

Students' Word of Mouth Electronic Conversation Formation Model Through Online Service Quality and Students' Online Satisfaction

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ABSTRACT

This study seeks to investigate the impact of E-Service Quality, E-Satisfaction, and the interaction between E-Service Quality and E-Satisfaction on the formation of E-Student Word of Mouth within the Management Study Program at the Faculty of Economics and Business, Ahmad Dahlan University in Yogyakarta. The sample selection involved a combination of convenience sampling and purposive sampling methods. Data collection was accomplished by distributing questionnaires to respondents, addressing aspects of E-Service Quality, E-Satisfaction, and E-WOM. Moderator Regression Analysis (MRA) was employed as the analytical tool. Additionally, T-tests and F-tests were utilized to examine the hypotheses put forth. The results of the partial regression coefficient test using the T-test indicate that both E-Service Quality and E-Satisfaction, as well as their interaction, have a significant influence on E-Student Word of Mouth. Furthermore, the regression coefficient analysis through the F-test demonstrates that the variables E-Service Quality, E-Satisfaction, and their interaction also collectively contribute to the influence on E-WOM. These variables - E-Service Quality, E-Satisfaction, and their interaction - can explain up to 85% of the variance in E-WOM, with the remaining 15% attributed to other variables not included in the research model.

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1. INTRODUCTION

After the COVID-19 pandemic occurred, several sectors experienced positive impacts. One institution that benefits from this situation is universities. So, it is important for universities to pay special attention to efforts to advance themselves. The learning system in the post-Covid-19 period provides the opportunity to implement blended learning which combines online and offline systems. Therefore, universities are required

to organize learning effectively even though it is carried out from their respective homes.

In order to carry out a blended learning process, universities must always improve the quality of online services (online service quality) to students. Measuring the quality of online services can be done by analyzing how students perceive the services they receive online. This assessment depends on the extent to which student expectations are met. If student expectations are achieved, then students will feel satisfied with online

services (Online satisfaction). On the other hand, if student expectations are not achieved, then students will be dissatisfied with the online service.

Moreover, communication that takes place between students online (E-WOM) has a crucial role in creating long-term relationships between universities and students. Trust plays a very important role in forming relationships, especially in the context of services which often involve levels of uncertainty, risk and lack of information between the parties involved [1]. Superior quality online services will increase online satisfaction (online satisfaction). Improvements in online service quality and online satisfaction will have a positive effect on increasing E-WOM communication. Therefore, the level of E-WOM communication will depend on the quality of online services and the level of online satisfaction it generates. [2].

In the midst of the COVID-19 outbreak, universities as educational institutions have improved the quality of online services, including at university, faculty and study program levels. Improving the quality of this service includes academic and non-academic aspects. The quality of academic services includes all forms of services related to educational services, teaching services, research services and study program services. On the other hand, this also includes the quality of non-academic services including facilities, infrastructure and other resources provided by universities. As one of the stakeholders in higher education, students must have their expectations met to achieve a better level of satisfaction in the online experience. Student satisfaction in the online context will have a positive impact on the communication that students carry out online with other parties, or what is known as E-WOM communication.

Given its significance, evaluation of the quality of online services and the level of student satisfaction in the online context has great relevance in the process of forming online word of mouth communication. Therefore, this research is important to do.

This research was carried out by taking samples from the Management Study Program at the Faculty of Economics and Business, Ahmad Dahlan University.

2. LITERATURE REVIEW

2.1 *Quality of online service*

Online service quality can be defined by [3] to what extent online sites are able to facilitate the procurement process, purchase transactions and product delivery in an optimal and economical way. Advances in information technology play an important role in service quality such as speed, reliability and security. In this case, service quality emphasizes the quality of service aimed at consumers or customers through web-based information technology. Apart from that, online service quality aims to continue and assess the quality of services connected to and related to the internet network. [2].

According to [4], service quality refers to ideal competitive advantages and the steps taken to manage these competitive advantages in order to meet customer expectations. The definition of customer satisfaction according to [4] is an attitude that is formed based on the experience gained by customers. If customer expectations exceed what is actually provided in the service, then the service will be rated as less than satisfactory. Conversely, if customer expectations are lower than what is actually received in service, then the service will be considered quality. and if the expectations and service received are comparable, then the service is considered satisfactory [5]. Therefore, the concept of Service Quality is a useful tool for evaluating the extent of the gap between reality and consumer expectations regarding the services received. [6].

However, in the perspective of [7], service quality is defined as consumers' view of quality as a result of performance. They point out that service quality depends largely on how the service is executed. SERVQUAL (Service Quality) analysis is used to assess service quality by involving dimensions such

as Physical Facilities, Reliability, Responsiveness, Assurance, and Empathy. However, in educational services, the application of SERVQUAL analysis is often unsuccessful. Research by [8] proposed the use of eight indicators as factors to measure the quality of the education sector consisting of 29 indicators. These indicators are: University Staff, Recreation Activities, Facilities, Campus Environment, Reputation, Fees, Consultations, and Schedules. The results of the research above confirm that these factors are able to guide and shape students' perceptions of the quality of educational services.

Research conducted by [9] shows that the condition of service quality in higher education is influenced by six main things, namely: physical aspects, competence, server attitude, material content, delivery method, and reliability. The results of this research are the result of a review that strengthens the findings of previous studies, such as the research of [6], [10], [11], and [12].

2.2 Online satisfaction

Online satisfaction is a customer's feeling related to previous transaction experiences with a company online (on the network) [13]. In addition, according to [14] Online satisfaction is the accumulation of levels of satisfaction experienced by consumers over time. time due to purchasing and experience of consuming products on certain online platforms. Online customer satisfaction has an important role in winning market competition for a company [2].

Several experts have provided definitions of what consumer satisfaction is. According to Day (in [15]), customer satisfaction or dissatisfaction is a consumer's response to comparing their initial expectations before making a purchase with the assessment of the product they feel after using it. According to [16] consumer satisfaction is the level a person feels after comparing the results or performance they experience with their expectations. Based on these theories, there are several similarities, namely involving elements of consumer satisfaction such as expectations and

perceptions of performance or results obtained. In general, consumer expectations are their estimates or beliefs about what they will receive when they purchase or consume a service or product.

Meanwhile, based on the customer satisfaction index parameters used in America, the overall level of customer satisfaction is determined by three main indicators, namely perceived value, perceived quality and customer expectations. Overall customer satisfaction then has implications for customer actions, such as making complaints or remaining loyal to the product or service [17]. [18] describe customer satisfaction as a positive achievement when a product or service succeeds adequately in achieving customer expectations, especially over a longer period of time. In their research, [18] identified a number of factors that influence customer satisfaction in the context of educational services, covering 32 different aspects.

Referring to various explanations about customer satisfaction that have been presented by experts, it can be explained that customer satisfaction has a significant role in determining the long-term success of a business entity. To achieve and maintain consistent levels of customer satisfaction, companies need to allocate significant resources and commit them over the long term. This is because customer satisfaction is basically a long-term strategy, and the positive impact can last in the long term. So it is important to continue efforts to generate customer happiness and build customer loyalty. This fact indicates that the level of customer satisfaction should be able to produce an increase in sales volume, better asset productivity, and a higher rate of return on investment for the company (Tjiptono, 2019).

2.3 Electronic Word of Mouth Conversation

According to [19] defines electronic word of mouth as opinions that can be positive or negative expressed by potential consumers, existing consumers and former consumers regarding the products and

services of various business entities through various platforms on the internet. On the other hand, Kotler and Keller (2016) define E-WOM as a form of marketing that utilizes the internet to create a word-of-mouth conversation effect with the aim of achieving targets in a marketing strategy.

E-WOM has an important role in efforts to fulfill the needs and desires of quality products, thereby reducing the risk of uncertainty in purchasing a product. Apart from that, consumers will have more confidence in the products they buy based on recommendations from other people who have bought the product (Malik et. Al., 2013).

According to [19], E-WOM can be defined in three main aspects:

1. Intensity, refers to the large or small number of opinions or reviews shared by consumers on social networking platforms.
2. Opinion Valence, refers to the nature of consumer opinion, whether positive or negative, regarding a particular product or brand.
3. Content, refers to the content of information contained in reviews or comments relating to products and services on social networking platforms.

2.4 Previous Research Results

A study conducted by [19] indicated that there was a very significant impact on service quality by word of mouth communication in the context of higher education in Singapore.

The results of [20] also confirm that there is a correlation between service quality and influence on student word-of-mouth communication. Meanwhile, [21] study shows that online service quality has an impact on electronic word of mouth conversations.

The results of [21] show that online satisfaction influences electronic word of mouth (E-WOM). Meanwhile, the results of [22] indicate the fact that online service quality influences E-WOM, online service quality influences online satisfaction and online satisfaction influences E-WOM. The results of studies by [23] and [24] which show that online satisfaction has an impact on E-WOM.

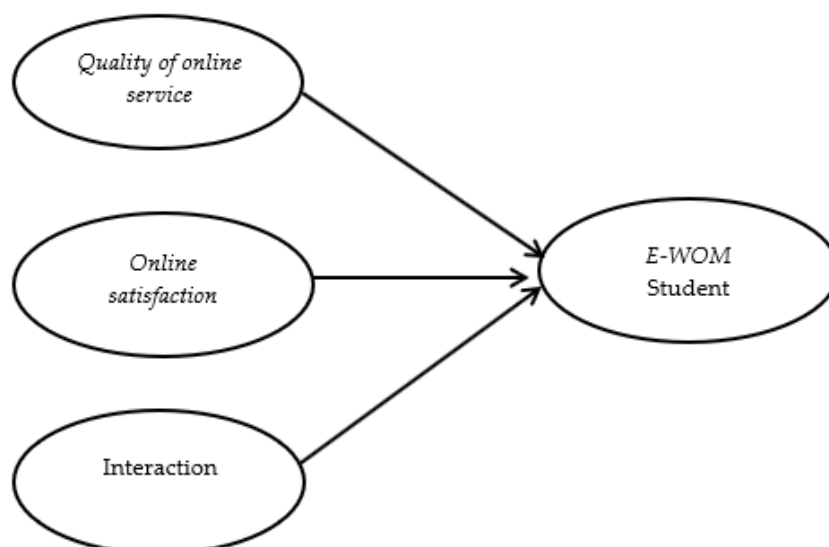
HYPOTHESIS

H1: Found a significant real influence of online service quality on student E-WOM.

H2: Found a significant influence of online satisfaction on student E-WOM.

H3: The interaction between online service quality and online satisfaction better describes variations in student E-WOM than the effects of each variable.

FRAMEWORK OF THINKING



3. METHODS

3.1 Population and Sample

Population refers to the entire unit of analysis that has the characteristics to be identified [25]. In the context of this research, the population is all students who are currently active in the Management Study Program at the Faculty of Economics and Business, Ahmad Dahlan University, Yogyakarta, who are writing a thesis.

The sample object of this research was determined using two methods, namely practical sampling technique (Convenience sampling) and planned sampling technique (Purposive sampling). Convenience sampling is an approach used to select members of the population who are easiest to reach and find to request information [26]. Meanwhile, purposive sampling is a sample selection method that is based on certain criteria or requirements [27], [28]. The sample selection criteria are as follows:

- a. The respondents in this research were students from the Management Study Program at the Faculty of Economics and Business who were registered as students in the odd semester of the 2021/2022 academic year.
- b. The sample consists of students who have experienced online (online) services during 2021.

In this study, the minimum sample size has been set at 100 respondents. Determination of sample size refers to the views explained by Roscoe, as contained in the explanation of [29], which states that in several studies, sample sizes ranging from 30 to 500 respondents are sufficient as a representation of the population.

3.2 Method of collecting data

This research uses primary data which functions as basic material for calculating research variables. The primary data collection process was carried out by administering a list of questions to respondents. The list of questions covers various aspects, such as students' perceptions of the quality of online services they receive, the level of student satisfaction, and its impact on student E-WOM.

3.3 Measuring Instruments and Measurement Scales

This research includes independent variables, namely online service quality (Online Service Quality) and online satisfaction (Student Satisfaction), as well as the dependent variable, namely Student E-WOM (Student Word of Mouth Communication). Online service quality was measured using an instrument developed by [9] and [30], which has 12 indicators. Each indicator is measured on a 7-point scale, with a score of 1 meaning "disagree", a score of 2 meaning "do not agree", a score of 3 meaning "agree", and so on up to a score of 7 meaning "strongly agree."

Meanwhile, the online satisfaction variable was measured using an instrument developed from the research results of [31] and [14], where there are 7 items. The measurement scale is a 7-point scale, where a score of 1 represents "disagree" and a score of 7 represents "strongly agree." The Student E-WOM variable (Student electronic word-of-mouth communication) was calculated using an instrument developed based on previous research, namely [32], [30], and [19]. This instrument has 10 items and uses a 7-point scale when measuring.

The research instruments used have gone through validity and reliability tests to ensure the quality of the data produced. The validity test aims to ensure that the instrument really measures what is intended in this research. Validity testing was carried out using the Pearson Product Moment correlation test method. Meanwhile, reliability tests are carried out to assess the extent to which the same measurement can be relied on. Reliability testing uses the Cronbach Alpha method.

3.4 Analysis Method

In order to test the proposed hypothesis, this research utilizes statistical analysis methods. Statistical analysis is used to test the relationship between online service quality, online satisfaction, and student E-WOM. The model adopted in this research follows the framework developed by Taylor and Baker (1994), namely Moderator Regression Analysis (MRA). Thus, the model

used in this research can be formulated as follows:

$$Y = \alpha + \beta_1 X + \beta_2 Z + \beta_3 XZ$$

Where :

Y = Dependent variable (E-WOM)

α = Constant

$\beta_1, \beta_2, \beta_3$ = Regression Coefficients

X = Independent variable (Online service quality)

Z = Moderator variable (Online satisfaction)

XZ = Interaction between online service quality and online satisfaction

In order to test the hypothesis that has been proposed, the t test and F test are used. The t test aims to assess the influence of the independent variable significantly on the dependent variable individually. Meanwhile, the F test is used to determine whether all of the independent variables together can explain the dependent variable.

4. RESULTS AND DISCUSSION

4.1 Research Instrument Validation

Test

Quality data is important in this research. To ensure quality data, tests were carried out on the validity and reliability of the instruments used. The validity test aims to verify whether the instrument used appropriately measures the concept to be studied. The validity of the instrument was tested using the Product Moment Test method. Meanwhile, the reliability test is used to measure the level of reliability or consistency of the instrument in measuring the same variable. Instrument reliability testing was carried out using the Cronbach Alpha method.

Variable Components in Research
The independent variables in this research consist of two aspects, namely online service

quality and online satisfaction (Student Satisfaction). Online service quality is measured using instruments based on previous research findings, namely the results of the study by [9] and [30]. This instrument consists of 12 indicators used to assess online service quality. Online service quality assessment is carried out using a 7-point scale, where a score of 1 means "disagrees" and a score of 7 reflects "strongly agree."

In addition, the online satisfaction variable was calculated using an instrument developed based on research by Naumann and [31] and [14]. This instrument has 7 indicators which are used to measure the level of student satisfaction with online services. Like online service quality, online satisfaction measurements also use a 7-point scale, with a score of 1 representing "disagree" and a score of 7 representing "strongly agree."

Meanwhile, the dependent variable in this research is Student Word of Mouth Electronic Conversation (Word of Mouth Communication). This variable was measured using an instrument developed based on the findings of a number of previous studies, including [32], [30], and [19]. This instrument consists of 10 indicators which are used to measure student electronic word-of-mouth conversations. Scoring is done on a 7-point scale, where a score of 1 means "disagrees" and a score of 7 means "strongly agree."

The research instruments tested for validity and reliability can be explained through the test results as follows:

4.1.1 Validity Test Results

The validity test of the variables online service quality, online satisfaction and electronic word of mouth conversations with 30 respondents is shown in the following table:

Table 1. Validity test results for online service quality

Variable	Item	R-Hitung	R-Tabel	Status
<i>Quality of online service</i>	1	0,864	0,361	legitimate
	2	0,840	0,361	legitimate
	3	0,918	0,361	legitimate
	4	0,937	0,361	legitimate
	5	0,915	0,361	legitimate

	6	0,915	0,361	legitimate
	7	0,904	0,361	legitimate
	8	0,884	0,361	legitimate
	9	0,933	0,361	legitimate
	10	0,892	0,361	legitimate
	11	0,911	0,361	legitimate
	12	0,792	0,361	legitimate

Table 2. Online Satisfaction Validity Test Results

Variable	Item	R-Hitung	R-Tabel	Information
<i>Online satisfaction</i>	1	0,707	0,361	legitimate
	2	0,934	0,361	
	3	0,917	0,361	legitimate
	4	0,936	0,361	legitimate
	5	0,948	0,361	legitimate
	6	0,891	0,361	legitimate
	7	0,932	0,361	legitimate

Table 3. Validity Test Results of Electronic Word of Mouth Conversation

Variable	Item	R-Hitung	R-Tabel	Information
<i>Electronic Word of Mouth Conversation</i>	1	0,877	0,361	legitimate
	2	0,726	0,361	
	3	0,634	0,361	legitimate
	4	0,766	0,361	legitimate
	5	0,855	0,361	legitimate
	6	0,857	0,361	legitimate
	7	0,866	0,361	legitimate
	8	0,865	0,361	legitimate
	9	0,602	0,361	legitimate
	10	0,869	0,361	legitimate

The results of the validity test indicate that the items in the instrument for measuring the variables Online Service Quality, Online Satisfaction, and Electronic Word of Mouth Conversation obtained a calculated R-value that was greater than the R-table value. This confirms that the items in this research can be considered valid or valid.

4.1.2 Reliability Test

The reliability test for the variables Online Service Quality, Online Satisfaction and Electronic Word of Mouth Conversation with Cronbach Alpha is shown in the following table:

Table 4. Reliability Test Results

Variable	Alpha	Information
<i>Quality of online service</i>	0,981	Reliable
<i>Online satisfaction</i>	0,970	Reliable
<i>Electronic Word of Mouth Conversation</i>	0,948	Reliable

The results of the reliability test on the variables Online Service Quality, Online

Satisfaction, and Electronic Word of Mouth Conversation show that the reliability value obtained is greater than 0.50. This indicates that the variables online service quality, online satisfaction, and electronic word of mouth conversations between students can be relied upon or are considered reliable.

4.2 Model for Forming Electronic Conversation from Word of Mouth to Students Through Online Service Quality and Student Online Satisfaction.

In this research, the model for forming electronic word of mouth conversations through online service quality or online student satisfaction is analyzed using Moderator Regression Analysis (MRA) developed by [33]. This study aims to explore how electronic word of mouth can be influenced by online service quality, student online satisfaction, and the interaction between online service quality and student online satisfaction.

The model for the formation of Electronic Word of Mouth Conversation can be explored by analyzing three regression equations which involve calculating R2 for each of these equations. To assess the type of moderator effect, the relevant R2 value is sought. In this study, analysis using

Moderator Regression Analysis (MRA) describes three equation models as follows: (1) The first model considers online service quality as an independent variable, (2) The second model describes online service quality and online student satisfaction as variables. independent, and (3) The third model includes online service quality, online satisfaction, and the interaction between online service quality and online satisfaction as independent variables.

The model equation can be shown through the following equation:

$$Y = \alpha + \beta_1 X + \beta_2 Z + \beta_3 XZ$$

Where :

Y = Electronic Word of Mouth Conversation

α = Constant

$\beta_1, \beta_2, \beta_3$ = Regression Coefficients

X = E- Service Quality

Z = Online satisfaction

XZ = Interaction between online service quality and online satisfaction.

In this research, the sample population consisted of 100 students of the Management Study Program, Faculty of Economics and Business, Ahmad Dahlan University (FEB-UAD). The results of the regression analysis can be presented in the following table:

Table 5. Regression Analysis Results

Model	Variable	α	β	Value t	Prob	R ²	Value E
1	Quality of online service	0,958	0,786	15,484	0,000	0,710	239,741
2	Quality of online service (X)	0,275	0,476	8,952	0,000	0,834	243,314
	Online satisfaction(Z)		0,470	8,506	0,000		
3	Quality of online service (X)		0,261	3,123	0,002	0,850	181,390
	Online satisfaction(Z)		0,271	3,331	0,001		
	Interaction (XZ)		0,053	3,224	0,002		

Based on the data above, the regression analysis can be explained as follows:

4.2.1 First Model Equation (1)

In the first model equation, there is a constant of 0.958 and a regression coefficient

of 0.786. The first model formula can be described as follows:

$$Y = 0.958 + 0.786$$

In this first model, it can be stated that when the quality of online service is zero, then the value of the student's Word of Mouth Electronic Conversation is 0.958.

Furthermore, if the quality of online service increases by 1, then student electronic word-of-mouth conversations will increase by 0.786. The results of the t test with a significance level of $\alpha = 5\%$ show that the calculated t value is 15.484 with a probability of 0.000, which is less than 0.05. From these results, it can be concluded that the t test provides evidence that online service quality has a significant influence on Word of Mouth. Apart from that, the results of the F test with $\alpha = 5\%$ show an F value of 239.741 with a probability of 0.000, which is also less than 0.05. This indicates that online service quality has a significant influence on students' electronic word of mouth conversations.

The R2 value of 0.710 reveals that around 71% of the variance in student electronic word-of-mouth conversations can be explained by variance in online service quality. Meanwhile, around 29% of the remainder can be explained by other factors not included in this first research model.

4.2.2 Second Model Equation (2)

In the second model, the results of the regression analysis produce the following equation: $Y = 0.275 + 0.476 X + 0.470 Z$

The constant in the second model is 0.275. This means that, in a situation where online service quality and online satisfaction have a value of zero, students' Word of Mouth Electronic Conversation has an average value of 0.275.

The regression coefficient for online service quality of 0.476 explains that, holding other factors constant (*ceteris paribus*), a one unit increase in online service quality will result in an increase in student electronic word-of-mouth conversations of 0.476.

Meanwhile, the regression coefficient value of student online satisfaction of 0.470 explains that, holding other factors constant (*ceteris paribus*), a one unit increase in online satisfaction will have an impact on increasing student electronic word-of-mouth conversations by 0.470.

The results of the t test show that the online service quality variable has a calculated t value of 8.952 with a probability of 0.000 (less than 0.05), which indicates that online service

quality has a significant influence on students' electronic word of mouth conversations. In addition, the results of the t test for student online satisfaction produced a calculated t value of 8.506 with a probability of 0.000 (also less than 0.05), which shows that student online satisfaction has a significant influence on student electronic word of mouth conversations.

The results of the F test with a calculated F value of 243.314 explain that together, the variables Online Service Quality and Student Online Satisfaction have a significant effect on students' Word of Mouth Electronic Conversation.

Finally, the R2 value of 0.834 indicates that around 83.4% of the variance in students' Word of Mouth Electronic Conversations can be explained by the variance in online service quality and students' online satisfaction. The remainder, around 16.6%, can be attributed to other factors not included in this second research model.

4.2.3 Third Model Equation (3)

In the third model, regression analysis produces the following equation: $Y = 1.037 + 0.261 X + 0.271 Z + 0.053 XZ$

In this equation, the variables online service quality, student online satisfaction, and the interaction between online service quality and student online satisfaction are included as independent variables.

The constant in this model is 1.037, which shows that when the variables Online Service Quality, Student Online Satisfaction, and interaction between the two have a value of zero, Student Electronic Word of Mouth Conversation has an average value of 1.037.

The online service quality regression coefficient of 0.261 explains that if the online service quality variable increases by one unit, with all other factors remaining constant (*ceteris paribus*), then student electronic word-of-mouth conversations will increase by 0.261.

The regression coefficient for student online satisfaction of 0.271 explains that if the student online satisfaction variable increases by one unit, with other factors remaining constant (*ceteris paribus*), then student

electronic word of mouth conversations will increase by 0.271.

In addition, the regression coefficient for the interaction between online service quality and student online satisfaction is 0.053, indicating that if the interaction between the two increases by one unit, with other factors remaining constant (*ceteris paribus*), then student electronic word-of-mouth conversations will increase by 0.053. The t test results show that the online service quality variable has a calculated t value of 3.123 with a probability of 0.002 (less than 0.05), which indicates that online service quality partially has a significant effect on students' electronic word of mouth conversations.

The results of the t test for the student online satisfaction variable produced a calculated t value of 3.331 with a probability of 0.001 (also less than 0.05), indicating that student online satisfaction partially has a significant effect on student electronic word of mouth conversations.

Furthermore, the results of the t test for the interaction between online service quality and online student satisfaction produced a calculated t value of 3.224 with a probability of 0.002 (also less than 0.05), which shows that the interaction between these two variables partially has a significant effect on Electronic Conversation. from word of mouth of students.

The results of the F test show that the calculated F value is 181.390 with a probability of 0.000 (less than 0.05), which indicates that together, the variables online service quality, online student satisfaction, and the interaction between the two have a significant effect on electronic conversations. Word of mouth of students. Finally, an R2 value of 0.850 indicates that approximately 85% of the variance in students' Word of Mouth Electronic Conversations can be explained by the variance in online service quality, students' online satisfaction, and the interaction between the two. The remainder, around 15%, can be attributed to other factors not included in this third research model.

DISCUSSION

By utilizing Moderator Regression Analysis (MRA) which was developed by [33], this research reveals that the variable online student satisfaction plays a role as a moderator in influencing the relationship between online service quality and electronic word of mouth conversations among students in the study program. Management, Faculty of Economics and Business, Ahmad Dahlan University (FEB-UAD). The function of the moderator variable: Student online satisfaction in this study can be identified through the increase in the R2 value seen in three different equation models.

In the first model equation (1), there is an R2 value of 71%. When we look at the second model equation (2), we can observe that the R2 value reaches about 83.4%. Furthermore, the third model equation (3) produces an R2 value of around 85%. These results confirm that in the three model equations, the R2 value continues to increase sequentially. Furthermore, the R2 value in the third model equation turns out to be higher than the R2 value contained in the second model equation. Likewise, the second model equation has a higher R2 value than the first model equation. From these results, we can see that there is an increase in the R2 value from the first model equation to the second model equation, and then to the third model equation. Therefore, we can illustrate that in the third model equation, which includes the variables online service quality, online satisfaction, and the interaction between online service quality and online student satisfaction as independent variables, produces the highest R2 value. Thus, these findings indicate that this research provides support and reinforcement for the MRA model that was developed by [33].

5. CONCLUSION

- a. The research results confirm that online service quality has a significant influence on electronic word-of-mouth conversations among students in the Management Study Program,

- Faculty of Economics and Business, Ahmad Dahlan University.
- b. The findings from this research also confirm that online satisfaction has a significant influence on electronic word-of-mouth conversations among students in the Management Study Program, Faculty of Economics, Ahmad Dahlan University.
 - c. The research results confirm that the interaction between online service quality and online satisfaction is more in-depth in explaining variations in student electronic word-of-mouth conversations compared to each of these variables separately.
 - d. Online satisfaction, which functions as a moderator variable, plays a significant role in influencing students' Electronic Word of Mouth.
 - e. In the entire research, the variable Word of Mouth Electronic Conversation among students can be explained by 85% by the variables Online Service Quality, Online Satisfaction, as well as the interaction between Online Service Quality and Online Satisfaction. The remainder, around 15%, can be attributed to other factors not included in the research model
- a. The Management Study Program at the Faculty of Economics and Business, Ahmad Dahlan University needs to improve the quality of online services (Online service quality) and the level of satisfaction (Online satisfaction) of students. It is hoped that this can contribute positively to student electronic word-of-mouth communication, so that students will be more likely to recommend this Management Study Program to other parties to continue their studies at the same university. These efforts can be strengthened through the use of various online platforms to build trust and obtain recommendations from students.
 - b. In further research, it is recommended to consider the existence of additional moderator variables that can have a positive influence on the electronic word-of-mouth communication of students in the Management Study Program, Faculty of Economics and Business, Ahmad Dahlan University. It is hoped that this will produce a deeper understanding of the factors that influence student electronic word-of-mouth communication.

Suggestions

REFERENCES

- [1] F. Jasfar, *Manajemen Jasa*. Jakarta: Ghalia Indoensia, 2009.
- [2] R. M. Al-dweeri, Z. M. Obeidat, M. A. Al-dwiry, M. T. Alshurideh, and A. M. Alhorani, "The impact of e-service quality and e-loyalty on online shopping: moderating effect of e-satisfaction and e-trust," *Int. J. Mark. Stud.*, vol. 9, no. 2, pp. 92–103, 2017.
- [3] A. Parasuraman, V. A. Zeithaml, and A. Malhotra, "ES-QUAL: A multiple-item scale for assessing electronic service quality," *J. Serv. Res.*, vol. 7, no. 3, pp. 213–233, 2005.
- [4] F. Tjiptono, "Pemasaran Jasa Edisi Terbaru," *Yogyakarta Penerbit Andi. Undang. Nomor*, vol. 15, 2019.
- [5] J. A. Fitzsimmons and M. J. Fitzsimmons, "Service management for competitive advantage," (No Title), 1994.
- [6] A. Parasuraman, V. A. Zeithaml, and L. Berry, "SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality," *1988*, vol. 64, no. 1, pp. 12–40, 1988.
- [7] J. J. Cronin Jr and S. A. Taylor, "Measuring service quality: a reexamination and extension," *J. Mark.*, vol. 56, no. 3, pp. 55–68, 1992.
- [8] M. Joseph, M. Yakhou, and G. Stone, "An educational institution's quest for service quality: customers' perspective," *Qual. Assur. Educ.*, vol. 13, no. 1, pp. 66–82, 2005.
- [9] A. Jusoh, S. Z. Omain, A. A. Majid, M. H. Som, and A. S. Shamsuddin, "Service quality in higher education: Management students' perspective," *Unpubl. Proj. Report. Skudai, Johor UTM [Technology Univ. Malaysia]*, 2004.
- [10] A. Parasuraman, V. A. Zeithaml, and L. L. Berry, "A conceptual model of service quality and its implications for future research," *J. Mark.*, vol. 49, no. 4, pp. 41–50, 1985.
- [11] G. M. Hampton, "Gap analysis of college student satisfaction as a measure of professional service quality," *J. Prof. Serv.*

- Mark.*, vol. 9, no. 1, pp. 115–128, 1993.
- [12] K. Abouhedid and R. Nasser, "Assuring quality service in higher education: registration and advising attitudes in a private university in Lebanon," *Qual. Assur. Educ.*, vol. 10, no. 4, pp. 198–206, 2002.
- [13] R. E. Anderson and S. S. Srinivasan, "E-satisfaction and e-loyalty: A contingency framework," *Psychol. Mark.*, vol. 20, no. 2, pp. 123–138, 2003.
- [14] J. Kim, B. Jin, and J. L. Swinney, "The role of etail quality, e-satisfaction and e-trust in online loyalty development process," *J. Retail. Consum. Serv.*, vol. 16, no. 4, pp. 239–247, 2009.
- [15] D. K. Tse and P. C. Wilton, "Models of consumer satisfaction formation: An extension," *J. Mark. Res.*, vol. 25, no. 2, pp. 204–212, 1988.
- [16] P. Kotler and G. Armstrong, *Marketing management, analysis, planning, implementation, and control*, Philip Kotler. London: Prentice-Hall International, 1994.
- [17] C. Fornell, M. D. Johnson, E. W. Anderson, J. Cha, and B. E. Bryant, "The American customer satisfaction index: nature, purpose, and findings," *J. Mark.*, vol. 60, no. 4, pp. 7–18, 1996.
- [18] K. Dodge Kelsey and J. A. Bond, "A model for measuring customer satisfaction within an academic center of excellence," *Manag. Serv. Qual. An Int. J.*, vol. 11, no. 5, pp. 359–368, 2001.
- [19] R. Teo and G. N. Soutar, "Word of mouth antecedents in an educational context: A Singaporean study," *Int. J. Educ. Manag.*, vol. 26, no. 7, pp. 678–695, 2012.
- [20] S. Asakdiyah, "Membangun Komunikasi Word of Mouth Melalui Anteseden dan Konsekuensi Kualitas Pelayanan Perguruan Tinggi," 2018.
- [21] Benekdiktus, "Pengaruh Kualitas pelayanan secara online Terhadap Electronic Word Of Mouth Dengan Kepuasan secara online Sebagai Variabel Intervening," *J. Manaj.*, vol. 6, no. 4, 2017.
- [22] A. Yaqin, "Peran e-satisfaction sebagai mediasi pada e-wom (studi pada pelanggan olx)," *J. Ilmu Manaj.*, vol. 8, pp. 506–516, 2020.
- [23] I. Kemény, J. Simon, Á. Nagy, and K. Szucs, "Measuring quality perception in electronic commerce: a possible segmentation in the Hungarian market," *Ind. Manag. Data Syst.*, vol. 116, no. 9, pp. 1946–1966, 2016.
- [24] H. Rizal, S. Yussof, H. Amin, and K. Chen-Jung, "EWOM towards homestays lodging: extending the information system success model," *J. Hosp. Tour. Technol.*, vol. 9, no. 1, pp. 94–108, 2018.
- [25] M. Singarimbun, "Metode penelitian survai," 1995.
- [26] S. Hadi, "Metodologi Research I, Yogyakarta: Yayasan Penerbitan Fak," *Psikol. UGM*, 1986.
- [27] D. R. Cooper and C. W. Emory, "Business Research Methods, Chicago: Richard D. Irwin." Inc, 1995.
- [28] E. Babbie, *The Practice of Social Research*, 7th ed. Wadsworth Publishing Company.
- [29] U. Sekaran, *Research Methods For Business: A Skill Building Approach*, 3rd edn. John Wiley and Sons Inc, 2000.
- [30] M. Salehnia, M. Saki, A. Eshaghi, and N. Salehnia, "A Model of E-Loyalty and Word-Of-Mouth based on e-trust in E-banking services (Case Study: Mellat Bank)," in *8th International Conference on e-Commerce in Developing Countries: With Focus on e-Trust*, IEEE, 2014, pp. 1–7.
- [31] E. Naumann and K. Giel, "Customer satisfaction measurement and management: Using the voice of the customer," (*No Title*), 1995.
- [32] L. J. Harrison-Walker, "The measurement of word-of-mouth communication and an investigation of service quality and customer commitment as potential antecedents," *J. Serv. Res.*, vol. 4, no. 1, pp. 60–75, 2001.
- [33] S. A. Taylor and T. L. Baker, "An assessment of the relationship between service quality and customer satisfaction in the formation of consumers' purchase intentions," *J. Retail.*, vol. 70, no. 2, pp. 163–178, 1994.