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EXAMINING THE ROLE OF SYSTEM QUALITY ON SATISFACTION OF ONLINE COURSE PARTICIPANT

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ABSTRACT

In this era of industry 4.0, many offline courses have closed and many offline courses have switched to online. In an era of COVID-19, offline courses are no longer possible because the government is forcing them to stay away and limit teaching and learning activities. This causes offline courses to migrate to online. However, many conventional courses that turn to online have failed. Failure is caused by many online course participants being dissatisfied. Here, we will examine the factors that influence the quality of courses and the satisfaction of online course participants in Indonesia. The online course referred to here is a non-formal course institution that focuses on vocational training such as Arkademi, Skill Academy, Dicoding and Duta Academy. The combined MOOC has approximately 5.5 million course participants until July 2021. So in this paper, we will discuss research on the analysis of the factors that affect learning satisfaction on the MOOC in Indonesia.

Keywords: Online Course, E-Learning Satisfaction, MOOC, Participant.

1. INTRODUCTION

In an era that continues to develop, until 2021, there will be many transformations towards industry 4.0, where everything is online, from online shops, online taxis and several aspects that can be online. With the rapid development of this era, ironically, the number of unemployed in Indonesia is still large, based on BPS data the number of unemployed in Indonesia is 2.6% in February 2021 [1]. Even the educated unemployment rate is also high. This is due to a lack of synchrony between industry needs and the output of graduates from formal education such as schools and universities. This causes people need additional non-formal education which we call course.

The COVID-19 pandemic is a global health crisis, including Indonesia. With the existence of pandemics in many sectors that have been affected. The spread of the coronavirus initially had a direct impact on the economic sector because of the activities of residents who had direct physical contact [2]. However, the impact has now spread to several other sectors, such as education. There are several types of educational institutions in Indonesia, namely formal education, non-formal education. Non-formal education is a path of education outside formal education which consists of course institutions, training, study groups, and so on. Meanwhile, non-formal education is a path of family and environmental education [3].

Conventional courses are also affected by the era of disruption and the industrial revolution 4.0. This situation has been exacerbated by the COVID-19 pandemic in Indonesia, since early April 2020. According to Gita Pratiwi 2020, that as a result of the COVID-19 pandemic, 85% of course and training institutions experienced financial difficulties [4].

The course is a non-formal educational institution, many conventional courses intend to switch to online. This is due to the COVID-19 pandemic, which does not support offline learning. In this case, there are many things that influence why there are online courses that are successful and have thousands of participants, there are also online courses that fail [5].

This research is very important because online courses are a new hope for non-formal educational

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institutions business in the era of the COVID19 pandemic.

We learn from a MOOC that has developed in Indonesia, namely Arkademi, Skill Academy, Dicoding and Duta Academy. In this paper, we will study what factors affect the quality of online courses and also how they affect the satisfaction of online course participants.

This study uses the model used by Erenler in 2020 to study learning satisfaction [6] and how it is applied to Indonesian online courses.

2. LITERATUR REVIEW

2.1 E-Learning

E-learning is the basis of this research because this research focuses on online education, more specifically online courses. E-learning is an information technology-based learning technology which has been accepted into teaching. E-learning is also part of information technology which has become a major competency in social life and the world of work [7].

Online learning is not a matter of time or place, it can be done at home, at work, while traveling or anywhere via a mobile device or a computer connected to the Internet [7]. In other words, elearning is an approach to providing interactive learning materials to anyone, anywhere, at any time, using digital technology in formal and nonformal learning environments.

The use of e-learning has various advantages:

(1) With e-learning we can learn anytime and from anywhere.

(2) The material consists of various learning resources.

(3) Learning content can be easily updated,

(4) Hyperlinks to other resources are easier,

(5) Collaboration can be done,

(6) Can be given online quizzes that are available both multiple choice and essay, and

(7) Students can send assignments in several media formats[8].

Efforts need to be made according to good elearning [9]

(1) Conditioning a supportive culture towards elearning.

(2)The existence of incentives to motivate lecturers / instructors.

(3) Provide e-learning software training.

(4) Making improvements in building e-learning applications that are more flexible and easy to use.

(5) Increase the awareness of lecturers / instructors / teachers about the importance of e-learning in the future.

2.2 Types of Online Learning

Learning through digital media continues to grow from year to year. From what used to be still using CD ROM technology, now it has switched through the internet (online). Online education can be categorized according to its users [10]:

a) University-Based Online Education

That is, online education where users are individuals who are registered at universities for the purpose of obtaining degrees, diplomas and expertise.

b) Massive Online Open Course (MOOC)

Massive Online Open Course, whose users are selfmotivated individuals and the program is based on learning objectives, prior knowledge and skills, and similar interests (Mcauley et al., 2010). Typically, students in the United States enroll in universities where online course formats have been added to existing classroom courses. At such institutions two modes of online classes are typically offered – fully online courses (not taught in brick-and-mortar classrooms), and mixed/hybrid courses (a combination of face-to-face and web-based and technology-oriented formats). Students in these two online program modes receive credits, diplomas and certificates after completing the required courses and placements.

To increase accessibility to higher education by a wider segment of society, the Massively Open Online Course (MOOC) model was introduced in 2008, which includes academic and commercial online offerings. University offerings were initiated by Ivy-league colleges of higher education, including edX in 2012 by the Massachusetts Institute of Technology (MIT) and Harvard University, eduMOOC in 2011 by the University of Illinois Springfield, Coursera in 2012 by the joint efforts of five universities (Princeton, Stanford, California/Berkeley, Michigan-Ann Arbor, and Pennsylvania), and others. Most are open to the public, reflecting the university's efforts to engage the public in online learning.

2.3 Satisfaction in Learning

One way to understand student satisfaction is to analyze students questionnaires about the courses

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they attend [11]. Students who complete computerassisted out-of-class activities obtain high satisfaction with the learning experience and participation in activities. Students who complete computer-supported out-of-class exercises score high satisfaction of the learning experience and for participation in activities. In contrast, another study showed no difference in student satisfaction levels for the process or outcome measures for the three types of offerings: remote video conferencing, local video conferencing, and face-to-face. [12]. However, the flexibility of time, place, and speed is certainly different in an online environment than face-to-face. So that flexibility affects student satisfaction too.

2.4 SEM

Structural Equation Modeling (SEM) is a second generation multivariate data analysis method that is frequently used in marketing research because it tests theoretically supported linear and additive causality models [13]. With SEM, marketers can visually review the relationships between variables of interest to prioritize resources to better serve customers. The fact that latent variables are unobserved and difficult to measure can be dealt with by SEM. The structural equation model has two sub-models: the outer model and the inner model. The outer model determines how the latent variables relate to the indicators observed. The inner model defines the relationship between the independent and dependent latent variables (see Figure 1). In SEM, variables can be exogenous or endogenous. Exogenous variables have path arrows pointing to the outside and none pointing to the inside. Meanwhile, the endogenous variables have at least one path that drives inwards and represents the effect of other variables.



Figure 1. Inner vs. Outer Model (source : Ken Kwong-Kay Wong, 2013)

2.5 Things that affect Course quality

According to Erenler, the elements that influence the quality of the online course are the interaction of the course, the behavior of the instructor and online advantages [14].

Interaction is very important in courses, including online courses. In online courses, the platform is expected to provide a means to interact between instructors and students or between participants.

Likewise, Instructor behaviors is also a determinant of the quality of the Online Course. Instructor behavior for example is facial gestures, feedback to participants, humor, giving praise to participants [6].

Online Advantages is the flexibility of online courses. The advantages of online courses compared to conventional courses, for example, are whether these online courses can be opened from tools such as Windows-based laptops, Androidbased smartphones or IOS-based smartphones (Apple).

Technology is also an important factor that affects the quality of online courses. The right technology to support things that improve the quality of online courses, such as the flexibility of the online course itself.

The majority of the Quality rubric of online courses said that Course technology and ease of use were a very important part and influenced the quality of online courses [13].

2.6 Critical Success Factor of E-Learning

Critical success factor (CSF) identifies the success of organizational unit performance that describes managerial preferences by taking into account key financial and non-financial variables at certain time conditions. A CSF can be used as a performance indicator or an input in setting performance indicators. Finding critical success factors can determine the sustainability of an organization. If an organization does not really understand its CSF, it will be difficult to measure performance. Performance measurement, monitoring and reporting will be likely to produce information that is not useful for achieving the

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organization's strategic goals. Given the relationship with these strategic objectives, performance measurement that is not based on critical success factors will only waste the company's costs.

Based on the results of the analysis of the critical success factor model that has been formulated by Buashiri in 2012, it is depicted in the following diagram [5]



Source: Bhuasiri et al. (2012, p. 846).

Figure 2. Critical Success Factor E-Learning (Source Bhuasiri 2012)

2.7 MOOC

MOOC is a distance online course with an unlimited number of participants (massive)[14]. The number of online course platforms in Indonesia is quite large, here will be a sample on the MOOC platform which is quite large such as Arkademy, Skill Academy, Dicoding and Duta Academy. They provide a wide range of high-quality hard skills and soft skills. Participants can learn anytime and anywhere online through the hand through a useroriented mobile or web-based application. Course participants on their platform are used by adults of working age by providing skills-based online learning that can help users find the jobs they desire. develop careers. and increase competitiveness. The learning method at them was developed to adapt to the mobility behavior of users both in terms of curriculum, teaching materials, and technology.

Majority of MOOC take a practical approach that allows learning to be carried out more efficiently, at an affordable cost, open to anyone, relevant, and accessible whenever needed. Arkademi was developed by PT Arkademi Daya Indonesia, an educational technology company based in Jakarta since 2017[15][15]. Skill Academy is a business unit of Ruang Guru which is engaged in MOOC. Ruang Guru is the largest and most comprehensive educational technology company in Indonesia, with 4 million users in 2020[16]. Different than Skill Academy, Dicoding is a technology education platform that helps produce digital talent of global standard. Dicoding's mission is to accelerate Indonesia's transition to a digital world through technology education that transforms lives. Dicoding has more than 475.357 in 2021[17]. Another MOOC being researched is Duta Academy. Duta Academy is a business unit of PT. Tras Tekno Indonesia which is engaged in online courses[18].

3. METHOD

3.1 Research Methodology

The research process starts from the formulation of the problem. In this case according to the subject matter are the factors that affect the quality of online courses and the satisfaction of online course participants. Next is to conduct a literature study on journals related to education, online courses. The next step is to describe the framework of thinking, then determine the method used, then conduct a survey and the next step is to analyze the survey results.

Before conducting a survey, we must determine the research method. This study uses the PLS SEM method as a tool for data management and analysis of research results. In this research, representative research variables are arranged, then indicators are compiled from these variables and the indicators are represented in questions or questionnaires. The purpose of the question must refer to the indicators compiled in this study.

This study uses a questionnaire addressed to respondents who are online course participants. The type of questionnaire is a question that must be answered by the respondent. To get a score from each respondent's answer, the author uses a 7-point Likert Scale. For research on online course participant satisfaction, a scale of 7 was used referring to previous research [6]. The points are as follows:

1. The answer strongly agrees (the highest

category) is given a score of 7.

2. There is strong agreement and a score of 6.



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3. Answers agree are given a score of 5.

4. Neutral answers are given a score of 4.

5. Disagree answers are given a score of 3.

6. Strongly disagree answers are given a score of 2.

7. Answers strongly disagree (lowest category) are given a score of 1.

The questionnaire in this study was made through a Google form in the form of a radio button, where respondents answered a number of statements submitted. From the results of the study, the scores for each question and the total score for all respondents will be obtained.

3.2 Hypothesis

The hypothesis used in this study is by referring to Course interaction, Instructor Behavior, Online advantages, Course technology and its effect on Course quality and the effect of Course quality on Course Satisfaction, where the hypotheses of this study include:

• H1: The interaction of the course has a major impact on the quality of the on-line course.

• H2 : There is a significant effect of instructor behavior on the online course quality.

• H3 : There is a significant effect of online advantages on the online course quality.

• H4 : There is a significant effect of course

technology on the online course quality.

• H5 : There is a significant effect of online course quality on the satisfaction of course participant.

3.3 Research Variable

According to Turhangil Erenler[6], that the quality of online courses in detail consists of Interactive Learning, Instructor behaviors, Flexibility. Based on Quality Matter Rubric Program (QM Rubric, 2020) said that technology greatly affects the quality of online courses. So that in this research, course technology is added as a variable that affects online course quality.

a) Interactive Learning (Course interaction)

Interactive Learning is an important factor that greatly affects the quality of online courses. With interactive learning will improve the quality of the online course. What is meant by interactive here is the interaction of instructors with students, students with students. How can they ask questions and discuss.

b) Instructor Behaviors

The second aspect is how the instructor behaviors affects the quality of the online course. The instructor behaviors and the way the instructor relates to his students are important because these processes influence student's perceptions of the online learning environment. In live sessions using zoom, verbal behaviors such as feedback, use of humor, greeting fellow students by name during stimulating discussions as well as nonverbal behaviors such as gestures, facial expressions enhance the learning experience and satisfaction. Since there is no physical movement as in a traditional class, interaction becomes harder in such an environment.

Harmony between technology and learning models will also enhance interactions in technology-enhanced learning environments. Studies examining instructor behavior in online courses suggest that instructors need to develop skills in using a constructivist model, in which students can build on their knowledge by sharing previous experiences through interactions with teachers and their peers. Arbaugh argues that the success of an e-learning system is highly dependent on the teaching skills of teachers, previous experience in teaching online courses and their ability to use technology, constructive approaches, and new methods [11].

c) Flexibility (Online advantages)

The third aspect is the flexibility of the online course. Flexible time and location for virtual classrooms increases student satisfaction and several communication tools can be used in elearning systems. Practitioners can develop and administer online courses, monitor and assess participants through surveys and questionnaires, communicate with participants through conversations, forums or emails, and collaborate through activities. Course participants can discuss with their peers, use forums to share their knowledge and enjoy several features other than accessing course content in the course curriculum. Participants who are unable to attend the video conference session may also access the integrated video conference link.

d) Course technology

In the Quality Matter Rubric Program (QM Rubric, 2020) said that technology has an important role in the quality of online learning. So online learning combines standards regarding the availability of technology and the ease of use of the technology.

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In this case how the platform can support this online course activity with features that are supported by the latest technology. Course technology must be up-to-date and how participants can access the technology easily, and in real time, can be accessed anytime when needed (Quality Matters Program, 2014). The technology of this online course must be easily accessible and also downloadable for the material.

The research objects that become independent variables in the study are the influence of course interaction (X1), instructor behavior (X2), online advantages (X3) and course technology (X4) to course quality (Y1) and the influence of course quality to course satisfaction (Y2).

This study uses a model that was carried out in 2020 by Turhangil Erenler, in Turkey, which discusses how the influence of course interaction, instructor behavior, course interaction and online advantages on the quality of online courses. Then how does the quality of online courses affect the satisfaction of course participants. The model can be seen in Figure 3.



Figure 3. Research Model (Source : Turhangil Erenler, 2020)

The research objects that become independent variables in the study are course interaction (X1), Instructor Behavior (X2), Online advantages (X3) on Course quality (Y1) and the effect of learning quality (Course quality) on online course user satisfaction / Course Satisfaction (Y2).

In the Quality Matter Rubric Program (QM Rubric, 2020)[13] that the quality of online courses is also inseparable from the technology. So here, the Course technology variable is added, which indicators consist of the availability of online

courses, the reliability of online courses, the ability of the online course platform to encourage participants to be active and the security of online course data. The research model can be seen in figure 4.



Figure 4. Research Model

3.4 Data Sample

One part of the research design is to determine the population and research sample. Where research is generally carried out by not using the entire population, due to limited costs and available time is the reason why the study only takes part of the existing population. This part of the population is called the sample.

In this study using a sample from an online course platform, where the total population of Skill Academy, decoding, Arkademi and Duta Academy approximately 5,5 million. Samples were taken from Arkademi, Skill Academy, Dicoding and Duta Academy.

The sample is part of the population that represents the population. According to Hoyle, 1995 [19] in the SEM method, the sample size is between 100-200. According to Hair 2012[20], the minimum sample recommendation is ten times the number of independent variables in the outer model and the inner model.

Referring to number Hoyle, the sample of this research used is 136 online course participants.

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3.5 Data Analyst

Data analysis techniques are used to answer the problem formulation or test the assumptions that have been made. This study will use the smartPLS 3.3.3 software to manage the data. Structural Equation Modelling (SEM) is a method used to correct weaknesses in the regression method. According to experts, the Structural Equation Modeling (SEM) search method is grouped in two approaches, exactly covariance-based SEM (CBSEM) and variance-based SEM or Partial Least Square (PLS). Partial Least Square is a powerful analytical method that relies on few assumptions. Approach (Partial Least Square) PLS is distribution free (assumes no data, can be nominal, categorical, ordinal, range and report). PLS (Partial Least Square) can use the bootstrapping method or random dubbing where the hypothesis of normality will not be an issue for the PLS (Partial Least Square). PLS (Partial Least Square) also for prediction purposes. Which in making these predictions is to predict the relationship between constructs, in addition to helping researchers in their research to get the value of the latent variable that aims to make predictions. The latent variable is the linear aggregate of the indicators. The weight estimate for creating the component score for the latent variable is obtained based on how the inner model (structural model that links between latent variables) and outer model (measurement model, namely the relationship between indicators and their constructs) is specified. The result is that the residual variance of the dependent variable (both latent and indicator variables) is minimized. Partial Least Square (PLS) estimates can be categorized as: 1) The estimation of the weight used to create the latent variable score, 2) Reflects the estimate of the trajectory linking latent variables and between latent variables and their indicator blocks (loading), 3) Linked to means and localization of parameters (constant regression values) for indicators and latent variables. To derive these three estimates, PLS (Partial Least Square) uses a three-step iteration process and in each step generates an estimate as follows: 1) Generate weighted estimate, 2) Produce estimates for the interior and exterior models, 3) Generate estimates of averages and locations (constants).

4. RESULT AND DISCUSSION

4.1 Data Collection

After distributing the questionnaires to several survey participants in Indonesia, 136 data have been collected.

Survey participants have a minimum age of 15 years. So that the online course that we examine here is an online course that focuses on vocational training. Vocational online courses focus on teaching practice skills needed in the world of work.

There are also survey participants who are already working and some are not. The figure 5 is the demographics of the survey results based on the type of job.





The majority of survey participants are Private Sector Employees, which is 68%. There is also Unemployment which is around 15%. Indeed, this online course is needed not only for those who have not worked, but also those who are already working but want to improve their skills. In the figure 5, it can also be seen that the composition of entrepreneurs is 13%. They also want to improve their skills in the field of entrepreneurship.

Survey participants are also dominated by productive age. The age group taking online courses the most is the age group 21-25 years, which is 43%.



Figure 6. Construct Diagram Using Smart PLS 3.3.3

After processing with smartPLS 3.3.3 software, construct diagram can be seen in Figure 7. The validity test is carried out first. Validity test can be done by using Outer Loading. The Outer loading value shows the correlation between the latent variable and the indicator.

The outer loading value is said to be valid if it is greater than 0.7. All variables have a valid correlation with the indicator. It is proven that all outer loadings values from this study are greater than 0.7. Based on the results of this research on the online course, all indicators are valid (refer to Table 1).

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Maggurament	Variable	Outers
Construct	Code	Loading
Course interaction	X1.1	0.931
(X1)	x1.2	0.898
	X1.2 V1.2	0.878
Instructor	X1.5	0.877
behaviors (X2)	A2.1	0.739
	X2.2	0.77
	X2.3	0.856
0.1	X2.4	0.857
Online Advantages (X3)	X3.1	0.797
Advantages (AS)	X3.2	0.858
	X3.3	0.888
	X3.4	0.812
Course technology (X4)	X4.1	0.847
	X4.2	0.836
	X4.3	0.788
	X4.4	0.713
	X4.5	0.823
Course quality	Y1.1	0.905
(YI)	Y1.2	0.929
	Y1.3	0.908
	Y1.4	0.874
Course	Y2.1	0.92
Satisfaction (Y2)	Y2.2	0.882
	Y2.3	0.864
	Y2.4	0.934
	Y2.5	0.859

Table 1. Validity Test Using Outers Loading

From the results of the validity test in table 1, it shows that each indicator has a value > 0.7. Then it shows all indicators are valid.

Reliability test can be done with Cronbach's Alpha and Composite Reliability. The following (table 2) are the results of the reliability test on the survey data.

Table 2. Reliability Tes

	Cronbach's Alpha	Composite Reliability
X1	0.885	0.929
X2	0.828	0.885
X3	0.86	0.905
X4	0.861	0.9
Y1	0.925	0.947
Y2	0.936	0.951

Reliability tests are intended to test the coherence of the model if it is used to measure the same object more than twice. A reliable instrument is an instrument used repeatedly to measure the same object will yield the same data [23]. In other words, a measurement that has high reliability is one that is able to provide reliable measurement results. Seen from table 2, all variables have Cronbach's Alpha of more than 0.7, then all of these variables are declared to have passed the reliability test.

Output Other testing of the model is done by looking at the value of R Square, which is the goodness-fit-model test of the PLS SEM inner model. The coefficient of determination (R Square) is a way to assess how much an endogenous construct can be explained by an exogenous construct. The value of the coefficient of determination (R Square) is expected to be between 0 and 1. R Square values of 0.75, 0.50, and 0.25 indicate that the model is strong, moderate, and weak [21]. The following (table 3) are the results of the R Square test with Smart PLS 3.3.3

Table 3. R Square of Data Processing

	R Square	R Square Adjusted
Y1	0.787	0.78
Y2	0.809	0.808

Based on the data, namely R Square Adjusted, the model results are included in the strong category. So this research deserves to be a reference.



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4.2 Discussion

Here we discussed the hypothesis in this study. In this study, we will discuss the effect of exogenous variables to endogenous variables, by looking at the T Statistics, P Values.

	Mean (M)	T Statistics	P Values
X1 -> Y2	0.093	1.379	0.168
X2 -> Y2	0.096	1.209	0.227
X3 -> Y2	0.280	3.521	0.000
X4 -> Y2	0.416	4.760	0.000

Table 4. Hypothesis Testing

a) Effect of Course interaction on Course quality

H1: Course interaction has a positive and significant effect on Course quality.

According to Table 4, we know that the direct effect of the course interaction on the quality of the course is positive, since the average is 0.093. From table 4 the P Values are 0.81 so P Value > 0.05 so H1 is rejected. This means that the hypothesis that course interaction has a significant impact on the quality of online courses in Indonesia is unproven. This could be due to:

1. To interact directly between participants and instructors is not as easy as face-to-face.

2. The media interaction forums that exist on the platform do not receive immediate response in real time from the instructor.

3. Participants already know that this is an On Demand course, so they don't often ask the instructor and they are satisfied.

b) Influence of Instructor behaviors on Course quality

H2: Instructor behaviors have a positive and significant effect on Course quality.

From the results of the analysis in table 4, the influence of Instructor behaviors on Course quality is positive because the Mean value > 0. If you pay attention to the P Values, it is 0.59 so that P Value > 0.05 means that H2 is rejected and Instructor behaviors has no significant effect on Course

quality. . According to researchers, this could be due to:

1. Instructors are used to face-to-face contact, so there are still adjustments when they only stare at the camera and don't look at the audience directly.

2. There is no element of humor from the instructor or talking about things that are not important, even though things that are not important outside the course can be an attraction for course participants.

3. The instructor does not allow participants to ask questions if there are things that are not clear, because the instructor does not know the interaction facilities are provided by the platform.

c) Effect of Online Advantages on Course quality

H3: Online advantages have a positive and significant effect on course quality.

From table 4, H3 has P Values of 0.01 so that P Value <0.05 means that H3 is accepted and Online Advantages have a significant effect on Course quality.

For the Online Advantages variable, it is accepted, from the conclusion of the researcher, because Online Advantages are the main attraction that participants do not have to pay for transportation and feel the course at a more costeffective way. Participants were satisfied after completing the course that the perceived course was of the same quality as the conventional course, at a much cheaper price.

d) Effect of Course technology on Course quality

H4: Course technology has a positive and significant effect on course quality.

From table 4, H4 has P Values of 0.00 so that P Value <0.05 means that H4 is accepted and course technology has a positive and significant effect on course quality. In August 2021, the number of students at the Arkademi jumped, because there was a wave of pre-employment work in August 2021. This caused the system to go down twice. Course participants really feel that when the application program is down, learning cannot be carried out. The application program is part of course technology, so its influence is very significant on the quality of the course.

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e) Effect of Course quality on Course Satisfaction

H5: Course quality has a positive and significant effect on course satisfaction.

From table 4, H5 has P Values of 0.00 so that P Value <0.05 means that H5 is accepted and course quality has a positive and significant effect on course satisfaction.

5. CONCLUSION

The conclusion from the research online course platform operating in Indonesia, especially at Skill Academy, Dicoding, Arkademi and Duta Academy, shows that H0 and H1 are rejected but H2, H3 and H4 are accepted.

Course interaction and instructor behaviors have a positive influence on course quality, but they are not proven variable.

From the results of data processing, the most positive influence is course technology variable. This means that technology that is focused on the online course feature will provide a significant factor for improving the quality of the course. The effect of course quality on course satisfaction is very significant. So it can be concluded that with increasing course quality, course satisfaction will increase.

From this research, online courses can learn to increase their customer satisfaction by increasing platform flexibility and improving course technology.

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