is still faced several challenges. One of the challenges faced in Indonesia is building the reputation of higher education institutions through external quality assurance because accreditation results are an indicator of the quality of a higher education institution. This is a challenge that is not easy to realize if the management of internal quality assurance in tertiary institutions has not created a culture of quality. The development of the education system must be planned as a whole, simultaneously and synergistically and continuously. The reality that is currently happening is that educational activities seem to take place mechanically, partially without creative innovation to change and adapt to the ever-changing needs of society along with changes in social, cultural and economic structures (Cummings & Kasenda, 1989; Haveman & Smeeding, 2006; Pratama et al., 2015; Tamsah et al., 2020).

The inconsistency of education quality policies is one of the factors inhibiting the realization of improving the quality of education, including the quality assurance of higher education. Likewise, the problem of policy implementation in Indonesia, is that one of the myopias of policy implementation is that "if the policy has been made, the implementation will run by itself". Likewise, the lack of understanding of quality management contributes to worsening efforts to realize quality assurance in higher education (Logli, 2016).

The fact shows that all parties in higher education want to improve the quality of higher education, but conversely, it takes work to make it happen. Low knowledge of quality policy, quality assurance and education quality management are the dominant factors that impede the realization of education quality assurance. Therefore, all parties want quality education, but it takes work to realize it.

#### 4. Final considerations

Quality is the best standard to meet customer needs. Producers improve quality through increasing standards or the best size to meet customer needs. Quality control is carried out so that the standards set by the institutions are always in accordance with customer requirements. Quality assurance is carried out so that customers increasingly believe the credibility of the products/services producers provide. Higher education quality is the best standard and service for higher education institutions to meet the needs of stakeholders. Universities carry out quality improvement by carrying out by universities by carrying out continuous improvements to meet the needs of stakeholders. Quality control is carried out by universities so that the standards set are always appropriate (adaptive) to the needs of stakeholders.



Higher education quality assurance has a reciprocal relationship with the developing a higher education quality culture in Indonesia. Improvements are needed in planning, implementing, monitoring and evaluating the quality of tertiary institutions. If these improvements can be carried out in a sustainably, developing of a quality culture can be realized and improved. The developing a quality culture includes increasing knowledge, understanding, awareness, discipline, and commitment to carrying out duties and responsibilities. Even though there are still obstacles to developing of a quality culture of higher education institutions in Indonesia, human resource development is improving.

The results of this research still limited to the analysis of concepts and theories as well as the practice of implementing higher education quality assurance in Indonesia. Therefore, relevant further research is needed. The results of this study have presented a number of problems that can be studied further in terms of scope, which includes higher education institutions: universities, institutes, high schools, academies, and other colleges. Then, the Bachelor, Masters and Doctoral levels, study of the components of planning and determining quality, how to determine it, how to implement it, how to evaluate and utilize the evaluation results, to control and improve quality standards in each tertiary institution, quality assurance managerial knowledge and skills, quality commitment, determinant factors in the development of quality culture.

### Ethical Considerations

Not Applicable.

### Conflict of Interest

I declare that there are no conflicts of interest.

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