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RESEARCH ARTICLE

IMPACT OF IMPLEMENTATION OF TOTAL QUALITY MANAGEMENT (TQM) PRACTICES IN HIGHER EDUCATION

Lina Anatan and Fanny Kristine
Maranatha Christian University.

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Abstract

The fast advancement of rivalry in advanced education expects to offer better quality instructive types of assistance than buyers and possible purchasers, in particular understudies and planned understudies. To accomplish the goal, executing All out Total Quality Management (TQM) rehearses in advanced education is urgent for laying out a competitive advantage and upgrading execution. This study plans to assess the use of TQM rehearses in accomplishing competitive advantage and further developing execution inside advanced education. Utilizing straightforward irregular testing and examining information with SmartPLS, the review included 89 respondents. The discoveries affirm all examination hypotheses: the impact of TQM rehearses on competitive advantage, the impact of TQM rehearses on organizational performance, the effect of competitive advantage on Organizational Performance, and the job of competitive advantage as a halfway middle person in the connection between TQM rehearses and organizational performance. These outcomes are supposed to give significant experiences to chiefs on the significance of executing TQM practices to make competitive advantages and further develop execution in advanced education.

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Introduction:-

Higher education is significantly influenced by external factors like demographic trends, technological advancements, economic shifts, and the competitive landscape among institutions in Indonesia (Vashishtha & Singh, 2022). In response to these dynamics, Indonesian higher education must lead in adapting to environmental changes by delivering formal education that equips individuals with professional skills and specific competencies. To remain relevant, higher education institutions must evolve and contribute actively as providers of intellectual capital to the real sector, enabling competitiveness in the global market (Smolentseva, 2023).

Universities bear the responsibility of producing graduates across various educational levels, including diploma, bachelor's, professional education, master's, and doctoral programs, who are equipped to meet the workforce demands of the industrial sector. Occasionally, the industrial sector offers students technical opportunities, such as training and insights into the business world, work processes, and company operations, through company visits—experiences that are not typically available in classroom settings (Mashwarni & Dywili, 2023).

Corresponding Author:- Lina Anatan

Address:- Maranatha Christian University.

It is undeniable that a gap often exists between academia (higher education) and the business world (industry), necessitating a shared understanding, policies, and management of collaborations to foster synergies between universities and industry (Rodzalan et al., 2024). To address this gap, collaboration between both sectors is essential, with the goal of facilitating knowledge transfer from universities to industry. Internally, higher education institutions must also prioritize the management of educational quality.

In addition to the challenge of aligning higher education with industry needs, the rapid intensification of competition in the higher education sector compels institutions to develop effective competitive strategies to deliver superior services to current and prospective students (Almusawy, 2024). This trend is evident in the proliferation of appealing study programs, accompanied by promises of high-quality facilities and services. Simultaneously, advances in information and communication technology have made students more discerning in their choices, with increasingly higher expectations regarding the quality of education and services offered by the universities they consider.

In this context, Indonesian higher education institutions continuously enhance their organizational systems through the application of Total Quality Management (TQM) (Ellitan & Mulia, 2019). The TQM approach supports organizations by promoting continuous improvements, allowing them to anticipate external changes, and ensuring their success in an increasingly competitive environment.

The implementation of TQM is promising due to its comprehensive and continuous focus on quality. TQM can be applied in various areas within higher education (Kritiani & Permana, 2019; Singh, 2021): 1) improving the functions and administration of higher education by enhancing managerial decision-making processes to better meet student needs, 2) integrating TQM into the curriculum by internalizing its philosophy through the core curriculum delivered by educators, 3) applying TQM as a teaching methodology, shifting the focus from teacher-centered to student-centered learning, and 4) managing university research activities by providing training to enhance researchers' skills (Sonia, 2021).

However, it is evident that higher education in Indonesia has struggled to adapt swiftly to changes in the external environment, largely due to a curriculum that lacks the necessary flexibility to respond to these shifts—a crucial factor in today's competitive landscape (Yusuf, 2023). By adopting TQM practices as a strategic management approach, higher education institutions in Indonesia are expected to address these challenges by effectively integrating TQM into their curriculum.

This research was conducted to examine the effect of implementing TQM in higher education on the performance and competitive advantage of higher education. Some of the research questions asked include:

1. Does TQM implementation have an influence on the competitive advantage of higher education?
2. Does TQM implementation have an influence on higher education performance?
3. Does competitive advantage have a significant influence on performance?
4. Does competitive advantage mediate the effect of TQM implementation on higher education performance?

Based on this background, the main objectives of this research are to: 1) analyze how the adoption of Total Quality Management (TQM) practices within higher education—covering aspects such as customer orientation, leadership dedication, comprehensive employee engagement, process-centric strategies, structured management, ongoing enhancement, data-driven decision-making, and collaborative supplier partnerships—affects the institution's competitive edge, particularly in terms of quality, cost efficiency, delivery timelines, adaptability, and the launch of new offerings, and 2) evaluate its effect on organizational performance, with a focus on operational performance. Additionally, the study aims to 3) determine whether competitive advantage influences organizational performance and 4) assess whether competitive advantage mediates the relationship between TQM practices and organizational performance.

The criticalness of this exploration lies in the normal examination results. From a reasonable side, it is normal that the consequences of this examination can be utilized as thought for leaders in settling on choices connected with the execution of TQM strategies. According to a hypothetical point of view, it is normal that the consequences of this exploration can give knowledge to future specialists in grasping the idea and execution of TQM in higher education. Moreover, this examination is supposed to add to the administration writing, especially with respect to TQM, by

supporting the improvement of scholarly abilities and expert information for scientists. It expects to progress hypothetical grasping through pragmatic application in genuine world or modern settings.

Literature Review:-

Previous Research on the Implementation of TQM in Higher Education

Quality is a determining factor for organizational success and sustainability, including in higher education institutions since good quality management will influence competitive advantage and employee performance specifically and organizational performance in general (Harts & Rodgers, 2023). Sutanto (2018) conducted a study using a qualitative approach with the aim of designing a TQM model to improve the competitiveness and performance of higher education. The TQM model is expected to bridge TQM practices and university performance. Implementing the TQM model requires the support of top management commitment and the need for a quality control system that is responsible for conducting quality audits both internally and externally. Through this audit process, it is expected that the TQM model developed can improve the competitiveness and performance of higher education.

Khan (2018) analyzed the effect of TQM rehearses on worker execution in advanced education. Utilizing relapse examination to test the hypotheses, the investigation discovered that TQM execution goes about as an impetus for further developing work perspectives, work fulfillment, emotional responsibility, and generally speaking representative execution. The outcomes exhibit that effective execution of TQM rehearses decidedly impacts worker execution. Training and development, fostering a supportive work environment, visionary leadership, and an efficient reward system are all important TQM practices that help with this. Ambibola (2020) conducted a study at the University of Lagos to investigate the connection between TQM, employee commitment, and competitive advantage. The review results affirm that carrying out TQM in an association will impact worker obligation to the association, and this responsibility element will affect the competitive advantage moved by the association. This can be made sense of that representatives who have high responsibility will quite often work gainfully which can expand the association's competitive advantage through working on quality, limiting expenses, and expanding consumer loyalty.

Cabacang (2021) conducted a study aimed to analyze the implementation of TQM at universities in the Philippines. By using ANOVA as a data analysis tool, this study found that the level of TQM implementation in higher education institutions in the Philippines places more emphasis on aspects of top management commitment, teaching and learning activities, provision of campus facilities, availability of management systems and processes, and customer satisfaction. Therefore, it can be concluded that to implement TQM practices successfully, higher education must have strategic planning and data management, both of which have an important role in supporting top management's commitment to being able to implement TQM practices well.

Sonia (2021) conducted research on the implementation of TQM in higher education through a literature review. The data for this study were gathered by analyzing and reviewing various journals, books, and both printed and electronic documents, along with other relevant information sources. The research focused on the elements of TQM in higher education, including input, process, output, and outcome, all of which emphasize the significance of human resources as a critical component. The study concluded that implementing TQM in higher education represents a shift from traditional, irrational management practices to modern, rational management, where decisions are made based on factual evidence.

Suyatmojo and Fitriyani (2023) conducted a study to examine how TQM practices enhance graduate quality through guidance and counseling. Using quantitative methods and analyzing data through presentation, reduction, inference, and verification, their research identified three key TQM elements applicable to their study: consumer focus, continuous improvement, and overall involvement and empowerment.

Total Quality Management (TQM) Practices in Higher Education

Experts in TQM have highlighted the significant organizational benefits derived from implementing TQM practices (Yahiaoui et al., 2022). These benefits can include gaining a competitive advantage (Ferdousi et al., 2018) or enhancing organizational performance (Garcia-Bernal & Ramirez-Aleson, 2015; Anil & Satish, 2019). While TQM research has been extensively conducted in various sectors such as MSMEs, high-tech companies, and service industries like hotels and hospitals, research on TQM practices in higher education is also advancing

(Mukhopadhyay, 2020). Key research topics in this area include TQM practices, TQM implementation, and the benefits, results, and impacts of TQM within higher education (Yahiaoui et al., 2022).

With regards to advanced education, Total Quality Management (TQM) is characterized as a far reaching the executives reasoning, technique, coordinated framework, constant improvement methodology, and change approach pointed toward accomplishing greatness (Yahiaoui et al., 2022). As per Khan et al. (2019), TQM in advanced education is portrayed by a coordinated arrangement of fundamental beliefs, methods, and apparatuses considered fundamental for authoritative achievement. Tight (2020) distinguishes eight vital areas of TQM rehearses in advanced education, featuring the meaning of both inner and outer quality confirmation processes for quality upgrade.

These practices remember a concentration for the client, responsibility from the board, full commitment of representatives, a cycle driven approach, methodical administration, continuous improvement, information driven navigation, and encouraging commonly helpful associations with providers (Yahiaoui et al., 2022). The objective of carrying out TQM in advanced education is to guarantee that scholar, managerial, and local area exercises are directed in a way that satisfies foreordained targets and sticks to quality norms.

Competitive Advantage

The concept of competitive advantage was originally introduced by Ansoff (1965) and Uytterhoeven et al. (1973) and popularized by Porter (1985) and is defined as a way for an organization to use the capabilities and resources they must produce superior returns in a competitive market share (Haan, 2015). Firman and Thabrani (2018) cite Porter (1985) as an authority on the importance of competitive strategy in generating cost, differentiation, and focus-related competitive advantages. According to Ashrafi & Mueller (2015), organizations can increase opportunities to enter new market shares, increase added value, create new products, and increase organizational efficiency by implementing the right competitive strategy. This can be explained as follows: organizations can build cooperation with suppliers and consumers, influence purchasing decisions, and produce uniqueness. As a result, organizations can produce uniqueness.

According to Heizer et al. (2017), the competitive advantage possessed by an organization will be able to have an impact on achieving a system that is unique and difficult for competitors to imitate since the system is able to produce sustainable values and efficiencies that can be obtained through competition in differentiation of quality, cost and response. In this study, the definition of competitive advantage refers to an organization's position in the industry which makes it difficult for competitors and unable to imitate the strategies used to achieve organizational success so that in the long term the organization can benefit from the strategies they implement (Kafetzopoulos & Gkana, 2015). The measures used to measure competitive advantage in this study include quality, price, delivery, flexibility, and new product introduction.

Organizational Performance

The consequences of experimental examinations demonstrate that the utilization of TQM rehearses in advanced education will actually want to work on the nature of advanced education and at last impact advanced education execution (Al-Omouh et al., 2015; Uralov, 2020). Ala (2022) recommends that there are a few methodologies that can be utilized to gauge advanced education execution, including utilizing the equilibrium score card approach presented by Kaplan and Norton in 1996, the exhibition crystal presented by Neely et al (2002), and the presentation pyramid presented by Cross and Lynch (1988). In this study, university performance is measured using a performance prism approach where measuring university performance focuses on the needs of organizational stakeholders. There are five elements used to measure higher education performance including (Ala, 2022):

- Stakeholder satisfaction

In this element, performance assessment is carried out based on the organization's ability to identify and meet stakeholder needs

- Strategies

In this element, performance assessment is based on how much the ability to implement strategies in higher education can meet the desires and needs of stakeholders

- Processes

In this element, performance assessment is based on the role of the process in implementing the strategies implemented by higher education

- Capabilities

In this element, performance assessment is based on the organization's ownership of the capabilities needed to implement efficient management processes.

- Stakeholder's input

In this element, performance assessment is based on the organization's ability to understand what stakeholders want so that the organization is able to develop and maintain capabilities.

Hypotheses Development**The Effect of TQM Practices on Competitive Advantage**

The implementation of TQM practices in organizations is expected to create superior service quality for consumers (Elhawi, 2022). By achieving superior service quality, consumer satisfaction and loyalty to the products and services produced by the organization or company can increase. In the long term, organizations will benefit from involving the role of consumers in the organization's business processes so that a collaborative environment for all stakeholders involved in the organizational process becomes a source of competitive advantage for the organization. Several studies have been conducted to provide empirical evidence of the influence of TQM practices in higher education on creating organizational competitive advantage.

Sari and Firdaus (2018) examined the effect of executing TQM on competitive advantage and company execution with regards to Miniature, Little, and Medium Ventures (MSMEs). Utilizing the Incomplete Least Squares (PLS) way to deal with test the connections between factors, the review tracked down a massive impact of TQM execution on competitive advantage, and a tremendous impact of competitive advantage on organization execution. In any case, the examination didn't track down a huge direct effect of TQM execution on organization execution.

The positive impact of TQM implementation on achieving a competitive advantage in the Malaysian hotel industry is demonstrated by another study by Yeng et al. (2018). Conversely, a review led by Firman and Thabarani (2022) which analyzed the impact of TQM rehearses on competitive advantage in advanced education showed irrelevant outcomes. In view of the discoveries of past examinations, in this exploration the accompanying hypotheses was created: Hypothesis 1: TQM practices influence an organization's competitive advantage.

The Effect of TQM Practices on Organizational Performance

Al-Omoush et al. (2015), Uralov, 2020, and other studies on the implementation of TQM in higher education confirm its significant contribution to improving organizational performance. Using SEM-AMOS 22.0, Alzeaiden (2019) investigated how TQM implementation affected Jordanian university performance. The outcomes showed a huge beneficial outcome of TQM on advanced education execution, driving the scientist to suggest the far and wide reception of TQM in Jordanian colleges to further develop execution and accomplish maintainability.

Similarly, Thabrani and Ramadini (2021) explored the implication of TQM practices on higher education performance, with knowledge management as a mediator, in universities across Padang, West Sumatra, Indonesia, including state, private, and religious institutions. Using a stratified random sample of 80 universities, the study found that TQM practices significantly and positively influenced higher education performance. The findings indicate that TQM not only enhances knowledge management but also improves overall organizational performance. Based on these findings and previous research, the following hypothesis was developed:

Hypothesis 2: TQM practices influence organizational performance.

The Effect of Competitive Advantage on Organizational Performance

Organizational performance is significantly influenced by competitive advantage, according to previous research (Hardiani, 2019; Firman, 2021, cited in Rahmawati et al., 2022). Hardian (2019) quoted in Rahmawati et al. (2022) stated that achieving competitive advantage can make MSME performance better since implementing appropriate competitive strategies will strengthen the organization's position through achieving high performance. Based on the results of a study conducted by Firman (2021) quoted in Rahmawati et al. (2022) it can be concluded that achieving

competitive advantage allows organizations to carry out innovations so that they can improve the organization's operating system in a sustainable manner, and ultimately improve overall organizational performance. Referring to the results of previous studies, in this study the following hypothesis was developed:

Hypothesis 3: Competitive advantage influence organizational performance.

Competitive Advantage Mediates the Effect of TQM Practices on Organizational Performance

Although this has primarily been studied in the context of micro, small, and medium enterprises (MSMEs), previous research has concluded that competitive advantage mediates the relationship between TQM implementation and organizational performance. Research shows areas of strength for a between competitive advantage and organizational performance, demonstrating that helping competitive advantage can upgrade authoritative capacities and potential, which thusly emphatically influences execution (Alawadi et al., 2019). This is due to the fact that increased capabilities within the organization aid in determining internal strengths and weaknesses and external opportunities and challenges, such as new competitors, suppliers, investors, or alternative goods and services.

Rahmawati et al. (2022) investigated the impact of TQM on MSME performance, with competitive advantage as a mediating variable, involving 70 MSME owners in North Jakarta. The study confirmed that TQM positively affects competitive advantage, which in turn influences organizational performance. Competitive advantage was also found to mediate the effect of TQM on organizational performance.

Additionally, Saputra et al. (2023) inspected the impacts of store network the executives and TQM on the exhibition of cafés in Bekasi, with competitive advantage as a middle person. The outcomes showed that both production network the executives and TQM straightforwardly impact competitive advantage. In addition, while supply chain management has a direct impact on an organization's performance, TQM has a mediated effect on performance through competitive advantage.

Based on these findings, this research has developed the following hypothesis:

Hypothesis 4: Competitive advantage mediates the effect of TQM practices on organizational performance.

Methods:-

This research was conducted on students at the Faculty of Business, Maranatha Christian University, Bandung. Data collection was carried out through surveys and sampling was carried out using the convenience sampling method. Regarding the measurement of the three variables in this research, it can be explained as follows:

1. TQM practices

In this study, TQM practices are defined based on Yahiaoui et al. (2022) and include eight key practices: Customer orientation, leadership dedication, comprehensive employee participation, process-based approach, structured management in higher education, ongoing improvement, data-driven decision-making, and mutually advantageous supplier relationships.

2. Competitive Advantage

The definition of competitive advantage in this study refers to the definition proposed by Kafetzopoulos and Gkana (2015) and includes five indicators to measure competitive advantage which include: quality, price, delivery, flexibility, and new product introduction.

3. Organizational Performance

The definition of organizational performance, in this case higher education performance, refers to the definition put forward by Ala (2022). Several indicators used to measure higher education performance include stakeholder satisfaction, strategies, processes, capabilities, and stakeholder input.

A Likert scale of 1 to 5 is used for the measurement scale, with 1 representing very low, 2 representing low, 3 representing average, 4 representing high, and 5 representing very high.

The data analysis for this study will utilize both descriptive statistics and quantitative methods through Smart PLS. This includes evaluating both the external and internal (structural) models. The external model assessment involves validity and reliability tests. Validity is measured by examining the loading factor values on latent variables and their indicators, with a loading factor greater than 0.60 considered high. Reliability is assessed using Cronbach's Alpha and Composite Reliability, with constructs deemed reliable if both values exceed 0.70.

For the structural model, R-squared values will be used to evaluate the dependent variable, while path coefficients will assess the independent variables, with significance determined by t-statistics. R-squared values are categorized as strong (0.67), medium (0.33), or weak (0.19). The Adjusted R-squared value will indicate the effect size of independent variables on the dependent variable. Additionally, the effect size value will be used to determine model goodness, with a value greater than 0.15 indicating a good model fit.

Findings

Result of The Data Collection:-

Data are collected through a survey method and the response rate in the data collection process is summarized in Table 1 while the respondent's profile is summarized in Table 2.

Table 1:- Rate of Return.

Total questionnaires distributed	110
Total returned and can be processed questionnaires	89
The rate of return based on the processed questionnaire	89/110 x 100% = 80,90%

Source: Processed Data

Table 2:- Respondent Profile.

No.	Statement	Criteria	Amount	Percentage
1	Gender	Male	37	41,57
		Female	52	58,43
2	Age	15 – 20 years old	11	12,36
		21 – 25 years old	51	57,30
		26 - 30 years old	13	14,61
		>30 years old	14	15,73
3	Study Programs	Management	49	55,06
		Master of Management	18	20,22
		Accounting	22	24,72
		Master of Accounting	-	-
3	Residential Status	Parent's House	21	23,60
		Dormitory	47	52,81
		Apartment	11	12,36
		Own House	9	10,11
		Others (Living in brother's and extended family)	1	01,12

Source: Processed Data

Based on the respondent's profile data, most respondents in this study were female, namely 58.43% or 52 respondents, aged between 21-25 years (57,30%) or 51 respondents, with the residential status being 52,81% at dormitory, and 49% are studying at undergraduate program of management. This study involved 89 respondents including three study program of management, master of management, and accounting.

Measurement Model Evaluation

Before hypothesis testing, the validity and reliability of the measurements in this study were assessed using an outer model evaluation. Validity testing was performed through cross-loading factors, as illustrated in Figure 1 and detailed in Table 3.

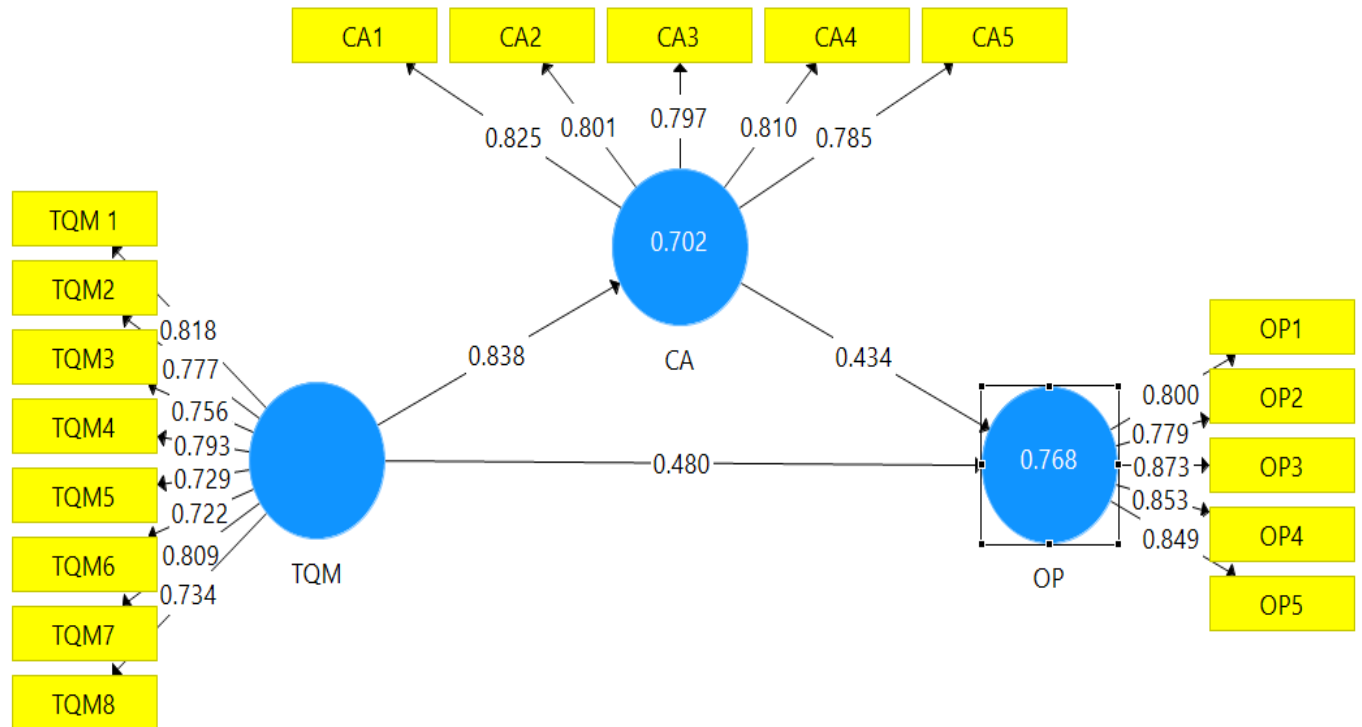


Figure 1:- Loading Factors of TQM Practices, Competitive Advantage, and Organizational Performance Indicators
 Source: Processed Data

Table 3 sums up the legitimacy testing results in view of cross-stacking values for every pointer estimating Total Quality Management (TQM), Competitive advantage (CA), and Organizational Performance (OP). Table 4 presents the unwavering quality testing results utilizing Cronbach's Alpha, Composite Dependability, and Normal Difference Separated (AVE). The component stacking values for each inactive variable surpass 0.7, showing that all pointers for TQM, CA, and OP are legitimate (Ghozali and Latan, 2015). Furthermore, since Cronbach's Alpha and Composite Unwavering quality qualities are above 0.7, it tends to be reasoned that all pointers are solid (Hair et al., 2019).

Table 3:- Loading Factors.

Indicators	Loading Factors		
	CA	OP	TQM
CA1	0,825		
CA2	0,801		
CA3	0,707		
CA4	0,810		
CA5	0,785		
OP1		0,800	
OP2		0,797	
OP3		0,873	
OP4		0,853	
OP5		0,849	
TQM1			0,818
TQM2			0,779
TQM3			0,756
TQM4			0,793
TQM5			0,729
TQM6			0,722
TQM7			0,809

TQM8			0,734
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Source: Processed Data

Table 4:- Cronbach Alpha, Composite Reliability, and AVE.

Latent Variables	Cronbach Alpha	Composite Reliability	AVE
CA	0,863	0,901	0,646
OP	0,888	0,918	0,692
TQM	0,900	0,920	0,590

Source: Processed Data

Structural Model Evaluation

Table 5 summarizes the results of evaluating the goodness of the structural model based on the R square value. The experimental outcomes show the R square incentive for the competitive advantage variable is 0.768, this actually intends that there is 76.8% variety in competitive advantage and TQM rehearses can impact organizational performance.

Table 5:- R-square Criteria.

	R Square	R Square Adjusted
Competitive Advantage (CA)	0,702	0.699
Organizational Performance (OP)	0.768	0.763

Source: Processed Data

The results of the evaluation test of the goodness of the structural model using the F test which shows the effect size in Table 6, it can be concluded that the value of measuring competitive advantage on organizational performance, TQM practices on competitive advantage, and TQM practices on organizational performance are good based on the F square value of (0.242; 2.359; 0.296).

Table 6:- F-square Criteria.

	CA	OP	TQM
Competitive Advantage (CA)		0,242	
Organizational Performance (OP)			
TQM Practices (TQM)	2, 359	0,296	

Source: Processed Data

Hypothesis Testing

Table 7 sums up the consequences of hyposthesis testing, including: the effect of TQM practices on competitive advantage, the impact of TQM practices on organizational performance, the influence of competitive advantage on organizational performance, and the mediating role of competitive advantage in the relationship between TQM practices and organizational performance. The results, based on the P-values, indicate that all hypotheses in this study are supported.

Table 7:- Hypothesis Testing Result.

Hypothesis	Causal Association	Original Sample	Sample Mean	Standard Deviation	T statistic	P Values
H1	TQM -> CA	0,434	0,432	0,093	4,645	0,000
H2	TQM -> OP	0,838	0,832	0,046	18,340	0,000
H3	CA -> OP	0,480	0,476	0,102	4,727	0,000
H4	TQM -> CA -> OP	0,364	0,361	0,086	4,210	0,000

Source: Processed Data

Hypothesis 1, which posits that TQM practices impact competitive advantage, is supported with a t-statistic value of 4.645 and a P-value of 0.000. Hypothesis 2, stating that TQM practices influence organizational performance, is also supported with a t-statistic value of 18.340 and a P-value of 0.000. The hypothesis that competitive advantage affects organizational performance is supported with a t-statistic value of 4.727 and a P-value of 0.000. Furthermore, the role of competitive advantage as a mediating variable is confirmed with a specific indirect effect t-statistic value

of 4.210 and a P-value of 0.002, indicating that competitive advantage partially mediates the effect of TQM practices on organizational performance.

Discussion:-

The aftereffects of the principal hypotheses testing, which analyzes the effect of TQM rehearses on the competitive advantage of advanced education, line up with past examination discoveries. The review affirms that the execution of TQM rehearses affects competitive advantage (Sari and Firdaus, 2018; Yeng et al., 2018; Elhawi, 2022). From the perspective of the respondents, these findings suggest that the TQM practices analyzed—such as management commitment, process approach, total employee involvement, customer focus, systematic management in higher education, continuous improvement, fact-based decision making, and mutual benefits in supplier relationships—are successfully implemented.

For example, related to the practice of continuous improvement, respondents could feel that there were continuous improvements in relation to physical facilities and educational services (such as classrooms, libraries, laboratories, halls, administrative service rooms, study room facilities, and other supporting facilities such as availability of internet facilities, prayer rooms, parking lots, ATM or automated teller machine facilities, health facilities and so on). It is expected that improving the organization's focus regarding the quality of service provided to consumers can become a source of competitive advantage for the organization and become an attraction for potential customers, in this case prospective students, to become part of higher education organizations. In other words, to increase competitive advantage so that it can attract the interest of potential consumers, the implementation of TQM is very necessary and must receive important attention in organizational management.

The results of the second hypothesis testing regarding the effect of implementing TQM practices on organizational performance were also proven. The results of this study support the previous study findings which suggest that there is a significant influence of TQM practices on organizational performance (Al-Omouh et al., 2015; Uralov, 2020; Alzeaideen, 2019, Thabrani and Ramadini, 2021). Studies prove that implementing TQM is a means for organizations to improve quality, especially service quality in the context of higher education. Improving the quality in providing services to stakeholders, especially students, can be achieved by implementing several strategies such as innovation in the implementation of the teaching and learning process, the level of responsiveness provided by the organization in dealing with problems that may occur, guaranteeing good quality education, the ability to provide services as promised and so on, where all of these things will be determining factors in creating high or low overall organizational performance. In other words, implementing good and correct TQM in organizational management is expected to improve organizational performance.

The hypothesis testing results regarding the impact of competitive advantage on organizational performance are consistent with prior research (Alawadi et al., 2019; Rahmawati et al., 2019; Saputra et al., 2019). In higher education, competitive advantage is defined as the ability to provide superior educational services compared to competitors. This advantage, achieved through effective organizational strategies, significantly boosts performance. An enhanced competitive advantage allows an organization to better assess its internal strengths and weaknesses and to recognize external opportunities and challenges, leading to improved overall performance.

Besides, the examination of the fourth hypotheses, which investigated how competitive advantage intervenes the connection between TQM rehearses and organizational performance, lines up with prior investigations (Rahmawati et al., 2019; Saputra et al., 2023). This affirms that competitive advantage goes about as a fractional middle person in the connection between TQM rehearses and organizational performance. As such, TQM rehearses altogether impact authoritative execution through competitive advantage. By adopting TQM practices—including management commitment, process approach, total employee involvement, customer focus, systematic management in higher education, continuous improvement, fact-based decision making, and mutual benefits in supplier relationships—are successfully implemented.

Conclusion:-

The results of testing the four hypotheses in this research include the influence of TQM practices on competitive advantage, the influence of TQM practices on organizational performance, the influence of competitive advantage on organizational performance, and testing the mediating role of competitive advantage on the influence of TQM

practices on organizational performance, all supports the findings of previous studies. In this study, competitive advantage plays a role as a partial mediating variable.

The author admits that there are still several limitations in carrying out this research, such as the limited number of samples used in this study, namely only taking samples from one faculty, in future research it is expected that the research can be expanded by involving a larger number of samples and sampling involving all faculty. It would be better if research could be carried out in a wider scope involving not only one higher education institution but more universities.

Moreover, this study examined only three variables: TQM implementation, competitive advantage, and organizational performance. Future research could expand by incorporating additional factors such as knowledge management and supply chain management, which might influence competitive advantage and organizational performance. Given that higher education institutions are key producers of knowledge, effective knowledge management is essential for enhancing competitive advantage, improving performance, and ensuring long-term viability.

This research aims to offer valuable insights for decision-makers by underscoring the importance of implementing TQM practices. Emphasizing practices like customer orientation, leadership commitment, full employee participation, a process-focused approach, systematic management, ongoing improvement, evidence-based decision-making, and collaborative supplier relationships is expected to strengthen competitive advantage and, as a result, enhance organizational performance.

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