ISSN 2723-6471

The Use of Artificial Intelligence in Accounting Classes: Behavioral Insights from Students

Fachrurrozie[1,*], Ahmad Nurkhin[2], Jarot Tri Bowo Santoso[3], Asrori[4], Harsono Harsono[5]

[1,2,3,4]*Faculty of Economics and Business, Universitas Negeri Semarang, L2 Building FEB UNNES Sekaran Campus, Semarang, Indonesia*

[5]*Faculty of Teacher Training and Education, Universitas Muhammadiyah Surakarta, First Campus, A. Yani Street, Surakarta, Indonesia*

(Received: December 1, 2024; Revised: January 20, 2025; Accepted: March 25, 2025; Available online: July 10, 2025)

Abstract

Accounting learning has entered a new transformation with the intensive use of artificial intelligence. This study analyzes student behavior in using artificial intelligence in accounting lectures. The Unified Theory of Acceptance and Use of Technology (UTAUT) framework is used to understand student behavior by adding the construct of experience and competence of information and communication technology. This study contributes to the extended application of UTAUT. This survey took a sample of accounting and accounting education students at the Faculty of Economics and Business, Universitas Negeri Semarang, totaling 124 students. The questionnaire distributed via Google Forms was used as a data collection technique. The data analysis technique used was SEM-PLS. The results of the analysis show moderate student behavior in using artificial intelligence in accounting lectures, there is 2.48 of an average score. ChatGPT and Canva are the types of AI most frequently used by students in accounting courses. SEM-PLS analysis indicates that students' intentions to use artificial intelligence in their accounting lectures are more determined by performance and effort expectancy. The coefficients are 0.519 and 0.382 at a P-value of 0.000. Social influence does not have a significant effect on student intentions, with a P-value of 0.104. Student intentions, ICT experience, and ICT competence significantly influence student behavior to use AI. The coefficients are 0.382, 0.241, and 0.214 at a P-value less than 0.05. Facilitating conditions do not have a substantial effect on actual behavior, with a P-value of 0.210. The practical implication of this study is the importance of highlighting students' ICT experiences and competencies that determine the use of AI for lecture purposes.

Keywords: Artificial Intelligence, Accounting Lectures, Student Behavior, Intention To Use AI, UTAUT, ICT Experience, ICT Competence

1. Introduction

Artificial intelligence (AI) has shown an increasing growth trend in recent years (from 2000 to 2015). The development of AI has dramatically affected human society and the field of technology [1]. Humans are now increasingly immersed in a society involving inclusive technological processes. Technological advances have changed global habits, including how people interact, read, communicate, write, and learn [2]. AI will infiltrate most industries in the next decade, creating a personal, industrial, and social shift towards new technologies [3]. AI is created to perform functions and carry out tasks that typically require human intelligence [4].

AI has been used in many fields, including education. Artificial intelligence is easy to use and offers valuable features that can be applied to various services. Artificial intelligence applications using machine learning are becoming more common in various contexts, including clinical research, agriculture, and education [5]. Artificial intelligence has become increasingly important in education as it has advanced over the past few decades [6]. Over the past few years, there has been a significant increase in the use of AI-based educational applications in education [7]. The education sector has leveraged digital technologies to support personalized and inclusive learning. Increasingly, cross-border universities and students from around the globe have opened new opportunities by leveraging AI-based tools in education [8]. Artificial intelligence applications are becoming more prevalent, and educators must adapt to prepare students for this new world [1]. The use of artificial intelligence in education can play a significant role in building the concept of sustainable development [9]. There are many decision-making situations in education where artificial

***Corresponding author: Fachrurrozie (fachrurais@mail.unnes.ac.id)**
DOI: https://doi.org/10.47738/jads.v6i3.781

intelligence can serve as a tool to support decision-making in understanding student behavior patterns [10]. The swift progress of AI is reshaping numerous industries, including education. Its application in the educational field has revolutionized the learning process, presenting both benefits and obstacles for student growth [11]. Reference [12] explains that technologies are gaining traction in higher education, offering potential benefits such as personalized learning support and enhanced productivity. However, there is a threat to student integrity due to the potential for misuse, such as submitting assignments that are not their own.

The development of technology and AI utilization has also penetrated the accounting field and is a significant challenge that accounting students will face in the future. AI has emerged as a pivotal innovation in the accounting and auditing fields, thanks to its capability to handle vast amounts of data with precision and at a lower cost, all while minimizing the need for human involvement [13]. The accounting profession mirrors the broader pattern of technological advancement. Initially grounded in manual bookkeeping, it has gradually progressed through Industry 3.0, marked by computerization and digitization, and Industry 4.0, characterized by digital technologies. With the advent of Industry 5.0, the focus has shifted to the integration of human and technological collaboration through digital transformation, paving the way for the anticipated Industry 6.0. These technological shifts have moved the profession from paper-based practices to electronic systems, leading to greater data accuracy, more efficient processes, and improved overall productivity for Professional Accountants (PAs) [14]. Other studies show that the integration of artificial intelligence supports businesses in boosting operational efficiency by minimizing mistakes, mitigating risks, strengthening competitive positioning, and increasing employee productivity [4].

Accounting students and accounting education should adopt the behavior of utilizing AI in learning ethically and adequately. Students' ability to master AI for learning will significantly improve their competence and understanding in the future field of accounting and learning. The phenomenon shows that not many students can utilize AI optimally to support the success of their studies. Many students still have not been able to adopt AI developments for learning or understanding AI developments in accounting. Many factors influence student behavior in adapting technology and AI.

A recent study identified the relationship between various factors in implementing AI in higher education. The study noted that factors such as risk perception, performance expectancy, and awareness significantly contribute to work engagement and the implementation of AI in the higher education system, with attitudes and behaviors mediating variables [8]. Using the Theory of Planned Behavior (TPB) perspective, it was found that the determinants of AI utilization intention are AI anxiety, basic knowledge, subjective norms, self-efficacy, personal relevance, and self-transcendent goals [15]. A previous study also examined how Chinese high school students' intention to learn AI is associated with eight other relevant psychological factors based on the extended TPB framework [16]. Another analysis found that eighteen out of twenty success factors for AI implementation are highly important. The most important success factor is "AI systems capable of computing big data to improve teaching" [2].

The Theory of the Acceptance Model (TAM) framework can also be used to understand students' intention to utilize AI. Empirical studies indicate that behavioral intention is significantly influenced by convenience and usefulness factors and subjective norm factors developed from the TPB framework [7]. The antecedents of teacher-bot adoption intention based on the TAM framework are perceived ease of use, usefulness, personalization, interactivity, trust, anthropomorphism, and intelligence [17]. The TAM 3 model was also proposed to evaluate students' intention to adopt AI-based robots in education. The results showed that students were willing to accept AI-based robots in their education [18]. The extended-TAM model was developed with other external factors, including subjective norms, enjoyment, supportive conditions, trust, and safety, to examine the main factors influencing students' use of AI-based voice assistants in educational activities [19].

Another study used the UTAUT perspective and highlighted the importance of strengthening behavioral intention, emphasizing the benefits of performance in building trust, and creating enabling conditions to promote the adoption and utilization of ChatGPT among professionals in Bangladesh [20]. The previous study also developed the UTAUT model. It provided a model that identifies the determinants that will help accelerate the adoption of AI in higher education [21]. In the UTAUT framework, the empirical study proved that the impact of performance expectancy, effort expectancy, and social influence on students' behavioral intention was significant and positive [9]. Students'

ISSN 2723-6471

intention to utilize AI was more influenced by performance expectancy and more easily influenced by social influence in the UTAUT framework [22]. Social influence and performance expectancy predicted prospective teachers' behavioral intention to design GenAI-assisted instruction. However, effort expectancy and facilitating conditions were not statistically associated with prospective teachers' behavioral intention [23].

This study aims to analyze student behavior in utilizing artificial intelligence in accounting lectures using the UTAUT framework. The UTAUT framework has been considered a TAM development by adding several constructs, such as social influence factors and facilitating conditions. The analysis in this study adds other factors, such as experience, Information, and Communication Technology (ICT) skills possessed by students, to better understand the factors that determine student intentions and behavior in utilizing AI in accounting lectures. Accounting lectures are very close to technology. Therefore, accounting students and accounting education should have adequate ICT competencies. Previous studies analyzed the impact of IT experience and competence on AI intention and adoption [24], [25]. This study focuses on the impact of IT experience and competence directly on student behavior. IT experience and competence are important today and will directly affect the use of AI. This study contributes to extending the UTAUT model by adding ICT experience and competencies.

2. Literature Review

Several models and theories have been used to understand students' behavior in adopting AI for educational purposes. A recent study noted that factors such as risk perception, performance expectancy, and awareness have significant contributions to work engagement and AI adoption in higher education systems, with attitudes and behaviors as mediating variables [8]. Another study found that the most important success factor for AI adoption is AI systems that are able to process big data to improve teaching [2]. Other researchers used the TPB perspective [7], [15], TAM [18], and extended TAM [19] to analyze AI adoption behavior. The UTAUT model provides a model that identifies the determinants of AI adoption in higher education [21].

The UTAUT is a framework developed to understand and explain how individuals adopt and use technology. The theory combines elements from several previous models to provide a comprehensive understanding of user behavior related to new technologies [24]. The UTAUT model identifies four primary determinants of technology acceptance and use, along with four moderating factors. The four determinants are performance expectancy, effort expectancy, social influence, and facilitating conditions. Age, gender, experience, and voluntariness of use are moderating factors in the UTAUT model. The UTAUT model is widely used in research and practice to evaluate technology adoption in a variety of settings, including business, educational institutions, and healthcare settings. The strength of the UTAUT model lies in providing a broad and integrative view of the factors that influence the adoption of technology, making it adaptable to a variety of contexts.

Performance expectancy refers to the extent to which a person believes that using a system (in this case, AI) will help improve their performance in completing tasks [24]. Performance expectancy has a positive and significant effect on the intention to use AI. The more students believe that using AI will help them complete academic tasks faster, better, and more efficiently, the higher their intention to use AI. Empirical studies indicate a significant impact of performance expectancy on students' behavioral intentions [9]. Students' intention to utilize AI is more influenced by performance expectancy in the UTAUT framework [22]. Referring to the description, this study formulates the following hypothesis:

H1: Performance expectancy influences the student's intention to use AI

Effort expectancy refers to the extent to which a person believes that using a system or technology will be free from great effort [24]. In the context of AI adoption by college students, effort expectancy plays an important role in shaping the intention and actual behavior of using the technology. Students who feel that AI is easy to use and does not require complicated efforts tend to have higher intentions to use it in academic activities. Previous studies have shown that effort expectancy has a significant effect on students' behavioral intentions significantly [9]. The hypothesis developed based on this description is as follows:

H2: Effort expectancy influences the student's intention to use AI

Social influence refers to the extent to which individuals feel that important people around them, such as peers, lecturers, family, or role models, expect or advise them to use technology. Social influence plays an important role in shaping students' intentions to use AI. Peer opinions and behaviors, encouragement from lecturers, and support from educational institutions create social pressure and legitimacy that encourage the use of AI. In an academic environment that considers AI as part of digital literacy, students are encouraged to adapt to maintain credibility and be socially accepted. There are previous findings that provide empirical evidence that social influence significantly affects students' behavioral intentions [9]. Students' intentions to utilize AI are more easily influenced by social influence in the UTAUT framework [22]. Referring to this description, this study formulates the following hypothesis:

H3: Social influence influences the student's intention to use AI

Students who have strong intentions due to the perception that AI is easy to use, useful, and supported by their environment tend to be motivated to implement the technology in real activities. In the UTAUT model, behavioral intention has a direct influence on the actual use of technology. This means that the higher an individual's intention to use technology, the more likely they are to use it in practice [24]. Empirical studies also provide evidence that behavioral intention is a major predictor of actual AI utilization [9], [22]. Referring to the description, this study formulates the following hypothesis:

H4: Student's intention influences the student's behavior to use AI

Facilitating conditions refer to an individual's perception that there is a technical and organizational infrastructure that supports the use of a system or technology [24]. In the context of students, this includes the availability of devices, internet access, technical guidance, training, and support from educational institutions in using AI technology. Students who feel that they have adequate access to AI devices, whether through laptops, smartphones, or stable internet connections, are more likely to use the technology in practice. Empirical findings present a significant influence of facilitating conditions on AI adoption [20], [21]. The hypotheses developed based on this description are as follows:

H5: Facilitating conditions influence the student's behavior to use AI

In the UTAUT framework, experience plays a moderating role in the influence of performance expectancy, effort expectancy, and social influence on behavioral intention [24]. This study adds experience and competence in ICT to provide additional analysis to the UTAUT framework. Experience of ICT refers to the practical knowledge and direct involvement that individuals or organizations have with various information technology systems and tools over time. This experience plays an important role in influencing how effectively artificial intelligence is adopted, implemented, and used. The hypotheses developed based on this description are as follows:

H6: Experience of ICT influences the student's behavior to use AI

Competency of ICT refers to the knowledge, skills, and abilities of individuals or organizations to use information technology effectively. Reference [25] found that literacy (part of competence) has a significant influence on the intention to use AI. Other studies also show that student expertise (digital literacy) can determine the application of AI [26]. The hypothesis developed based on this description is as follows:

H7: Competence of ICT influences the student's behavior to use AI

3. Methodology

This study uses a descriptive quantitative research design and a causality test. Descriptive analysis aims to reveal student behavior in utilizing AI during accounting lectures. The causality test assesses the factors influencing student intention and behavior to use AI sustainably for accounting learning. The study population includes students majoring in Accounting and Accounting Education at the Faculty of Economics and Business, Universitas Negeri Semarang. The sampling technique used is incidental sampling, with 124 students as respondents. Respondents are students from different study programs and intakes, and are students who have attended lectures for more than 2 years, so they have sufficient experience. The students also come from several regions in Central Java, Indonesia, which have diverse cultures. The demographics of the study respondents are shown in table 1.

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Table 1. Demographics of Research Respondents

Study program	Gender		Amount
	Man	Woman	
Accounting	15	35	50
Accounting Education	10	64	74
Amount	25	99	124

The variables in this study include the form and variation of AI use in accounting lectures, students' behavior and intentions to use AI for accounting learning, effort expectancy, performance expectancy, facilitating conditions, and social influence (which are dimensions of the UTAUT model), as well as experience and competence in information technology. Behavior and intention to use AI will act as dependent variables, while other variables are analyzed as independent variables. The student behavior is measured with a 5-point Likert scale of 7 items about the use of the type of AI in the accounting course (ChatGPT, Gemini, Bing Create, Canva, Microsoft Designer, Assembler-Edu, and Scite_AI). Other variables (intention, performance, effort, facilitating, social, experience, and competence) were measured with 3 items.

Data was collected using a questionnaire distributed online through the Google Forms platform. Instrument testing, including validity and reliability, was conducted before the questionnaire was distributed to respondents. The research data were analyzed using descriptive methods and the Structural Equation Model (SEM). Model testing was conducted first before conducting hypothesis testing. Figure 1 shows the research model. The hypotheses of this research are as follows.

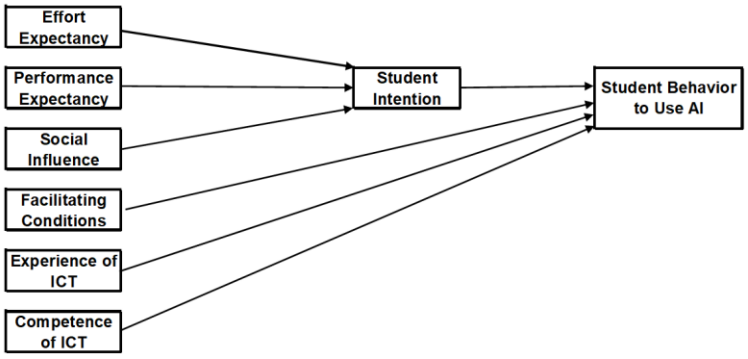

Figure 1. Research Model

4. Results and Discussion

4.1. Results

Figure 2 shows the intensity of AI utilization by the accounting and accounting education students of FEB UNNES in accounting lectures. The types of AI used in this study are ChatGPT (Chat Generative Pre-training Transformer), Gemini, Bing Create, Canva, Microsoft Designer, Assembler-Edu, and Scite_AI. Each AI has different benefits, and students can use them according to their needs. ChatGPT and Gemini are sophisticated generative AI models that students can use for many purposes, such as document processing, data analysis, research, content creation, and so on. Bing Create, Canva, Microsoft Designer, and Assembler_Edu also have more specific benefits related to design and presentation. While Scite_AI can be used more specifically in writing scientific articles and research.

ISSN 2723-6471

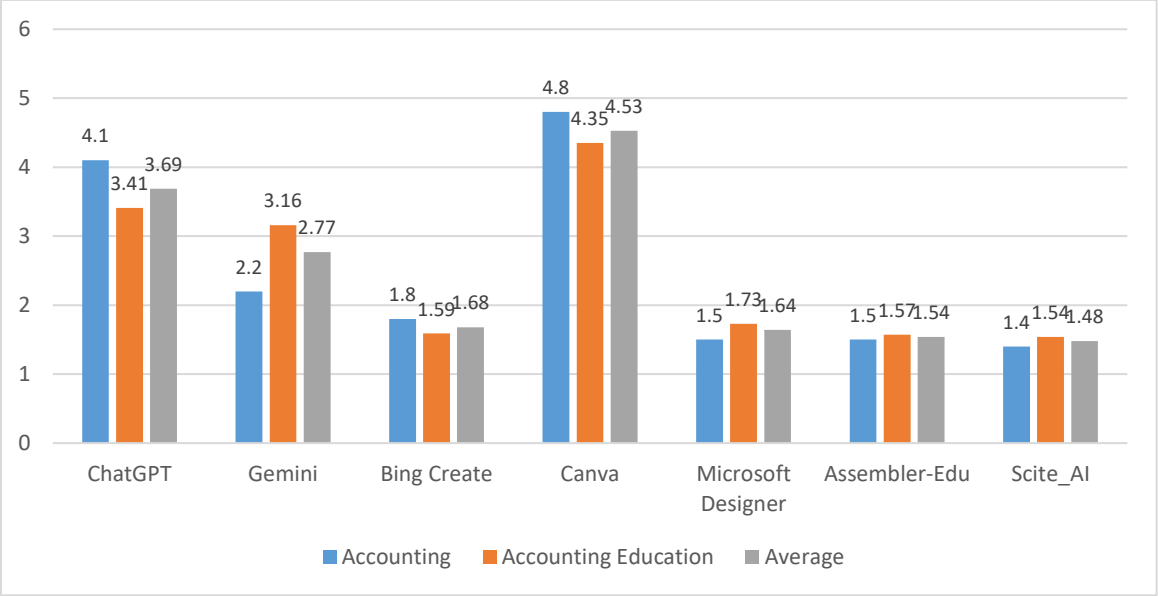

Figure 2. Intensity of AI Utilization in Accounting Lectures

Canva is the AI most frequently used by students besides ChatGPT. Students often use Canva to create presentation files through images and videos. It is easy to use, and the university has facilitated a subscription to a Canva premium account. Students also often use Gemini to do assignments and other tasks. Meanwhile, Scite_AI is the AI least used by students. The average score is only 1.48. This is because students must subscribe to a premium account to use the various features available on the Scite_AI platform.

The results of the research model analysis are presented in table 2, table 3, and table 4. Table 2 shows the results of the outer loading analysis and indicates that the variable items can be declared valid. Several invalid items exist, such as competency items 3 and experience 1. Table 3 presents the results of the construct reliability and validity analysis and indicates that the research variables can be declared reliable by looking at the Cronbach's alpha scores obtained by each variable. The Average Variance Extracted (AVE) value also indicates that the research variables can be declared valid.

Table 2. Outer Loading Analysis Results

	PE	EE	FC	SI	EICT	CICT	INT	AB
PE1	0.796							
PE2	0.810							
PE3	0.877							
EE1		0.903						
EE2		0.772						
EE3		0.885						
FC1			0.932					
FC2			0.933					
FC3			0.750					
SI1				0.677				
SI2				0.896				
EICT2					0.990			
EICT3					0.503			
CICT1						0.877		
CICT2						0.875		
INT1							0.957	
INT2							0.910	
INT3							0.900	
AB5								0.942
AB6								0.930
AB7								0.873

ISSN 2723-6471

Table 3. Results of Construct Reliability and Validity Analysis

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Performance Expectancy	0.776	0.788	0.868	0.686
Effort Expectancy	0.818	0.851	0.891	0.732
Facilitating Conditions	0.844	0.876	0.907	0.767
Social Influence	0.435	0.504	0.770	0.630
Experience of ICT	0.546	2,115	0.744	0.616
Competence of ICT	0.697	0.697	0.868	0.768
Student Intention	0.912	0.917	0.945	0.851
Actual Behavior	0.913	1,107	0.939	0.838

The results of the R-squared, R-squared adjusted, and Q-squared analyses shown in table 4 also indicate that the model in this study is fit and can be continued to the next analysis. R2 for student intention to use AI is included in the high category, which is 0.675. The model can explain the variance of student intention to use AI well through the variables of performance expectancy, effort expectancy, and social influence. R2 for student behavior is included in the small category, only 0.177. The model cannot explain the variance of student behavior more broadly. Intention to use AI, ICT experience, and ICT competence can explain student behavior to use AI, while facilitating conditions are not proven to be significant as determinants of student behavior. Other variables can be analyzed to understand the determinants of student behavior using AI in accounting courses.

Table 4. Results of R-Square, Adjusted R-Square, and Q-Square Analysis

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
			R-Square		
Student Intention to Use AI	0.675	0.682	0.042	15,927	0.000
Students' Actual Behavior to Use AI	0.177	0.194	0.051	3,459	0.001
			R-Square Adjusted		
Student Intention to Use AI	0.667	0.674	0.043	15,351	0.000
Students' Actual Behavior to Use AI	0.150	0.167	0.053	2,825	0.005
			Q-Square		
	Q^2predict	RMSE	MAE		
Student Intention to Use AI	0.655	0.596	0.471		
Students' Actual Behavior to Use AI	0.110	0.976	0.698		

Table 5 presents the results of the path coefficient analysis of the SEM-PLS model proposed in this study. The P-value of performance expectancy and effort expectancy is 0.000 or less than 0.05, so it can be stated that performance expectancy and effort expectancy significantly influence the intention of utilizing AI by students in accounting learning. Meanwhile, the p-value of social influence is 0.104 or more than 0.05, so it can be stated that social influence cannot determine students' intention to utilize AI in their accounting lectures. Student intentions are more determined by performance expectancy and effort expectancy. These students' intentions are significant determinants of actual AI utilization behavior, ICT experience, and ICT competence. Other results show that facilitating conditions cannot determine student behavior when utilizing AI in their lectures. The p-value of facility support is 0.210 or greater than 0.05.

Table 5. Results of Path Coefficient Analysis

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
Performance Expectancy → Student Intention to Use AI	0.519	0.517	0.095	5,436	0.000
Effort Expectancy → Student Intention to Use AI	0.382	0.381	0.090	4,258	0.000
Social Influence → Student Intention to Use AI	-0.095	-0.080	0.058	1,628	0.104
Student Intention → Student Behavior to Use AI	0.221	0.202	0.093	2,369	0.018
Facilitating Conditions → Student Behavior to Use AI	-0.163	-0.160	0.130	1,254	0.210
Experience of ICT → Student Behavior to Use AI	0.241	0.253	0.097	2,490	0.013
Competence of ICT → Student Behavior to Use AI	0.214	0.192	0.103	2,077	0.038

4.2. Discussion

4.2.1. Student Intention and Behavior to Use AI for Accounting Lectures: UTAUT Perspective

The UTAUT framework is developed to understand and explain how individuals adopt and use technology. Introduced by reference [26], the theory combines elements from several previous models to comprehensively understand user behavior related to new technologies. The UTAUT model identifies four primary determinants of technology acceptance and use and four moderating factors. The four determinants are performance expectancy, effort expectancy, social influence, and facilitating conditions. Age, gender, experience, and voluntariness of use are moderating factors in the UTAUT model. The UTAUT model is widely used in research and practice to evaluate technology adoption in various settings, including business, educational institutions, and healthcare settings. The strength of the UTAUT model lies in providing a broad and integrative view of the factors that influence technology adoption, making it adaptable to various contexts.

The results of this study were not fully able to prove the UTAUT framework in understanding student intention and behavior to use AI in their accounting courses. The results showed that performance and effort expectancy were two significant determinants of students' intention to use AI in accounting learning. Meanwhile, social influence was not proven to affect intention significantly. Intention determined the level of actual behavior, while facilitating conditions were not proven to have a significant effect. Previous findings revealed mixed results. Social influence and performance expectancy significantly predicted prospective teachers' behavioral intentions to design GenAI-assisted teaching. However, effort expectancy and facilitating conditions were not statistically associated with prospective teachers' behavioral intentions [23].

The effort and performance expectancy dimensions measure the ease and usefulness felt by students in using AI for accounting lectures. Students consider that AI is very easy to use and does not require special education and training to be able to use AI. Students are very tech-savvy and can quickly learn new technologies such as AI. The benefits of AI are also very diverse to support student productivity during accounting lectures. Students can use AI to help compile articles and research, help complete assignments from lecturers, such as making presentations, reviewing articles, and so on. AI can also present data and learning materials quickly.

Social influence measures how lecturers and classmates play the role of students in using AI. The results of the study showed that social influence was not proven to affect student intentions. Students considered the use of AI important and did not really need support from others (lecturers or other students). Students thought the use of AI was not too difficult.

4.2.2. Student Behavior to Use AI for Accounting Lectures: Experience and Competence of ICT Factors

The research findings prove that ICT experience can determine students' behavior to use AI in accounting courses. ICT experience refers to the practical knowledge and hands-on involvement that an individual or organization has with various information technology systems and tools over time. This experience significantly influences how effectively artificial intelligence is adopted, implemented, and used. Someone with extensive ICT experience is more familiar with the technology ecosystem, making adopting and integrating AI solutions easier. They understand how AI fits into the broader ICT infrastructure, including databases, cloud services, and software applications. Integration of AI technology will be smoother into existing workflows, ensuring operational continuity and minimizing disruption. With hands-on experience in ICT, users are more adept at customizing AI systems to suit specific business or operational needs. Users can customize AI workflows and integrate additional data sources, according to their unique usage needs. This increases the overall effectiveness and efficiency of AI solutions.

ICT competency has significantly influenced students' behavior to use AI in their accounting courses. ICT competency refers to an individual or organization's knowledge, skills, and abilities to use information technology effectively. When it comes to the adoption and use of AI, IT competency plays a critical role in determining how well AI technologies can be integrated, used, and leveraged for business or personal purposes. A person with high IT competency will be better equipped to understand AI systems' technical requirements and intricacies. This facilitates the smooth integration of AI tools into existing IT infrastructure, ensuring smoother implementation and minimizing downtime or errors during the adoption phase. A high level of IT competency allows users to better understand the potential and limitations of AI technologies. This means they can make informed decisions about which AI tools to implement, how to customize them for specific needs, and how to set realistic expectations for the results they get.

Students' behavior to use AI for accounting lectures shows that students who are Generation Z can adopt technology (AI) well and quickly. Students can use Canva better than their lecturers. This is evident in the products produced in the form of presentation documents, posters, and others. When using ChatGPT and Gemini, students find prompts faster according to their needs to complete assignments and lecture activities. Students can find steps and procedures for utilizing AI more adaptively. Students have more time to quickly learn new technologies, and the impact will be more competent and experienced if they want to and continue to try for it.

Reference [25] found that literacy (part of competence) significantly influences the intention to use AI. Other studies have also shown that students' expertise (digital literacy) can determine the adoption of AI [24]. The analysis revealed that intrinsic motivation and competence to learn with chatbots depend on teacher support and students' expertise (i.e., self-regulated learning and digital literacy), and teacher support is more likely to meet the need for relatedness, and less likely to meet the need for autonomy. These findings refine our understanding of the application of self-determination theory and expand pedagogical considerations and the design of AI applications and teaching practices.

5. Conclusions

This study examines student behavior to use artificial intelligence in accounting courses. UTAUT framework adds ICT experience and competency variables to understand this behavior. The results show that ChatGPT and Canva are the most frequently used AI in accounting courses. SEM-PLS analysis shows that students' intention to use AI is more influenced by its effort and performance expectancy, while social influence is insignificant. Student behavior in using AI is significantly influenced by intention, experience, and competence of ICT, while facilitating conditions do not significantly impact actual behavior. Students believe that the use of AI for lectures is a must because it can increase their productivity. The use of AI is also considered easy to do. Therefore, they will continue to use it to support their lecture activities. Their ICT competence and experience will further increase the use of AI.

The limitation of this study is a limited number of respondents and methodological constraints. The research was only conducted on a limited objects in a short time, so that only a limited respondents were obtained. In addition, there were several variable measurement items that did not meet the validity test, so the variable measurement was not optimal. This has an impact on the results of the analysis obtained. Future research is recommended to expand the scope of respondents and be conducted over a longer period of time to obtain a larger number of respondents. The research

model can be added to the moderation or mediation analysis of variables relevant to the UTAUT model. AI-related ethical risks (e.g., misuse, academic dishonesty) can be analyzed for further research.

6. Declarations

6.1. Author Contributions

Conceptualization: F.F., A.N., J.T.B.S., A.A., and H.H.; Methodology: F.F., A.N.; Software: F.F., and A.N.; Validation: F.F., A.N., and H.H.; Formal Analysis: F.F., A.N., A.A., and H.H.; Investigation: F.F., A.N., and A.A.; Resources: A.N. and J.T.B.S.; Data Curation: A.N., and J.T.B.S.; Writing Original Draft Preparation: F.F., A.N., and H.H.; Writing Review and Editing: A.N., F.F., and H.H.; Visualization: F.F., and J.T.B.S.; All authors have read and agreed to the published version of the manuscript.

6.2. Data Availability Statement

The data presented in this study are available on request from the corresponding author.

6.3. Funding

Dana DPA LPPM UNNES Tahun 2025, No.: 53.14.3/UN37/PPK.11/2025.

6.4. Institutional Review Board Statement

Not applicable.

6.5. Informed Consent Statement

Not applicable.

6.6. Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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