Influence of Artificial Intelligence technology on the behavioral intention of International Students in Thai Universities

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ABSTRACT

This research explored how artificial intelligence technology affects university students' behavioral intentions, with a particular focus on Thai universities' international programs. The purpose of the study was to explore the students' attitude toward and intention of using AI tools among international students in Thailand. The study examined how AI tools have influence and any impact on their behavioral intention among international students. The Technology Acceptance Model (TAM) was used in this study to explain international students' attitudes and behavioral intentions in their daily life. Evaluating this important aspect helped understand how much international students rely on AI tools and how those influenced their academic performance. This research applied a non-probability convenience sampling approach to conduct a cross-sectional, quantitative research. The primary data was collected via online surveys administered via Google Forms. The participants were international students who studied international programs in English in the public and private universities. To examine the relationship between the variables and the impact of AI on university students, Pearson's correlation, exploratory factor analysis, and regression analysis were used. The study discovered a strong association between attitude toward using AI tools and behavior intention. Additionally, the beta coefficient showed a positive correlation, but behavior intention is statistically significant with perceived usefulness and behavioral attitude towards using AI tools. The results showed that most of the students normally used and relied on AI tools for their academic performances which affected their behavioral intention of using AI tools.

Keywords: AI tools, Technology Acceptance Model (TAM), behavioral intention, international students.

INTRODUCTION

Artificial Intelligence (AI) involves computer systems development, capable of performing tasks, which require the intelligence of humans of data learning, making decisions and knowledge recognizing. AI is the technology of simulating human intelligence processes by machines with the use of data and algorithms (Glover, 2024). Artificial Intelligence originated from John McCarthy who is considered as the father of AI. In recent years, AI is being increasingly popular in the educational field, because of the advances occurring in technology, implying that learning and researching things can use technology to enhance those (Alzahrani, 2023). AI became well-developed in 1956 and more popular nowadays for data improvement as early AI of the 1950s performed research about problem solving operations related to rationality and optimizing expected utility. AI has the capacity to recognize human habits and behaviors that are affected by certain types of fallacies and apply that knowledge to influence the opinions of people. Artificial intelligence (AI) has the ability to advance quickly even while it is unable to display human-like intelligence or emotions (Xavier, 2021).

The years 1940 –1960 were highlighted as the birth of AI in the wake of machine with human intelligence, by an integration of technological developments which were accelerated by the Second World War and an effort to understand how to combine the functions of machines and human beings. Before AI's era, books, articles, journals and face-to-face discussion or interaction with subject-matter experts (SME) were the main reliable sources of searching information which developed the critical thinking and research skills of users. Before AI, people performed a lot of work by hand and relied on outdated non-digital techniques which is one of the main differences between both eras (Khelenius, 2023). After AI, people's lifestyles are changing as it can handle complex multi-tasks and assist in making better decisions. The integration of AI gained an abundance of online resources, AI tools for research, learning and analysis from virtual platforms to improve the learning experiences and develop skills in society. AI generates the higher education sector effectively, efficiently and accessible which can improve the productive teaching and learning experiences to get more adaptable and responsive to individual needs. AI can be utilized for both good and bad sides, means, which can help university students to improve their studies or for negative use, students who use AI in educational fields face the risk of not learning much at all or becoming their own obstacles (Krasadakis, 2023).

The term Technology Acceptance Model (TAM) is an information systems theory that analyzes how people accept and benefit from using new technology. According to TAM, the terms of Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) are that people are more willing to adopt technology. Behavior intention (BI) is a main factor that influences people to use the technology which is influenced by the attitude (A), the general impression of technology. Their attitude toward the technology that determines how they expect to use it, affects how they influence their actual behavior. Perceived Usefulness (PU) refers to that a person considers

they can use that technology in order to achieve their goals, meaning, if it is useful, their intention is also higher. Perceived Ease of Use (PEOU) refers to that the barrier is overcome if the technology is easy to use. If people have a positive attitude to use, their intention is higher to do the positive behavior (Davis, 1989).

This research focuses on university students who are studying in private universities in Thailand under international programs. The behavior of students has been influenced by AI technology since it provides individualized learning experiences based on each student's requirements and behaviors, which has increased interest and motivation levels. However, it has additionally contributed to an ability toward less attention and reliance on technology for academic work, which may have a negative impact on their abilities. In addition, procrastination and an absence in interaction between students may result from the ease of using AI technology. Nowadays most of the university students are using AI technology and tools more which can directly influence and impact their behavior and attitude.

LITERATURE REVIEW

ARTIFICIAL INTELLIGENCE (AI)

Artificial Intelligence (AI) is an emerging technology with a wide range of applications and its goal is to duplicate or overtake human intelligence (Kulkarni & Dhillon, 2020). Artificial Intelligence (AI) is a technical term that evaluates and realizes the ordinary mental process by motivating and growing a human's intelligence (Ahmad et at., 2022). Artificial Intelligence (AI) in higher education refers to computer programs that can execute complex tasks that are limited to human capabilities, which means problem-solving, reasoning, and decision-making (Staff, 2024). Nowadays, the role of AI plays a crucial tool in business fields. The author, Franklin (2024) claims that "AI has revolutionized various business functions, including marketing strategies, product development, sales efficiency, customer support, human resources, operations and security. Marketers and business professionals leverage AI to create stronger campaigns, make smarter decisions and streamline workflows," which means AI has transformed in business functions such as in marketing fields, content writing personalization, market research, competitor analysis and assisting in creating new product design with the help of AI. The foundation of AI technology is made up of algorithms that simulate the functions of human brains.

It has close connections to language, biology, medicine, and other fields (Schwyzer et at., 2022). Artificial Intelligence (AI) combines social science and engineering through a wide range of applications that improve society. It is able to recognize human instructions and apply its algorithms to analyze data in a similar way to how human minds work. Advances in computer technology and artificial intelligence are closely linked to advancements in the economy and society. The two primary technologies of artificial intelligence (AI) are learning

through interaction and machine learning. It includes data research, theories of probability, analysis of data, recognition of patterns, and other fields (Bazoukis et at., 2022). The development of modern science and technology has led to an increase in the commercial applications of artificial intelligence (AI), which have changed the way people live and work. AI also offers several benefits, particularly in e-commerce, and is becoming more and more of a driving force in other fields like education every day (Mohamad, Hassan & Elrahman, 2022). As artificial intelligence (AI) continues to advance in terms of technology, more academic and business researchers are drawn to examine how best to apply AI in various sectors of life. These days, it assists people in carrying out all kinds of responsibilities, etc.

TECHNOLOGY ACCEPTANCE MODEL (TAM)

Davis (1989) created the Technology Acceptance Model (TAM), which has gained significant popularity in the literature on technology acceptance due to its use in various studies (Farzana, Jayaranjan & Rahman, 2021). Furthermore, a new systematic review pointed out, based on research by Qaysi, Nordin, and Emran (2018), that the use of TAM in educational technology acceptance has demonstrated its effectiveness in comparison to other theoretical models. The concept states that attitudes toward utilizing a technology will be determined by two personal beliefs "perceived usefulness" and "perceived ease of use" that are influenced by system-specific and external factors.

TAM appears as the main model in the educational setting, considering the range of theories (King & He, 2006). This theory uses a model made up of five factors PU, PEOU, ATT, BI, & AU to describe the process of technology acceptance. Technology Acceptance Model (TAM) claims that perceived ease of use (PEOU) will impact perceived usefulness (PU): users will view a technology as "useful" if they find it "easy to use." Along with three additional factors "attitude toward using (ATT), "behavioral intention to use (BI), and "actual use (AU)," TAM provides the relationship between these two basic components (PEOU and PU). The term ATT is characterized as "an individual's positive or negative feeling about performing the target behavior" (Fathema, Shannon & Ross, 2015; Farzana, Jayaranjan & Rahman, 2021).

TAM is the most appropriate approach for developing technology adoption studies in the field of education because of this as well as its ability to adapt to various situations and amounts of data (King & He, 2006). However, TAM has its limitations such as lack of consideration of the effect of the external variables which means although the model acknowledges the influence of external variables, it fails to adjust for their effect, and when used in exploratory studies, its ability to explain is limited (Garcia, 2012).

Venkatesh and Davis (2000) claimed that by using technology acceptance model to under the students' behavior and attitude, researchers can find scenarios for TAM-based model design and application in the field of academic, developed with concepts from other usage theories

like self-efficacy, subjective norm, or facilitating conditions to analyze how students accept various technologies like mobile devices, learning management systems (LMSs), and QR codes but in order to understand, there aren't many models that are intended expressly to look at eLearning students' acceptance of AI-driven measurement.

AI TOOLS IN ACADEMIC PERFORMANCES

Higher education needs an alternative model, but in order to adapt to this change, students must also continue to improve their cognitive abilities, technological knowledge, and physical capabilities. Technology and machines are constantly overcoming previous limitations. It is expected that AI technology would benefit a large number of researchers globally as well as in academics and students. Therefore, the higher education sector must find ways to use this technology (Menon et al., 2014; Stefan & Sharon, 2017). Investigating a future technology such as artificial intelligence (AI) requires a thorough understanding of the components that will decide whether potential consumers agree with or disagree with it. Recent studies have found that student's intentions typically influence their real actions (Cronan et al., 2018). Artificial intelligence (AI) in education, such as ChatGPT, holds potential to improve student satisfaction and learning performance and success. As the technology advances, the author, Chrisinger (2019) noted that AI-enabled tools may be able to quickly respond to specific student requests. Apart from lectures and professors, AI systems can also provide students quick responses, assist them in finding online study materials, and instantly and conveniently inform them of their results. Also, for the range of online courses, such kinds of AI tools are being used in higher education to help students with their study process.

PROPOSED HYPOTHESES

From the above discussion, the following hypotheses are proposed:

H1a: AI-based tools will have a positive influence on the user's perceived usefulness of AI among international students.

H1b: AI-based tools will have a positive influence on the user's perceived ease of use of AI among international students.

H2: Perceived ease of use will positively influence the perceived usefulness of AI-based tools among international students.

H3a: Perceived usefulness of AI-based tools will positively influence the attitude toward using them among international students.

H3b: Perceived ease of use of AI-based tools will positively influence the attitude towards using them among international students in Thai universities.

H4: Perceived usefulness of AI-based tools will positively influence the behavioral intention of using AI among international students.

H5: The attitude towards using AI-based tools will positively influence the behavioral intention of using them among international students.

These hypotheses form the foundation of the research, and their examination will help uncover the intricate relationships between Perceived usefulness, Perceived ease of use, Students' attitude, behavior intention of using AI-based technologies among international students in Thai universities, providing valuable insights for institutions, policymakers, and decision-makers.
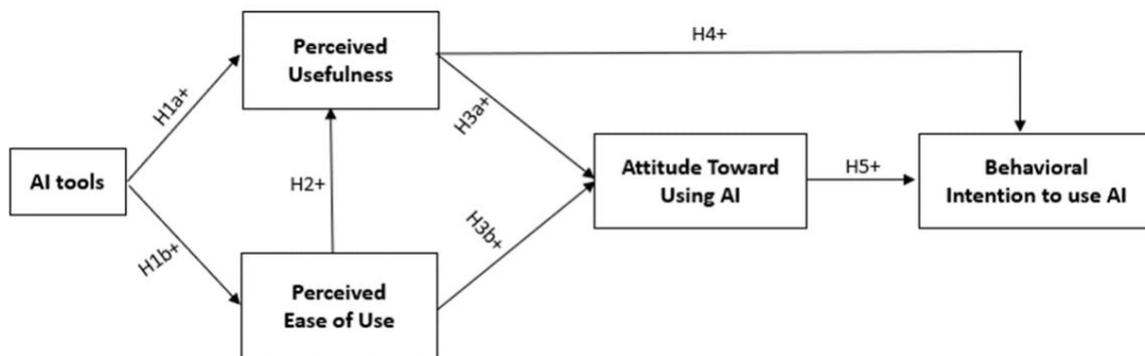
PROPOSED CONCEPTUAL MODEL

Figure 1: Proposed conceptual model

RESEARCH METHODOLOGY

RESEARCH DESIGN

This study employed a quantitative research design to investigate the influence of Artificial Intelligence (AI) technology on the behavior and attitude of international students in Thai Universities. The data was collected using google form and the link or QR code of the survey was distributed among the participants who used AI tools for their academic purposes. Non-probability convenience sampling techniques were used to receive maximum participation. Cross-sectional data was collected between April to July 2024. Participants sampling strategy for the survey were the international students who enrolled in various programs at Thai universities from bachelors' and master's program. The inclusion criteria involved students

from different cultural backgrounds, representing numerous nationalities, genders, age, educational background and years of study, etc. which were under the demographic survey section. The second part of the survey was focusing on the satisfaction of international students' experience in using AI tools in their studies or human life. The aim was to capture a comprehensive view of the experiences of international students in Thai universities. Participants were recruited through purposive sampling, ensuring a representative and varied sample. Anonymity was maintained meaning, names, student ID, email addresses, telephone numbers were not asked.

SAMPLING

An online survey was conducted to collect data from university students who were studying international programs in universities located in Bangkok. International students studying undergraduate, and masters level courses and using AI tools for their academic purposes in international programs were considered as the sampling frame. 180 survey links were shared among the participants and 114 university students studying international programs responded to the survey. The majority of the respondents were from Myanmar, followed by Asian, European, and African countries. Data Collection was done by self-administered survey instruments which was adopted from prior literature.

MEASUREMENT SCALE

In this research, the independent variables such as Perceived Ease of Use (PEOU), Perceived Usefulness (PU), Attitudes towards using AI tools (ATT), Behavioral Intention of using AI tools (BI) were assessed using the Artificial Intelligence Attitude Scale (AIAS), a well-established and validated scale, an instrument designed to assess the attitudes towards AI tools (Grassini, 2023). The AIAS scale was aimed to measure attitudes towards AI by considering the intentions for using AI tools, perceived benefits, potential risks, and the potential impact of technology on society and humanity. The initial AIAS consisted of 5 items. The factors were measured by 5 item scales adopted from AIAS scales proposed by the author and sample questions (Grassini, 2023) to measure various aspects of factors, providing a comprehensive understanding of individuals' behavior, attitude and intention of international students among Thai universities. The survey questionnaires included 2 sections – demographic information and the satisfaction of international students' experience in using AI tools. Under the second part of survey included 5 factors, each item had each different items, total 23 items such as - 5 items in Perceived Ease of Use, 5 items in Perceived usefulness, 4 items in Attitudes towards using AI tools, 3 items in Intention of using AI tools, 4 items in individual attitudes towards AI and the rest 2 items in social attitude towards AI and risks. Those total 23 survey items measured the Likert scale in 5 points; 1 = strongly disagree, 2 = disagree, 3 = neither disagree nor agree, 4 = agree, 5 = strongly agree to identify the detailed result of the survey.

DATA ANALYSIS

Statistical Package Software called Jamovi (3rd generation) was used to examine the data. The responses were placed as (.csv) format and inserted to excel file and saved in the (.sav) format for data analysis. And the comparison was carried out using Jamovi between demographic information, and the variables of satisfaction of international students' experience in using AI tools in their studies (PEOU, PU, ATT, BI). The correlation was also carried out to find the association between the independent, and dependent variables. Adding some control variables, the result was analyzed for the proposed hypothesis.

RESULT

DEMOGRAPHIC INFORMATION

The respondents (n=114) who participated in the survey were mostly from Myanmar and the rest are different nationalities. Among the respondents there were 63 (55.3%) female and 51 (44.7%) were male international students under international programs from three different private universities but the majority was Siam University. The mean age of the students' group was 21.9 with the standard deviation (SD) of 2.43 with the minimum and maximum age group of 18 and 29 respectively. The majority of participants were from Myanmar which was 72 (63.2%) and the rest were different nationalities from other countries, 42 (36.8%). The majority of participants 94 (82.5%) were from university students not graduated, followed by 17 (14.9%) and 3 (2.6%) were from Bachelor and Master's program respectively. Among the participants, the majority of students were first year students which is 50 (43.9%), 31 (27.2%) were second year students, 19 (16.7%) were third year and 14 (12.3%) were fourth year.
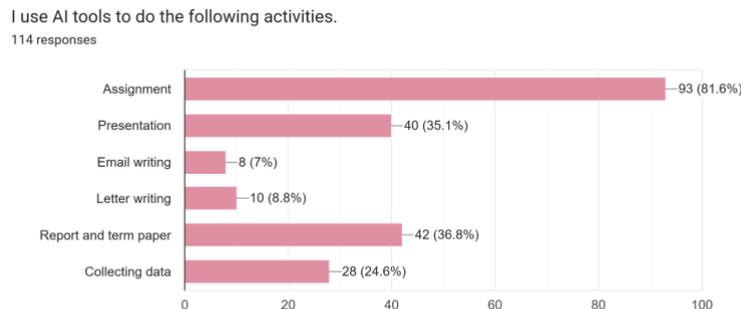
For frequency of usage of AI tools in daily life, 62 (54.4%) were using AI tools daily, 26 (22.8%) were using twice a week, 18 (15.8%) were using occasionally which means weekly to monthly, 7 (6.1%) were using weekly, and the rest 1 (0.9%) were using AI tools once a month. There were 60 (52.6%) participants who used only 1 AI tool, especially ChatGPT; whereas 37 (32.5%) respondents used 2 applications of AI tools and the rest 17 (14.9%) used 3 and above AI applications among international students. There were 93 (81.6 %) participants who used AI applications mostly for doing assignment, 42 (36.8%) used for doing report and term paper writing, 40 (35.1 %) used for presentation, 28 (24.6%) used at collecting data information, 8 (7.00%) for letter writing and the rest 10 (8.8%) used AI applications for email writing.

Aspects	Statistics
Gender	Male : 51 (44.7%); Female : 63 (55.3%)
Age (actual) in years	Mean: 21.9, Standard Deviation : 2.43
Nationality	Myanmar : 72 (63.2%) Non-Myanmar : 42 (36.8%)

Education level	University student not graduated : 94 (82.5%) Bachelor Degree : 17 (14.9 %) Master's Degree : 3 (2.6%)
Academic study year	First year : 50 (43.9%) Second year : 31 (27.2%) Third year : 19 (16.7%) Fourth year : 14 (12.3%)
AI usage in daily life	Daily :62 (54.4%) Twice a week : 26 (22.8%) Weekly : 7 (6.1%) Occasionally : 18 (15.8%) Once a month : 1 (0.9%)
AI applications	1 application : 60 (52.6%) 2 applications : 37 (32.5%) 3 and above : 17 (14.9%)

Table-1 Demographic Characteristics

I use AI tools to do the following activities.
114 responses

Activity	Count
Assignment	93 (81.6%)
Presentation	40 (35.1%)
Email writing	8 (7%)
Letter writing	10 (8.8%)
Report and term paper	42 (36.8%)
Collecting data	28 (24.6%)

Graph 1 - Reasons of using AI tools

ANALYSIS OF THE SURVEY

The results obtained from the survey were compiled and calculated. Step by step was documented and all the sub-factors were duly measured.

EXPLORATORY FACTOR ANALYSIS AND RELIABILITY TEST

Internal reliability consistency of all the variables were found at a moderate level, the reliability coefficient (Cronbach's alpha) were perceived ease of use = 0.878, perceived usefulness = 0.865, attitude towards using AI tools = 0.757; behavioral intention of using AI = 0.604. The result of Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO and Bartlett's Test)

showed that perceived usefulness had the highest factor loading with 0.851 (p = .000) and behavioral intention had the lowest factor loading with 0.523 (p = .000) as there were only 2 survey questions in that part. The factor loading of perceived ease of use was 0.838 (p = .000), attitude towards using AI tools was 0.680 (p = .000).

Item	Cronbach's Alpha	KMO & Bartlett's Test	Significant
PEOU	0.878	0.838	0.000
PU	0.865	0.851	0.000
ATT	0.757	0.680	0.000
BI	0.604	0.523	0.000

Table-2: Reliability Statistics Analysis and Kaiser Meyer-Olkin test for factor instrument (KMO and Barlett's Test)

CORRELATION ANALYSIS

Bivariate correlation was calculated between perceived ease of use, perceived usefulness and attitudes towards using AI tools and behavioral intention of using AI. It was observed that perceived ease of use was positively correlated with perceived usefulness (r = 0.710, p <.001) and attitude towards using AI tools (r = 0.503, p < .001). Perceived usefulness was positively correlated with attitude towards using AI tools (r = 0.516, p < .001). It was also found that attitude towards using AI tools was also positively correlated with behavioral intention of using AI (r = 0.742, p < .001). And then the behavioral intention of using AI tools was also positively correlated with all variables PEOU (r = 0.419, p < .001), PU (r = 0.504, p < .001) and ATT (r = 0.742, p < .001). From the table below it was observed that all the correlations were significant at 0.001 level (2-tailed). Table 2 exhibits correlations among all the variables.

		PEOU	PU	ATT
PU	Pearson Correlation	0.710		
	Sig (2-tailed)	< .001		
	N	114		
ATT	Pearson Correlation	0.503	0.516	
	Sig (2-tailed)	< .001	< .001	
	N	114	114	
BI	Pearson Correlation	0.419	0.504	0.742
	Sig (2-tailed)	< .001	< .001	< .001
	N	114	114	114

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

Table 3 - Correlations of the variables

LINEAR REGRESSION ANALYSIS

The coefficient beta figure for each variable was obtained after computing perceived ease of use and perceived usefulness with attitude towards using AL tools followed by behavior intention. Firstly, the first stage of the research model of AI tools, perceived usefulness and perceived ease of use were checked with the dependent variable of attitude towards using AI tools. The regression analysis result showed that AI tools (β = .0201, p value = .918) were positively correlated with perceived ease of use and perceived usefulness that supported H1a and H1b. On the other hand, the perceived ease of use (β = .1534, p value = .006) was positively correlated and statistically significant with attitude towards using AI tools and perceived usefulness which supported H2 and also perceived usefulness (β = .1610, p values = .018) had a positive relationship and statistically significant related with attitude towards using AI tools that supported H3a and H3b. The R-square of the relationship was 0.304 and the adjusted R-square was 0.285.
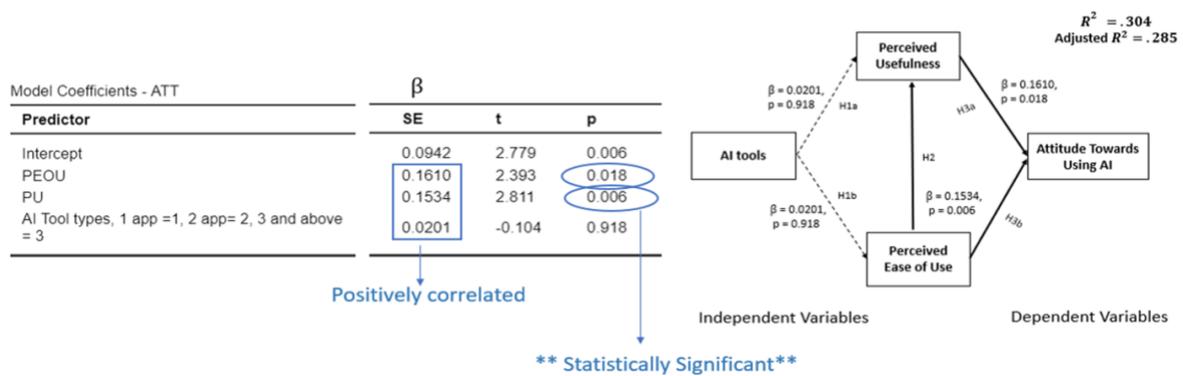

Figure 2: Result of Model 1

After that the full research model was checked with dependent variable, behavioral intention to use AI tools and the result of regression analysis was that the perceived usefulness (β = 0.1633, p value = .032) was positively related and statistically significant to attitude towards using AI tools and behavioral intention to use AI that supported H3a and H4. On the other hand, the results revealed attitude towards using AI tools and behavioral intention to use AI (β = .0972, p value < .001), positively related and statistically significant which related with the R square (= .465) and adjusted R-square (= .556) that also supports H5.
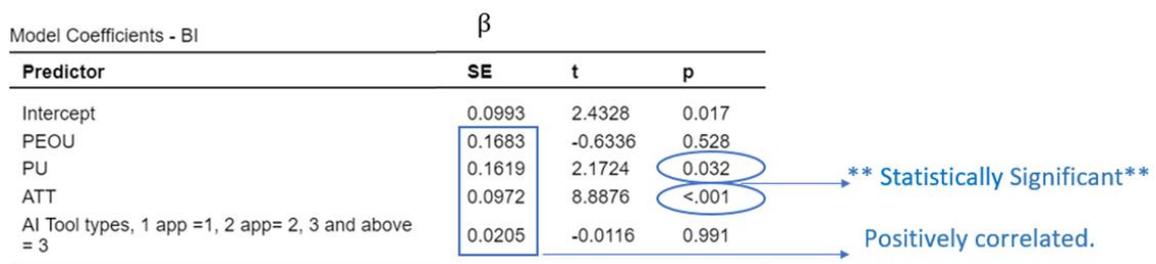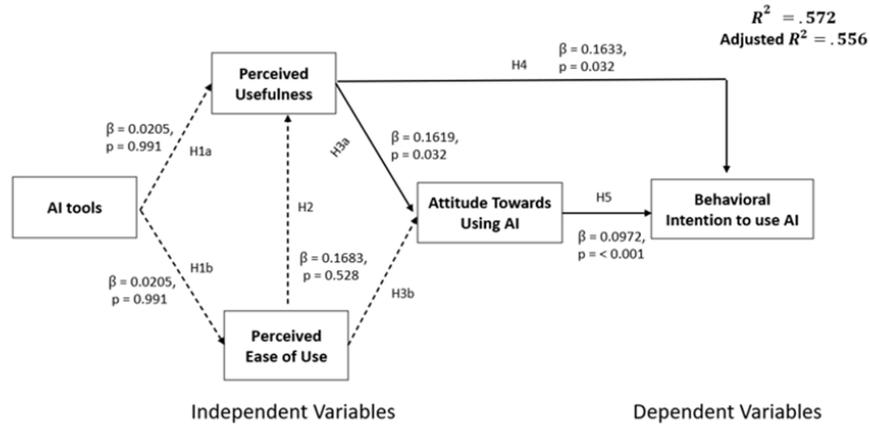
Table 4: Regression analysis

Figure 3: Regression analysis of the model

To fit the model, control variables such as Gender and Frequency of using AI tools were added to the regression analysis to check whether it had any changes or not. After adding the control variables, it was noticed that attitude toward using AI is positively related with behavioral intention to use AI, the p value was significant as well. Control variables, gender and frequency of using AI tools are positively correlated, but all the p values were not significant between these variables. From the result, it was also observed that perceived ease of use became also positively related with attitude towards using AI tools and the result is not significant. The R-square of this model was 0.574 and the adjusted R-square was 0.550.

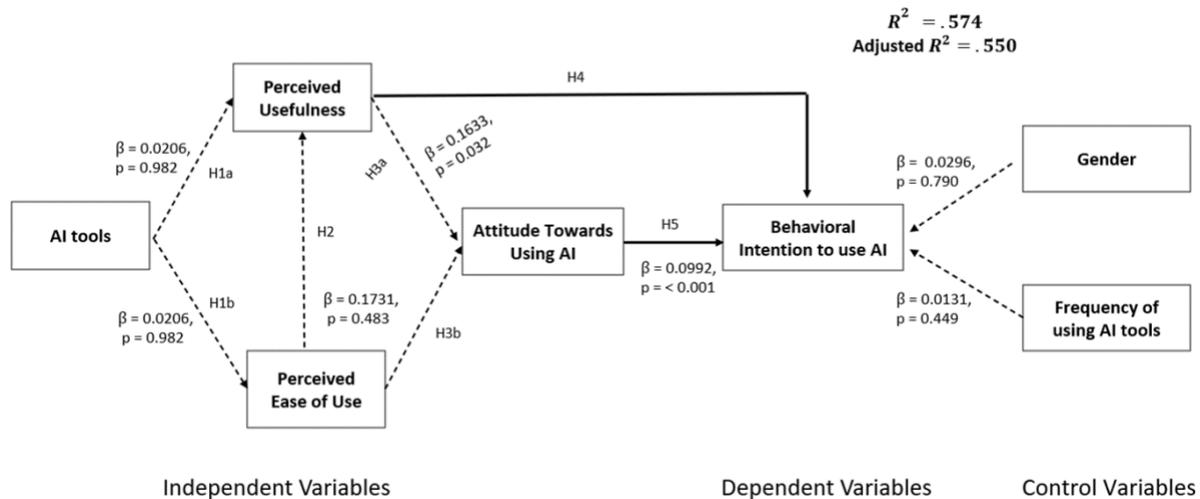*Table 5: Regression analysis with control variables*

Figure 4: Regression analysis with control variable

DISCUSSION AND RECOMMENDATIONS

DISCUSSION

AI has made significant improvements to education that have always benefited professors and university students, from developing an automated system. The use of artificial intelligence (AI) in education is becoming more and more widespread which allows teachers to quickly respond to student questions and personalized instruction (Roy et al. 2022). The reason for this study was to examine the behavioral intentions of international students of using AI tools in the context of the Technology Acceptance Model (TAM). AI makes it possible to modify study materials according to each student's skill level which means that everyone can study at their own pace, improving their skills where they lack proficiency and moving forward in those where they do. (Rmontalvo, 2023). This study also focused on perceived usefulness and perceived ease of use of how international students can increase the trust on AI tools, resulting in behavioral intentions.

Some variables in this model did not have significant results for the behavioral intention of using AI tools among the international students. According to the result, the survey shows a negative result of using AI tools which means international students are using more than one AI tools as AI tools provide lots of features which are useful for their academic studies. The findings of the research showed that most of the Myanmar students were using AI tools more, maybe because of these factors. Maybe the language barrier and diverse educational backgrounds are the reason why Myanmar students are using AI tools frequently. They may have difficulties in understanding and completing academic assignments, especially those who are requiring proficiency in English as it is not their first language. International students from diverse educational backgrounds may have different levels of skills. AI tools, especially those with translation capabilities for language support, can help this gap by providing translations,

writing assistance and grammar corrections. Additionally, there is a growing trend among students to use AI to assist their work and compensate for their weaknesses. The academic performance can be improved by using AI tools to complete their tasks more quickly and accurately.

AI tools offer substantial opportunities for enhancing education. By adjusting to the individual needs and learning abilities of each international student, AI tools offer individualized learning experiences which can provide their necessary. Additionally, AI can automate administrative tasks like feedback and evaluations, allowing professors to concentrate more on teaching methods and interacting with students. AI integration in education also brings out creative solutions that can improve student performance and engagement. The growing adoption of AI tools reflects their potential to transform educational environments, making learning more accessible and modifying to individual needs.

The perception of AI tools as user-friendly and beneficial for learning experiences is another critical factor driving their adoption among international students. Even people who are not proficient in technology are able to utilize AI technologies because of their simple layouts and user-friendly features. As these AI tools are seen as both useful and easy to use, international students are more likely to use them in their daily academic routines. This factor shows that AI is becoming more widely accepted in education and that international students are getting started to understand and interest what kind of benefits these resources can bring.

As the perceived ease of use (PEOU - H4) was positively related to behavioral intention of using AI tools (BI) and also the attitude towards AI tools (ATT - H5) also positively related to BI in the model analysis, so there may be some connection between PEOU and ATT. The increasing use of AI tools among international students can be attributed to the need to overcome language barriers and different educational backgrounds, the substantial opportunities these tools offer for enhancing education, and their perceived usefulness and ease of use. These results highlight the value of addressing the issues that lead international students to rely on AI tools as well as the possible advantages of AI.

LIMITATION OF THE STUDY

According to the study, there were some limitations. At first, convenience non-probability sampling techniques were chosen to collect data from three universities. In addition, the majority of the respondents were from Siam University, and a very few from other universities responded. So, the result cannot generalize the total population. Secondly, the sample size was quite small to reach enough to expected participants, so better to have a large number of participants from different nationalities would give a deeper meaning and understanding for this research. Thirdly, this research survey relied on cross-sectional analysis that means the survey results can only focus on the current situation which cannot be analyzed the future situation of the participants. As non-probability convenience sampling was used for this

research and the majority of the participants were Myanmar according to the result, it was quite difficult to analyze the true data information of the results. Maybe some participants didn't understand the meaning of the survey questionnaires that I expected to ask, the answers that the participants did were quite different from others which means sometimes the way some participants' understanding, and others were different, maybe because of the language barrier. So better to translate their native languages to get the truth data information and to understand the mindset of international students in Thai universities.

RECOMMENDATION

For future studies, it is recommended to involve a larger and more diverse sample of participants from different universities to gain a more comprehensive understanding of how students feel and behave regarding AI tools. Better comprehension and more accurate responses can be provided by translating the survey questions into the participants' native languages. Additionally, some questions for actual behavior should be included, for example with open-ended questions to provide deeper insights. To enable more thorough study, it would be helpful if it specified the exact AI tools to measure and analyze. Additionally, by comparing how International and Myanmar students use AI tools, the significant cross-cultural insights that highlight both potential differences and similarities in the behavioral intention of using AI tools.

CONCLUSION

The attitudes (ATT) and behavioral intentions (BI) about AI technologies are strongly correlated with perceived usefulness (PU) and perceived ease of use (PEOU) according to the result. This indicates that as students perceive AI tools to be useful and easy to use, their attitudes towards these tools become more favorable, and their intention to use them increases. The relationship focuses on how important it is to create AI tools that are both user-friendly and effective in order to increase student adoption and engagement.

The data also suggests that students' attitudes and intentions toward AI tools appear to be positively correlated with how beneficial and user-friendly they perceive these tools to be. The importance of user experience in fostering adoption and successful use of AI tools in educational settings is shown by this positive connection. Educators and developers can foster a more welcoming and enthusiastic environment for AI adoption among students, by focusing on improving the usability and perceived benefits of AI tools.

AI tools have a big impact on creating educational experiences and enhancing academic results. AI in education makes it easier to manage resources effectively, provide more individualized instruction, and better support for students, all of which enhance academic achievement and create more engaging learning opportunities. This positive contribution highlights how AI has

the ability to completely transform the education system and create significant advancements in learning and teaching processes.

Although the use of AI tools can significantly enhance educational experiences and improve academic performance, there are valid concerns about relying too much on AI. AI dependence may weaken critical thinking abilities, decrease interpersonal communication and relations with others, and result in a heavy reliance on technology for education. To guarantee a comprehensive and balanced educational experience, it is necessary to find a balance between using the potential of AI as well as maintaining essential human characteristics in education.

REFERENCES

Ahmad.S.F, Alam.M.M, Rahmat.M.K, Mubarak.M.S, Hyder.S.I, Academic and administrative role of artificial intelligence education,Sustainability 14(3) (Jan. 2022) 1101, https://doi.org/10.3390/su14031101.

A. Helmy Mohamad, G. Farouk Hassan, A.S. Abd Elrahman, Impacts of e-commerce on planning and designing commercial activities centers: a developed
approach, Ain Shams Eng. J. 13 (4) (Jun.2022), 101634, https://doi.org/10.1016/j.asej.2021.11.003.

Cronan, T. P., Mullins, J. K., & Douglas, D. E. (2018). Further understanding factors that explain freshman business student's academic integrity intention and behavior: Plagiarism and sharing homework. Journal of Business Ethics, 147(1), 197–220.

Chrisinger, D. (2019). The solution lies in education: Artificial intelligence & the skills gap. On the Horizon, 27(1), 1–4. https://doi.org/10.1108/OTH -03-2019-096.

Fathema, N., Shannon, D., & Ross, M. (2015). Expanding the Technology Acceptance Model (TAM) to examine faculty use of Learning Management Systems (LMSs) in higher education institutions. Journal of Online Learning & Teaching, 11(2).

Franklin, T. (2024, February 29). *The role of artificial intelligence in business in 2024*. Sprout Social. https://sproutsocial.com/insights/ai-in-business/

Farzana, S., Jayaranjan, M. L. D., & Rahman, S. U. (2021). An Empirical Study on E-book Usage Intention–Perspective of International Students Studying in Thailand. In 18th International Symposium on Management (INSYMA 2021) (pp. 228-234). Atlantis Press.

Fathema, N., Shannon, D., & Ross, M. (2015). Expanding the Technology Acceptance Model (TAM) to examine faculty use of Learning Management Systems (LMSs) in higher education institutions. *Journal of Online Learning & Teaching*, *11*(2).

F. D. Davis, ''Perceived usefulness, perceived ease of use, and user acceptance of information technology,'' *MIS Quart.*, vol. 13, no. 3, pp. 319–340, 1989.

Glover, E. (2024, April 2). *What is artificial intelligence (AI)?* Built In. https://builtin.com/artificial-intelligence

G. Bazoukis, J. Hall, J. Loscalzo, E.M. Antman, V. Fuster, A.A. Armoundas, The inclusion of augmented intelligence in medicine: a framework for successful
implementation, Cell Reports Med. 3 (1) (2022) 1–8, https://doi.org/10.1016/j.xcrm.2021.100485.

García.H , Á.: Desarrollo de un modelo unificado de adopción del comercio electrónico entre empresas y consumidores finales. Aplicación al mercado español. Ingenieria Empresas, p. 422. Telecomunicacion (2012)

Grassini, S. (2023). Development and validation of the AI attitude scale (AIAS-4): a brief measure of general attitude toward artificial intelligence. *Frontiers in Psychology*, *14*. https://doi.org/10.3389/fpsyg.2023.1191628

Holmes, Mary. (2008). Higher education reform in Egypt: Preparing graduates for Egypt's changing political economy. Education, Business and Society: Contemporary Middle Eastern Issues. 1. 175-185. 10.1108/17537980810909797.

Khelenius. (2023, November 15). Journeying Back: Exploring the world before AI and machine learning. *Medium*. https://medium.com/b8125-fall2023/journeying-back-exploring-the-world-before-ai-and-machine-learning-7d997e3da472

Krasadakis, G. (2023, October 20). The impact of artificial intelligence on the society and everyday life | 60 leaders. *Medium*. https://medium.com/60-leaders/the-impact-of-ai-on-society-and-everyday-life-711307e06b87#:~:text=AI%20is%20changing%20the%20way,help%20humans%20make%20better%20decisions.

King, W.R. He : A meta-analysis of the technology acceptance model. Inf. Manag. 43, 740–755 (2006)

Khechine, H., Pascot, D., Lakhal, S., & Bytha, A. (2014). UTAUT model for blended learning: The role of gender and age in the intention to use webinars. Interdisciplinary Journal of ELearning and Learning Objects, http://www.ijello.org/Volume10/IJELLOv10p033-052Khechine0876.pd ,10, 33-52.

Khasawneh, M., & Ibrahim, H. (2012). A model for Adoption of ICT in Jordanian Higher Education Institutions: An Empirical Study. Journal of e-Learning & Higher Education, 2012, c1-10.

M.Kolotylo-Kulkarni,W.Xia,G.Dhillon, Information Disclosure In-commerce: asystematic review and agenda for future research, March2020,J.Bus.Res. 126 (2021) 221–238, https://doi.org/10.1016/j.jbusres.2020.12.006.

M. Schwyzer, M. Messerli, M. Eberhard, S. Skawran, K. Martini, T. Frauenfelder, Impact of dose reduction and iterative reconstruction algorithm on the detectability of pulmonary nodules by artificial intelligence, 000, Diag. Interv. Imag. (2021) (2022), https://doi.org/10.1016/j.diii.2021.12.002.

Menon, R., Tiwari, A., Chhabra, A., & Singh, D. (2014). Study on the higher education in India and the need for a paradigm shift. Procedia Economics and Finance, II, 1, 886–871. https://doi.org/10.1016/S22125671 (14)00250-0.

N. Al-Qaysi, N. Mohamad-Nordin, and M. Al-Emran, ''A systematic review of social media acceptance from the perspective of educational and information systems theories and models,'' *J. Educ. Comput. Res.*, 2018.

Roy, R., Babakerkhell, M. D., Mukherjee, S., Pal, D., & Funilkul, S. (2022). Evaluating the intention for the adoption of artificial intelligence-based robots in the university to educate the students. *IEEE Access*, *10*, 125666-125678.

Rmontalvo. (2023, October 3). *The benefits of AI in education*. CIS University - EN. https://www.cis-spain.com/en/blog/the-benefits-of-ai-in-education/#:~:text=AI%20allows%0adapting%20study%20materials,where%20they%20show%20greater%20ability.

Staff.C, *What is artificial intelligence? Definition, uses, and types*. Coursera, (2024, April 3). https://www.coursera.org/articles/what-is-artificial-intelligence#

Scherer, R., Siddiq, F., Tondeur, J.: The technology acceptance model (TAM): a meta-analytic structural equation modeling approach to explaining teachers' adoption of digital technology in education. Comput. Educ. 128, 13–35 (2019)

Vighnesh. (2024, January 20). *The impact of AI on higher education learning and teaching*. Online Skill Assessment | Online Exam Software | Eklavvya.com. https://www.eklavvya.com/blog/ai-higher-education-trend/#:~:text=AI%20plays%20a%20significant%20role,cost%20savings%20for%20educational%20institutions.

V. Venkatesh, Morris, Davis.: User acceptance of information technology: toward a unified view. MIS Q. 27, 425–478 (2003)

V. Venkatesh, Davis : A theoretical extension of the technology acceptance model: four longitudinal field studies. Manage. Sci. 46, 186–204 (2000)

Venkatesh, V., Morris, M.G., Davis, G.B., Davis, F.D.: User acceptance of information technology: Toward a unified view. MIS Quarterly 27(3), 425–478 (2003).

Xavier, R. (2021, March 14). Can artificial intelligence influence human behavior? - ITMunch. *iTMunch*. https://itmunch.com/how-artificial-intelligence-influences-behavior/#:~:text=As%20shown%20by%20a%20recent,has%20capability%20to%20develop%20rapidly.