

# OPTIMIZATION OF SERVICES AND ACCESSIBILITY WEBINAR TUTORIALS ON SASTISFACTION USING THE MICROSOFT TEAMS APPLICATION FOR UNIVERSITAS TERBUKA STUDENTS

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## **Abstract**

This research aims to determine the effect of webinar tutorial facilities and accessibility on student satisfaction in applying Microsoft Teams. This type of research is survey research that is quantitative with multiple linear regression analysis. Where the service and accessibility of the webinar tutorial are independent variables, and student satisfaction with using the Microsoft Teams application is the dependent variable. The research population is the Universitas Terbuka students in the 2022.2 academic years who follow the webinar tutorial for scientific papers. Obtained the sample from students of the public administration study program by filling out google forms. This study tries to show a positive influence between the service and accessibility of webinar tutorials on student satisfaction after applying Microsoft Teams. The study is expected to produce new findings on the benefits and accessibility of webinar tutorials to provide satisfaction to Universitas Terbuka students in using the Microsoft Teams application.

Keywords: Innovation, technology, research projects, etc.

## **1 INTRODUCTION**

The era of the industrial revolution 4.0 has provided many significant changes in the development of information technology that can change the pattern of face-to-face teaching and learning activities becoming virtual or online. Universitas Terbuka, a pioneer of digital- based learning, provides space for students to access webinar tutorials (Tuweb). The education system designed by the Universitas Terbuka is long-distance by utilizing the internet network to deliver lecture services so that students can accept learning materials with a flexible schedule. Lecture services with webinar tutorials aim to assist students in completing their studies as well as accessibility in accessing webinar tutorial services using the Microsoft Teams application. The webinar tutorial service is part of the Universitas Terbuka e-learning system, where students create and activate accounts, usernames, and passwords, do login activities, and take webinar tutorial classes following learning activities mutually agreed upon between tutors and students. The webinar tutorial sessions are eight sessions with 14 learning activities in 14 weeks with four webinar tutorials. Students can learn the material through the available modules in e-learning. In e-learning, some assignments were submitted into three learning activities (task 1), five learning activities (task 2), seven learning activities (task 3), eight learning activities (task 3) continued, ten learning activities (task 3) 4), learning activities 11 (task 4) continued, and the last is publishing the final article on learning activities 14.

Student accessibility on the webinar tutorial service uses the Microsoft Teams application, which provides easy access and security of webinar tutorials to students and changes the lecture atmosphere from face-to-face to virtual. So that students can get webinar tutorial services with the Microsoft Teams application flexibly by utilizing internet connectivity. This system can help students improve their independent learning activities. The accessibility of the webinar tutorial makes it easy for students to attend lectures for one semester. The webinar tutorial service is carried out virtually in synchronous teaching, where students and tutors meet face-to-face virtually through the Microsoft Teams application. The webinar tutorial consists of scientific work courses with 4 meetings out of 14 learning activities, namely in learning activities 2, 6, 9, and 12. It aims to improve distance education learning services at the Universitas Terbuka. Webinar tutorials are learning activities included in the Universitas Terbuka academic calendar, providing opportunities for students to enhance their competence in scientific work courses. However, students must register as participants in the webinar tutorial class by activating. Because if it's too late, students will inevitably be able to take the tutorial webinar class. Accessibility, better known as the ease of accessing webinar tutorials, is a learning facility provided by the Universitas Terbuka to students who have a good agenda. The problem is often signal or wifi network problems, which can hinder students from accessing the webinar tutorial. In addition, other issues also happen due to the lack of student insight regarding the accessibility guidelines for webinar tutorials. Students who have registered in the tutorial webinar class expect to be able to follow the webinar tutorial process starting from learning activities 2, 6, 9 to 12. During 4 synchronous meetings, students should study learning modules and work on drafting scientific papers at the Universitas Terbuka.

The challenge for students as distance learners at the Universitas Terbuka is their readiness and toughness in implementing digital/online systems with the accessibility of webinar tutorial services as a place to provide mastery and understanding of scientific work courses via the internet and supporting tools such as laptops, computers, and tablet, and cell phones. The impact/influence of the webinar tutorial service and accessibility is as a means of digital/online learning, a service of the Universitas Terbuka distance education system to support the success of student's independent learning. The output of this research is to obtain data on how much satisfaction students have in using the Microsoft Teams application in a webinar tutorial for a scientific paper course. In addition, research held to determine the effect of the webinar tutorial facility and accessibility on students' satisfaction using the Microsoft Teams application. Satisfaction here is a form of giving aspirations from digital learning assistance provided by the Universitas Terbuka.

The results of this study are a reference in sharing enthusiasm for learning from students using digital learning facilities facilitated by the Universitas Terbuka.

### **Webinar Tutorial**

The webinar tutorial is an online tutorial service facilitated by the Universitas Terbuka, which is synchronous and asynchronous, where the interaction between tutors and students is carried out simultaneously but in a different room/place. Learning activities are carried out through webinars connected to the internet. Webinar tutorials are virtual classes equipped with advanced features: attendance forms, assignments, tutorial materials, asynchronous facilities such as online tutorials, and other information. The pattern for the implementation of the webinar tutorial is as follows: a) for the diploma/bachelor program, it is carried out with a pattern of 1 pre-session and 8 meetings with 14 learning activities, b) for the master/doctoral program, 4 meetings are held as a complete requirement that integrated with 8 online tutorial sessions, tutorials Webinars are integrated with online tutorials.

The purpose of a webinar tutorial is to equip students to write scientific papers because every student is an academic person who should have competence in the field of writing scientific papers. Universitas Terbuka students throughout Indonesia and abroad can access this service through the internet network. According to V. J. Caiozzo, F. Haddad, S. Lee, M. Baker et al., (2019), webinars, namely seminars, workshops, presentations, and teaching that are held virtually, face-to-face virtual is delivered using internet media and attended by many people from various places, in the implementation of the webinar participants can communicate directly either through video or chat. Based on previous research from Zakirman & Rahayu (2022), obtained from the assessment of webinar participants by filling out evaluation questionnaires through the LMS, the results of the average evaluation score were as many as 54.68% of respondents stated that the webinar activities ran smoothly and satisfactorily. In addition, other research on webinars also shows positive results where the use of webinars as a means of communication is very effective and efficient in reaching all levels of society from various regions in Indonesia and abroad because of internet-based media (Gogali et al., 2020).

### **Accessibility**

Accessibility, according to the Regulation of the Minister of Public Works of the Republic of Indonesia Number 30/PRT/M/2006 (Male et al., 2006), facilitated many people, both ordinary and

people with disabilities and the elderly to realize equal opportunities in all aspects of life. In addition, it can also interpret as follows:

- 1 Ease can be interpreted as people - people can go to a place;
- 2 Usefulness means that people can use a place.
- 3 Safety, interpret that all building construction and the environment must pay attention to the safety of people.
- 4 Independence, where everyone can go, enter, and use all places without asking for help from others.

According to Prawira & Pranasari (2020), accessibility is the ease of reaching one location to another with the transportation system. The size of something reached includes the ease of cost, duration, and effort to move from one place to another. Meanwhile, according to Prajalani (2017), accessibility is a convenience given to people with disabilities, actualized to the maximum, to achieve equal opportunities in various fields of life. So, equal access to life services consists of facilities and accessibility services for students with special needs. Then Sheth dan Sisodia (2012), explain that accessibility is the extent to which consumers can quickly obtain and use a product. It has 2 dimensions, namely: 1) availability, indicated by the supply factor relative to a demand for a product, then the extent to which a product stored in storage regarding products and services, and 2) convenience, indicated by the effort and time required to obtain the product. Product is the ease with which one can find a product in various locations and attractive packaging. From the experts' opinions above, it can conclude that accessibility is the ease of accessing a learning system, in this case accessing webinar tutorials on [learning.ut.ac.id](http://learning.ut.ac.id). This convenience expects to provide flexibility to students in learning so that they are comfortable and safe in education wherever they are without being bound by space and time.

### **Microsoft Teams Application**

The rapid development of technology, information, and communication (ICT) in the current era has contributed significantly to long-distance upgrading. In addition, information technology is also a means of remote upgrading or better known through upgrading Microsoft Teams, Zoom, Google Meet, and Google Classroom. Those are some examples of applications used for remote or online upgrading (Nafisah & Fitriyati, 2021). In the current digital era, the Microsoft Teams application is one of the most appropriate videos conferencing applications to support the smooth running of various learning activities. This application can be obtained for free and is available for laptops, Mac computers, Windows 32 bits, Android smartphones, or iPhones (Fahri, 2020). According to Rakhmawati & Sulistianingsih (2020), the Microsoft Teams application is one of the

many online learning platforms that facilitate lecturers and students to interact and collaborate during virtual learning. This is because the Microsoft Teams application has a chat menu and a learning video that is relatively easy to use. The advantages of the Microsoft Teams application are that it is pretty easy to use by students and tutors, has an HD menu, and the audio is relatively good quality. In addition, the Microsoft Teams application maintains the confidentiality of data from its users (Sulz, 2020).

From the axioms of the experts described above, the Universitas Terbuka, a pioneer of distance or online learning, is very suitable to use the Microsoft Teams application because it follows the mission and vision of the Universitas Terbuka, and many advantages provided in this application compared to other applications. Thus, this application is in line with the implementation of webinar tutorials for scientific work courses that use synchronous and asynchronous modes.

## **2 METHODOLOGY**

This research is survey research that functioned as quantitative with multiple linear regression analysis. The method used in collecting data is using a virtual questionnaire, namely google forms, which is presented and analyzes data from independent and dependent variables to obtain an appropriate description of events in numerical data. This data was obtained from respondents through a virtual questionnaire and used a likert scale to measure it. The time and place of the research are in 2022 at the Universitas Terbuka. The population of this study is Universitas Terbuka students in the 2022.2 academic years who follow the webinar tutorial for scientific papers. For the technique of taking and sampling data using random sampling. Examples from the community give equal rights in filling out the virtual questionnaire form. As for the research example, some active students participate in webinar tutorials and enter questionnaires on google forms, and as many as 20 students take scientific work courses. SPSS 25 was used to analyze the data.

## **3 FINDINGS AND DISCUSSION**

### **3.1 Multiple Linear Regression Analysis**

The opinion of Ghozali (2018), regarding the study of multiple linear regression is a model of regression by including more than one independent/independent variable. This analysis was carried out in an effort to find out how much influence the independent/independent variables have on the dependent/dependent variable. Multiple Linear Regression Analysis Webinar Tutorial Facilities and Ease of Satisfaction using the Microsoft Teams Universitas Terbuka Students are as follows:

Table 1. Results of Student Satisfaction Determination Coefficient of Regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df 1	df2	Sig. F Change	
1	.901 <sup>a</sup>	.813	.791	3.34276	.813	36.862	2	17	.000	1.663

- a. Predictors: (Constant), Accessibility (X2), Tuweb Service (X1)
- b. Dependent Variable: Student Satisfaction using Microsoft Teams (Y)

Based on the results of the regression coefficient of determination test above, the number of the regression coefficient (*R-square*) = 0.813, it can be explained that the factor of the tutorial facility Webinars and convenience have an impact on the satisfaction factor of students in using the *Microsoft Teams* by 81.3%, while the remaining 18.7% is influenced by other factors outside of the variables from webinar tutorial services and student accessibility. This means that through the webinar tutorial service and accessibility that has been carried out by the Universitas Terbuka, it has had a major influence on student satisfaction using the *Microsoft Teams*. Thus webinar tutorial services and accessibility are effective in providing services to students in the virtual learning process.

### 3.2 Partial Test

Partially testing a regression or partial coefficient involves determining its meaning, in accordance with Fadhila Sena & Artikel (2011). Through the t test and a significance level of 5%, this test aims to be able to identify the partial impact between the independent variable and the dependent variable. T count is calculated by running the SPSS software on the coefficients. The coefficient of determination (*R2*) is another metric used in this study to assess a model's capacity to account for variance in the dependent variable. Additionally, a scale from 0 to 1 is used to determine the coefficient of determination's value. The conclusion is that the capacity of the independent components is severely constrained if *R2* is low. However, the value is regarded as zero if the modified *R2* value in the empirical test is negative. In other words, if the value of *R2* = 1, then the value of adjusted *R2* = *R2*, however a negative value will be assigned to adjusted *R2* if the value of *R2* = (1-k)/(if k>1).

Based on *R* = 0.901, this indicates that all independent factors, namely webinar tutorial services and student accessibility, have a strong relationship based on the correlation coefficient interpretation table with the degree of satisfaction of students using Microsoft. Based on *R2* =

0.813, this indicates that the combined impact of these two factors is 81.3%; the remaining independent factors have no significant influence.

*Table 2. Product of Service Regression Study Webinar Tutorial and Accessibility to Student Satisfaction using Microsoft Teams*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics		
	B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF	
1	(Constant)	.093	9.869		.009	.993					
	Tuweb Service (X <sub>1</sub> )	.208	.149	.217	1.403	.179	.752	.322	.147	.463	2.162
	Accessibility (X <sub>2</sub> )	.905	.191	.731	4.732	.000	.889	.754	.497	.463	2.162

According to the study, the equation for multiple linear regression is  $Y = 0.093 + 0.208X_1 + 0.905X_2$ , which indicates that the convenience and webinar tutorial service have a positive impact on student satisfaction with Microsoft Teams. The converse is also true: if these two variables rise, student satisfaction with Microsoft Teams will rise as well. So as to be more clear:

- 1 0.093 indicates that the dependent variable (satisfaction with Microsoft Teams) has a value of 0.093 as well if the independent variable (webinar tutorial and accessibility services) has a value of 0 or is constant. The dependent/dependent variable may automatically rise by the same amount whenever the independent/independent variable increases by one unit;
- 2 The regression coefficient for the webinar tutorial service (X<sub>1</sub>) is 0.208, indicating a positive influence of the variable on the degree of happiness with using Microsoft Teams. If the variable's score rises, so will student satisfaction;
- 3 According to the regression coefficient of the accessibility dimensions (X<sub>2</sub>), which is 0.905, there is a positive relationship between accessibility and student happiness with Microsoft Teams. If the accessibility variable's score rises, this relationship will likewise rise.

### 3.3 Determination Coefficient

Philp (2002), states that in order to determine the extent of the influence of factor X on factor Y, one has to know the coefficient of determination, or (R<sup>2</sup>). The size of the variable Y can be easily calculated after the impact of factor X is understood.

Table 3. Product of Calculation of Correlation and Coefficient of Determination Shown

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	823.791	2	411.896	36.862	.000 <sup>b</sup>
	Residual	189.959	17	11.174		
	Total	1013.750	19			

- a. Dependent Variable: Student Satisfaction using Microsoft Teams (Y)
- b. Predictors: (Constant), Accessibility (X2), Tuweb Service (X1)

According to the analysis's known points,  $F = 36,775$  has a sig 0.00 ( $<0.05$ ) that shows the two variables simultaneously have a positive and relevant impact on students' satisfaction with using Microsoft Teams. In other words, as both variables rise, student satisfaction with using Microsoft Teams will follow, and vice versa.

#### 4 CONCLUSION

The following are the study's findings:

1. Student satisfaction with using Microsoft Teams is positively impacted by webinar services and accessibility training. Thus, if the accessibility tutorials and webinar service levels both improve at the same time, student happiness with utilizing Microsoft Teams will likewise rise;
2. The webinar tutorial service has a limited positive impact on students' Microsoft Teams usage happiness;
3. Student satisfaction with utilizing Microsoft Teams is partially influenced by accessibility, simplicity, and security in accessing webinar tutorials.

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