

## VOCATIONAL HIGH SCHOOL STUDENT'S ACCEPTANCE ON THE USE OF OFFICE 365 IN THE CLASSROOM

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### ABSTRACT

Learning process in schools is currently being affected by pandemic Covid-19. Distance learning and utilizing technology are carried out to reduce the spread of the virus. The development of information and communication technology can reach all fields, including education. One of them is Microsoft 365, consisting of one note, sway, teams, and forms that can support the interactivity and meaning of the distance learning process. This study aims to determine the acceptance of students for Microsoft 365 in the classroom. The acceptance model used in this study is the Technology Acceptance Model (TAM) which consists of perceived usefulness and perceived ease of use. The research method uses descriptive qualitative. The study population was the students of SMK Negeri 2 Salatiga, Central Java. The sample in this study amounted to 270 students consisting of class X, XI, and XII. Data were collected using questionnaires and interviews. The results show that Microsoft 365 can be accepted by students with a percentage of acceptance of perceived usefulness of 73% and 80% of perceived ease of use.

**KEYWORDS:** Microsoft 365; Technology Acceptance Model (TAM), online learning.

### INTRODUCTION

Indonesia's Education should ideally not only memorize products in the form of concepts or theories but must practice the process of discovery and the formation of scientific attitudes (Andersen & Hepburn, 2015; Fudge, 2014). Learning discovery is a theory from Jerome Bruner. Bruner (1960) argues that discovery learning is compatible with the active search for knowledge by humans and will provide the best results. Students who construct their knowledge by developing the ability to think, act and act scientifically in solving problems will produce truly meaningful knowledge (Asyari et al., 2016; Probosari et al., 2017). Meaningful knowledge can be trained through the process of discovery and the formation of scientific attitudes will encourage students to be more diligent, motivated in learning and also train high order thinking skills (Yusnaeni et al., 2017).

Indonesia is a country with a lower level of higher-order thinking skills, based on the results of the Program for International Student Assessment (PISA) survey conducted by the Organization for Economic Cooperation and Development (OECD), it is known that the average score of Indonesian students is still low by ranking 72 out of 77 countries (OECD, 2019). PISA indicates that students' higher-order thinking skills are still low because the international standard for the advanced category is 625, high is 550 and medium is 475, and the score is low is 400.

Increasing higher-order thinking skills can be done through education in schools by applying learning models or methods that direct students to analyze, evaluate, and construct direct observations and experimental results (Berawi, 2019; Fudge, 2014). Conducting observations or experiments can stimulate students' thinking skills through the analyzing experimental results, evaluating information creatively and critically, concluding, and elaborating (Kigo et al., 2018; Probosari et al., 2017). Higher-order thinking skills, require students to apply concepts, theories, laws, abilities, and skills to make logic, an attitude of reflection for problem-solving, making decision and creating idea (Costa & B., 2014; Shi et al., 2020).

The learning process in schools is currently being affected by the pandemic. Distance learning and utilizing technology are carried out to reduce the spread of the virus. Online learning can interfere with the higher-order thinking skill training process for students if it is not accompanied by the application of learning that still refers to the realms of attitudes, knowledge, and skills (Ahied et al., 2020). Innovative and creative use of instructional media is a must for teachers. Even though learning is carried out online, teachers still have the principle of achieving educational goals in the realm of attitudes, knowledge, and skills (Ahied et al., 2020; Sukarno & Widdah, 2020).

Distance learning is supported by the developments in information and communication technology. Almost all education sectors currently utilize technology. One of the products in the technology for accommodating distance learning in the classroom is Microsoft 365 (Amirullah & Maesaroh, 2020; Murniarti, 2020). Microsoft 365, with the help of the internet, makes it easier for users to explore and share learning content remotely and also to collaborate in preparing learning tools, (Aribowo, E. & Setianingtyas, A., 2018). Microsoft 365 is comprised of several products and services. Teachers can create quizzes or questionnaires through Microsoft Forms. Teachers create presentations, resumes, and interactive reports with Microsoft sway. Creating 3D animations using Microsoft PowerPoint 365. Students can also improve learning outcomes of digestive system material using mind mapping techniques from Microsoft One Note (Alvia et al., 2018). The personalized feature on One Note can make students actively participate in the learning process because it can reach each student's needs individually. One note can be accessed flexibly as long as it is connected to the internet. Besides, motivation, interest in learning, and learning objectives can be achieved and enhanced through the strategize feature (Aribowo et al., 2018; Wijaya, 2019). Microsoft 365 was chosen for some studies because many schools and colleges had not made good use of it (Aribowo, E. & Setianingtyas, A., 2018).

Along with the development of online learning, research is needed to determine students' acceptance of the use of media for delivering material. The acceptance of technology will show why educators and students continue to take the advantage of Microsoft 365 or highlight parts that maybe needs to be improved.

The acceptance model used in this study to determine the acceptance of the Technology Acceptance Model (TAM) (Davis, 2013). TAM consists of perceived usefulness and perceived ease of use. Perceived usefulness refers to the belief in the use of certain systems that can improve

job performance (Davis, 2013). Meanwhile, perceived ease of use refers to the belief in using a certain system without requiring a lot of effort (Davis, 2013). Many researchers have adopted TAM to study the acceptance and use of technology. This has been successfully adopted in the same context in electronic learning systems (T. Almarabeh, 2014) and smartphone-based learning systems (Al-Emran et al., 2016).

## MATERIALS AND METHODS

This study were using the descriptive qualitative method. The research subjects were class X, XI, and XII of SMK Negeri 2 Salatiga, Central Java Province, with 270 students who were selected using cluster random sampling. The demographic information of the research subjects is shown in Table 1. Research data were obtained through interviews and questionnaires. The questionnaire was compiled by adapting the Technology Acceptance Model (TAM) indicator which consists of perceived usefulness and perceived ease of use (Davis, 2013). Respondents' answers were then analyzed and categorized as benefit and convenience according to Table 2 (Dec'man, 2015). The data were analyzed by the following formula (Sugiyono, 2012):

$$P = \frac{\sum SH}{\sum SK} \times 100\%$$

$\sum SK$  = highest score per item x number of item x number of respondents

### Information

P = percentage of respondents' answer

$\sum SK$  = criterion score

$\sum SH$  = total score

**Table 1. The demographic information of the research subjects**

| Subject | Values                                   | Frequency | Percentage |
|---------|--|-----------|------------|
| Gender  | Male                                     | 201       | 74 %       |
|         | Female                                   | 69        | 26 %       |
| Age     | 14 – 16                                  | 181       | 67 %       |
|         | 17 – 20                                  | 89        | 33 %       |
|         | X  | 161       | 60 %       |
| Class   | XI                                       | 49        | 18 %       |
|         | XII                                      | 60        | 22 %       |
| Major   | Construction and Property Business       | 24        | 9 %        |
|         | Modeling Design and Building Information | 7         | 3 %        |
|         | Technical light vehicle                  | 63        | 23 %       |
|         | Automotive Body Repair Techniques        | 30        | 11 %       |
|         | Mechanical Engineering                   | 35        | 13 %       |
|         | Computer network Engineering             | 111       | 41 %       |

**Table 2. Categories of perceived usefulness and perceived ease of use**

| Percentage (%) | Category          |
|----------------|-------------------|
| 0 – 20         | Strongly disagree |
| 21 – 40        | Disagree          |
| 41 – 60        | Slightly agree    |
| 61 – 80        | Agree             |
| 81 – 100       | Strongly agree    |

**RESULT AND DISCUSSION**

The results of the analysis regarding the acceptance of Microsoft 365 on the perceived usefulness of TAM show that 73% of respondents agree that Microsoft 365 is useful with the distribution of respondents' acceptance shown in Figure 1.



Based on the acceptance analysis with TAM, 23% of students disagree and strongly disagree that Microsoft 365 provides benefits to users. Respondents explained that Microsoft 365 did not increase efficiency, productivity, learning performance and did not improve academic abilities. Even though they have taken advantage of technological developments for the learning process, respondents said the activities carried out were not interesting and the material was more difficult to understand. The results of the analysis regarding the acceptance of Microsoft 365 on the perceived ease of use show that 80% of respondents agreed that Microsoft 365 was easy to use with the distribution of respondents' acceptance shown in Figure 2.



Based on the acceptance analysis with TAM, as many as 20% of students disagree and strongly disagree that Microsoft 365 provides ease of use for users. Respondents explained that Microsoft 365 is not easy to use, the process of opening features and uploading files takes a long time, the video call feature is difficult to use, takes a long time to open one feature to another, and the application requires a laptop with certain specifications. Most students agree that Microsoft 365 is useful (perceived

usefulness) in the education sector because it can increase efficiency, productivity, performance, and academic ability in the learning process. Besides, students agree that Microsoft 365 is easy to use (perceived ease of use) in the education sector because it can be used to upload assignments without obstacles except for an internet connection, can access various literature, does not need special training if using it to learn, applications are not heavy, easy-to-use tools and features as well as a simple and attractive appearance, clear and easy-to-use menu settings, access to material, easy to use for communicating with other users, and easy to use for commenting on materials or quizzes presented by teachers.

The results of the questionnaire show that the use of Microsoft 365 in the learning process can be accepted by students of class X, XI, and XII of SMK Negeri 2 Salatiga. Microsoft 365 consists of some products and services, such as sway, one-note, and Teams. These features make it easier for teachers to make evaluations in the form of quizzes or questionnaires; create interactive presentations, resumes, reports, and course materials; create 3D animation; There is also a mind mapping technique in one of its features which can improve student learning outcomes (Alvia et al., 2018). Motivation, interest in learning, and learning objectives can be increased with one note (Aribowo, E. & Setianingtyas, A., 2018). Microsoft 365 can be used by educators for virtual classroom activities or distance learning.

The results of interviews with students related to problems when using Microsoft 365, namely, there is no bell notification when the learning process starts, certain features have small and meeting buttons so that they often press the wrong button, sometimes assignments uploaded to the feature are not sent to the teacher. On average, students have internet connection constraints when using Microsoft 365. Students also say that Microsoft 365 helps improve knowledge and learning outcomes through collaborative project assignments.

Apart from being accepted by students because of its benefits and ease of use, Microsoft 365 strongly supports the process and evaluation during online learning (Alvia et al., 2018; Amirullah & Maesaroh, 2020). The features in it can create interesting, innovative, and not monotonous learning activities. By utilizing Microsoft 365 in the learning process, students get more meaningful learning in doing schoolwork, class reports, even personal portfolios, project assignments, and still get learning activities in the realm of attitudes, knowledge, and skills, which are the achievement of educational goals. Indonesia and still able to practice higher-order thinking activities.

## CONCLUSION

Microsoft 365 can be accepted by students with a percentage of acceptance of perceived usefulness of 73% with the agreeing category, and 80% of perceived ease of use with the agree with category.

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