

FACTORS INFLUENCING STUDENTS' DIGITAL ENTREPRENEURIAL INTENTION IN THE CONTEXT OF ARTIFICIAL INTELLIGENCE DEVELOPMENT

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Received: 12 March 2026; Revised: 25 April 2026; Accepted: 10 May 2026

ABSTRACT

This study examines the factors influencing students' digital entrepreneurial intention in the context of the rapid development and widespread application of artificial intelligence (AI) in learning, business, and innovation. Guided by the attitude and perceived behavioral control components of the Theory of Planned Behavior (TPB), the study proposes a model comprising five variables: AI literacy, AI self-efficacy, attitude toward digital entrepreneurship, perceived behavioral control, and digital entrepreneurial intention. Data were collected from 196 students at universities in Ho Chi Minh City who had the intention to engage in digital entrepreneurship, and the data were analyzed using the PLS-SEM method to test the proposed model and research hypotheses. The results show that all six hypotheses were supported. AI literacy and AI self-efficacy both positively affect attitude toward digital entrepreneurship and perceived behavioral control, while attitude toward digital entrepreneurship and perceived behavioral control positively influence digital entrepreneurial intention. The study provides useful implications for universities in enhancing AI-related capabilities and fostering students' digital entrepreneurial spirit.

Keywords: AI literacy, AI self-efficacy, artificial intelligence, digital entrepreneurial intention, students.

1. INTRODUCTION

In recent years, artificial intelligence has evolved from supporting technology into a critical infrastructure for learning, innovation, and value creation in the digital economy. UNESCO [1] notes that the diffusion of generative artificial intelligence is advancing faster than the adaptive capacity of educational governance frameworks, while also emphasizing the need to develop the capacity to use AI safely, ethically, and in a human-centered manner within educational institutions. In higher education, many universities have begun issuing AI guidelines, redesigning teaching and learning activities, and strengthening students' AI-related capacities, indicating that AI is becoming an increasingly important component of the contemporary higher education environment [2].

In parallel with this transformation, digital entrepreneurship has emerged as a promising pathway for university students. Digital technologies and AI can lower barriers to market entry, support the development of new products, services, processes, and business models, facilitate the identification of market opportunities, and reduce operational costs [3]–[5]. Previous studies have shown that students' digital entrepreneurial intention is influenced by factors such as attitude, self-efficacy, digital entrepreneurial knowledge, and digital entrepreneurship education [6]–[9]. More recent research suggests that AI-related capabilities, particularly AI literacy and

AI adoption, may play an important role in shaping entrepreneurial intention in digital contexts [9], [10]. These findings indicate that the formation of digital entrepreneurial intention among students should be examined not only from the perspective of general entrepreneurial cognition, but also from the perspective of AI-related knowledge and capabilities.

However, despite the growing body of research on digital entrepreneurship and AI adoption, prior studies have mainly examined digital entrepreneurship education, general self-efficacy, technology adoption, or AI adoption as separate predictors of entrepreneurial intention. Less attention has been paid to how AI literacy and AI self-efficacy jointly shape students' attitudes toward digital entrepreneurship and perceived behavioral control, which subsequently influence their digital entrepreneurial intention. This gap is particularly relevant in emerging-economy contexts such as Vietnam, where the role of AI-related capabilities in shaping students' digital entrepreneurial intention remains underexplored. In addition, although the Theory of Planned Behavior (TPB) has been widely used to explain entrepreneurial intention [11], further empirical evidence is needed to clarify how AI-related capabilities can be integrated into this theoretical framework to explain students' intention to pursue digital entrepreneurship.

Accordingly, this study aims to analyze the factors influencing students' digital entrepreneurial intention in the context of AI development, drawing on the attitude and perceived behavioral control components of TPB. Specifically, the study examines whether AI literacy and AI self-efficacy predict students' attitudes toward digital entrepreneurship and perceived behavioral control and whether these two TPB components, in turn, predict digital entrepreneurial intentions. By doing so, the study contributes to the literature by providing empirical evidence on the role of AI-related capabilities in shaping students' digital entrepreneurial intentions. The findings also provide practical implications for universities in designing AI-related training activities, strengthening students' confidence in using AI, and fostering their readiness for digital entrepreneurship.

2. LITERATURE REVIEW

2.1. Theoretical Background

2.1.1. Theory of Planned Behavior

The Theory of Planned Behavior (TPB), proposed by Ajzen [11], is one of the most widely used theoretical frameworks for explaining and predicting human behavior across a variety of contexts. TPB posits that behavioral intention is the most immediate antecedent of actual behavior and that behavioral intention is influenced by three main components: attitude toward the behavior, subjective norm, and perceived behavioral control.

TPB has been widely applied to explain behaviors in the fields of learning, consumption, technology, and entrepreneurship. It provides an appropriate foundation for explaining students' digital entrepreneurial intentions because attitude toward the behavior, subjective norm, and perceived behavioral control are theorized as direct antecedents of behavioral intention. In entrepreneurship research, TPB is particularly useful for explaining why individuals develop entrepreneurial intentions and how strongly they intend to perform entrepreneurial behavior [12]-[14]. Although subjective norm is an important component of TPB, the present study focuses specifically on attitude and perceived behavioral control because these two constructs are more directly aligned with the AI-related antecedents examined in this research. AI literacy mainly reflects students' understanding of AI and its practical applications, while AI self-efficacy reflects their confidence in using AI. Therefore, these two factors are expected to shape students' personal evaluations of digital entrepreneurship and their perceived ability to engage in such behavior. The exclusion of

subjective norm does not imply that social influence is unimportant; rather, it reflects the specific scope of this study, which emphasizes the cognitive and capability-based mechanisms through which AI-related factors influence digital entrepreneurial intention. Accordingly, this study draws on selected components of TPB rather than testing the complete TPB framework.

2.1.2. Digital Entrepreneurial Intention

According to Ajzen [11], intention is the most immediate predictor of behavior; the stronger the intention, the greater the likelihood that an individual will perform the behavior. In the field of entrepreneurship, entrepreneurial intention is regarded as a proximal antecedent of entrepreneurial behavior and may be shaped by cognitive, motivational, and individual factors [15]. Mohan [16] suggests that individuals with entrepreneurial intentions are more likely to recognize economic opportunities than those with little or no interest in entrepreneurship. Digital entrepreneurship refers to the use of digital technologies and online platforms to create, launch, and scale new ventures, products, or services [6]. Accordingly, digital entrepreneurial intention may be understood as the degree of an individual's willingness and desire to engage in entrepreneurial activities through digital technologies, platforms, and business environments. For university students, digital entrepreneurial intention is particularly important because students generally have substantial exposure to emerging technologies and may possess the capacity to adapt to technology-enabled business models. Recent studies have also identified digital entrepreneurial intention as an important indicator of students' willingness to pursue digital entrepreneurial activities and careers [6], [7], [12], [14].

2.2. Research Hypotheses

2.2.1. AI Literacy

In the context of the digital economy, AI literacy can be regarded as a cognitive resource that helps students better understand AI technologies, identify new business opportunities, and evaluate digital entrepreneurship more positively. AI literacy refers to the extent to which an individual possesses fundamental knowledge about artificial intelligence, including an understanding of what AI is, how it works, and how it can be applied in practice [17]. This concept does not emphasize programming ability or advanced technical expertise, but instead focuses primarily on foundational knowledge, critical thinking about the use of AI, and awareness of ethical issues associated with this technology [18]. Sharma et al. [10] report that AI adoption is positively associated with attitudes toward digital entrepreneurship, while Zulfqar et al. [19] indicate that the perceived value, usefulness, and ease of use of AI tools may shape students' attitudes toward AI-supported learning and entrepreneurship. In addition to shaping attitudes, AI literacy may also enhance perceived behavioral control. When students understand AI principles, tools, and potential applications, they may be more likely to perceive digital entrepreneurship as feasible and within their capacity to undertake [10]. Liu et al. [20] further suggest that greater AI literacy may reduce AI-related anxiety and uncertainty, thereby strengthening individuals' perceived ability to engage with AI technologies. Therefore, the study proposes the following hypotheses:

H1: AI literacy positively affects attitude toward digital entrepreneurship.

H2: AI literacy positively affects perceived behavioral control.

2.2.2. AI Self-Efficacy

Wang and Chuang [21] define AI self-efficacy as an individual's general belief in their ability to use and interact with AI. In the educational context, Bewersdorff et al. [22] define AI self-efficacy as students' confidence in their ability to use and interact with AI technologies and applications, as well as to understand and learn about them. This sense of confidence may reduce technology-related anxiety, increase perceptions of AI-related benefits, and lead students to

evaluate digital entrepreneurial activities more positively. Kim [23] shows that study on attitudes toward generative AI tools shows that digital self-efficacy is positively associated with users' attitudes, both directly and indirectly through perceived AI benefits. Similarly, research on digital entrepreneurial intention indicates that self-efficacy may strengthen entrepreneurial intention through attitudes toward entrepreneurship [24]. These findings suggest that when students believe they are capable of using and interacting effectively with AI, they may experience less anxiety about emerging technologies and be more likely to recognize the practical benefits that AI offers for business and entrepreneurial activities.

In addition to shaping favorable attitudes, AI self-efficacy may strengthen students' perceptions of their ability to perform and manage tasks associated with digital entrepreneurship. When students believe that they can use AI effectively, they are likely to experience less technology-related apprehension and greater confidence in their ability to undertake digital entrepreneurial activities. This argument is consistent with recent evidence showing that perceived AI competence is positively related to perceived behavioral control in the context of students' digital entrepreneurial intention [25]. Similarly, AI adoption has been found to enhance young people's perceived behavioral control over digital entrepreneurial activities [10]. In addition, Ferreira et al. [26] show that personal factors such as self-efficacy, skills, and opportunity recognition are important predictors of perceived behavioral control. On this basis, AI self-efficacy is expected to positively influence students' perceived behavioral control in the context of digital entrepreneurship. Therefore, the following hypotheses are proposed:

H3: AI self-efficacy positively affects attitude toward digital entrepreneurship.

H4: AI self-efficacy positively affects perceived behavioral control.

2.2.3. Attitude toward Digital Entrepreneurship

Attitude toward digital entrepreneurship reflects an individual's favorable or unfavorable evaluation of engaging in digital entrepreneurial activities and is an important antecedent of digital entrepreneurial intention. According to Sharma et al. [10], positive attitudes arising from the perceived usefulness of AI and digital technologies are associated with stronger intentions to pursue digital entrepreneurial activities. Duong [27] indicates that study of 1,061 university students indicates that attitude functions as an important psychological mechanism through which GenAI-supported entrepreneurial education contributes to digital entrepreneurial intention. Similarly, favorable attitudes can increase the perceived attractiveness and desirability of entrepreneurship as a future career option [28]. Accordingly, the following hypothesis is proposed:

H5: Attitude toward digital entrepreneurship positively affects digital entrepreneurial intention.

2.2.4. Perceived Behavioral Control

Perceived behavioral control (PBC) reflects an individual's perception of the ease or difficulty of performing a behavior and the extent to which the behavior is perceived as being under their control [11]. Within the TPB framework, individuals who perceive greater control over digital entrepreneurial activities are more likely to develop stronger intentions to engage in such activities. Sharma et al. [10] identify PBC as a key determinant of readiness to engage in digital entrepreneurship, particularly when individuals believe that they possess the technological capabilities required to perform entrepreneurial tasks. In the context of rapid technological change, confidence in using AI and related digital tools may strengthen students' perceptions of the feasibility of establishing and managing entrepreneurial ventures [29]. When individuals perceive that they possess sufficient technical skills and access to relevant support and resources, they may encounter fewer perceived barriers and develop stronger entrepreneurial intentions [30]. Accordingly, the following hypothesis is proposed:

H6: Perceived behavioral control positively affects digital entrepreneurial intention.

2.2.5. Research Model

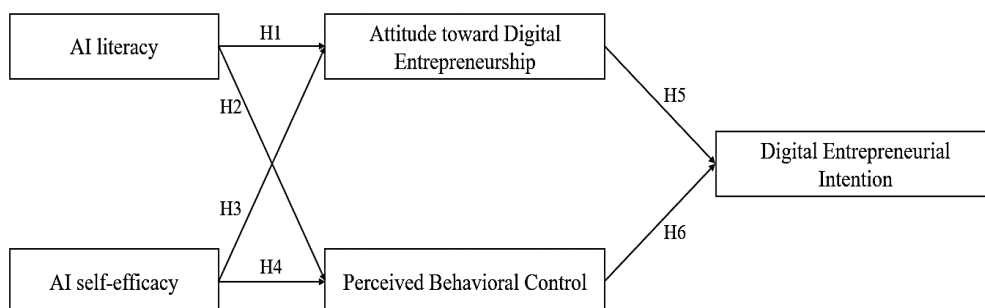


Figure 1. Proposed Research Model

Source: Proposed by the authors, 2026

3. METHODOLOGY

This study was conducted in two phases, comprising qualitative and quantitative research, to ensure that the measurement scales were appropriate for the research context and that the proposed model could be systematically tested. The qualitative phase was conducted first to revise, supplement, and refine the measurement scales for examining students' digital entrepreneurial intention amid the development of artificial intelligence. At this stage, the authors conducted a focus group discussion involving lecturers, entrepreneurship experts, and students with digital entrepreneurial intentions. The discussion focused on assessing the clarity of the wording and the contextual appropriateness of each measurement item.

After the measurement scales were refined and finalized, the quantitative phase was conducted through a survey administered both in person and online via Google Forms. All measurement items were assessed using a five-point Likert scale ranging from 1 ("strongly disagree") to 5 ("strongly agree"). The respondents were students enrolled at universities in Ho Chi Minh City who reported an intention to engage in digital entrepreneurship amid the rapid development of digital technologies and AI.

Construct	Items	Measurement item
AI Literacy Adapted from Nong et al. [33]	AL1	I understand the basic concepts and functions of artificial intelligence relevant to digital entrepreneurship.
	AL2	I can identify and select appropriate AI tools for developing digital entrepreneurial ideas or projects.
	AL3	I know how to verify the accuracy and reliability of AI-generated information when using it for digital entrepreneurial activities.
	AL4	I am aware of the risks, algorithmic biases, and ethical issues associated with applying AI in digital entrepreneurial activities.
AI self-efficacy	AISE1	I am confident that I can use AI tools to support the development of digital entrepreneurial ideas.
	AISE2	I am confident that I can apply AI tools to perform tasks related to digital entrepreneurial projects.

Adapted from Barbeite and Weiss [34]	AISE3	I am confident that I can handle basic difficulties that arise when using AI to implement digital entrepreneurial ideas.
	AISE4	I am confident that I can learn and use new AI tools when needed for digital entrepreneurial activities.
Attitude toward Digital Entrepreneurship Adapted from Liñán and Chen [35]	ATT1	For me, digital entrepreneurship offers more advantages than disadvantages.
	ATT2	Pursuing a career in digital entrepreneurship is attractive to me.
	ATT3	If I had the opportunity and necessary resources, I would like to start a digital venture.
	ATT4	Engaging in digital entrepreneurship would give me a sense of satisfaction.
Perceived Behavioral Control Adapted from Liñán and Chen [35]	PBC1	I believe that I am capable of starting and sustaining a digital venture.
	PBC2	I feel prepared to establish a viable digital venture.
	PBC3	I believe that the process of creating a digital venture is largely under my control.
Digital Entrepreneurial Intention Adapted from Liñán and Chen [35]	DEI1	I will make every effort to start and operate my own digital venture.
	DEI2	I am determined to establish a digital venture in the future.
	DEI3	I firmly intend to start a digital venture someday.

A total of 250 questionnaires were distributed. After data collection and screening, 196 usable questionnaires were retained, yielding a usable-response rate of 78.4%. Questionnaires were excluded mainly because of incomplete responses, straight-lining, whereby respondents selected the same response option for all items, or inconsistent response patterns. The final sample size ($N = 196$) exceeded the minimum requirement of 68 observations determined using G*Power 3.1 for a fixed-model multiple regression analysis with two predictors, a significance level of 0.05, statistical power of 0.80, and a medium effect size of $f^2 = 0.15$. The sample also satisfied the recommended sample-size considerations for PLS-SEM [36] and was therefore considered adequate for evaluating the structural model. The retained responses were subsequently coded and analyzed using PLS-SEM to test the proposed hypotheses.

4. RESULTS AND DISCUSSION

4.1. Description of the Survey Sample

The survey sample consisted of 196 respondents. In terms of gender, there were 109 male students, accounting for 56% of the sample, and 87 female students, accounting for 44%. Regarding year of study, fourth-year students represented the largest proportion, with 72 respondents (37%), followed by third-year students with 56 respondents (29%), second-year students with 49 respondents (25%), and first-year students with 19 respondents (10%). This indicates that the sample was more concentrated among final-year students, who may already have clearer career awareness and entrepreneurial orientation.

In terms of academic major, students in Economics accounted for the largest proportion, with 86 respondents (44%), followed by Information Technology with 75 respondents (38%), while students from other majors accounted for 35 respondents (18%). This structure is reasonably aligned with the research topic of digital entrepreneurship in the context of AI, as it includes both business-oriented and technology-oriented groups. Regarding the level of AI usage, 100% of the students in the sample reported using AI on a daily basis. This suggests

that the respondents had a very high level of exposure to and use of AI technologies, which is appropriate for a study on digital entrepreneurship.

4.2. Measurement Model

The results of Harman's single-factor test showed that the first factor accounted for 35.421% of the total variance, which was below the 50% threshold. Therefore, common method bias (CMB) was not considered a serious concern in this study.

As presented in Table 1, all constructs met the requirements for indicator reliability, internal consistency reliability, and convergent validity. The outer loadings ranged from 0.764 to 0.902, all exceeding the recommended threshold of 0.70. In addition, the outer VIF values ranged from 1.520 to 2.424, indicating no significant collinearity concerns among the indicators. The Cronbach's alpha, rho_A, and composite reliability (CR) values were all greater than 0.70, confirming satisfactory internal consistency reliability. Furthermore, the average variance extracted (AVE) values ranged from 0.626 to 0.750, all exceeding the minimum threshold of 0.50. Overall, these results indicate that the measurement scales demonstrate good reliability and that all constructs achieve adequate convergent validity.

Table 1. Construct Reliability and Convergent Validity

	Outer loadings	VIF	Cronbach's alpha	rho_A	CR	AVE
AI literacy	0.814–0.878	1.961–2.424	0.867	0.870	0.909	0.715
AI self-efficacy	0.780–0.834	1.599–1.716	0.813	0.824	0.876	0.64
Attitude	0.764–0.819	1.520–1.815	0.801	0.802	0.870	0.626
Digital Entrepreneurial Intention	0.857–0.873	1.836–1.981	0.828	0.829	0.897	0.745
Perceived Behavioral Control	0.846–0.902	1.821–2.226	0.833	0.842	0.900	0.750

Source: Data analysis results, 2026

Table 2 provides evidence of discriminant validity based on the Fornell–Larcker criterion. Specifically, the square roots of the AVE for AI literacy (0.846), AI self-efficacy (0.800), Attitude (0.791), and Digital Entrepreneurial Intention (0.863) are all greater than their corresponding inter-construct correlations. This indicates that each construct shares more variance with its own indicators than with other constructs in the model, supporting adequate discriminant validity. Therefore, the constructs appear to be empirically distinct and represent different theoretical concepts.

Table 2. Discriminant Validity (Fornell-Larcker Criteria)

	AI literacy	AI self-efficacy	Attitude	Digital Entrepreneurial Intention	Perceived Behavioral Control
AI literacy	0.846				
AI self-efficacy	0.422	0.800			
Attitude	0.375	0.370	0.791		
Digital Entrepreneurial Intention	0.313	0.348	0.499	0.863	
Perceived Behavioral Control	0.434	0.370	0.279	0.530	0.866

Source: Data analysis results, 2026

The HTMT analysis further confirmed discriminant validity, as all HTMT values ranged from 0.333 to 0.635, which are well below the conservative threshold of 0.85 (see Table 3). These results indicate that the constructs are empirically distinct from one another and capture different theoretical concepts. Therefore, the measurement model demonstrates satisfactory discriminant validity based on the HTMT criterion.

Table 3. Discriminant Validity (HTMT Ratio)

	AI literacy	AI self-efficacy	Attitude	Digital Entrepreneurial Intention	Perceived Behavioral Control
AI literacy					
AI self-efficacy	0.508				
Attitude	0.446	0.455			
Digital Entrepreneurial Intention	0.366	0.418	0.611		
Perceived Behavioral Control	0.508	0.441	0.333	0.635	

Source: Data analysis results, 2026

Table 4. Explanatory Power, Predictive Relevance, and Effect Sizes

Endogenous construct	R ²	Adjusted R ²	Q ² predict	Relationship	f ²	Effect size
Attitude	0.195	0.187	0.168	AI literacy → Attitude	0.072	Small
				AI self-efficacy → Attitude	0.068	Small
Perceived Behavioral Control	0.231	0.223	0.203	AI literacy → Perceived Behavioral Control	0.122	Small
				AI self-efficacy → Perceived Behavioral Control	0.055	Small
Digital Entrepreneurial Intention	0.415	0.409	0.137	Attitude → Digital Entrepreneurial Intention	0.229	Medium
				Perceived Behavioral Control → Digital Entrepreneurial Intention	0.283	Medium

Source: Data analysis results, 2026

As shown in Table 4, the R² values indicate that AI literacy and AI self-efficacy explain 19.5% of the variance in Attitude and 23.1% of the variance in Perceived Behavioral Control. Attitude and Perceived Behavioral Control jointly explain 41.5% of the variance in Digital Entrepreneurial Intention. The f² values show small effects of AI literacy and AI self-efficacy on Attitude and Perceived Behavioral Control, whereas Attitude and Perceived Behavioral Control have medium effects on Digital Entrepreneurial Intention. Furthermore, all Q²predict values are greater than zero, indicating that the model demonstrates predictive relevance for all endogenous constructs.

4.3. Structural Model

After confirming reliability, convergent validity, and discriminant validity in the measurement model, we proceeded to test the structural relationships among the constructs (see Figure 2). The structural model examined the hypothesized paths among the proposed variables. Using bootstrapping analysis with 5,000 subsamples, we assessed the significance and strength of each relationship in order to evaluate their effects on students' digital entrepreneurial intention. The results revealed that all six hypothesized relationships were empirically supported, as all paths showed positive and statistically significant effects (see Table 4).

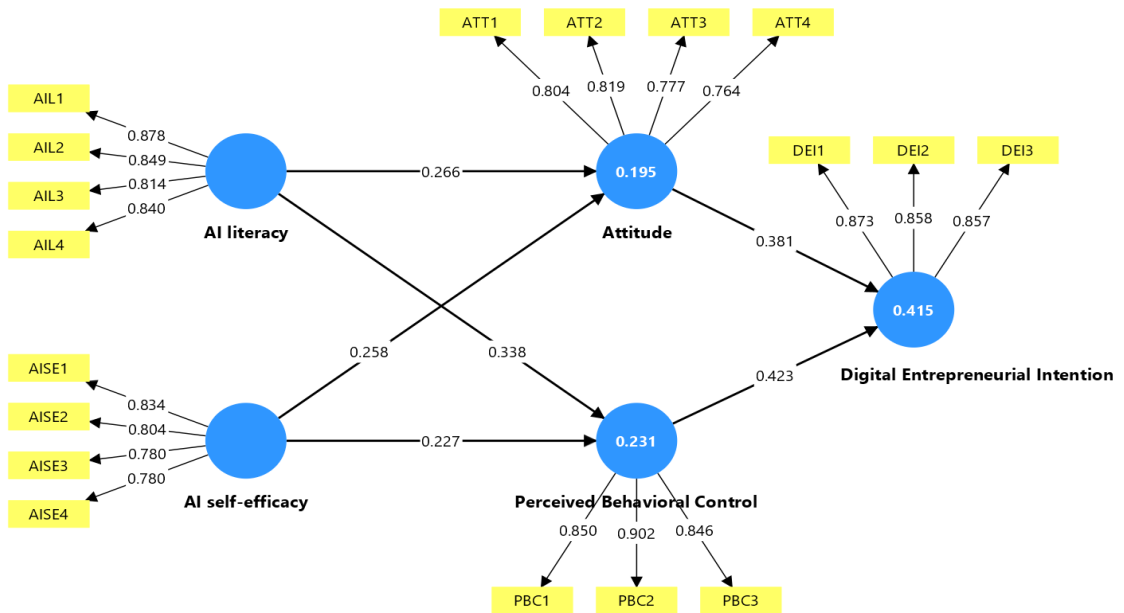


Figure 2. Structural Model

Source: Data analysis results, 2026

Table 4. Hypothesis Test Results

	Original sample	Sample mean	Std Dev	T Value	P values	Result
AI literacy → Attitude	0.266	0.265	0.082	3.241	0.001	Significant
AI literacy → Perceived Behavioral Control	0.338	0.340	0.087	3.893	0.000	Significant
AI self-efficacy → Attitude	0.258	0.262	0.080	3.215	0.001	Significant
AI self-efficacy → Perceived Behavioral Control	0.227	0.230	0.086	2.638	0.008	Significant
Attitude → Digital Entrepreneurial Intention	0.381	0.384	0.064	5.929	0.000	Significant
Perceived Behavioral Control → Digital Entrepreneurial Intention	0.423	0.423	0.070	6.092	0.000	Significant

Source: Data analysis results, 2026

AI literacy has a positive effect on Attitude ($\beta = 0.266$, $t = 3.241$, $p = 0.001$) and Perceived Behavioral Control ($\beta = 0.338$, $t = 3.893$, $p < 0.001$). Similarly, AI self-efficacy positively influences Attitude ($\beta = 0.258$, $t = 3.215$, $p = 0.001$) and Perceived Behavioral Control ($\beta = 0.227$, $t = 2.638$, $p = 0.008$). In addition, Attitude has a positive and significant effect on Digital Entrepreneurial Intention ($\beta = 0.381$, $t = 5.929$, $p < 0.001$), while Perceived Behavioral Control exerts the strongest effect on Digital Entrepreneurial Intention ($\beta = 0.423$, $t = 6.092$, $p < 0.001$). Regarding the explanatory power of the model, the R^2 values indicate that AI literacy and AI self-efficacy explain 19.5% of the variance in Attitude and 23.1% of the variance in Perceived Behavioral Control, while Attitude and Perceived Behavioral Control together explain 41.5% of the variance in Digital Entrepreneurial Intention. Overall, these findings support all the proposed hypotheses and indicate that the model has satisfactory explanatory power.

4.4. Discussion

All six hypotheses were supported, thereby confirming that the proposed model is meaningful in explaining students' digital entrepreneurial intention in the context of artificial intelligence development. Both AI literacy and AI self-efficacy played positive roles in shaping attitudes toward digital entrepreneurship and perceived behavioral control, which in turn enhanced digital entrepreneurial intention. These findings suggest that AI-related capabilities should not be viewed merely as technical skills, but also as important cognitive and psychological resources that influence how students evaluate digital entrepreneurship and how capable they feel in pursuing it. In this sense, the study extends the application of the Theory of Planned Behavior by showing that AI-related factors can serve as antecedents of attitude and perceived behavioral control in the digital entrepreneurship context.

First, AI literacy had a positive effect on both attitude toward digital entrepreneurship and perceived behavioral control. This finding is consistent with previous studies suggesting that AI literacy helps students more clearly identify digital business opportunities while also making digital entrepreneurship appear more feasible. This result is in line with Sharma et al. [10] and Duong [9], both of whom emphasized the role of AI-related capabilities in stimulating the cognitive and psychological mechanisms associated with digital entrepreneurial intention. A possible explanation is that students with higher AI literacy are better able to understand how AI tools can be used to generate ideas, analyze markets, automate tasks, and support the development of digital products or services. As a result, they may perceive digital entrepreneurship as more attractive and less uncertain. This finding is important because it indicates that AI literacy contributes not only to technological understanding, but also to the formation of entrepreneurial cognition among students.

Second, AI self-efficacy also positively influenced both attitude and perceived behavioral control. This suggests that when students have confidence in their ability to use AI, they are more likely to view digital entrepreneurship positively and feel that they possess sufficient capability to engage in such behavior. This finding is consistent with Duong [9], Sharma et al. [10], and Simba et al. [31], whose studies all confirm that self-efficacy is an important factor in strengthening perceived capability and entrepreneurial intention in digital environments. This result further implies that confidence in using AI may reduce students' perceived technological barriers and increase their sense of readiness for digital venture creation. In other words, students are more likely to consider digital entrepreneurship feasible when they believe that they can interact with AI tools, apply them to practical tasks, and use them to solve business-related problems. Therefore, AI self-efficacy appears to be a key psychological condition that transforms AI exposure into entrepreneurial readiness.

Third, the study confirms that both attitude toward digital entrepreneurship and perceived behavioral control positively affect digital entrepreneurial intention, which is consistent with the foundation of the Theory of Planned Behavior [11]. This result is consistent with Rahaman

et al. [32] and Sharma et al. [10], who likewise identified these two variables as important predictors of digital entrepreneurial intention. However, in this study, perceived behavioral control had a stronger effect than attitude, suggesting that, for students, perceiving that they are capable of engaging in digital entrepreneurship may be more important than merely evaluating digital entrepreneurship positively. This finding is particularly meaningful in the student context because digital entrepreneurship often requires not only interest or positive evaluation, but also a sense of practical capability, including technological skills, access to resources, problem-solving ability, and confidence in implementation. Therefore, universities should not focus only on encouraging students to view digital entrepreneurship positively; they also need to provide learning experiences that help students feel capable of initiating and managing digital entrepreneurial activities.

Another point worth noting is the explanatory power of the model. AI literacy and AI self-efficacy explained 19.5% of the variance in attitude and 23.1% of the variance in perceived behavioral control, while attitude and perceived behavioral control explained 41.5% of the variance in digital entrepreneurial intention. These results indicate that the model has a reasonable ability to explain students' intention, especially at the final intention stage. However, the relatively modest R^2 values for attitude and perceived behavioral control also suggest that students' perceptions may be shaped by other factors beyond AI literacy and AI self-efficacy, such as entrepreneurial education, institutional support, family encouragement, peer influence, prior startup experience, and access to technological or financial resources. This implies that AI-related capabilities are important but not sufficient conditions for developing digital entrepreneurial intention.

Overall, students' digital entrepreneurial intention is influenced not only by positive perceptions of AI but also by their level of confidence and their perceived ability to control entrepreneurial behavior. The findings indicate that AI literacy and AI self-efficacy help build the cognitive and psychological foundation for digital entrepreneurship, while attitude and perceived behavioral control act as more immediate motivational mechanisms leading to intention. This implies that, in order to foster the spirit of digital entrepreneurship, universities should pay simultaneous attention to enhancing AI literacy, strengthening students' confidence in using AI, and improving their ability to apply AI to practical business ideas. Such efforts may include AI-integrated entrepreneurship courses, practical workshops, startup simulations, mentoring programs, and opportunities for students to develop AI-based business prototypes. These activities can help students move from simply knowing about AI to feeling capable of using AI for entrepreneurial action.

5. CONCLUSION AND MANAGERIAL IMPLICATIONS

5.1. Conclusion

This study was conducted to analyze the factors influencing students' digital entrepreneurial intention in the context of artificial intelligence (AI) development. Drawing specifically on two components of the Theory of Planned Behavior (TPB), attitude toward the behavior and perceived behavioral control, the research model examined the roles of AI literacy and AI self-efficacy in shaping attitude toward digital entrepreneurship and perceived behavioral control, which in turn influence digital entrepreneurial intention.

The findings show that all six hypotheses were supported. Specifically, both AI literacy and AI self-efficacy had positive effects on attitude toward digital entrepreneurship and perceived behavioral control. At the same time, both attitude and perceived behavioral control positively influenced students' digital entrepreneurial intention. Among these factors, perceived behavioral control exerted a stronger effect than attitude, indicating that, in addition

to viewing digital entrepreneurship positively, students particularly need to feel that they possess sufficient capability to carry out such behavior in practice.

5.2. Managerial Implications

Based on the findings, several managerial implications can be proposed for universities and student entrepreneurship support units.

First, universities should pay greater attention to enhancing students' AI literacy by integrating AI-related content into academic programs, especially in courses on innovation, digital technology, and entrepreneurship. Training content should not stop at introducing concepts or tools but should also help students understand how AI can be applied to identify business opportunities, develop business models, and create digital products or services.

Second, universities need to strengthen activities that help students improve AI self-efficacy, that is, their confidence in using AI in both learning and practice. This can be achieved through hands-on workshops, simulation projects, business idea competitions involving AI applications, or experiential programs using AI tools for problem-solving. When students feel that they can use AI effectively, they are more likely to develop a positive attitude toward digital entrepreneurship and greater confidence in their ability to implement their own ideas.

Third, university-based entrepreneurship support centers should shift their focus from merely inspiring students to strengthening students' perceived ability to implement entrepreneurial ideas. The findings indicate that perceived behavioral control is the strongest determinant of digital entrepreneurial intention. Therefore, in addition to organizing seminars or panel discussions, universities should develop mentoring programs, idea incubation programs, project development guidance, and connections with technology experts and businesses so that students perceive digital entrepreneurship as not only attractive but also genuinely feasible.

Fourth, entrepreneurship education and support activities should be more closely aligned with the realities of the digital economy. Students should be exposed to real business cases, AI-based startup models, and opportunities to collaborate with businesses, incubators, or innovation communities. This would help students not only understand AI at a theoretical level but also recognize its practical value in creating and developing digital startup projects.

5.3. Research Limitations and Future Research Directions

Despite its contributions, this study has several limitations. First, the sample was limited to 196 university students in Ho Chi Minh City who intended to engage in digital entrepreneurship. In addition, all respondents reported using AI on a daily basis. Although this characteristic is suitable for examining digital entrepreneurial intention in an AI-intensive context, it may limit the generalizability of the findings to students in other regions, students with lower levels of AI exposure, or those who do not use AI regularly. Second, the research model focused only on AI literacy, AI self-efficacy, attitude, and perceived behavioral control. In reality, students' digital entrepreneurial intention may also be influenced by many other factors, such as the entrepreneurial support environment, university policies, practical experience, social norms, or access to technological and financial resources. Third, the study did not examine the role of moderating variables in relationships among the constructs. In practice, the effects of AI literacy or AI self-efficacy on digital entrepreneurial intention may vary depending on factors such as academic major, level of AI usage, experience in entrepreneurial activities, or degree of institutional support. Fourth, the model did not test broader mediating mechanisms beyond attitude and perceived behavioral control, although factors such as personal motivation, perceived feasibility, or technological readiness may play important roles in shaping students' digital entrepreneurial intention.

Future studies may expand the model by incorporating additional independent variables, moderating variables, and mediating variables in order to clarify the mechanisms underlying

these relationships in the context of digital entrepreneurship. Future research should also use larger and more diverse samples across different regions and compare students with different levels of AI usage to improve the generalizability of the findings. At the same time, comparisons across different student groups may provide further empirical evidence and enrich the overall findings of the study.

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