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**Research Paper** 



### The Influence of Integrated Quality Management on E-Learning User Satisfaction in E-Commerce Independent Study of the Merdeka Campus Program

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ABSTRACT: Therapid dissemination of information from the internet makes the internet a necessity in activities every day, especially during the Covid-19 pandemic. Allsectors are undergoing changes, educational institutions are one of them. The policy set in educational institutions is to require all educational activities to be carried out remotely online. This policy greatly influences the trend of change in education institutions, especially in learning activities. The change that occurs when activities are carried out online is the use of E-learning mediaas one of the learning methods. The use of E-learning mediais currently not only used by official educational institutions, but also used by professional institutions, one of which is Power academy. Power Academy is one of the partners organizing the E-commerceCertified Independent Study program, part of the Merdeka Campus program. Power academyhasan E-learning learning medium, namely Power learning. In line with the development of E-learning in this saat, its use should be measured to determine the success of its application in onlinelearning. The Metode used is quantitative research. This research aims to be able to find outintegrated quality management, namely individual perceptions of the quality, use, and user satisfaction of the Power learningsystemin E-commercelearning. It is hopedthat this research in the future will provide information about the quality of the *E*-learning system that is effective for use in learning. Therefore, questionnaires have been distributed to 175 samples of respondents (active participants) and conducted research, used to obtain information and processed by analyzing validity test data, reliability tests, Average Variance Extracted (AVE), and R squareanalysis. Conclusions from the analysis, namely the quality of the system, the quality of information and the quality of service have a positive and signive effecton user satisfaction. The quality of the system must be improved especially on the appearance of power learning. So that Power academy, especially integrated quality management, has the quality, use and satisfaction of Power learning and E-commercein the next wave of activities.

KEYWORDS:, Information Quality, Kampus Merdeka, Satisfaction, System Quality, Service, Quality

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#### I. INTRODUCTION

The evolution of technology and information today has become commonplace, because every day people access the internet with their own needs. Coupled with the fast and easy dissemination of information, as well as the amount of information presented on the internet. At this time, the internet can be viewed as a giant library. Of course, indirectly, people depend on the internet every day, especially during the Covid-19 pandemic. The internet presents a faster online media in terms of the latest information dissemination. The Existence of the Covid-19 pandemic has made people carry out daily activities online, especially surpassed by all information that can be accessed in just one device (gadget) / smart phone (smartphone).

The Covid-19outbreak has madeit a benefit from the use of technology in obtaining various information sourced fromnternet. The worldof education is one that applies the benefits of using technology and information.Educational activities can be carried outremotely via the internet, minimizing face-to-facemeetings in person.Educational activities carried out through online itself have the aim ofbreaking the cycle of transmission of covid-19.On August 7,2020, four ministers issued a Joint Decree (SKB), establishing learning policies in the current pandemic era.Educational institutionsare given various freedoms to determine curricula that can adapt topandemic conditions, based on theneeds of eacheducationalinstitution.OnlineLearninguilizing

technology produces several learning methods through online application media, the following is a survey conducted by the Indonesian Association for Education and Teachers (P2GI).

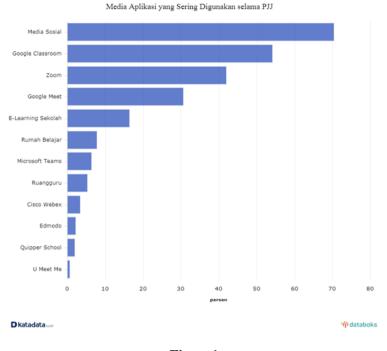


Figure1 Frequently Used Application Media during PJJ

The study was conducted at various levels of education, P2GI mensuring surveying 29 provinces and 100 cities/districts, around 320 data onteachers, school staff, and principals were collected. Data collection by online meansfrom November 24 to November 27, 2020. According to the Indonesian Teachers and Education Association, during theCovid-19pandemic, 70% of thedatawas obtained, for distance learning jauh (PJJ) 70% usedsocial mediaplatforms Facebook, Whatsapp, Instagram, and Line. Furthermore, data on the use of the application as a support for learning was obtained follows, as many as 54% of respondents use Google Classroom, 42 percent of respondents prefer the Zoom application. After that, 31% of people reported that they used Google Meet for PJJ, and the restusedother distance learningsupport apps.

As previously stated, the phenomenon of using and using information and technology has a significant impact on changing trends in the world of education, especially in terms of teaching methods. The changes that occur in theworldof education canbe indicated by several things such as, the availability of many and easy learningresources, the use and use oftechnologyinformation and communication of variousonline mediasuch as E-learning, other forms of learnings a form of learning, as well as learning models with blended learning systemsorself-study. [1]. One of the elearning methods is the use of E-learning, sistem E-learning is a feasible solution for a big n of educational problems in Indonesia. E-learning is intended to help teachers and students overcome obstacles such as space and time constraints. Teachers and students are no longer required tomeet face-to-faceatthat time in the E-learning arena. By ignoring these two aspects, the educational process can be neglected atany time [2]. In line with the development of the current E-learning system, it is important to evaluate E-learning and its absorption. The evaluation aims to determine the level of achievement of the E-learning websites othat further improvement efforts can be made [3]. When an institution has implemented an E-learning systemin its institution, its achievement or effectiveness must be measured and determined in athorough manner.

The application of E-learning as a learning method today is not only in the official educational institutions, but has been applied to various organizations and professional institutions, one of which is the Power academy.Power Academy is one of the partners organizing the E-commerce Certified Independent Study program, part of the Merdeka Campus program.Power academy aims to reduce the GAP between the needsof the E-commerce industryand the experts needed, through the Independent Study program held, Power academy applies learning methods that are directly equated with the ecosystem in E-commerce, mentors who are experienced and are professionals in the E-commerce ecosysteminvolved directly into learning activities, so that

participants can get theory and practice directly from mentors who have experience in the E-commerce ecosystem.

This E-commerce Certified Independent Studywas held to increase the quantity of university graduates in Indonesia who are better prepared to work in the field of E-commerce. The learning method is experience learning, where students learn through the process of implementing the material they get in various tasks. The provision of material is given both synchronously (among others in the form of lectures and questions and answers, group discussions, presentation of results, all through online meetings) and asynchronously (among others by providing reading materials, teaching videos, practice questions). Online learning methodscan be applied by utilizing video conferencing and utilizing E-learning mediaor referred to as synchronous methods and asynchronous methods[4].Power academy hasan E-learning learning learning media, namely Power learning, which contains information related to information on activity schedules, activity modules, to feedback by mentors on the tasks that have been done.

Several researchers have conductedresearch related to E-learning, one of which is[1].In hisresearch concluded that to meet the use of an E-learningsystem, theE-learning system must have a good system quality.The research is within the scope of the official educational institution, namely Mercu Buana University.Furthermore, in the study[5] concluded that the satisfaction of STIE Muhammadiyah Jakartastudents waspositively influenced byservice qualityvariables, then indicators measurement of servicevariables that play a very important role insatisfaction, namely in the aspects of the level of application of learning delivered by lecturers and the utilization of the SIAKAD system.Furthermore, the study[6] concluded that satisfaction ispositively influenced by the quality of the informationsystem and thequality of service inonlinelearning.

E-learning which is used as one of the teaching bellmethods and adopted by professional institutions / organizations becomes the main motiva of theauthor of the research, focusing on solidquality managementconsisting of systemqualityvariables, information and service terhadap user satisfaction. The recency of this research is yaitu, the scope of research is carried out in Organisasi / Professional institutions. The focus of thisresearch is the individual perspective onintegrated qualitymanagement, namely individual perception on the quality, use, and users at is faction of power learning systems in learning E-commerce.

Based onthe explanations that have been explained above, a problem can be compiled in this problem, is integrated quality management related to user satisfaction? Later, it can be hoped that this research will provide empirical data in the next research, especially related to the relationship between which quality is integrated in quality, use and satisfaction, then can then used as a measurement of bagi the Power academy, especially about which quality jemen is integrated on the quality, use and satisfaction of Power learning and E-commerce learning in the next wave of activities.

#### **II. LITERATURE REVIEW**

#### **Integrated Quality Management in Educational Institutions**

The principle of integrated quality management requires comprehensive supervision of the actions of the Institution by all members of the educational institution. Due to large number of changes in rules and conditions, supervision and evaluation need to be used to ensure that all processes work effectively to achieve goals [7].Because all parties who take part in all aspects of education in lembaga pendidikan mustfully understand the the sence and purpose of education, the implementation of integrated quality management means that all members of the institution are responsible for the quality of education. That is, all interested people must understand the purpose of education. Integrated quality management cannot be implemented if people have a hand in education that does not have a thorough understanding. Integrated quality management in education has the main objective, namely, improving the quality of education in the long term, consistently, and thoroughly. Such goals can be achieved by applying user-centric principles, improving the quality of the process, and involving all components of education [8]. The combination of all thefunctions of elements in an institution becomes a holistic philosophy that is compiled based on a perspective quality, cooperation, productivity and satisfaction, is the meaning of actual integrated quality management[9].

#### **Information System**

A system consists of elements or parts of the elements that interact, correlate, influence, and collaborate to achieve a common goal. Information that can be used to inform growth of an institution is the final product of a series of data collection, processing, and interpretation activities. An information system collection can be used to process, collect and present output data in theform of appropriate information inorder to support decision making in an institution [10]. User satisfaction and the achievement of an information system are influenced by quality. The satisfaction of information system users is also described by several things such as ease, comfort, and security[11]. A model is needed inanalyzing aspects of the success of information systems. Delone and McLean's model can be used as an alternative measurement and has been widely adapted in research that examines the success of the information system[12].

#### **Education Management Information System**

The survival of an educational institution depends ongood management and management, this is an absolute requirement for an educationalinstitution to survive. In order for an educationalinstitution to survive to develop, it needs appropriate information management [13]. Advances inscience and information technology have changed most of the views and habits of social life in society in Indonesia, especially in the world of education.

Research conducted[14] to develop asuccessful and quality educational management information, it takes apenting aspect, namely human resources that manage well for the availability of information technology management, youcan create a conducive learning environment.

#### System quality

A quality system based on the validity of the information system, which consists of software and hardware[15]. De Lone and McLean, 2003 [16] explain the so-called system quality i.e. Quality of software and hardware of information systems, focusing information about the system itself, covering things such as simplicity of use, reliability of the system, sophistication, and response time.

#### Quality of information

An information systemcan produce an output that can be used, the output used is the quality of information. The results of quality information output can bein the form of accurate and easy-to-understandinformation, complete and sufficient information, and precise information[17]. Information technology used in an application system must be able to interpret information that can be used by its users in making decisions[18].

#### Quality of service

According to[19], proper delivery to customers and efforts in fulfilling customer wishes and requirements is calledservice quality. In his research [20] explained theattributes and featurescontained in a product and service, its capacity to influence the need to satisfy needs satisfying needscustomers who are spoken or not spoken are called quality service. In research[21] explaining theservicereceived by customers produces a perception of themeasure of the service that has been obtained, measuring between expectations and in fact, that measure is thequality of service. The purpose of thequality of service is themeasure of service provided in meeting consumer expectations[22]From some of the exposures above, it produces a conclusion about the quality of service. If a product or service is received by the customer in accordance with what is expected, good quality, the perception of the quality of service will be good.

#### User satisfaction

A generalassessment of the user's experience in using an information system and the possibility of disruption that will result in it is called user satisfaction [23]. User satisfaction cannot be separated from the experience in using information systems, how users feel the benefits and how they feel when using them, these two feelings can be affected by the characteristics of each individual that are different. User satisfaction is a feeling that is not influenced by anything in the form of pleasure or dissatisfaction resulting from interaction with information systems, based on the benefits to the whole that the individual anticipates.

#### Hypothesis

Aproposition formulation that serves as a tentative answer to aproblem that is further tested empirically is called a hypothesis. A hypothesis is a type of proposition that usually used to express the relationship between twoor more variables, the relationship produces a statement that can formulated into the framework of the theory. The problem formulated can produce a temporary answer or also called a hypothesis, which comes from a framework that dapat formulate a hypothesis. Using h causal, associative (causal) hipotesis is a kind of hypothesis that investigates the n-entwining of more than two variables. [24].

[1] in his research user satisfaction is positively influenced by system quality.[10] also states about user satisfaction in the positive influence of iby system quality variables. The hypothesis presented, based on the theoretical foundations as well as previous studies, the first hypothesis:

#### H(1) : System quality has a positive effect on user satisfaction

In his research[25] concluded that an information system produces information characteristics, these characteristics become a reference for the quality of information. The information conveyed becomes the basis of the quality of the information, if the information is accurate and up to date, and the information is allied and can be useful for users.

Basedon the theoretical foundation as well as previous studies, these condhypothesis:

#### H(2) : Information Quality has a positive effect on user satisfaction

Research related to information systems has widely used the dimension of service quality, along with the quality of information and systems as an alternative to measuring effectiveness. The recommended measure of service quality consists of assurance, responsiveness, reliability, empathy and tangibility [26]. Research conducted by [5] stated, satisfaction is positively and significantly influenced by the quality of service.

Basedon the theoretical foundation as well as previous studies, the thirdhypothesis:

#### H(3) : Service Quality has a positive effect on user satisfaction

#### **III. RESEARCH METHODS**

This research used quantitative methods, carried out an analysis of independent variables System quality, information quality and service quality which directly affects the satisfaction E-learning Users (Power learning). Primary data was used as data source inthis study. The use of questionnaire method is intended to be able totake the data needed in conducting research, all participants of the E-commerce Certified Independent Study become the object in this research. Partial Least Square (PLS) use for hypothesis testing. One of the alternative methods based on variance uses Structural Equation Modelling (SEM).

Causal research design used in thisstudy,looking at the relationship between two or more variables. The impact of system quality, information quality, and service qualityonpower learning usersatisfaction.

1.Bound variables (Dependentt), namely:

a.E-learning usersatisfaction (Y)

2.Free Variables (Independentt), namely:

- a. System quality (X1)
- b. Information quality (X2)
- c. Service quality (X3)

The sample in a research activity is to represent and be used as a research subject respondent or to be researched and used as a research respondent. As stated by (Sugiyono, 2017)states that the sample is part of the number and characteristics possessed by the population. Determination of the sample needs to be done in a way that can be accounted for to get the correct data, so that the conclusions drawn can be trusted. So that the samples taken are representative, the sampling technique used is saturated sampling. According to (Sugiyono, 2017), the saturated sampling technique is a sampling technique when all members of the population are used as samples. All members of the population of 200 people were used as samples, then the sample received by the researchers is 175 respondents.

#### **Data Analysis Methods**

In quantitative research, the collection of all respondentquestionnaire datawas then analyzed on the respondent's data. The stages in data analysis include, variable data and types of respondents are grouped, the data that has been obtained from respondents is tabulated based on the variables, each variable that has been studied is presented with data, the formulation of the problem is answered through calculations first and conducting a hypothesis test proposed (Sugiyono, 2017). The data were analyzed using partial least squares (PLS). PLS analysis is a comparative approach that compares many dependent variables t and independent Field[28]. The reason why researchers use PLS is because the depiction of multivariate statistical models Structural Equation Modelling (SEM) can help the data obtained can be tested in theory and based on empirical research[29].can mediate between variabel quality systems, information and services. Researchers utilize PLS SmartPLS 2.0 software to facilitate the data testing process. Pengujian outer model, inner model assessment to test validity and reability and hypothesis testing are 3 stages in PLS analysis[30]

#### **Outer Model**

The constructivity and reliability of the instrument were tested using an outer model or alsocalled a measurement model.

#### 1. Validity Test

Validity refers tohow well a test or a collection of indicators are operated in the measurements of Bowin & Leonard, 1981(In Abdillah & Hartono, 2015)An indicator of questionnaire measurementis said to be accurate or cannotbe tested through this test. A questionnaire can be said to be valid if it can answer and prove whatis asked in thequestionnaire question. This isnoted in Convergent Validity describing the value of the loading factor on the measured variable, when utilizing Smart PLS to test its validity. The value ismore than 0.6. If the loading score is between 0.5 - 0.6 until convergence validity [32].

#### 2. Reliability Test

The accuracy, accuracy, and consistency of measuring instruments are shown by testing reliability [28]. If the value of reliabilitas construct> 0.6 means that the variable is quite reliable. Data with composite reliability> 0.6, indicating good reliability.

#### Structural Model (Inner Model)

Relevance between constructs tested using thevalue of the aspect of the path,  $R^2$  for the dependent construct or thevalue of t for each path, the test is to evaluate the structural model in the PLS[28]. Structural models based on theory describe causal relationships between latent variables [28]. IndependentariabelV t relative to the dependent variable t used  $R^2$  for measurements in PLS analysis. Apabila R value<sup>of 2</sup> is high, then themodel is getting better. The research modelgets weakerwhen thevalue of  $R^2$  issmaller (close to zero), causing at least the contribution of the independent variable t. In hypothesis testing, to see the level of signification, it depends on the path coefficients coreor t-values. If the T-statistical value  $\geq 1.96$ , it means that the hypothesis can be expressed as supported [28].

#### **Descriptive Analysis**

Explain and describe the results of calculations from qualitative analysis and clearly describe the conditions that exist in the object of research.

#### **Hypothesis Test**

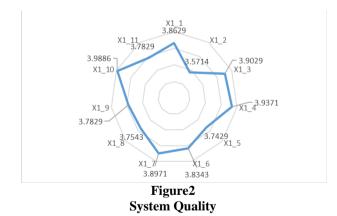
In this study, the value of t-statistics on each path is used to test the hypothesis using SmartPLS in the bootstrap display. According to [33] this bootstrap method describes a method based on resampling sample data with the condition that the data is taken in completing the sample size statistics of a sample in the hope that the sample represents the actual population data.

Testing the hypothesis can be seen through the value of t-statistics and probability values. For hypothesis testing using the t-statistical value, for alpha 5% the t-statistic value used is 1.96 [34]. So the criteria for acceptance or rejection of the hypothesis is Ha is accepted and H0 is rejected if the t-statistic > 1.96. To reject/accept the hypothesis using probability then Ha is accepted if the p value <0.05.

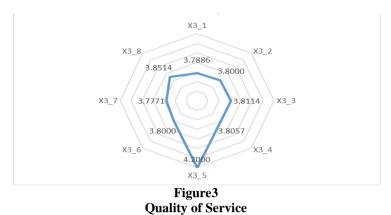
#### **Descriptive Analysis**

## The satisfaction of using *E-learning*, especially in the *e-commerce* learning required by the participants, is illustrated by several alternative measurements in the quality of the system in Figure 2.

**IV. RESULTS AND DISCUSSION** 



Based on Figure2 variabel system quality on measuring theflexibility of using power learning positively affects atisfaction. On theother hand, the appearance of the power learning system is considered less user friendly than othere-learning.



Based onFigure3, it shows that power learning can provide accurate learning information related to E-commerce learning. Power learning is considered still not good in terms of punctuality, speed of information delivery, and speed of information update.

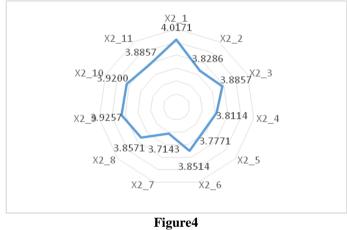
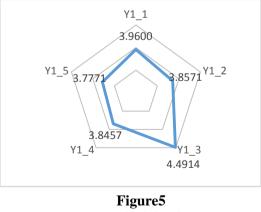


Figure4 Quality of information

Figure4 shows that Power Academy has competentstaff in facing many challenges that occur with power learning. The quality of power learning services shows that, overall, the services provided to participants when using power learning have met expectations in E-commerce learning.

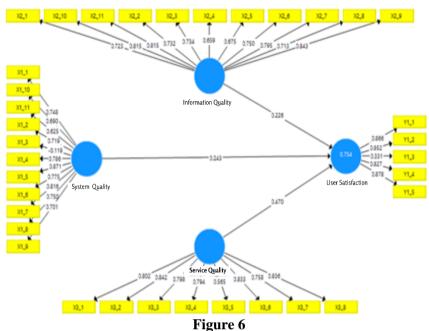


User Satisfaction

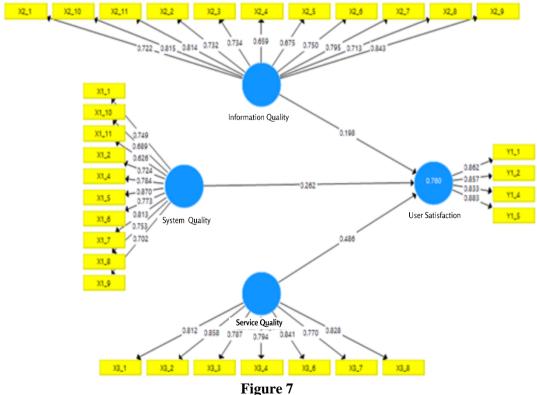
Figure5 shows the participants liking the zoom application for E-commerce learning because it allows participants to communicatedirectly with mentors and other participants. Overall, the participants were still not satisfied with the power learning media.

#### Validity

UtilizingSmart PLS software, check the accuracy of each alternative question as a measurement indicator. Individualksif reflective actions with a loading factor value ( $\alpha$ ) > 0.5-0.6 are considered valid.The value of the loading factor ( $\alpha$ ) of >0.6 was determined inthisstudy.If the alternative indicator has a loading factor ( $\alpha$ ) valueof < 0.6, it will be eliminated or excluded from this study, indicating the inability to measure latent variables.



Path & Loading Factor Diagram of Research Variables Before Drop



Path & Loading Factor Diagram of Research Variables After Drop

#### Reliability

Table 1 shows the test results. Variable that has a construct reliability value of > 0.6 means that the variable is said to be reliable.

ReliabilityTesting Results								
Variable	Cronbach Alpha	Composite Reliability	AVE	Information				
User satisfaction(Y)	0.881	0.918	0.738	Reliable				
System quality (X1)	0.913	0.928	0.564	Reliable				
Information quality (X2)	0.923	0.935	0.566	Reliable				
Service quality (X3)	0.915	0.932	0.662	Reliable				

Table 1 ReliabilityTesting Results

Source: SmartPLS data analysis 2022

Reliability tests on all variables showed Composite reliability and the Cronbach Alpha had a value of >0.6.This means that measurements on all variables can be relied upon to measure their constructs. The average Variance Extracted (AVE) of the four variables showed avalue of > 0.5, meaning that it showed excellent discriminatory validity.

#### Godness of Fit Model

The value of  $R^2$  becomes the basis in the analysis, give t the results of the analysis in table 2:

# Table 2R-square results

R Square

User satisfaction 0.745

Source: SmartPLS data processed 2022

The data of table 2 shows the relationship between the independent variables 0.745, according to the results of the analysis in table 2 above. This shows 74 percent of user satisfaction models are explained by the quality of systems, information, and services, with the remaining variables explained by variables that exist outside the research model.

#### Hypothesis Test

Table 3	
<b>Results of Analysis of Relationships Between</b>	Variables

<b>Relationships Between</b>	Original	Sample	Standard		
Variables	Sample	Mean	Deviation	T Statistics	P Value
System Quality $\rightarrow$ User	0.262	0.261	0.077	3.419	0.000
Satisfaction					
Information Quality $\rightarrow$ User	0.198	0.205	0.079	2.495	0.006
Satisfaction					
Service Quality $\rightarrow$ User	0.486	0.479	0.081	5.985	0.000
Satisfaction					

Source: SmartPLS Data Analysis 2022

Based on table 3, the above path diagram, as well as theresults of hypothesis tests, the data for all indicators of each variabel have statistics > 1.64 (t tabel), indicating that such measurements can be used for measurements of each of its constructs.Can assess the relationship of one variable withanothervariable, the tstatistic value of the Smart PLS output compared to the ttable value or significance value of P-Value (hypothesis test), which is presented in table 4 below.

Influence between Variables	Koofisien	t Statistics	Information
	Parameter		
System Quality →User	0.262	3.419	Significant**
Satisfaction			
Information Quality $\rightarrow$ User	0.198	2.495	Significant**
Satisfaction			
Service Quality $\rightarrow$ User	0.486	5.985	Significant**
Satisfaction			

 Table 4

 Signification of The Results of Relationships Between Variables

Source: SmartPLS Data Analysis 2022

From the table above, the following equation is obtained:

Y = 0.262 X1 + 0.198 X2 + 0.486 X3

Information:

- 1. The beta coefficient for the system quality variable is 0.262, which means that if the system quality increases, satisfaction will increase by 0.262, as long as the independent variable remains constant.
- 2. The beta coefficient for the information quality variable is 0.198, which indicates that when information quality increases, satisfaction increases by 0.198, provided that the independent variable remains constant.
- 3. The beta coefficient for the variable quality of learning implementation is 0.486, which indicates that if the quality of learning implementation increases, satisfaction increases by 0.486, assuming the independent variable remains.

#### DISCUSSION

#### The Effect of Sistem Quality on User Satisfaction

The value of the parameter coefficient obtained is 0.262 with a statistical value of 3.419 > 1.64 at a significant t araf = 0.05 (5%) based on the hypothesis test, user satisfaction can beinfluenced positively by the quality of the system, the first hypothesis is appropriate. This means **Hypothesis 1 is accepted**.

Based on the four alternative measurements of system quality, namely ease of use, reliability, response time and flexibility, there are two alternative measurements that have a greater influence on system quality, namely ease of use and flexibility. Alternative measurement of ease of use, has a bad score, the power learning system is considered not user friendly when compared to other E-learning systems, users experience problems when using the power learning system, so that in terms of ease of use, the power learning system needs to be adjusted, improved back so that the power learning system can be used easily like other E-learning. On the other hand, the flexibility indicator has the highest value, meaning that users are quite satisfied with the power learning system that can be easily accessed whenever needed. The explanation above is in line with the theory put forward by [23] System quality refers to the inherent information about the system itself, which can include things like simplicity of use, system reliability, sophistication, and response time. defines system quality as an assessment of the information system process that focuses on the results of user involvement and according to research conducted by [35] System Quality has a positive and significant effect on user satisfaction.

#### The Effect of Information Quality on User Satisfaction

Value The coefficient of the parameterobtained is 0.198 tstatistical 2.495 > 1.64 with a significant t araf = 0.05 (5%) based on thehypothesis test, user satisfaction can be positively influenced by the quality of information, the second hypothesis is appropriate. This means **Hypothesis 2isaccepted**.

Measurement of alternative indicators of information accuracy, power learning has accurate information related to learning that has a positive effect and has the greatest value on user satisfaction, but the information in power learning still does not provide up-to-date or latest information related to learning. On the consistency indicator, power learning can present information on learning outcomes according to what the user wants and the information content of the power learning has met the user's needs. The above explanation is in line with the theory proposed by [36]. The quality of information output of the information that is easy to understand, good accuracy, sufficient completeness, consistency, accuracy of information delivery, reliable

sources, and validated. and according to research conducted by [35] user satisfaction is positively influenced by the variable quality of information.

#### The Effect of Service Quality on User Satisfaction

The value of the parameter coefficientobtained is 0.486 tstatistic 5.985 > 1.64 with a significant t araf = 0.05 (5%) based on thehypothesis test, user satisfaction can be positively influenced by the quality of service, the third hypothesis is appropriate. This means **Hypothesis 3isaccepted**.

The alternative of responsive measurement has the greatest value on service quality compared to other indicators, this indicator is supported by the staff owned by Power academy in dealing with every obstacle that exists in Power learning. In reliability indicators, academic services provided by power learning are better than information services related to E-commerce learning. Power learning is more reliable as a learning medium than E-commerce learning information media. The above explanation is in line with the theory put forward by [37]. The dimensions of service quality have been widely used in information systems research and have become an important determinant of effectiveness along with information quality and system quality, indicators for measuring service quality (SERVQUAL), as follows: five of them are guarantee, response time, reliability, empathy and tangibility and research conducted by [5] user satisfaction is positively influenced by service quality variables.

#### V. CONCLUSIONS AND SUGGESTIONS

#### Conclusion

There is a positive and significant influence on system quality variables on power learning user satisfactionin e-commerce learning. System quality on indicators of ease of use and flexibility has a positive influence on the satisfaction of power learning users. There is a positive and significant influence on information quality variables on power learning user satisfaction. The quality of information on the indicator of information accuracy, power learning has accurate information related to learning has a positive effect and has the greatest value on user satisfaction, but the information in power learning still does not display the latest and up to date information related to learning. In the consistency indicator, power learning can present information reports on learning outcomes as desired by users and the information content of the power learning user satisfaction. Responsive indicators have the greatest value on service quality compared to other indicators, Power academy has staff who handle various obstacles contained in power learning during e-commerce learning. In reliability indicators, the academic services provided by power learning arebetter than information services related to e-commerce learning. Power learning is more relied upon as a learning medium than e-commerce learning information media.

#### Suggestion

Thequality of the system must be improved, especially in the appearance of power learning. The power learning systemis considered less user friendly when compared toother e-learning media. The power learning systemis expected to be used simply, so that navigation and some of the tools in power learning can be used optimally. In addition to the simplified function, the display is also an aspect that is no less important to give attention to.

The use of power learning in e-commerce learning as an information medium is expected to be further improved and always up to date. So that users are helped and can maximize the power learning platformas a learning medium.

The quality of service based on the results of research, the power academy has had good staff in dealing with various problems contained in power learning, but power learning services a learning medium and information media masih have not been maximized. It is hoped that existing staff can help power learning provide learning media and better information.

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