ARTIFICIAL INTELLIGENCE AND ENTREPRENEURSHIP EDUCATION: INCREASING ENTREPRENEURIAL INTENTIONS AMONG FUTURE ENTREPRENEURS IN BANDUNG CITY

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ABSTRACT

The rising number of young entrepreneurs in Bandung City is now a rapidly growing phenomenon. The growth of creative industries is inseparable from the contributions of young entrepreneurs, who continually develop new innovations. However, despite this positive trend, challenges remain in effectively cultivating entrepreneurial intentions among students. One of the key challenges is ensuring that entrepreneurship education effectively enhances students' motivation and readiness to pursue entrepreneurial careers. This issue highlights the need to explore additional factors that can strengthen the impact of entrepreneurship education.

This research aims to determine the effect of entrepreneurship education on the entrepreneurial intentions of business students in Bandung City and to evaluate the role of artificial intelligence (AI) as a mediating factor in this relationship. The study investigates whether integrating AI tools within entrepreneurship education can enhance students' entrepreneurial intentions by fostering creativity, decision-making, and problem-solving skills. Data were collected through surveys conducted at various universities in Bandung offering management or business programs, targeting students majoring in these fields. A total of 400 respondents participated in the survey, and the data were analyzed using Structural Equation Modeling (SEM).

The results of this study show that entrepreneurship education has a significant positive effect on entrepreneurial intention. Furthermore, artificial intelligence significantly mediates the impact of entrepreneurship education on entrepreneurial intentions. These findings suggest that integrating AI tools within entrepreneurship education can enhance students' entrepreneurial mindset and motivation.

This study contributes to the literature by providing empirical evidence of the mediating role of AI in entrepreneurship education. It offers valuable insights for educators and policymakers to optimize teaching strategies through the integration of emerging technologies, ultimately fostering a more innovative and entrepreneurial generation.

Keywords: *Entrepreneurship Education, Artificial Intelligence, Entrepreneurial Intention*

1. INTRODUCTION

In recent years, entrepreneurial intention has significantly increased, particularly among academics such as students. Entrepreneurship is essential for economic growth, social progress, innovation, and job creation, making it a crucial component of national development [1]. Understanding the factors that influence entrepreneurial intention is key to fostering this behavior [2].

Entrepreneurship education has gained significant attention due to its role in revitalizing stagnant economies, addressing social issues through innovative skills, and enhancing students' capabilities [3]. Universities play a critical role in promoting entrepreneurial development by providing entrepreneurship education [4,5]. In Indonesia, the government and institutions have initiated programs to support young entrepreneurs. However, challenges remain, including the uneven distribution of entrepreneurship education,

predominantly concentrated on Java, leading to resource disparities [6].

Moreover, despite the increasing interest in entrepreneurship, some studies have questioned the effectiveness of entrepreneurship education in cultivating entrepreneurial intentions [7,8]. Research indicates that students often face significant risks and uncertainties when starting businesses, including a lack of confidence and conviction that heavily influence their decision-making [9]. These challenges raise questions about how entrepreneurship education can be enhanced to effectively nurture entrepreneurial intentions. If these challenges are not addressed, the potential of young entrepreneurs in contributing to economic growth and social development may be hindered.

One potential solution lies in leveraging technological advancements, particularly Artificial Intelligence (AI), which has increasingly influenced daily life and business practices. AI enhances entrepreneurs' imagination and creativity, uncovers profitable opportunities, and improves efficiency across various sectors, including education and entrepreneurship [11,12]. According to the World Economic Forum, 70% of new businesses will rely on digital platforms, making digital skills and knowledge of emerging technologies essential for future entrepreneurs [10]. This highlights the strategic role of AI in modern entrepreneurship education, offering innovative tools to enhance learning and problem-solving.

However, despite its potential, the integration of AI in entrepreneurship education remains underexplored. There is limited empirical research examining how AI can mediate the relationship between entrepreneurship education and entrepreneurial intentions. Therefore, the present study addresses this gap by investigating the direct impact of entrepreneurship education on students' entrepreneurial intentions and evaluating the role of AI as a mediating factor. The study focuses on business students in Bandung City, a growing entrepreneurial hub, to provide context-specific insights.

This study adopts a quantitative approach using Structural Equation Modeling (SEM) to analyze the survey data collected from 400 business students in Bandung. SEM is chosen because it allows for testing complex relationships between variables, including the mediating effect of AI. By utilizing SEM, this study aims to provide a comprehensive

understanding of how entrepreneurship education and AI jointly influence entrepreneurial intentions.

This research seeks to answer the following questions:
- To what extent does entrepreneurship education influence entrepreneurial intentions among business students in Bandung City?
- How does Artificial Intelligence mediate the relationship between entrepreneurship education and entrepreneurial intentions?

By addressing these questions, this study aims to contribute to the literature by providing empirical evidence on the role of AI in entrepreneurship education. It also offers practical implications for educators and policymakers to enhance entrepreneurial intentions through the integration of emerging technologies.

2. LITERATURE REVIEW

A. Theoretical Foundations of Entrepreneurial Intention

Various studies have explored the psychological factors that shape entrepreneurial intention by applying different theoretical frameworks. The Theory of Reasoned Action (TRA) [15,16] and the Theory of Planned Behavior (TPB) [17,18] propose that an individual's intention is a key determinant of their future actions. Similarly, Triandi's Attitude-Behavior Theory [19,20] underscores the significance of attitudes in forming behavioral intentions, while Protection Motivation Theory [21] explains how perceived risks and coping strategies influence decision-making in entrepreneurial contexts.

Entrepreneurial intention itself represents a cognitive state that precedes entrepreneurial action. According to [22], it reflects an individual's commitment to establishing a business, whereas [23] defines it as the cognitive awareness that prompts the necessary steps to launch a venture. Additionally, [14] highlights that entrepreneurial intention is shaped by an individual's level of focus, competencies, and determination in starting a business.

Examining the theoretical foundations of entrepreneurial intention is crucial for understanding the psychological and behavioral drivers behind entrepreneurial decision-making. This perspective is especially relevant in the realm of entrepreneurship

education, where cultivating strong entrepreneurial intentions can contribute to higher rates of venture creation among aspiring entrepreneurs.

B. The Impact of Entrepreneurship Education on Entrepreneurial Intention

Entrepreneurship education has become an essential component in preparing university graduates for business ventures. It plays a vital role in equipping students with the necessary skills to start and manage their own businesses, making entrepreneurship an increasingly attractive career choice [2,24]. Over the years, educational institutions have actively incorporated entrepreneurship into their curricula to nurture innovation and problem-solving abilities among students [25].

Additionally, entrepreneurship education is recognized as a structured discipline designed to develop the knowledge, skills, and mindset required for self-sufficiency, profit generation, and business problem-solving [26,27]. It provides students with comprehensive training on various aspects of business development, including how to establish a business, create and implement business strategies, and manage operational challenges [28].

Despite its growing significance, the effectiveness of entrepreneurship education in fostering entrepreneurial intention remains a subject of debate. Some studies suggest that participation in entrepreneurship education positively influences students' willingness to pursue entrepreneurial careers [29,30]. However, other research indicates that formal education alone may not be sufficient in shaping strong entrepreneurial characteristics and intentions [31,8]. These contrasting perspectives highlight the need to explore additional factors— such as the quality of educational programs, hands-on experience, and external influences—that may impact the success of entrepreneurship education in cultivating entrepreneurial aspirations.

Hypothesis 1: Entrepreneurship education significantly influence on intention in entrepreneurship.

C. The Impact of Entrepreneurship Education on Artificial Intelligence

Artificial intelligence (AI) has significantly influenced various aspects of technology, society, and the economy, including the field of education. In the context of entrepreneurship education, AI presents both opportunities and challenges. On one hand, advancements in AI enhance students' learning experiences by improving decision-making processes and supporting a more dynamic educational environment. On the other hand, concerns arise regarding students' potential over-reliance on AI, which may impact their ability to develop independent problem-solving skills [32,33].

As AI continues to evolve, it is expected to bring new possibilities and challenges to entrepreneurship education. Adapting to these changes requires careful consideration of AI's role, ethical implications, and long-term effects on learning outcomes. However, research examining the intersection of AI and entrepreneurship education remains limited, with even fewer studies specifically exploring its integration into entrepreneurship courses [34].

Hypothesis 2: Entrepreneurship education significantly influence on artificial intelligence

D. The Impact of Artificial Intelligence on Entrepreneurial Intention

Research suggests that artificial intelligence (AI) can play a crucial role in fostering students' entrepreneurial intentions [35,36]. AI supports entrepreneurs in various stages of business development, including planning, designing, implementing, and evaluating their ventures [37]. In recent years, AI's integration into entrepreneurship education has shown the potential to reshape entrepreneurial thinking by providing personalized learning experiences that engage students and strengthen their interest in entrepreneurship [35].

Additionally, AI enhances opportunity recognition and facilitates decision-making through advanced data analysis, allowing students to better assess risks and identify potential business prospects [38]. As AI continues to evolve, its role in shaping entrepreneurial intentions is expected to grow, further influencing how future entrepreneurs approach business innovation and strategy

Hypothesis 3: Artificial intelligence significantly influence on entrepreneurial intention.

E. Artificial Intelligence as a Mediator

A mediation effect occurs when a third variable serves as an intermediary between two other variables. To establish a mediating variable, specific criteria must be met. According to [39], these

conditions include: (a) the mediating variable must have a significant relationship with both the independent and dependent variables; (b) there should be a notable relationship between the independent variable (X) and the mediator; (c) the mediating variable must also have a significant relationship with the dependent variable (Y); and (d) the direct effect of X on Y should be diminished or absent when the mediator is introduced [40].

In this study, artificial intelligence meets these criteria as a mediating variable by forming three direct relationships: entrepreneurship education and entrepreneurial intention (EED-EI), artificial intelligence and entrepreneurial intention (AI-EI), and entrepreneurship education and artificial intelligence (EED-AI). This positioning allows AI to function as an intermediary within the framework.

Previous research highlights that integrating artificial intelligence into entrepreneurship education enhances entrepreneurs' self-efficacy, particularly in digital environments. This increased confidence in utilizing AI contributes to a stronger entrepreneurial intention [41]. Empirical studies also indicate that students' acceptance and use of AI positively influence their inclination toward entrepreneurship [42]. Furthermore, research on Perceived Behavioral Control (PBC) suggests that PBC acts as a significant mediator between entrepreneurship education and entrepreneurial intention. These findings imply that students who effectively manage and control their use of AI tend to demonstrate a higher likelihood of pursuing entrepreneurial ventures [43].

Hypothesis 4: Artificial intelligence significantly influence on the relationship between entrepreneurship education and intention in entrepreneurship
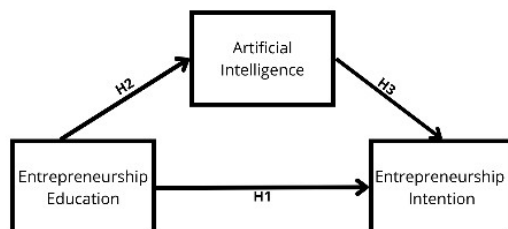

Figure 1. Conceptual Framework

3. RESEARCH METHOD

Considering the context and review of the literature variables used, the research method was developed according to Figure 1. Students majoring in management and/or business at multiple universities in the city of Bandung represented the population under analysis in this study. Data from 400 respondents were gathered for this study. The Structural Equation Model (SEM) is the analytical tool utilized to address the proposed hypotheses.

A. Respondents and Data Collection Procedures

Respondents were selected from different universities in Bandung. Data collection involved distributing online surveys to students at these universities, adhering to specific criteria: (a) active students, from the targeted universities who are in their sixth to eighth semesters, and (b) students majoring in business management and/or business. These criteria were established to ensure the accuracy and precision of the results in relation to the problem being investigated.

B. Construct Measurement

In measuring the constructs used in this study, each answer in the questionnaire outside of demographic answers will be symbolized by a Likert scale, namely a scale of 1-7. Numbers 1-7 are used to get a higher level of sensitivity of answers, with number 1 (one) representing "Strongly Disagree", up to number 7 (seven) representing "Strongly Agree". The higher the number obtained indicates the respondent's high level of agreement with the question, and vice versa.

C. Reliability Test

Based on [39], reliability indicators must be at a significant level of 0.05 and achieve minimum treshold of 0.70 to be considered reliable. A higher reliability score indicates that the instruments are free from excessive random errors and capable of yielding similar results under similar condition. A reliability indicator is assessed when a variable or group of variables is consistent with the construct to be measured [45].
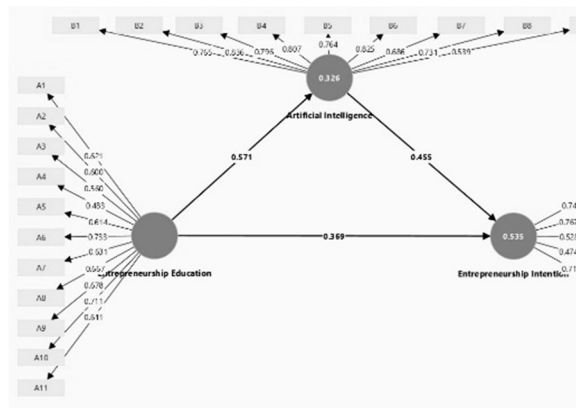
Figure 2. Results of model design and data entry, as well as PLS Algorithm results

Table 1. First Outer Loading (Reliability Indicator) Calculation

	Outer Loadings		Outer Loadings
A1	0.621	B3	0.796
A2	0.600	B4	0.807
A3	0.560	B5	0.764
A4	0.483	B6	0.825
A5	0.614	B7	0.686
A6	0.733	B8	0.731
A7	0.631	B9	0.539
A8	0.667	C1	0.745
A9	0.678	C2	0.767
A10	0.711	C3	0.528
A11	0.611	C4	0.474
B1	0.765	C5	0.714
B2	0.836		

Table 2. Second Outer Loading (Reliability Indicator) Calculation

	Outer Loadings		
A6	0.822	B5	0.778
A10	0.880	B6	0.824
B1	0.798	B8	0.744
B2	0.855	C1	0.814

B3	0.785	C2	0.757
B4	0.834	C3	0.736

In the model image, several items did not pass the reliability test, producing outer loading values below 0.70 (see Table 1-2). Therefore, these items will be cleaned. After the data is cleaned, data that passes the reliability test can be carried out for further calculations (see Figure 2).
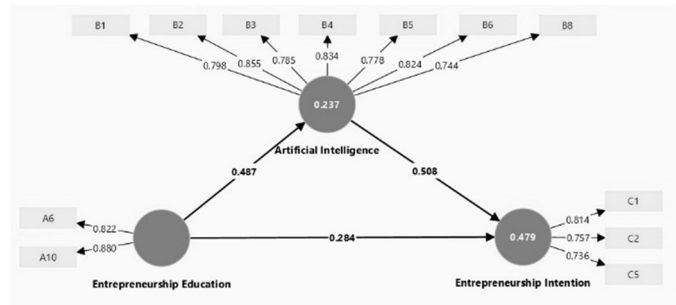

Figure 3. Model results and data that have passed Outer Loading

D. Internal Consistency (Composite Reliability)

Based on previous research, there is no definite definition of "Internal Consistency". Reference [46] used "Internal Consistency" and "Homogeneity" interchangeably, stating that a test's internal consistency or homogeneity should be independent of its length. In contrast, other researchers [47] use the term "internal consistency" which refers to the relationship between questions, while homogeneity refers to the unidimensionality of a question [48].

Conceptually, "internal consistency" can be defined as an assessment that evaluates whether all items within a measurement instrument assess the same latent construct, as suggested by [48].

In measurement, internal consistency has the criterion that the minimum value that is still acceptable for research is between 0.60 to 0.70, with the higher the value obtained, the higher the correlation level. Values between 0.70 and 0.95 are considered as a standard value to have a high level of reliability. However, a value that is too high (>0.95) is considered problematic with the assumption that the items assessed are almost identical and can be said to be repetitions (Diamantopoulos, 2012).

Table 3. Reliability and Validity Construct

	Artificial Intelligence	Entrepreneurship Education	Entrepreneurship Intention
Cronbach's Alpha	0.908	0.623	0.659
Composite Reliability (rho_a)	0.912	0.637	0.673
Composite Reliability (rho_c)	0.927	0.840	0.813
Average Variance Extracted	0.645	0.725	0.592

In the table above, it is known that each variable in this study meets the criteria for construct reliability and internal consistency. This can be seen in the "Composite Reliability (rho_a)" column, where the "Artificial Intelligence" variable has a reliability level of 0.912. The variable "Entrepreneurship Education" with a reliability level of 0.637. And the variable "Entrepreneurship Intention" with a reliability level of 0.673. Although the Entrepreneurship Education and Entrepreneurship Intention variables have a fairly small composite reliability value, they still meet the minimum requirements to be declared valid. This confirms that the measurement instrument effectively captures the intended constructs without excessive redundancy or measurement error.

E. Cronbach Alpha

Reference [50] states that a Cronbach Alpha value of 0.70 is considered adequate, with higher values indicating more variable reliability. In the study (refer to Table 3), the variable "Artificial Intelligence" has a Cronbach Alpha value of 0.908, and is declared to have a high level of validity. However, the "Entrepreneurship Education" variable has a Cronbach Alpha value of 0.623, and the "Entrepreneurship Intention" variable has a Cronbach Alpha value of 0.659. These values in theory do not meet the validity standards because they are below the value of 0.7, but values above 0.6 can still be considered valid if a variable is still in the development and exploratory stage [51]. In such cases, slight deviations from minimum threshold do not necessarily invalidate the reliability of the instrument, but may indicate the need of further research of the instruments. The variables used in this study can be stated to be reliable based on reliability testing using outer loading, composite reliability, and Cronbach alpha.

F. Validity Test

According to [52], the minimum acceptable value of AVE (Average Variance Extracted) is 0.50, with greater AVE value meaning that the construct covers over half of the variance of the items. A higher AVE value suggest that the construct has strong convergent validity, meaning that the observed variables effectively measure the underlying latent construct. If the AVE value is less than 0.50, in average, more error rate remains compared to the variance defined in the construct [53]. This situation can indicates weak convergent validity and may suggest issues such as poor item loadings, the presence of redundant or unrelated items, or a need of construct refinement. In this study, all three variables meet the minimum AVE threshold of 0.50 (refer to Table 3). This results confirm that the measurement model demonstrates adequate convergent validity, ensuring that each construct meaningfully represents its intended concept.

G. Discriminant Validity

Discriminant validity assesses the extent to which a cosntruct is empirically distinct from other construct in a model. A strong discriminant validity ensures that each construct measures a unique concept and does not excessively overlap with others. Reference [52] notes that HTMT calculations for discriminant validity tend to produce high values. Consequently, [54] recommend a maximum threshold of 0.90 is acceptible for models where construct are conceptually similar. Also, a stricter threshold of 0.85 is recommended for models with more distinct construct to ensure sufficient differentiation.

Table 4 shows that the HTMT discriminant validity results for the three variables in this study meet the required threshold, as none exceed the 0.85 limit, confirming that the construct exhibit strong discriminant validity.

Table 4. Discriminant Validity – HTMT

	Artificial Intelligence	Entrepreneurship Education	Entrepreneurship Intention
Artificial Intelligence			
Entrepreneurship Education	0.645		
Entrepreneurship Intention	0.821	0.803	

4. RESEARCH RESULTS

This section tests the hypothesis model using SEM, as shown in Figure 1. As per [55], a hypothesis is considered significant if the p-value is less than 0.05, and statistically insignificant if greater than 0.05.

Table 5. Path Coefficient

	Artificial Intelligence → Entrepreneurship Intention	Entrepreneurship Education → Artificial Intelligence	Entrepreneurship Education → Entrepreneurship Intention
Original Sample (O)	0.508	0.487	0.284
Sample Mean (M)	0.509	0.489	0.285
Standard Deviation (STDEV)	0.058	0.042	0.058
T-statistics (|O/STDEV|)	8.767	11.524	4.882
P-values	0.003	0.008	0.002

Table 6. Hypothesis Results

Hypothesis Statement	β-value (STDEV × T-Value)	P-Values	Results on Hypothesis
Entrepreneurship education has a significant influence on entrepreneurship intentions.	0.28	0.002	Significant
Entrepreneurship education has a significant influence on artificial intelligence.	0.48	0.008	Significant
Artificial intelligence has a significant influence on entrepreneurship intentions.	0.51	0.003	Significant
Artificial intelligence has a significant influence on the relationship between entrepreneurship education and entrepreneurship intentions.	0.24 (0.48 x 0.51)	0.0001	Significant

As shown in Table 6, the effect of entrepreneurship education on entrepreneurship intention is significant (β = 0.28, P = 0.002), as is the effect on artificial intelligence (β = 0.48, P = 0.008), and the effect of artificial intelligence on entrepreneurship intention (β = 0.51, P = 0.003). Thus, entrepreneurship education positively influences both entrepreneurship intention and artificial intelligence. Additionally, artificial intelligence significantly impacts entrepreneurship intention, indicating that the relationship between entrepreneurship education and entrepreneurship intention is partially mediated by artificial intelligence, as evidenced by the differences in direct and indirect effects following AI's intervention.

The mediating effect of artificial intelligence (AI) between entrepreneurship education and

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entrepreneurship intention necessitates further development and currently exhibits low validity. Nonetheless, it reflects the progress of students in leveraging AI to enhance decision-making, foster innovation, and improve work efficiency [38,41]. Educators should serve as mentors, guiding students in the ethical application of AI, with entrepreneurship education facilitating the development of their skills and promoting an entrepreneurial orientation.

5. DISCUSSION

The purpose of this study is to examine the mediating effect of artificial intelligence on the relationship between entrepreneurship education and entrepreneurship intention. It explores how entrepreneurship education influences artificial intelligence and entrepreneurship intention, and how artificial intelligence affects entrepreneurship intention. A survey was conducted with 350 target respondents, yielding a total of 400 respondents from business management students in Bandung City.

The results of the first hypothesis align with several previous studies, confirming a significant relationship between entrepreneurship education and entrepreneurship intention (β = 0.28, P = 0.002), though some studies present inconsistent findings. Numerous studies highlight the substantial impact of entrepreneurship education on entrepreneurship intention [29,30]. However, other research suggesting that entrepreneurship education does not always have a direct impact on entrepreneurship intention [31,8].

In the context of Bandung, entrepreneurship education plays a key role in fostering intentions among creative entrepreneurs, indirectly contributing to job creation, capital flow, and the generation of innovative ideas and solutions. As students engage with entrepreneurship education, their desire to pursue entrepreneurial activities can mature and strengthen.

These results provide crucial implications on how entrepreneurial intention can be formed when students in Bandung City receive entrepreneurship education. Teachers, mentors, or student companions also play a role in providing education and encouragement for students for their business development [56]. Entrepreneurship education can be a facilitator for students in increasing their entrepreneurial intention through building self-efficacy, improving soft and hard skills, and encouraging critical thinking [55].

Another thing that needs attention in developing entrepreneurship intention through entrepreneurship education is the need for a practical approach that provides direct experience for students in experiencing and developing a business, either through internships, business simulations, or business competitions. Students also need to be encouraged to develop a real business and not just as part of the curriculum.

The second hypothesis, entrepreneurship education significantly influences artificial intelligence (β = 0.48, P = 0.008). This finding suggest that entrepreneurship education not only equips individuals with business fundamental, but also enhances their ability to develop, comprehend, and apply AI technology in business context. It fosters innovative thinking, problem-solving skills, and adaptability to technological advancements, enabling students to create innovative and sustainable business solutions with the aid of AI [59].

To strengthen this relationship, entrepreneurship education should elaborate with AI technology, such as:

- AI for for Business Optimalization - Teaches students how to use AI to boost the effectiveness of marketing, customer service, or supply chain management.
- Enhances Decision Making – Helping students improve the quality of business decisions based on data-driven analysis, assisted by AI.
- Practical AI Simulations - Encourage students to undertake AI-driven business projects as part of their work, enhancing students' analysis of the usefulness and effectiveness of AI in work.

By embedding AI literacy and application into entrepreneurship education, institution can equips students with necessary tools of harness AI for innovation and competitive advantages.

The third hypothesis confirms that Artificial Intelligence significantly affects entrepreneurship intention. The findings reveal a positive effect of AI on entrepreneurship intention (β = 0.51, P = 0.003). AI offers numerous advantages to students in Bandung City by providing easy access to information, identifying market opportunities, and delivering accurate, diverse analyses of modern business trends. This strengthens students' confidence in starting businesses. AI minimizes workload, making processes more efficient and faster, thereby optimizing learning and boosting students' entrepreneurial intentions [59].

The practical implications of this study are significant for educators, institutions, and policymakers. For educators and institutions, integrating AI tools into entrepreneurship curricula is essential to enhance students' entrepreneurial competencies, creativity, and decision-making abilities. This includes incorporating data analytics, business simulations, digital marketing platforms, and virtual mentorship systems to foster innovative thinking and digital literacy. Adopting experiential learning approaches through hands-on projects and entrepreneurial case studies can increase students' Perceived Usefulness (PU) of AI, thereby enhancing their entrepreneurial intentions. Additionally, educating students on digital ethics and responsible AI usage is crucial to address data privacy, algorithmic bias, and the social implications of AI. For policymakers, supporting digital transformation in education through funding, infrastructure support, and public-private partnerships is necessary to bridge the gap between education and industry needs. Standardized guidelines for AI-integrated entrepreneurship education and fostering a digital ecosystem through digital incubators, accelerators, and training programs are recommended to empower young entrepreneurs and prepare them for digital entrepreneurship in the modern economy. By leveraging AI tools and supporting digital transformation, educators and policymakers can enhance students' entrepreneurial intentions, contributing to Bandung's vision of becoming a leading entrepreneurial hub and supporting regional economic growth through digital entrepreneurship

The fourth hypothesis, AI significantly functions as a mediator between entrepreneurship education and entrepreneurship intention. In this study, AI demonstrates a partial mediating effect, both directly and indirectly, as a significant relationship exists both before and after AI intervenes between entrepreneurship education and entrepreneurial intention. The findings suggest that AI integration in entrepreneurship education can effectively enhance students' intention to become entrepreneurs. The integration of AI in education is a critical component in modern entrepreneurship education. By leveraging AI as a learning and business development tools, students can gain a real-world entrepreneurial experience, increasing their likelihood of successful and sustain ventures. Moreover, AI can continue to support students in their business development even after graduation, fostering their transition into full-fledged entrepreneurs.

To maximize AI as a mediator between entrepreneurship education and entrepreneurship intention, students need to be introduced to how to optimize AI for business automation, market analysis, and competitive advantages. Universities also need to present AI-based projects, business competitions, incubations, and teach how to use AI in accordance with applicable ethics. Overall, incorporating AI into entrepreneurship education increases students' entrepreneurial intentions and bridges the gap between theoretical education and practical application [35,59].

Our analysis indicates that AI has a significant impact on entrepreneurship intentions, as it provides substantial support and efficiency for students in business development. AI assists young entrepreneurs in problem-solving, decision-making, strategy formulation, and offering alternative perspectives on challenges. In the modern era, AI not only offers advice but also functions as a virtual mentor, providing features such as business pitch guidance, customized feedback, product evaluations, and SWOT analysis.

Furthermore, AI broadens students' understanding of markets due to its vast reach, enabling more informed and targeted business decisions. Building a business demands critical thinking and adaptability, which AI helps students develop in a more practical and accessible manner.

Artificial intelligence (AI) provides numerous advantages for students in the context of entrepreneurial education, particularly as starting a business requires comprehensive preparation across multiple areas, which can be overwhelming. AI offers various features that assist students, such as guidance in developing business plans, conducting market and competitor analyses, formulating marketing strategies, managing finances, and attracting investors. Furthermore, AI supports students by offering insights on legal aspects, facilitating product innovation, improving time management and scheduling, enhancing soft skills, and providing motivational support, thereby helping students navigate the complexities of entrepreneurship.

6. CONCLUSIONS

This study examined the mediating role of artificial intelligence (AI) between entrepreneurship education and entrepreneurial intention using Structural Equation Modeling (SEM) with SmartPLS 4. Reliability and validity tests confirmed that the data met the necessary requirements. The findings indicate that entrepreneurship education significantly influences both AI adoption and entrepreneurial intention. Furthermore, AI serves as an effective mediator, strengthening the relationship between

entrepreneurship education and entrepreneurial intention among business students in Bandung City.

Compared to existing literature, this study aligns with previous research emphasizing AI's role in enhancing entrepreneurial competencies. While prior studies have demonstrated AI's contribution to business decision-making and opportunity recognition, our findings highlight its specific role in reinforcing the impact of entrepreneurship education on students' entrepreneurial intentions. This underscores AI's potential as a valuable tool for improving entrepreneurship education outcomes.

As AI becomes increasingly integrated into education, institutions must proactively guide its implementation to maximize its benefits while addressing ethical concerns. AI enables students to conduct more precise data-driven analyses, improving business decision-making processes. However, ethical considerations and digital literacy must remain a priority to ensure responsible AI use—supporting entrepreneurial growth rather than replacing critical thinking and problem-solving skills.

This study highlights the importance of optimizing entrepreneurship education and AI adoption to reduce post-graduation unemployment and foster young entrepreneurs. However, its scope is limited to students in Bandung, which may affect the generalizability of the findings to other regions. Additionally, the limited research on AI's role in entrepreneurship education underscores the need for further studies. Future research should expand on these findings by examining AI's impact across diverse educational and cultural contexts, providing a more comprehensive understanding of its influence on entrepreneurial intention.

7. ACKNOWLEDGEMENTS

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