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AI ACCEPTANCE IN HIGHER EDUCATION: THE IMPACT OF PERFORMANCE EXPECTATIONS, EFFORT EXPECTATIONS AND FACILITATING CONDITIONS FACTORS

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Abstract: *Artificial Intelligence (AI) would boost academic performance and engagement in higher education by streamlining administrative procedures, improving learning outcomes, and offering students personalise learning experiences. Despite all that, the acceptance is inconsistent because of different student perceptions and lack of preparedness. Despite its potential, there is obstacle to AI application, including perceived complexity, poor pedagogical integration, and limited support system. This paper closes the gap by highlighting the performance expectancy, effort expectancy, and facilitating conditions that influence higher education AI acceptance, which is among Universiti Teknologi MARA (UiTM) students in Malaysia. Previous research particularly those related to usage security demonstrates a significant impact on AI acceptance. A structured questionnaire was gathered from 300 students of multiple faculties as part of quantitative research design. Pearson Correlation, Multiple regression, and ANOVA analysis were utilised to analysed the data. The performance expectancy, effort expectancy and facilitating conditions proved to be significantly affect AI acceptance. The coefficient value indicates that performance expectancy has the greatest effect. The result report that students are motivated by AI's capabilities to boost academic performances and learning process efficiency, as long as the tools are accessible and supported*

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by the institution. This paper concludes creating a supportive technological environment is essential for successful AI acceptance. It emphasises the need for higher education institutions to take proactive approach in implementing AI effectively. Future studies should explore AI's impact on academic performance through experimental studies. Further investigation into AI literacy and the success of training programs could also provide helpful insights for higher education institutions in shaping AI's future role.

Keywords: *Performance Expectancy, Effort Expectancy, Facilitating Conditions, Artificial Intelligence (AI), Acceptance, Higher Education.*

Introduction

In higher education, technological tools have become indispensable in various fields. Artificial Intelligence (AI) has emerged as a major force due to its rapid advancement. This includes robotics, generative AI, machine learning, and natural language processing (NLP). AI transforms higher education by enhancing academic performance, streamlining administrative procedures, and offering personalised students learning process (Xu et al., 2024). By incorporating it into educational context, AI would be broadly accepted by educators and students and improve learning experience (Hwang & Chen, 2023).

AI is revolutionizing higher education in terms of "pedagogical revolution" that is transforming how knowledge is managed, accesses, and delivered. AI's tools streamline the task at full with intelligent learning synergy, such as automated learning platforms and personalize education. It also improves inclusion and helps students with deep insights to achieve an excellent academic performance within global institutions.

According to Lee et al. (2021), AI can engage students personalised learning, accelerate administrative procedures and spark their curiosity. From academicians' perspectives, AI is essential to education as it has the potential to transform how teaching and learning are carried out (Wu et al., 2022). It enables them to organise their tasks more effectively and equips students with personalised learning through generative AI and deep learning, which could automatically generate text, images, audio, and other media. As noted by Marimekala (2024), AI elements, such as generative AI-based chatbot, including Generative Pre-trained Transformers (ChatGPT), are gradually becomes a component of the education ecosystem that students rely on rather than conducting research or exercising critical thinking.

A captivating paradox has emerged as AI technologies become increasingly important for higher education success (Razia et al., 2023). There are varieties of students' perceptions on AI acceptance. In smart education ecosystems, AI integration has the capacity to transform teaching methods, improve learning process, and encourage autonomous or self-directed learning. According to Fidan and Gencel (2022), incorporating AI into educational system increased student engagement and promoted comprehensive communications. Meanwhile, students felt more comfortable interacting and asking questions with the chatbots in the virtual classroom, which enhanced their educational setting and fostered a sense of belongings.

Fundamentally, the role of AI, the benefits, and perception of the students' have significant impact toward the way in which AI is perceived (Shahzad et al., 2024). The AI application in higher education does not make any exemption, even though there will be behavioral changes over a certain period (Razia et al., 2023). Previous studies have shown that the successful

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application of AI in educational institutions is contingent on AI acceptance and influencing factors of the students. However, while some of the students could accept AI because of the benefit that brings to them flexibility and adaptability, other student could be sceptical about the use of AI due to their concerns on reduced human interaction and data privacy issues. Due to this loophole, factors such as performance expectancy, effort expectancy, and facilitating conditions become imperative to be studied in higher educational settings, particularly among UiTM students in Malaysia. Institutions may find it difficult to adopt AI in a way that is widely accepted and successful if they are unaware of these factors. Therefore, the objective of this is to examine the relationship of those factors and AI acceptance in higher educational context.

Literature Review

AI acceptance in higher education is influenced by multifaceted institutional, technological, and individual factors. Technology Acceptance Model (TAM) and its expanded forms, the Unified Theory of Acceptance and Use of Technology (UTAUT) are used to better understand these processes. The main variables influencing the acceptance of AI in higher education were proposed by this integration.

Performance Expectancy

Technology acceptance is highly predicted by performance expectancy, which reflects users' expectations that a would enhance academic performance. AI-based technologies have the potential to improve performance, problem-solving skills, and learning efficiency. Venkatesh et al. (2003) describe it is as "the degree to which an individual believes that using a system will help them attain gains in job performance" in the Unified Theory of Acceptance and Use of Technology (UTAUT). Vieriu and Petrea (2025) expanded this idea to emphasize on how AI technology might enhance learning outcomes and academic achievement.

In contrast, Davis (1989) in Technology Acceptance Model (TAM) describe AI acceptance as "the willingness of users to employ a technology for the tasks it is designed to support." AI acceptance reflects to the readiness and positive attitude of educators and students toward integrating AI technologies into administrative and personalised learning processes. According to Mittal et al. (2025), educators and students could adapt to AI technology in educational settings based on perceived usefulness, ease of use, and trust. Nevertheless, Venkatesh et al. (2003) argue that individual may accept technology if they anticipate it to perform better. Also, if AI-based learning platforms boost academic performance, university students are more likely to accept them (Hu, 2022; Zhou & Li, 2022).

Performance expectation involves both motivational or engagement factors, and academic benefits. Previous studies have analysed this from different perspectives, Bhavani and Rajeshwari Shetty (2025) for example, discovered that individualized learning supported by AI could enhance the perceived usefulness and motivation to adopt technology. Davis (1989) has emphasis the importance of perceived utility in technology acquisition by measuring the impact of predicted advantages on technology adoption. However, Alam (2021) found that there is close connection between performance expectancy and students' acceptance of AI-based tutoring systems since academic performance led to a positive attitude towards AI technology. Nevertheless, Nemani (2025) discovered that the use of AI by lecturers will be increased if the lecturers think that the AI decreases their administrative burdens.

Otherwise, Clifford (2024) found that faculty members who adopted AI, were heavily depends on their expectations of higher efficiency and increase student participations. Performance

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expectancy is comprised of technology capabilities, institutional support, and adequate training. It can therefore be stated that when organizations encourage AI adoption, they should create supportive environments for sustaining the AI's potential. In this case, TAM should consider how performance expectation works with social influence and its enabling factors. Cheng et al. (2025) added that peer and academic leader endorsement can increase performance expectation and AI adoption. The use of AI by other staff students can make the individuals feel that the technology can be effective in increasing their performance. Thus, it is necessary to demonstrate the capabilities and impact of technology in order to incorporate performance expectation into institutional support. AI confidence also could be boosted by workshops, case studies, and success stories. Additionally, targeted communication effort to debunk AI myths could further decrease concerns and promote AI in academic. These theoretical and empirical insights highlight the significance of performance expectancy in predicting AI acceptance, not only in academic, but also psychologically, motivationally, and institutionally. Hence, incorporation of AI technology in higher education requires a lot of consideration regarding performance expectancy for the student and faculty members.

H_1: The AI acceptance in higher education is significantly impacted by performance expectancy.

Effort Expectancy

Davis (1989) refers effort expectancy as "the degree to which a person thinks using a system will require little effort". This concept addressed how easy it is for students and educators to utilize AI tools in higher education. Dwivedi et al. (2024) confirmed that the perceived ease of use of the AI and virtual learning setting, not only influenced attitudes but also perceived usefulness and behavioural intentions (Sanusi et al., 2022). As perceived ease of use has consistently proven to be a strong predictor of new technology acceptance, yet, Venkatesh et al. (2003) study highlights that when user find a system easy to navigate, they are more likely to adopt it.

Acceptance occurs more easily with less mental strain when students use AI platforms such as intelligent tutoring systems, which are simple and require minimal training. As reported by Wang et al. (2021), the more effortless the technology, the better the student engagement. Likewise, Fleckenstein et al. (2024) discovered that AI tutors may accelerate learning process by an average of 27%, and stressed the importance of ease-of-use. As far as educators are concerned, it is the ease-of-use of AI-based educational tools that usually attracts their attention. Automated grading and learning analytics help them to save time and concentrate on creative aspect of their task (Akinwalere & Ivanov, 2022). This corresponds with the results of Elfeky and Elbyaly (2023), who found that the more convenient AI becomes for teachers, the more positively they accept it.

Thus, universities that provide workshops, guidelines, and technical assistance contribute to improve users' confidence in their ability to use technology. Wong and Li (2020) found that customised training programs have a role to play in making users perceived AI as not as difficult to use, regardless of their experience. Further studies of pre-service teachers reveal the effectiveness of digital literacy course in promoting AI adoption (Zhou, 2024). In addition, the assistance of AI in performing tasks such as grammar checking, content recommendation, and scheduling routine tasks, thereby reducing their cognitive load. Hence, there a positive feedback coeffect whereby users' experience leads to satisfaction and acceptance of AI. However, poorly designed AI systems, which may be difficult to install, need urgent upgrades, or possess

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complicated interfaces, might serve as barriers. This explains the need for user-centered design, continuous usability testing, and timely improvement through feedback (Habibi et al., 2023; Venkatesh et al., 2012).

H_2: The AI acceptance in higher education is significantly impacted by effort expectancy.

Facilitating Conditions

Facilitating conditions are explained as "the existence of resources, infrastructure, and support that enable individuals to adopt technology" (Taylor & Todd, 1995). This factor is crucial for the effective acceptance of technology. The successful acceptance of technology by an individual is important, such conditions encompass technical and organizational support to help user with new systems. In terms of an individual's view, Venkatesh (2003) describes this concept in relation to the fact that the resources and infrastructure available to the individual are sufficient to facilitate the use of a certain technology.

In the context of higher education, it entails access to devices, stable internet, technical assistance, and policy measures to promote the use of technology. The presence of effective enabling factors plays a significant role in determining the speed of AI acceptance by students and educators. Institutions that have the robust technical infrastructure including fast internet connection, modern equipment, and good IT support will make it easier for people to integrate AI in their studies. Universities that provide computer labs with AI technology integrated into their learning programs will make AI adoption easy (Brown & Green, 2022). This will significantly reduce barriers to the use of AI technology. in the absence of these basic facilitates, both students and teachers may get frustrated and face challenges that make them not be able to fully utilised AI technology (Farhood, et al., 2025).

In addition to the proper infrastructure, effective training programs are key to fostering the ability and willingness of users in adopting AI technologies. A comprehensive training seminars, tutorials, and continuous support programs ensure that instructors and students are aware about the capabilities and potential applications of AI technologies. Training sessions draw attention to usage of AI, such as adaptive learning modules, personalised feedback, or automated grading can improved their appeal and increase their rate of adoption (Zawacki-Richter et al., 2019). Also, policies and technological support significantly boost the acceptance of AI technologies by setting the guidelines regarding data protection and security, as well as proper use of AI technologies, which builds the consumer trust. In case of there is no appropriate support, including infrastructure and technical knowledge, students and instructors may struggle to apply AI technologies. This might cause harmful, loss of confidence in technology, and, definitely delay in the adoption of AI. This means that the higher the facilitating conditions, the higher the probability of the successful implementation of AI technology in learning context. Based on Liu et al. (2025), the AI acceptance performance in educational setting is directly influenced by traditional infrastructure like slow internet and computer systems.

Meanwhile, the importance of cooperation of educational institutions with technology vendor is also a significant aspect of the facilitating conditions. Collaboration with AI developers can provide universities with access to the latest resources and tailored made solutions intended specifically for educational purposes. Such collaborations shall give rise to collaborative research projects when students and educators join forces with AI experts to improve the applicability of the AI tools in learning process. Through such collaboration, it becomes

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possible not only to ease the process of adoption but also to ensure that the development of the AI tools takes into account the need and goals of the users. These initiatives of promoting technological acceptance and an innovative culture have bridge the gap between academic theory and practical contribution. Gregory and Romm (2001) made an assumption on the facilitator's role of aiding estimation and debates. Through this approach in learning process, it enables the creation of opportunities for group problem-solving and engaging dialogue. The perception and use of AI technologies in the institution will be highly dependent on the sociocultural context. An AI friendly culture will be the one that experimental, reflective, and open minded towards technology. it is also possible to develop a common understanding and trust for the use of AI tools through the support from peers and community programs, such as workshops and learning groups on AI. People are more willing to accept new technology if they feel that they are part of a community.

Nevertheless, there is always risk of AI technologies. Educational institutions that fail to provide sufficient facilitating conditions may be exposed to the underutilised or even disregarded. Students and educators may resist using the technology if they perceive them as lack of technical assistance or appropriate training. As noted by Viberg et al. (2021), the institutional opposition is often caused by a lack of knowledge and readiness, thus, the importance of targeted communication or support approach is evident. For example, institutions could create special help desks to deal with the user queries promptly and effectively. Therefore, creating an atmosphere that fosters research, development, and sustained utilisation of AI technology is what the concept of facilitating conditions is all about. It goes much further than simply providing resources. Institutions that emphasise the importance of ongoing support, training, and resource development not only contribute to improve user satisfaction but also position themselves as leaders of the AI revolutionization in education context.

Conclusively, to ensure that AI technology is used continuously, the sustainability of facilitating should be considered. To sustain a high state of preparedness, continuous training, technology infrastructure upgrades, and financial backing of AI-related initiatives are needed. Regular evaluation has to be performed by institutions to identify new problems, needs, and adapt the strategy accordingly. For instance, with advances in AI technologies, there would be a need for more advanced training programs focused on more intelligent applications such as machine learning or natural language processing. This can be viewed within the broader framework of changes drive by AI, where systems, lifestyles, and consumption patterns are being transformed through automation and integration of data (Sestino & De Mauro, 2022; Lindgren, 2025). By addressing this requirement, educational institutions could ensure maintaining of facilitating conditions and successful incorporation of AI technology.

H_3: The AI acceptance in higher education is significantly impacted by facilitating conditions.

Research Framework

A direct influence between three independent variables is indicated by the research framework as; performance expectancy, effort expectancy, and facilitating conditions. The dependent variable for this research is AI acceptance in higher education. The three independent variables are anticipated to influence students' willingness to use AI tools in classrooms, and hence contribute to the AI acceptance in higher education. Figure 1 demonstrate the framework of this research.

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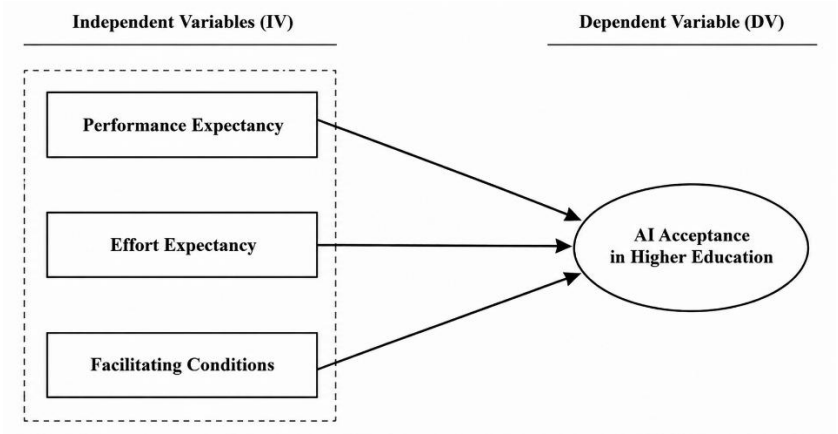


Figure 1: Research Framework

Source: Author's Own

Methodology

In this paper, quantitative research design, cross-sectional design, and non-experimental research design are used to examine the factors that influence the AI acceptance in higher education. Descriptive research design was used in order to describe the current status of the perceptions without any manipulation of variables. This enables statistical generalization for hypothesis testing across a diverse student population (Mertens, 2020). Data was collected from undergraduate Universiti Teknologi MARA (UiTM) students in all faculties using quota sampling. A sample size of 300 is usually adequate for populations of one million or more (Rahman, 2023). Meanwhile, a set number of participants are chosen from each category until the quotas are reached using this method, which splits the population into subgroups according to attributes like faculty and academic level. The study guaranteed equitable representation for all faculties, including the Faculty of Office System Management, the Faculty of Business and Management, and other faculty, by establishing a certain number of pupils from every faculty. Quota sampling guarantees inclusion and balanced representation of various student viewpoints which does not rely on random selection (Hossan, Mansor, & Jaharuddin, 2023).

The data were gathered using a self-administered structured questionnaire that was distributed through Google Forms. This technique proved to be very cost-effective, reliable, and convenient for students who could respond to the survey independently. Strict adherence to ethical principles was maintained, with a focus on data protection and confidentiality. To ensure construct reliability and validity, the questionnaire's items were measured using 7-point Likert Scale that was adapted from previous studies (Taherdoost, 2021). A total of 20 items with 5 items for each variable was validated by 30 initial data analysis. Performance expectancy measurement is adapted from validated measures by Baca and Zhushi (2024), while the effort expectancy measurement was modified from validated measures by Abdelwahab et al. (2023) and Gado et al. (2022). The questionnaire items about "facilitating conditions" are based on Min and Kim (2024), which include questions about having devices, reliable internet, technical help, and effective use of AI tools. Research on AI acceptance by Shahzad, Xu, and Javed (2024) was used as the basis to measure the dependent variable (DV) of higher education AI acceptance.

The Statistical Package for the Social Sciences (SPSS) Version 27 was utilised to analyse the data of this study. The direction and strength of the linear relationships between the independent variables and the dependent variable were evaluated using Pearson correlation analysis (Coscia,

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2021). Afterwards, the multiple regression analysis was generated in order to test the power of prediction the independent variables on the AI technology acceptance. Through this test, the determination of those factors which significantly influenced the AI acceptance by students became possible. Ultimately, the Analysis of Variance (ANOVA) was applied to assess the goodness of the regression model fitness and establish whether the model could significantly explain variations in the dependent variable. In essence, all these statistical analyses have been integral in analysing the data within the objective of the study.

Analysis And Finding

Pearson Correlation Analysis

Pearson Correlation analysis examines the relationship between the independent variables (performance expectancy, effort expectancy, and facilitating conditions) and the dependent variable (AI acceptance in higher education). Table 1 shows the Pearson Correlation analysis of the variables.

Table 1: Correlation Analysis

		A	B	C	D
A	Pearson Correlation	1	.605**	.549**	.545**
	Sig. (2-tailed)		<.001	<.001	<.001
	N	300	300	300	300
B	Pearson Correlation	.605**	1	.643**	.612**
	Sig. (2-tailed)	<.001		<.001	<.001
	N	300	300	300	300
C	Pearson Correlation	.549**	.643**	1	.645**
	Sig. (2-tailed)	<.001	<.001		<.001
	N	300	300	300	300
D	Pearson Correlation	.545**	.612**	.645**	1
	Sig. (2-tailed)	<.001	<.001	<.001	
	N	300	300	300	300

**. Correlation is significant at the 0.01 level (2-tailed).

A. Dependent variable: AI Acceptance.
B. Performance Expectancy.
C. Effort Expectancy.
D. Facilitating Conditions.

The Pearson Correlation results indicate a strong positive significance impact of performance expectancy (r = 0.605) on AI acceptance in higher education. This shows that increased performance expectancy leads to increased AI acceptance in higher education. Effort expectancy (r = 0.549) demonstrates a moderate positive significance impact on AI acceptance in higher education. This result implies that a rise in effort expectancy exhibit a greater AI acceptance in higher education. Similarly, the results also indicate a moderate positive significance impact of facilitating conditions on AI acceptance in higher education (r = 0.545). This also suggests adequate facilitating conditions encourage the AI Acceptance in higher education. Moreover, the three independent variables are significantly correlated with one another. Performance expectancy is positively related to effort expectancy (r = 0.643) and facilitating conditions (r = 0.612), with effort expectancy and facilitating conditions (r = 0.645). As a conclusion, all independent variables have a positive significance impact on AI Acceptance in higher education at the significance level ($p < 0.001$). This indicate that if these factors become more prevalent, so will the AI acceptance in higher education.

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Regression Analysis

Regression analysis is used as a statistical technique to evaluate a significance impact of a dependent variable and independent variables (Ali & Younas, 2021). This study assesses how UiTM Students in Malaysia view AI technology. Regression analysis was used to identify the independent variables that have a substantial influence on AI Acceptance. The significance of those values was measured using the Adjusted R-Square value was because it gives estimate of how much the independent variables contribute to AI acceptance, depending on the number of variables used. The greater the value of Adjusted R-Square, the greater the influence of the independent variables on AI acceptance among students at UiTM. The following table shows the result of the regression model analysis.

Table 2: Regression Model Analysis

Model	R	R Square (R^2)	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.662[a]	.438	.431	.32511	2.097

a. Predictor/ independent variable: (Constant), D, B, C
b. Dependent Variable: A

The R^2 (coefficient of determination) value is 0.438, meaning that about 43.8% of the variation in AI Acceptance is due to the independent variables (performance expectancy, effort expectancy, and facilitating conditions). This implies that 43.8% of the variation in AI acceptance among UiTM students is cause by these predictors. The rest of 56.2% of the variation might have been influenced by other variables like technology awareness, digital literacy, perceived risk, and social influence towards AI technology. The minimal differences between R^2 and adjusted R^2 (0.431) suggest that the model is stable and all of the independent variables are important in determining AI acceptance (Chicco et al., 2021).

In addition, the Analysis of Variance (ANOVA) test outcomes shown in Table 3 provide additional evidence in favor of the model's robustness. The ANOVA test analysed the statistical significance of the regression model as a whole, making a comparison between the variance that has been explained and that which is yet to be explained (Field, 2018). In the present research, the regression model revealed an F-value equal to 57.535, with degrees of freedom (4, n-5), thus implying that the variance explained by the model is significantly more than the unexplained variance. The obtained number is relatively high, showing that independent variables (B, D, C) together account for a significant proportion of variability of the dependent variable (A). Additionally, the p-value associated with this result was less than 0.001, being far from 0.05 threshold value. In other words, this outcome confirms the regression model that predicts AI acceptance in a statistically significant way.

Table 3: ANOVA Analysis

Source	df	Sum of Squares	Mean Square	F	p-value
Regression	4	24.325	6.081	57.535	< .001
Residual	295	31.180	0.106		
Total	299	55.505			

Form the analysis in Table 4, the coefficient indicates three main variables that have been investigated in order to measure the influence of these on the AI Acceptance in higher education. These variables have had a significant impact on the AI acceptance. The

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performance expectancy that involves the expectations that AI will increase the efficiency and effectiveness in the academic process. It has had a significant impact on AI acceptance in higher education. In the analysis, the 0.352 coefficient value, 5.496 of the t-value of, and p-value less than 0.05 have been observed. This indicates a significant influence of these variables that influenced student adopt AI since it is beneficial to their academic tasks. Hence, the first hypothesis (H_1), which investigate a significant impact of performance expectancy on AI acceptance in higher education is accepted.

The same applies to the effort expectancy, that refers to ease of use associated with AI systems, since it also exhibited a significant impact on AI acceptance. It was revealed that the 0.175 coefficient value, 2.580 of the t-value, and p-value of 0.010 were less than threshold value of 0.05. Thus, when AI technology is easy to use and implement within academic activities, it becomes more acceptable. Meanwhile, the second hypothesis (H_2), is confirmed as it proves that there is a significant impact of effort expectancy and AI acceptance. In addition, the facilitating conditions, which refer to the infrastructure availability and requirement resources for AI acceptance, were found to have a significant impact. It was revealed that the results included the coefficient value of 0.177, t-value of 2.705, and p-value of 0.007, which is even lower than 0.05 significance level. This means that the presence of supportive conditions, like resources and technology, leads to greater AI acceptance in higher education. Therefore, the third hypothesis (H_3), is also confirmed.
Lastly, the findings support the hypothesis that the overall model is statistically significant in explaining variations in AI acceptance among UiTM students. The main factors that contribute to AI acceptance in higher education are performance expectancy, effort expectancy and facilitating conditions. Approximately, performance expectancy was found to be the most influential factor with β = 0.352, followed by facilitating conditions with β = 0.177, and effort expectancy of β = 0.175.

Table 4: Coefficient Analysis

Hypothesis	Coefficient (β)	t-value	p-value	Significance
H_1	0.352	5.496	0.050	Significant
H_2	0.175	2.580	0.010	Significant
H_3	0.177	2.705	0.007	Significant

Discussion

The findings indicate the presence of significant effect of positive nature between the variables of performance expectancy and AI acceptance in higher education. It demonstrates that students are more prepare to use AI if it helps improves their learning. AI-based learning systems, automated grading platforms, and intelligent tutoring tools help enhance academic performances and administration functions. AI aided in completing tasks faster and improved learning. This paper affirms the findings of Venkatesh et al. (2003) indicating that perceived usefulness leads to technological adoption. A one-unit increase in performance expectancy led to 25% increase in AI acceptance.

Thereafter followed by a significant role of effort expectancy plays a significant role when it comes to AI acceptance in higher education. Those users who felt that AI technology was easy to use had a high chance to accept it. When it came to students who used AI enabled LMSs, they have no issues. However, a few participants stated that the easy interface of AI tools have helped to reduce their reluctant to accept the technology. Based on Davis (1989), simplicity of

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use is very important for technology acceptance in TAM model. Regression analysis proved that 20% AI acceptance is determined by perceived ease of use.

Finally, there is significant impact of facilitating conditions on AI acceptance in higher education. In this paper, the institutions that had supportive structures were seen to accept AI at higher rate. The institutions which offer AI training programs and resources shows an increase participation. The analysis showed that 85% of the participants thought that having proper training and IT infrastructure played an important role in AI acceptance. This is supported by the UTAUT theory which suggest that external support systems play an important role in AI acceptance. Also, the institutions with strong IT infrastructures which include high-speed internet, cloud-based AI applications, and support teams for AI adoption showed high AI adoption rates as compared to without technological support.

Conclusion

In view of the increased necessity for AI in universities, it is vital to comprehend what motivates students to embrace the technology. in this paper, the research identifies the most important determinants that include performance expectancy (usefulness of AI), effort expectancy (ease of use), and facilitating conditions (concerns on support system). These variables were used to determine why student adopted AI technology in higher education including personal learning environment, automated assessment, and intelligent tutor systems. This paper is valuable but it possesses many limitations. For example, it comprises of small number of participants, the outcomes of the study may not be generalised to entire higher education institutions in Malaysia. Besides, the research focused on a specific academic context, hence, the outcomes of the research may differ across other area or universities. Self-reported data were used by the study; therefore, participants' responses may be biased. Last but not least, the rapidly developing field of AI technology could influence perceptions of individuals and their decision on technology adoption. Future studies should address these limitations with an increased number of sample sizes with experimental methodologies.

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References

Abdelwahab, H.R., Rauf, A., & Chen, D. (2023). Business students' perceptions of Dutch higher educational institutions in preparing them for artificial intelligence work environments. *Industry and Higher Education, 37*(1), 22-34. https://doi.org/10.1177/09504222221087614.

Akinwalere, S. N., & Ivanov, V. (2022). Artificial intelligence in higher education: Challenges and opportunities. *Border Crossing*, *12*(1), 1. https://doi.org/10.33182/bc.v12i1.2015

Alam, A. (2023). Harnessing the power of AI to create intelligent tutoring systems for enhanced classroom experience and improved learning outcomes. In *Intelligent communication technologies and virtual mobile networks* (pp. 571-591). Singapore: Springer Nature Singapore. https://doi.org/10.1007/978-981-99-1767-9_42

Ali, P., & Younas, A. (2021). Understanding and interpreting regression analysis. *Evidence-Based Nursing*, *24*(4), 116–118. https://doi.org/10.1136/ebnurs-2021-103425

Baca, G., & Zhushi, G. (2024). Assessing attitudes and impact of AI integration in higher education. Higher Education, Skills and Work-Based Learning. https://doi.org/10.1108/HESWBL-02-2024-0065

Bhavani, B. D., & Rajeshwari Shetty, M. D. (2025). Enhancing student engagement and personalized learning through ai tools: A Comprehensive review. *Computer Science & Engineering: An International Journal (CSEIJ). 15(1),* 111-119. https://doi.org/10.5121/cseij.2025.15113

Brown, M., & Green, T. (2022). The role of institutional culture in the adoption of AI in education. *Journal of Educational Technology Research, 34*(2), 120–130.

Cheng, A. Y., Loy, C. K., Peng, K. P. Y., Wei, P. Z., & Hansaram, S. K. (2025). The Influence of Performance Expectancy, Effort Expectancy, and Social Influence on Artificial Intelligence Adoption Behaviour: A Case Study from a Malaysian University. *International Journal of Research and Innovation in Social Science (IJRISS)*, *9*(11). https://doi.org/10.47772/IJRISS.2025.91100379

Chicco, D., Warrens, M. J., & Jurman, G. (2021). The coefficient of determination R-squared is more informative than SMAPE, MAE, MAPE, MSE and RMSE in regression analysis evaluation. *PeerJ Computer Science, 7*, e623. https://doi.org/10.7717/peerj-cs.623

Clifford, P. L. R. (2024). AI in higher education: Faculty perspective towards artificial intelligence through UTAUT approach. Ho Chi Minh City Open University Journal of Science. *Social Sciences*, *14*(4). https://doi.org/10.46223/HCMCOUJS.soci.en.14.4.2851.2024

Coscia, M. (2021). Pearson correlations on complex networks. *Journal of Complex Networks*, *9*(6). https://doi.org/10.1093/comnet/cnab036

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319-340. https://doi.org/10.2307/249008

Dwivedi, D. N., Mahanty, G., & nath Dwivedi, V. (2024). The role of predictive analytics in personalizing education: tailoring learning paths for individual student success. In Enhancing Education with Intelligent Systems and Data-Driven Instruction (pp. 44-59). IGI Global Scientific Publishing. https://doi.org/10.4018/979-8-3693-2169-0.ch003

Elfeky, A. I. M., & Elbyaly, M. Y. H. (2023). The impact of virtual classrooms on the development of digital application skills among teachers of digital skills in Najran region. *Ann. For. Res, 66*(1), 2044-2056.

Farhood, H., Nyden, M., Beheshti, A., & Muller, S. (2025). Artificial intelligence-based personalised learning in education: a systematic literature review. *Discover Artificial Intelligence*, *5*(1), 331. https://doi.org/10.1007/s44163-025-00598-x

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Fidan, M., & Gencel, N. (2022). Supporting the instructional videos with chatbot and peer feedback mechanisms in online learning: the effects on learning performance and intrinsic motivation. *J. Educ. Comput. Res., 60*, 1716–1741.

Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). SAGE Publications Ltd.

Fleckenstein, J., Meyer, J., Jansen, T., Keller, S. D., Köller, O., & Möller, J. (2024). Do teachers spot AI? Evaluating the detectability of AI-generated texts among student essays. *Computers and Education: Artificial Intelligence, 6,* 100209. https://doi.org/10.48550/arXiv.2507.06878

Gado, S., Kempen, R., Lingelbach, K., & Bipp, T. (2022). Artificial intelligence in psychology: How can we enable psychology students to accept and use artificial intelligence? *Psychology Learning & Teaching, 2*(1), 37–56. https://doi.org/10.1177/14757257211037149

Gregory, W. J., & Romm, N. R. (2001). Critical facilitation: Learning through intervention in group processes. *Management Learning*, *32*(4), 453-467. https://doi.org/10.1177/1350507601324003

Habibi, A., Muhaimin, M., Danibao, B. K., Wibowo, Y. G., Wahyuni, S., & Octavia, A. (2023). ChatGPT in higher education learning: Acceptance and use. *Computers and Education: Artificial Intelligence, 5*, 100190. https://doi.org/10.1016/j.caeai.2023.100190

Hossan, D., Mansor, Z. D., & Jaharuddin, N. S. (2023). Research Population and Sampling in Quantitative Study. *International Journal of Business and Technopreneurship*, *13*(3), 209–222. https://doi.org/10.58915/ijbt.v13i3.263

Hu, Y. H. (2022). Effects and acceptance of precision education in an AI-supported smart learning environment. *Education and Information Technologies*, *27*(2), 2013-2037. https://doi.org/10.1007/s10639-021-10664-3

Hwang, G.-J., & Chen, N.-S. (2023). Editorial position paper: Exploring the potential of generative artificial intelligence in education: Applications, challenges, and future research directions. *Educational Technology & Society, 26*(2), 18. https://doi.org/10.30191/ETS.202304_26(2).0014

Lee, J., Wu, A. S., Li, D., & Kulasegaram, K. (mahan). (2021). Artificial Intelligence in Undergraduate Medical Education: A Scoping Review. *In Academic Medicine 96*(11), S62–S70. Wolters Kluwer Health. https://doi.org/10.1097/ACM.0000000000004291

Lindgren, H. (2025). Emerging roles and relationships among humans and interactive AI systems. *International Journal of Human–Computer Interaction*, *41*(17), 10595-10617. https://doi.org/10.1080/10447318.2024.2435693

Liu, T., Luo, Y. T., Pang, P. C. I., & Kan, H. Y. (2025). Exploring the impact of information and communication technology on educational administration: A systematic scoping review. *Education Sciences*, *15*(9), 1114. https://doi.org/10.3390/educsci15091114

Marimekala, D., & Lamb, J. (2024). Impact of Generative AI Adoption in Academia and How it Influences Ethics, Cognitive Thinking and AI Singularity. *IEEE Integrated STEM Education Conference (ISEC 2024).* https://doi.org/10.1109/ISEC61299.2024.10664756

Mertens, D. M. (2020). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods* (5th ed.). SAGE Publications.

Min, S., & Kim, B. (2024). AI technology adoption in corporate IT network operations based on the TOE model. *Digital, 4*(4), 947–970. https://doi.org/10.3390/digital4040047

Mittal, N., Batra, G., & Sijariya, R. (2025). Understanding AI Adoption in Higher Education: A Systematic Review of Technology Acceptance Model, Technology Readiness Index, and the Integrated Technology Readiness and Acceptance Model. *Asian Journal of Research in Computer Science*, *18*(7), 186-209. https://doi.org/10.9734/ajrcos/2025/v18i7729

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DOI: 10.55573/IJAFB.117009

Nemani, S. (2025). Evaluating the impact of artificial intelligence on reducing administrative burden and enhancing instructional efficiency in middle schools. *Current Perspectives in Educational Research*, *8*(1), 1-16. https://doi.org/10.46303/cuper.2025.1

Rahman, Md. M., Tabash, M. I., Salamzadeh, A., Abduli, S., & Rahaman, Md. S. (2022). Sampling Techniques (Probability) for Quantitative Social Science Researchers: a Conceptual Guidelines with Examples. *SEEU Review*, *17*(1), 42–51. https://doi.org/10.2478/seeur-2022-0023

Razia, B., Awwad, B., & Taqi, N. (2023). The relationship between artificial intelligence (AI) and its aspects in higher education. *Development and Learning in Organizations, 37*(3), 21–23. https://doi.org/10.1108/DLO-04-2022-0074

Sanusi, M. S. (2022). Action research to reassess the acceptance and use of technology in a blended learning approach amongst postgraduate business students. *Cogent Education, 9*(1). https://doi.org/10.1080/2331186X.2022.2145813

Sestino, A., & De Mauro, A. (2022). Leveraging artificial intelligence in business: Implications, applications and methods. *Technology analysis & strategic management*, *34*(1), 16-29. https://doi.org/10.1080/09537325.2021.1883583

Shahzad, M., F., Xu, S., & Javed, I. (2024). ChatGPT awareness, acceptance, and adoption in higher education: the role of trust as a cornerstone. *International Journal of Educational Technology in Higher Education, 21*(1). https://doi.org/10.1186/s41239-024- 00478-x

Taherdoost, H. (2021). Data Collection Methods and Tools for Research; A Step-by-Step Guide to Choose Data Collection Technique for Academic and Business Research Projects. *International Journal of Academic Research in Management (IJARM)*, *10*(1), 10-38. https://elvedit.com/journals/IJARM/wp-content/uploads

Taylor, S., & Todd, P. (1995). Understanding information technology usage: A test of competing models. *Information Systems Research*, 6(2), 144-176.

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly, 27*(3), 425-478. https://doi.org/10.2307/30036540

Venkatesh, V., Thong, J. Y., & Xu, X. (2012). Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology. *MIS quarterly*, 157-178. https://doi.org/10.2307/41410412

Viberg, O., Khalil, M., & Baars, M. (2021). Self-regulated learning and learning analytics in online learning environments: A review of empirical research. *Computers in Human Behavior, 115*, 106654. https://doi.org/10.1145/3375462.3375483

Vieriu, A. M., & Petrea, G. (2025). The impact of artificial intelligence (AI) on students' academic development. *Education Sciences*, *15*(3), 343. https://doi.org/10.3390/educsci15030343

Wang, Y., Liu, C., & Tu, Y. F. (2021). Factors Affecting the Adoption of AI-Based Applications in Higher Education. *Educational Technology & Society, 24,* 116-129.

Wong, K., & Li, T. (2020). Enhancing digital literacy through AI-supported learning platforms. *Education and Information Technologies, 25*(6), 4219-4237.

Wu, W., Zhang, B., Li, S., & Liu, H. (2022). Exploring Factors of the Willingness to Accept AI- Assisted Learning Environments: An Empirical Investigation Based on the UTAUT Model and Perceived Risk Theory. *Frontiers in Psychology*, 13. https://doi.org/10.3389/fpsyg.2022.870777

Xu, X., Su, Y., Zhang, Y., Wu, Y., & Xu, X. (2024). Understanding learners' perceptions of ChatGPT: A thematic analysis of peer interviews among undergraduates and postgraduates in China. *Heliyon, 10*(4), 1–13.

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Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education – Where are the educators? *International Journal of Educational Technology in Higher Education, 16*, 39.

Zhou, T. (2024). The role of pre-service physical education teachers in physical education - A bibliometric and systematic review. *Heliyon, 10*(7). https://doi.org/10.1016/j.heliyon.2024.e28702

Zhou, X., & Li, Y. (2022). Performance expectancy and AI-driven learning: A study on students' intentions. *Journal of Educational Technology Research, 30*(2), 145-168.

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