

DETERMINANTS OF VOCATIONAL HIGH SCHOOL STUDENTS' INTENTION TO USE CHATGPT IN LEARNING: INTEGRATING TAM AND UGT

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ABSTRACT

The development of artificial intelligence has influenced learning practices, particularly through the use of ChatGPT as a learning support tool. This study aims to examine the factors influencing students' intention to use ChatGPT in learning by integrating the Technology Acceptance Model (TAM) and Uses and Gratifications Theory (UGT). The variables analyzed include Perceived Ease of Use, Perceived Usefulness, Convenience, and Information Seeking toward Intention to Use. This study employed a quantitative explanatory approach with respondents consisting of 11th grade students majoring in Office Management. Data were collected using a Likert-scale questionnaire and analyzed using Structural Equation Modeling-Generalized Structured Component Analysis (SEM-GSCA). The results indicate that Perceived Ease of Use significantly influences Perceived Usefulness but does not directly affect Intention to Use. Furthermore, Perceived Usefulness and Information Seeking have a significant effect on Intention to Use, while Convenience shows no significant influence. These findings suggest that students' intention to use ChatGPT is driven more by perceived benefits and information needs than by ease or convenience of use.

Keywords: ChatGPT, intention to use, learning media, TAM, UGT

ABSTRAK

Penelitian ini bertujuan untuk menganalisis faktor-faktor yang memengaruhi niat penggunaan ChatGPT sebagai alat bantu belajar pada siswa SMK dengan pendekatan integratif TAM dan UGT. Variabel yang diteliti meliputi Perceived Ease of Use, Perceived Usefulness, Convenience, dan Information Seeking terhadap Intention to Use. Penelitian ini menggunakan metode kuantitatif dengan pendekatan explanatory research. Sampel penelitian adalah siswa kelas XI jurusan Manajemen Perkantoran yang dianalisis menggunakan Structural Equation Modeling-Generalized Structured Component Analysis (SEM-GSCA). Hasil penelitian menunjukkan bahwa Perceived Ease of Use berpengaruh signifikan terhadap Perceived Usefulness, namun tidak berpengaruh langsung terhadap Intention to Use. Sementara itu, Perceived Usefulness dan Information Seeking berpengaruh signifikan terhadap Intention to Use, sedangkan Convenience tidak berpengaruh signifikan. Temuan ini menunjukkan bahwa niat siswa menggunakan ChatGPT lebih dipengaruhi oleh manfaat nyata dan kebutuhan pencarian informasi dibandingkan kemudahan dan kenyamanan penggunaan.

Keywords: ChatGPT, niat penggunaan, media pembelajaran, TAM, UGT

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INTRODUCTION

Rapid technological developments have given rise to various innovations such as artificial intelligence (AI), which has become part of everyday life to facilitate certain activities and goals. In recent years, *artificial intelligence* (AI) has become a significant and promising field in various aspects of life in the current era of digitalization (Le *et al.*, 2024). The ability of AI to analyze complex data, search for information, and communicate with humans has led to its frequent use by students in independent or group learning. According to research conducted by Rudolph *et al.*, (2023) this has become an important part of the student learning process.

In November 2022, OpenAI launched ChatGPT, an artificial intelligence-based chatbot (OpenAI, 2022). ChatGPT has become one of the applications with the fastest consumer growth. Research conducted by Rudolph *et al.*, (2023) shows that ChatGPT functions as a learning tool that helps students with the flexibility to adjust their learning according to their personal understanding in terms of time and location, thereby accelerating the creation of an effective and efficient learning experience. The evolving ChatGPT technology opens up opportunities for further exploration in various aspects of life. With the proliferation of information and rapid advances in AI, the intention to use ChatGPT has become very important Le *et al.*, 2024.

One AI-based chatbot is ChatGPT, which has become a frequently used academic tool for students in schools. This platform allows students to learn quickly and can reduce stress because it is accessible anytime, anywhere. The use of ChatGPT provides opportunities for students and helps improve their learning experience (Jishnu *et al.*, 2023). ChatGPT provides students with information quickly and in a timely manner, offering personalized assistance tailored to the user based on previous information or conversations, and providing timely feedback in a manner that mimics human communication (Le *et al.*, 2024). The variables influencing an individual's tendency to use ChatGPT in the education sector have become an increasingly studied research topic.

In the context of vocational education, particularly vocational high schools (SMK), the use of learning technology is very important because SMKs are oriented towards mastery of competencies, work readiness, and familiarity with the use of technological devices in the learning process. SMK students are more often involved in practice-based learning and apply digital technology in the learning process, so SMK students have a high potential to utilize artificial intelligence technology (ChatGPT). SMKS Ketintang was chosen as the research location because this school has a reputation as a leading private vocational school in the city of Surabaya, with various fields of expertise at SMKS Ketintang that are in line with current technological developments.

Although the use of ChatGPT in education is becoming more widespread, empirical studies discussing the factors that influence students' intentions to use ChatGPT as a learning medium are still limited, especially at the vocational school level. Most previous studies have focused more on university students or higher education contexts, while the vocational and practical characteristics of vocational high school students have not been explored much. This condition indicates a *research gap* that needs to be further explored.

To understand the acceptance and use of learning technology, the Technology Acceptance Model (TAM) Davis, (1989) is often used as the main theoretical framework. TAM emphasizes the role of perceived usefulness and perceived ease of use in shaping the intention to use a technology. However, TAM is considered to be fully capable of explaining users' internal motivations for using digital learning media. Therefore, the integration of TAM with Uses and Gratifications Theory (UGT) is relevant, as UGT highlights user motivations, such as information seeking and convenience, in utilizing a medium. Moreover, the integrative approach provides a deeper understanding of the cognitive and functional dimensions of technology use, encompassing psychological aspects as well as the individual needs of users (Le *et al.*, 2024).

The integration of TAM and UGT provides a comprehensive theoretical framework for exploring students' intentions in using ChatGPT as a learning tool. Previous studies have shown that the combination of these two theories can provide a more holistic explanation of digital technology usage behavior in an educational context (Le *et al.*, 2024). This integrative approach is expected to provide a more comprehensive understanding of the factors that influence students' intentions to use ChatGPT. Novelty of this study differs from previous research by focusing on vocational high school students and integrating the Technology Acceptance Model (TAM) and Uses and Gratifications Theory (UGT) within a secondary education context.

Based on the above description, the purpose of this study is to analyze the factors that influence vocational high school students' intention to use ChatGPT as a learning medium through an integrative approach of the Technology Acceptance Model (TAM) and Uses and Gratifications Theory (UGT). The results of this study are expected to contribute theoretically to the development of AI-based learning media studies and practically to teachers and schools in integrating ChatGPT into the learning process.

RESEARCH METHOD

This study uses a quantitative method that has been widely used by researchers. This method is referred to as a *scientific* method because it meets scientific principles, namely concrete, systematic, rational, and measurable (Sugiyono, 2017). The quantitative approach was chosen because this study aims to examine the relationship between variables and analyze the factors that influence students' intentions to use ChatGPT as a learning medium. This study was conducted on vocational high school (SMK) students who are familiar

with and use ChatGPT in their learning activities.

A population is a collection of objects or subjects that have a certain number and characteristics, determined by researchers as an area of generalization to be studied and then conclusions drawn (Sugiyono, 2017). The population in this study was students majoring in office management in grade XI at SMKS Ketintang. The sample must have characteristics that correspond to the population so that it can be used to represent the population. The sample in this study was determined using the *stratified random sampling* technique. *Stratified random sampling* is a technique that divides the population into several groups or strata with certain characteristics relevant to the research. Based on the Morgan & Krejcie, (1970) with a significance level of 0.05%, the number of samples that must be obtained for this study is 118 students. Thus, the division of several groups was made into 5 classes, with 24 students in each class.

The variables in this study include perceived usefulness and perceived ease of use, which are adopted from the Technology Acceptance Model (TAM), as well as information seeking and convenience, which are adopted from the Uses and Gratifications Theory (UGT). The core constructs of TAM are *Perceived Ease of Use* (PEOU) and *Perceived Usefulness* (PU), both of which influence students' *Intention to Use* (ITU) ChatGPT. Findings from Le et al. (2024) indicate that PU has a strong impact on ITU, while PEOU shows a significant positive effect in the context of learning with ChatGPT. These results are consistent with Yuemin et al. (2023), who also found that PU and PEOU positively affect ITU.

From the UGT, motivation factors such as *Convenience* play a crucial role. Jishnu et al. (2023) highlight that convenience will be essential for the future development of ChatGPT, as users benefit from its accessibility and the availability of information without requiring excessive effort. Another motivational factor is *Information Seeking*. ChatGPT facilitates access to knowledge and information that supports learning processes. According to Le et al. (2024), educators can also benefit, as ChatGPT helps save time and enhances teaching effectiveness by providing positive feedback aligned with learners' needs. These variables are used to explain the intention to use ChatGPT as a learning medium. Each variable was measured using a number of indicators compiled in the form of statements in the questionnaire instrument.

The research procedure was carried out in several stages. The planning stage was conducted by developing research instruments based on TAM and UGT theory and adapting them to the context of vocational school learning. Next, the implementation stage was carried out by distributing an online questionnaire in the form of a survey created using Google Forms. The measurement scale used by the researcher in this study was a 5-point Likert scale. The data collected from the questionnaire was analyzed using Structural Equation Modeling with a Generalized Structured Component Analysis (SEM-GSCA) approach. This analysis technique was used to test the relationship between research variables and to determine the direct and indirect effects of each variable on the intention to use ChatGPT as a learning medium.

GSCA is a new method of SEM that is useful for calculating scores and can be applied to very small samples (Ngatno, 2019). SEM-GSCA can be used in structural models involving variables with reflective or formative indicators. This study uses a *reflective* measurement model because it uses latent variables (*unobserved variables*) to measure motivation in using ChatGPT. The reflective indicator model is reflected in indicators whose data are perceptual in nature, so it can be assumed that all indicators have *common factors* (Ngatno, 2019).

The *Structural Equation Modeling–Generalized Structured Component Analysis* (SEM-GSCA) method was employed as it enables simultaneous analysis of latent variable relationships with high accuracy. This method was chosen due to its relevance to the research objective, namely examining the influence of TAM and UGT factors on students' intention to use ChatGPT. Furthermore, SEM-GSCA is suitable for testing complex models with relatively small sample sizes, making it more appropriate than alternative approaches (Hidayat & Wulandari, 2022). Parameter estimation can be performed without any criteria requirements (Chin, 1998). The structural model of this study is shown in the following figure.

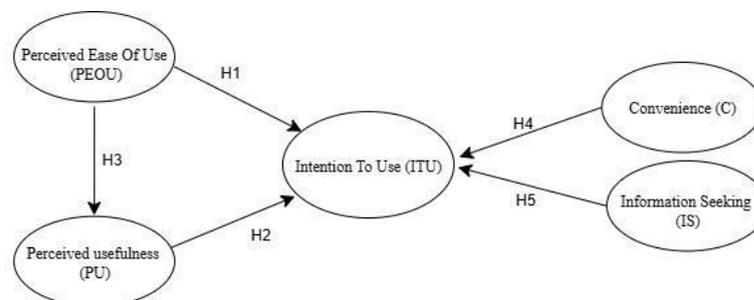


Figure 1. Research Structural Model

Based on this model, the research hypotheses include:

H1: There is a significant positive influence between *Perceived Ease of Use* and *Intention to Use* in the use of ChatGPT in vocational school students' learning

H2: There is a significant positive influence between *Perceived Usefulness* and *Intention to Use* in the use of ChatGPT in vocational school students' learning

H3: There is a significant positive influence between *Perceived Ease of Use* and *Perceived Usefulness* in the use of ChatGPT in vocational school students' learning

H4: There is a significant positive influence between *Convenience* and *Intention to Use* in the use of ChatGPT in vocational high school students' learning

H5: There is a significant positive influence between *Information Seeking* and *Intention to Use* in the use of ChatGPT in vocational high school students' learning

Before the questionnaire was distributed, the instruments for each variable were tested outside the sample first. Based on the test results, all statements in the instrument were declared valid, as indicated by a calculated *r* value greater than the table *r* value or a significance value of less than 0.05. Each variable was also declared reliable with a reliability value of more than 0.70.

RESULTS AND DISCUSSION

This study used a total of 148 respondents, who were 11th grade Office Management students in the 2025/2026 academic year at SMKS Ketintang Surabaya. Based on the data obtained, there was a significant difference in the gender composition of the respondents. A total of 88.51% of respondents were female, while only 11.49% were male. Based on this data, it can be seen that 0.68% of respondents were 19 years old, 3.38% were 18 years old, 46.62% respondents were 17 years old, 49.32% were 16 years old, and 0.68% were 15 years old. Furthermore, regarding the use of ChatGPT, 33.11% of respondents used ChatGPT every day of the week, 6.08% of respondents use ChatGPT 5-6 times a week, 21.62% of respondents use ChatGPT 4-5 times a week, 37.16% of respondents use ChatGPT 2-3 times a day, and 0.68% of respondents use ChatGPT once a week. The following is a statistical review of the respondents in this study:

Table 1. Demographic Profile of Respondents

| Variable | Item | n | Percentage |
|---------------|------------------|-----|------------|
| Gender | Male | 17 | 11.49% |
| | Female | 131 | 88.51% |
| Age | 19 years old | 1 | 0.68% |
| | 18 years old | 5 | 3.38% |
| | 17 years old | 69 | 46.62% |
| | 16 years old | 73 | 49.32% |
| | 15 years old | 1 | 0.68% |
| Usage ChatGPT | Daily | 49 | 33.11% |
| | 5-6 times a week | 9 | 6.08% |
| | 4-5 times a week | 32 | 21.62% |
| | 2-3 times a week | 55 | 37.16% |
| | Once a week | 1 | 0.68% |

Measurement Model Assessment

Indicator of loading assessment

According to Hair *et al.*, (2021), if the value of the indicator of loading assessment reaches ≥ 0.7 , it is declared to meet the value requirements. However, according to Chin, (1998) an indicator of loading assessment value of $\geq 0.5 - 0.6$ can be declared sufficient. In this study, the overall loading assessment indicator value is ≥ 0.5 , so this research model can be declared to meet the Indicator of Loading Assessment requirements. The following are the results of the researcher's data processing in the indicator of loading assessment:

Table 2. Indicator of loading assessment

| Loadings | | | | |
|----------|----------|-------|-----------|----------|
| | Estimate | SE | 95% CI(L) | 95%CI(U) |
| PEOU1 | 0.674 | 0.051 | 0.572 | 0.764 |
| PEOU2 | 0.65 | 0.075 | 0.474 | 0.752 |
| PEOU3 | 0.713 | 0.055 | 0.591 | 0.808 |
| PEOU4 | 0.582 | 0.061 | 0.44 | 0.671 |
| PEOU5 | 0.639 | 0.077 | 0.462 | 0.76 |

| | | | | |
|------|-------|-------|-------|-------|
| PU1 | 0.647 | 0.058 | 0.506 | 0.736 |
| PU2 | 0.676 | 0.062 | 0.557 | 0.779 |
| PU3 | 0.717 | 0.054 | 0.593 | 0.809 |
| PU4 | 0.678 | 0.074 | 0.447 | 0.77 |
| PU5 | 0.772 | 0.039 | 0.695 | 0.829 |
| IS1 | 0.536 | 0.086 | 0.347 | 0.678 |
| IS2 | 0.656 | 0.068 | 0.498 | 0.755 |
| IS3 | 0.76 | 0.044 | 0.661 | 0.822 |
| IS4 | 0.593 | 0.086 | 0.408 | 0.738 |
| IS5 | 0.765 | 0.054 | 0.655 | 0.845 |
| C1 | 0.676 | 0.054 | 0.569 | 0.784 |
| C2 | 0.753 | 0.038 | 0.669 | 0.812 |
| C3 | 0.722 | 0.05 | 0.592 | 0.794 |
| C4 | 0.763 | 0.047 | 0.676 | 0.844 |
| C5 | 0.614 | 0.058 | 0.475 | 0.723 |
| ITU1 | 0.706 | 0.049 | 0.609 | 0.787 |
| ITU2 | 0.794 | 0.034 | 0.708 | 0.849 |
| ITU3 | 0.862 | 0.022 | 0.812 | 0.893 |
| ITU4 | 0.763 | 0.041 | 0.667 | 0.831 |
| ITU5 | 0.692 | 0.061 | 0.531 | 0.779 |

Construct quality measures

According to Hair *et al.* (2021), the results of *Construct quality measures (Reliability of indicators)* to ensure that the research achieves *convergent validity, internal consistency, and adequate composite reliability* are required in PVE measurements, with values considered good if they are ≥ 0.50 . This is in line with Ali *et al.* (2021), who state that the values of *Cronbach's Alpha* and *Composite Reliability (rho)* should be > 0.70 . Then, according to Meneau & Moorthy (2022), the *dimensionality* value is 1.0. Based on the table presented above, it shows that the PVE value for the *Convenience* and *Intention to Use* variables is above 0.50. The Alpha value for the variable *Perceived Usefulness, Convenience, and Intention to Use* above 7.0 Rho values for the variables *Perceived Ease of Use, Perceived Usefulness, Information Seeking, Convenience, and Intention to Use* are above 7.0 and the dimensionality value is 1. Therefore, it can be concluded that all variables in this research model have a level of *convergent validity, internal consistency, and composite reliability* that meets acceptable criteria. The following are the results of the researcher's data analysis in Construct quality measures:

Table3. Construct quality measures

| | PEOU | PU | IS | C | ITU |
|----------------|-------|-------|-------|-------|-------|
| PVE | 0.426 | 0.489 | 0.446 | 0.501 | 0.587 |
| Alpha | 0.664 | 0.738 | 0.683 | 0.749 | 0.822 |
| Rho | 0.787 | 0.827 | 0.798 | 0.833 | 0.876 |
| Dimensionality | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

Component Validity Assessment

The *Fornell-Lacker* criteria indicate that all diagonal values representing the square root of AVE exceed the correlation between factors (Fornell & Larcker, 2018). This is important in establishing discriminant validity in

research, which essentially shows that the measurement model has acceptable psychometric properties (Adu & Boakye, 2020). The HTMT ratio can be said to have good discriminant validity when it shows a value ≤ 0.90 (Ali et al., 2021). In line with Henseler *et al.* (2014), a HTMT value above 0.90 indicates a lack of discriminant validity. This study shows results ≤ 0.90 . The following are the results of the researcher's data processing in Component Validity Assessment:

Table 4. Component Validity Assessment

| Fornell-Larcker Criterion Values | | | | | |
|----------------------------------|-------|-------|-------|-------|-------|
| | PEOU | ITU | C | IS | PU |
| PEOU | 0.653 | | | | |
| ITU | 0.491 | 0.766 | | | |
| C | 0.538 | 0.537 | 0.708 | | |
| IS | 0.501 | 0.66 | 0.498 | 0.668 | |
| PU | 0.603 | 0.652 | 0.649 | 0.564 | 0.699 |
| HTMT | | | | | |
| PEOU<->PU | | | 0.84 | | |
| PEOU<->IS | | | 0.734 | | |
| PEOU<->C | | | 0.754 | | |
| PEOU<->ITU | | | 0.651 | | |
| ITU<->C | | | 0.677 | | |
| ITU<->IS | | | 0.882 | | |
| ITU<->PU | | | 0.828 | | |
| C<->IS | | | 0.706 | | |
| C<->PU | | | 0.872 | | |
| IS<->PU | | | 0.799 | | |

R square

R square is used to measure the predictive power of structural models. The R square values indicated that 36.4% of the variation in Perceived Usefulness (PU) was explained by Perceived Ease of Use (PEOU), and 55.7% of the variation in Intention to Use (ITU) was indicated by PEOU, PU, Information Seeking (IS), and Convenience (C) The following are the results of the researcher's data processing in R square:

Table 5. R squared

| R squared values of components in structural model | | | | |
|--|-------|-------|-------|-------|
| PEOU | PU | IS | C | ITU |
| 0.000 | 0.364 | 0.000 | 0.000 | 0.557 |

Structural Model Assessment

Structural Model Fit Measure

FIT is an indicator that shows how much variance of all variables is explained in the research model (Hwang *et al.*, 2021). From the table presented, the FIT value is 0.439, which means that the research model is able to explain 43.9% of the variance. The AFIT value has a similar meaning to FIT but takes into account the complexity of the model and ranges from 0 to 1. Based on the table above, the AFIT value is 0.43, which indicates that the research model explains 43% of the variance. FITS is able to explain the total variance of all model components, with a value of 0.184, which means that 18.4% of the variance is explained in the structural model. Meanwhile, FITm has a value of 0.49, indicating that 49% of the variance has been explained in the measurement model. Hwang *et al.* (2021) revealed that when the sample is > 100 , the GFI value must be > 0.93 and the SRMR must be < 0.08 . In this study, the values are 0.965 and 0.066, respectively, thus meeting the model FIT requirements. The following is a table of Structural Model Fit Measures in the study:

Table 6. Structural Model Fit Measure

| FIT | AFIT | FITs | FITm | GFI | SRMR | OPE | OPEs | OPEm |
|-------|------|-------|------|-------|-------|-------|-------|-------|
| 0.439 | 0.43 | 0.184 | 0.49 | 0.965 | 0.066 | 0.571 | 0.832 | 0.519 |

Path Coefficients

Path Coefficient values can be considered statistically significant when they fall within the 95% confidence interval and

have positive values or no negative values (an estimate is considered statistically significant at the 0.05 level if its confidence interval does not include 0 (zero) (Hwang et al., 2021). In this study, *Perceived Ease of Use* (PEOU) on *Intention to Use* (ITU) indicates that the first hypothesis is rejected and that *Perceived Ease of Use* has no positive effect on *Intention to Use*. PEOU does not directly influence ITU, but functions as an enabling factor through PU. In other words, ease of use enhances students' perception of usefulness, which subsequently increases their intention to use ChatGPT. *Perceived Usefulness* (PU) on *Intention to Use* (ITU) indicates that the second hypothesis is accepted and that *Perceived Usefulness* has a positive effect on *Intention to Use*. *Perceived Ease of Use* (PEOU) on *Perceived Usefulness* (PU) indicates that the third hypothesis is accepted and that *Perceived Ease of Use* has a positive effect on *Perceived Usefulness*. *Convenience* (C) on *Intention to Use* (ITU) indicates that the fourth hypothesis is rejected and that *Convenience* does not have a positive effect on *Intention to Use*. *Information Seeking* (IS) on *Intention to Use* indicates that the fifth hypothesis is accepted and indicates that *Information Seeking* has a positive effect on *Intention to Use*. The following are the results of the researcher's data analysis in Path Coefficients:

Table 4.7 Path Coefficients

| | Estimate | SE | 95% CI(L) | 95% CI(U) | Description |
|-----------|----------|-------|-----------|-----------|-------------|
| PEOU->ITU | 0.03 | 0.109 | -0.163 | 0.23 | Rejected |
| PU->ITU | 0.345 | 0.087 | 0.176 | 0.522 | Accepted |
| PEOU->PU | 0.603 | 0.059 | 0.497 | 0.714 | Accepted |
| C->ITU | 0.096 | 0.09 | -0.069 | 0.289 | Rejected |
| IS->ITU | 0.403 | 0.087 | 0.231 | 0.548 | Accepted |

Discussion

The Effect of *Perceived Ease of Use* on *Intention of Use*

The results of this study indicate that *Perceived Ease of Use* does not have a significant effect on *Intention of Use*. This study supports the findings of Camilleri & Falzon (2021) in the use of streaming technology. *Perceived Ease of Use* does not affect *Intention to Use* because users tend to perceive the usefulness of the technology. Additionally, another study by Jaya et al. (2024) found that *Perceived Ease of Use* does not significantly influence *Intention of Use*, with motivation and enjoyable experiences having a greater impact than *perceived ease of use*.

This is because the study was conducted on Gen Z, who have been exposed to numerous technologies and digitalization, making the factor of enjoyment more influential in their interest in using a technology. They are recognized as the first generation to grow up with technology and social media embedded as integral aspects of everyday life (Zulfikasari et al., 2024). In the educational context, Generation Z demonstrates a stronger preference for interactive learning approaches that are directly connected to real-life experiences. They also favor technology-based learning methods that provide practical benefits. Moreover, Generation Z possesses considerable potential due to their distinctive characteristics being creative, innovative, goal-oriented, socially engaged, and inclined toward enjoyment. Respondents considered a technology easy to use but did not get the expected benefits, so users were less motivated and did not intend to use the technology. In addition, there are obstacles that are often encountered in using a technology, such as system errors and responses that are not relevant to needs, causing interest in using it to decline even though the technology is easy to use (Foroughi, 2024). These findings indicate that within the context of secondary education, particularly among vocational high school students, the components of the Technology Acceptance Model (TAM) do not operate in a strictly linear manner. *Perceived Ease of Use* does not act as a direct predictor of the intention to use; rather, it serves as a supporting factor that enhances the influence of perceived usefulness. This insight extends the understanding of TAM by highlighting a mediating mechanism in settings where users are already accustomed to technology.

The Effect of *Perceived Usefulness* on *Intention to Use*

The results of this study prove that *perceived usefulness* has a significant effect on *the intention to use* ChatGPT. This study supports the findings of Hussain et al. (2019), which state that users generally accept ChatGPT as their virtual assistant if ChatGPT is useful. In line with the research by Shahzad et al. (2024), which states that users are interested in using ChatGPT if it can provide tangible benefits in helping users complete tasks and support their academic activities. In addition, research conducted by Zhang et al. (2023) states that *Perceived Usefulness* influences *Intention to Use*, users will be motivated to adopt technology if it can help improve effectiveness and efficiency and enhance user learning outcomes.

The intention to use a technology can increase when users feel that the technology supports the effectiveness and efficiency of their performance. The more benefits they feel, the higher their intention to use the technology (Amali et al., 2022). This study shows that the more benefits students feel when using ChatGPT, the higher their intention to use it. This is evidenced by students who feel helped by using ChatGPT to understand the material and complete academic assignments. Students simply enter the desired keywords in the ChatGPT web search, and they can obtain the information they need. ChatGPT provides responses quickly and instantly, which is much more efficient

than having to search for traditional sources such as books or manual searches.

In its use, ChatGPT is often used to understand various topics more clearly, especially when teachers do not have time to provide explanations or are unable to convey certain lessons effectively. Before exams, students use ChatGPT to learn faster through summaries, practice questions, or explanations of difficult concepts in language that is easier to understand. In addition, students use ChatGPT to plan their learning strategies, such as determining which topics to prioritize based on the information they have obtained and collected.

The Influence of Perceived Ease of Use on Perceived Usefulness

The results of this study indicate that *Perceived Ease of Use* has a significant influence on *Perceived Usefulness*. This study supports the findings of research conducted by (Camilleri & Falzon, 2021) on the use of *streaming* technology. *Perceived Ease of Use* influences *Perceived Usefulness*; the perception of ease of use increases the perception of usefulness, which ultimately indirectly encourages *the Intention to Use streaming* technology. In line with the research conducted by Le *et al.* (2024), users feel that ChatGPT is easy to use, which then has an impact on users who are more likely to assess ChatGPT as truly useful in supporting academics. Additionally, research conducted by Mokhtar *et al.* (2025) states that the higher a person's perception of a technology's ease of use (*perceived ease of use*), the higher a person's perception of the technology's usefulness (*perceived usefulness*).

This study shows that the easier it is for students to use ChatGPT, the higher their perception of its benefits in the learning process. Most students use mobile phones as their learning devices, and ChatGPT is easily accessible on the electronic devices used by students, allowing them to search for information on ChatGPT with ease thanks to its user-friendly features. Because the process is considered practical and fast, students feel the real benefits in an enjoyable learning experience, better understanding of the material, and assistance in completing school assignments. Thus, with the ease of access to ChatGPT, students are convinced that this technology is helpful and useful in learning activities.

The Influence of Convenience on Intention to Use

The results of this study prove that *Convenience* does not have a significant effect on *Intention of Use*. This study supports the results of research conducted by Le *et al.*, (2024) on the use of ChatGPT in higher education, stating that convenience is not significant in the intention to use ChatGPT because users already have experience in using technology and digitalization, so that the factors of enjoyment and Usefulness has a greater influence on interest in using a technology. In line with research by Jonathan & Soelasih (2022) on the use of digital wallet applications, it shows that the influence of *convenience on intention to use* is not significant because convenience is not the main factor in driving the intention to use for some users. Users are accustomed to using technology and find the application practical to use, so the *convenience* factor is not the main factor in the intention to use technology.

In the research by Jishnu *et al.* (2023), *convenience* is one of the factors used in assessing the comfort and ease of using ChatGPT. However, the comfort factor is not the main factor for *the intention to use* ChatGPT. Users are more motivated by cognitive benefits such as usefulness, effectiveness, and understanding of the material (Sa'baniyah *et al.*, 2025). In addition, there are obstacles that are often encountered in using a technology, such as system errors and responses that are irrelevant to user needs, which cause interest in using it to decline even though the technology is easy to use (Foroughi, 2024).

This study reveals that even though students feel comfortable and find it practical, this does not influence their intention to use ChatGPT. Vocational high school students, the majority of whom are Gen Z, are already accustomed to various digital applications, so easy and practical access is not a special feature that influences students' decisions to use a technology. For students, almost all modern applications such as Google, TikTok, YouTube, or WhatsApp are equally accessible, so the level of comfort provided by ChatGPT does not offer significant added value. Students are more focused on the real benefits and usefulness of ChatGPT.

The Influence of Information Seeking on Intention to Use

The results of this study prove that *Seeking Information* has a significant influence on *the Intention to Use* ChatGPT. This study supports the findings of (Alam, 2024), which state that users consider ChatGPT to be an important tool for finding authentic information and the latest information according to user requests. In line with the research (Rahman *et al.*, 2023), which found that the *Seeking Information* factor is significantly related to users' intention to use ChatGPT. ChatGPT is able to provide clear and concise answers to its users, as well as the ability to complete tasks and requests for presentations in seconds. Then there is research by Jishnu *et al.*, (2023) which shows that the *Information Seeking* factor has a significant effect on user intention. Users use ChatGPT for various information needs, such as seeking new knowledge, checking the accuracy of information, and collecting data that is useful for users, including in decision making.

The results of this study indicate that students' acceptance of information searches influences their intention to use ChatGPT. Students in learning activities need information that is fast, clear, and easy to understand. Vocational high school students often face various tasks, reports, projects, or questions that require additional explanations beyond what teachers can provide, so students tend to look for other sources that can provide information directly and accurately. ChatGPT is considered helpful in providing quick answers, summarizing material, giving examples of solutions, and helping to verify information found in other sources. When students feel that ChatGPT can answer their questions

clearly, be consulted at any time, clarify difficult topics, and make it easier for them to understand lessons, their motivation to return to using ChatGPT becomes stronger.

CONCLUSION

Based on the results of the study, it can be concluded that the intention of vocational high school (SMK) students to use ChatGPT as a learning medium is influenced by certain factors from the integration of the Technology Acceptance Model (TAM) and Uses and Gratifications Theory (UGT). The analysis results show that *Perceived Usefulness* and *Information Seeking* have a significant effect on the *Intention to Use ChatGPT*, indicating that students tend to use ChatGPT if the technology provides tangible benefits and is able to meet their information-seeking needs in the learning process. Conversely, *Perceived Ease of Use* and *Convenience* do not have a significant direct effect on the intention to use, because ease and convenience are considered commonplace by students who are accustomed to digital technology. In addition, *Perceived Ease of Use* was found to have a significant effect on *Perceived Usefulness*, indicating that ease of use plays a supporting role in increasing the perceived usefulness of ChatGPT.

This study reinforces the relevance of integrating the Technology Acceptance Model (TAM) with the Uses and Gratifications Theory (UGT) in explaining the intention to adopt artificial intelligence based technologies within vocational education settings. The findings reveal that *Perceived Usefulness* and *Information Seeking* play a dominant role in shaping the *Intention to Use*, whereas *Perceived Ease of Use* and *Convenience* do not exert a direct influence. This suggests that cognitive motivation is more decisive than ease-related factors for students who are already accustomed to digital technologies.

In practical terms, the findings of this study suggest that the use of ChatGPT as a learning support tool should be directed toward enhancing tangible benefits and facilitating academic information-seeking. Teachers and schools are encouraged to integrate ChatGPT strategically through guided assistance and instructional design that fosters conceptual understanding, problem-solving practice, and the development of critical thinking, accompanied by responsible AI usage guidelines. For technology developers, these results emphasize the importance of creating AI features that are relevant, responsive, and adaptive to the learning needs of vocational students.

RECOMMENDATIONS

Teachers and schools are advised to integrate ChatGPT as a learning support tool in a structured manner, emphasizing its use for conceptual understanding, academic information retrieval, and the development of critical thinking. The application of ChatGPT should be accompanied by teacher guidance to ensure that students do not rely solely on instant answers but are encouraged to evaluate and process information independently. Within vocational education, ChatGPT can be utilized to strengthen project-based and problem-solving learning, particularly in task planning and reinforcement of vocational subject matter. Furthermore, schools are recommended to provide short training sessions for teachers along with ethical and responsible AI usage guidelines to enhance digital literacy and improve learning effectiveness. Future research is recommended to further develop the model by incorporating additional variables, such as *Attitude Toward Using*, in order to gain a more comprehensive understanding of the factors influencing the adoption of artificial intelligence based technologies.

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