
WHAT DRIVES ENTREPRENEURIAL INTENTION IN THE DIGITAL ERA? INSIGHTS FROM POSTGRADUATE STUDENTS EXPERIENCING AI-BASED ENTREPRENEURIAL EDUCATION

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ABSTRACT

Entrepreneurial intention (EI) has become a central focus in understanding how students transform learning experiences into entrepreneurial behavior, particularly amid the transition from the Fourth to the emerging Fifth Industrial Revolution. This preliminary study explores the determinants of perceived EI among postgraduate students in Indonesia, emphasizing the mediating role of Entrepreneurial Education on Artificial Intelligence (EEOAIN) as an integral component of the curriculum designed to prepare students for business start-up initiatives. A qualitative approach was employed using semi-structured, one-on-one interviews with eight postgraduate students representing various provinces and disciplines, including management, computer science, and education. The discussions aimed to uncover factors that strengthen entrepreneurial intention and to explore how individual psychological traits: Self-Efficacy (SE), Leadership Skills (LS), Digital Skills (DS), Work Experience (WE), and Perceived Stress (PST), influence EI within the rapidly evolving digital learning ecosystem. The findings reveal that EEOAIN is perceived as a transformative driver that enhances students' readiness for entrepreneurial activity through exposure to AI-based innovations. Perceived University Support (PUS) and Positive Emotions (POEM) are identified as moderating factors that reinforce entrepreneurial intentions, thereby fostering entrepreneurial development and expanding employment opportunities for Indonesians. PUS acts as an external enabler by providing mentoring, resources, and social capital, while POEM functions as an internal psychological catalyst that promotes resilience and creativity. Collectively, these preliminary insights validate the conceptual model and provide empirical grounding for future quantitative investigations. This study offers initial evidence supporting the integration of technological, institutional, and emotional dimensions in shaping entrepreneurial intentions within higher education in developing-country contexts.

Keywords: Entrepreneurial Intention (EI); Entrepreneurial Education; Perceived University Support (PUS); Positive Emotions (POEM); Self-Efficacy; Qualitative Research

INTRODUCTION

Entrepreneurial intention (EI) is increasingly recognised as a crucial psychological precursor to entrepreneurial action, particularly in the context of rapid technological change and labour market uncertainty. In developing countries such as Indonesia, entrepreneurship is widely viewed as a pathway to job creation, economic inclusion, and innovation-driven growth (Ahmed et al., 2021; Gomes et al., 2023; Asian Development Bank, 2022). Encouraging entrepreneurial intention among university students, especially at the postgraduate level, is vital, as these individuals often possess the cognitive maturity and disciplinary knowledge to convert ideas into viable enterprises. Despite representing less than 2% of Indonesia's higher education population (Badan Pusat Statistik, 2025), postgraduate students hold strategic potential in shaping community development, advancing technological innovation, and building resilient economies.

In today's digital landscape, entrepreneurship is no longer a static skill set, but a dynamic capability requiring technological, emotional, and cognitive readiness (Vahdat, 2022; Manchanda & Arora, 2023). Digital transformation reshapes productivity, institutional performance, and national competitiveness in developing countries (Aly, 2022; Hanna, 2018; Vafaei-Zadeh et al., 2023), implying that universities must strengthen their digital-competence infrastructures and AI-enabled learning environments to remain responsive and competitive in the evolving global landscape. The global shift from the Fourth to the emerging Fifth Industrial Revolution

underscores the need for entrepreneurial competencies that integrate digital literacy, artificial intelligence (AI), ethical judgement, and human-centred problem solving (Thottoli et al., 2025; Meyer et al., 2023). Consequently, entrepreneurial education must evolve, equipping students with both the mindset and tools to navigate complex, technology-driven environments (Bae et al., 2023).

Theories such as the Theory of Planned Behaviour (Ajzen, 1991) and Social Cognitive Theory (Bandura, 1986, 2023) provide foundational insights into how intention is shaped by perceived behavioural control, attitudes, and self-efficacy. Self-efficacy, the belief in one's ability to perform tasks successfully, has been widely recognised as a critical predictor of entrepreneurial behaviour (Zhao et al., 2005; Hamdani et al., 2023). Within academic contexts, fostering self-efficacy, supported by institutional resources and psychological reinforcement, is central to strengthening students' entrepreneurial readiness (Yousaf et al., 2021; Ghouse et al., 2024).

Emerging pedagogical innovations, such as Entrepreneurship Education on Artificial Intelligence (EEOAIN), reflect this shift by embedding AI-based tools into entrepreneurial curricula. This includes exposure to business simulations, predictive analytics, chatbot technologies, and data-driven decision-making processes (T. Nuseir et al., 2020; Duong et al., 2024; Zarifis & Efthymiou, 2022). These interventions are designed not only to increase digital competence but also to enhance students' ability to identify opportunities and mitigate risk in volatile markets (Durach & Gutierrez, 2024). EEOAIN holds promise as a

catalyst for entrepreneurial intention by enhancing students' innovation capability and technological self-efficacy.

However, entrepreneurial success is not shaped by education alone. The broader learning ecosystem plays a mediating role. Factors such as Perceived University Support (PUS), including mentoring, incubation, and funding, have been shown to significantly affect entrepreneurial outcomes by offering external enablers (Shi et al., 2020; Pan et al., 2025). Simultaneously, Positive Emotions (POEM) such as optimism, enthusiasm, and creative confidence are internal psychological drivers that buffer stress and build resilience in uncertain environments (Fredrickson, 2001; Belea, 2021; Nguyen et al., 2024). Together, these constructs shape a synergistic environment in which individual traits and institutional resources align to foster entrepreneurial motivation.

Despite the growing emphasis on digital entrepreneurship education, there remains limited empirical research on how EEOAIN interacts with personal and institutional factors to influence EI, particularly in Indonesia. While recent studies from Malaysia, Vietnam, and Pakistan highlight the value of AI in entrepreneurship education (Ahmed et al., 2017; Duong et al., 2024; Ghouse et al., 2024), the Indonesian context, with its unique socio-cultural, digital, and institutional landscape, has not been sufficiently explored. Addressing this gap, the present study investigates:

(1) How does AI-based entrepreneurial education influence postgraduate students' entrepreneurial intention?, (2) What individual factors shape their intention to engage in

entrepreneurship?, and (3) How do perceived institutional and emotional supports reinforce their entrepreneurial readiness?

This research contributes to three key areas. First, it offers contextual insight into the perceptions of Indonesian postgraduate students regarding AI-enhanced entrepreneurship education. Second, it integrates psychological, technological, and institutional dimensions into a holistic framework of entrepreneurial intention. Third, It provides a qualitative foundation for future empirical testing and policy interventions to support innovation-driven education systems in developing countries.

In alignment Informed by Social Cognitive Theory (Bandura, 1986; 2023) and enriched by contemporary scholarship on digital entrepreneurship and higher education (Gelaidan et al., 2024; Pan et al., 2025; Abdurahman et al., 2025), this study adopts an exploratory stance to understand how various internal and external factors interact to shape entrepreneurial intention (EI). Rather than relying on a predefined set of variables, the research draws on in-depth interviews with eight postgraduate students from diverse academic backgrounds, uncovering emergent themes related to digital readiness, emotional resilience, and institutional trust.

Through a qualitative lens, the study captures the lived experiences, doubts, and aspirations of these students as they navigate post-pandemic uncertainty, digital transformation, and Indonesia's weakened economic climate. From their narratives, several recurring factors were identified, Self-Efficacy (SE),

Leadership Skills (LS), Digital Skills (DS), Work Experience (WE), and Perceived Stress (PST), as significant influences on their entrepreneurial outlook. These factors, alongside perceptions of university support (PUS) and positive emotions (POEM), create a dynamic ecosystem shaping students' readiness to pursue start-up ventures.

This grounded approach offers early insight into how entrepreneurship education, particularly the integration of Artificial Intelligence in Entrepreneurial Education (EEOAIN) within postgraduate curricula, can be continuously developed and ethically adapted to support entrepreneurial intention amid technological uncertainty, emotional complexity, and institutional evolution.

Theoretical Foundations of Entrepreneurial Intention

Entrepreneurial Intention (EI) refers to an individual's conscious state of mind that precedes entrepreneurial action (Ajzen, 1991; Liñán et al., 2011). The Theory of Planned Behaviour (TPB) posits that intention is influenced by attitudes toward entrepreneurship, subjective norms, and perceived behavioural control (Ajzen, 1991). Complementing this, Social Cognitive Theory (SCT) emphasises the role of self-efficacy, the belief in one's ability to achieve specific goals, in shaping motivation and persistence (Bandura, 1986, 2023; Zimmerman, 2000). In entrepreneurship research, self-efficacy has consistently emerged as a key predictor of entrepreneurial motivation, especially among university students (Zhao et al., 2005; Boyd & Vozikis, 1994; Yousaf et al., 2021).

Several studies underscore that entrepreneurial education strengthens

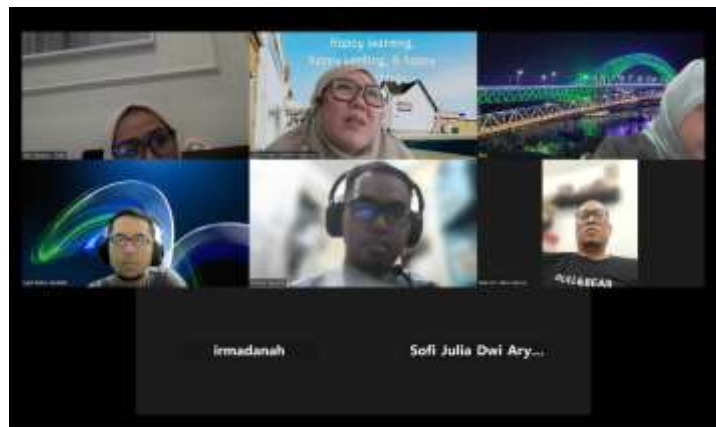
EI when it enhances self-belief, skills, and access to entrepreneurial ecosystems (Ahmed et al., 2017; Bae et al., 2023). However, most of these studies focus on general or undergraduate populations. This study contributes by focusing on postgraduate students, who bring more diverse disciplinary backgrounds, work experiences, and cognitive maturity to the learning process. As advanced learners, they often serve as informal role models and knowledge brokers within their peer networks and professional communities (Satriadi et al., 2022; Yusriani et al., 2023).

The Role of Postgraduate Students in Entrepreneurship

Postgraduate students are uniquely positioned to act as both learners and leaders in entrepreneurial ecosystems. Many of authors' colleagues, active in postgraduate programmes across management, computer science, and education, combine academic study with work or business experience, making their insights into EI particularly rich. These individuals often represent first-generation entrepreneurs or digital innovators who see entrepreneurship not only as a career path but as a means to address community problems and national development goals (Masduki, 2024; Abdurahman et al., 2025).

Yet, the entrepreneurial readiness of postgraduate students is not automatic. It depends on several interacting factors: personal traits (e.g., self-efficacy, leadership), exposure to digital technologies, affective states (e.g., perceived stress or optimism), and the institutional environment (e.g., mentoring, funding, networks) (Pan et al., 2025; Gelaidan et al., 2024). Understanding these dynamics is

critical for designing effective entrepreneurship education models that serve postgraduate learners.



(image 1)



(image 2)

Image 1&2. Screenshots of postgraduate students from diverse sectors and provinces who voluntarily engaged in additional learning outside formal class hours to strengthen their leadership and soft skills. FGD sessions, 2024. Archived by the authors.

Entrepreneurial Education on Artificial Intelligence (EEOAIN)

As the digital economy accelerates, the integration of Artificial Intelligence (AI) into entrepreneurship education is reshaping how students develop business models and solve problems. Entrepreneurial Education on AI (EEOAIN) exposes students to simulation tools, predictive analytics, and AI-driven customer engagement systems, allowing them to engage in more realistic, data-informed business planning (T. Nuseir et al., 2020; Zarifis & Efthymiou, 2022). This approach aligns

with calls to reform higher education in response to the demands of the Fifth Industrial Revolution, which blends technological intelligence with human creativity (Thottoli et al., 2025; Meyer et al., 2023).

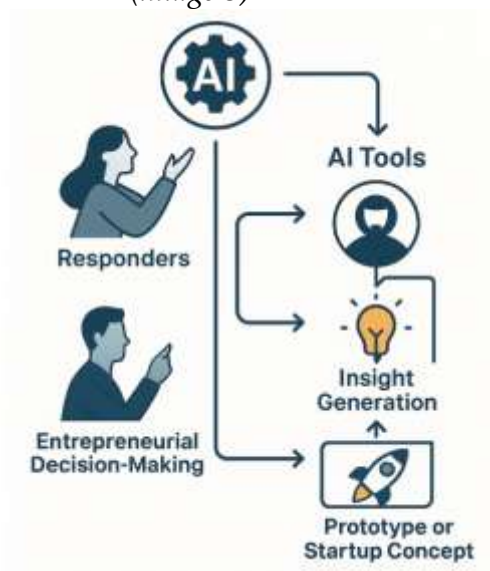
Early evidence suggests that AI-enhanced learning improves students' digital skills and entrepreneurial confidence (Duong et al., 2024; Ghouse et al., 2024). In previous study (Yusriani et al., 2025; Abdurahman et al., 2025; Vafaei-Zadeh et al., 2023), postgraduate students report that AI-based modules helped

them visualise market opportunities, anticipate customer behaviours, and navigate business complexity. Such experiential learning is vital for building

entrepreneurial self-efficacy, improve leadership skills, and for nurturing flexible, innovative thinking.

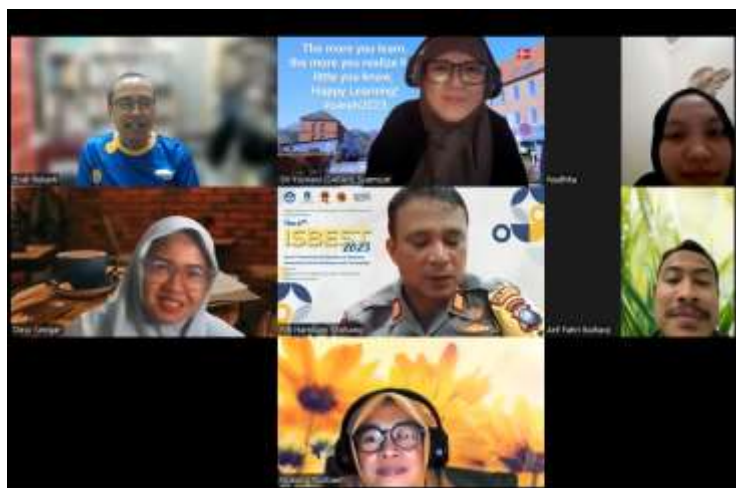


(image 3)



(image 4)

Image 3 &4. Workflow of AI-Supported Entrepreneurial Learning. Analysis by the authors, 2025.



(image 5)

Image 5. Discussion session with postgraduate students exploring Entrepreneurial Education on AI, accompanied by guidance from facilitators on the ethical and responsible use of AI tools.

Perceived University Support and Positive Emotions

The success of EEOAIN is highly dependent on its learning environment. Perceived University Support (PUS), including access to mentorship, seed funding, business incubators, and networking events, serves as an external enabler that converts knowledge into entrepreneurial action (Shi et al., 2020; Rekarti et al., 2025). Without institutional scaffolding, students may struggle to turn intention into execution, regardless of the quality of instruction.

Moreover, psychological factors such as Positive Emotions (POEM), including optimism, enthusiasm, and creative confidence, are increasingly recognised as internal drivers of EI (Fredrickson, 2001; Pan et al., 2025). These emotional states buffer stress (Belea, 2021; Cohen et al., 1983), enhance resilience, and support cognitive flexibility, all of which are critical in uncertain entrepreneurial environments. For postgraduate students navigating demanding academic and life responsibilities, such affective support is essential (Yusriani et al., 2025; Arshi et al., 2021).

METHODE

Research design, This study adopts a qualitative exploratory design using semi-structured, one-on-one interviews to understand how postgraduate students develop entrepreneurial intention (EI) within the context of AI-based entrepreneurial education (EEOAIN). A qualitative approach is appropriate because the research aims to capture personal

experiences, emotions, and meaning-making processes that cannot be quantified (Creswell & Creswell, 2017; Bryman, 2016).

Following an interpretivist paradigm, this approach enables the exploration of how and why entrepreneurial intentions emerge among students engaged with EEOAIN, providing rich, context-embedded insights into their motivations and perceived challenges. The design also draws from Yusriani et al. (2023), who emphasise the importance of self-efficacy and reflective learning in shaping confidence and agency among postgraduate learners in Indonesia.

Participants and Sampling Procedure

Eight postgraduate students from Indonesian universities offering AI-based entrepreneurship programmes were purposively selected to ensure relevance and diversity. Participants came from management, computer science, and education backgrounds and originated from various regions across Indonesia. Inclusion criteria were:

1. Active enrolment in a postgraduate programme integrating entrepreneurship and AI-related learning modules;
2. Completion of at least one entrepreneurship or innovation-oriented course; and
3. Voluntary consent to participate in an in-depth interview.

The participants included:

R1: Yln (Babel)

R2: Hrd (Bekasi)

R3: RAb (Kalimantan)

R4: NMK (East Java; currently studying abroad)

R5: IMR (Central Java)

R6: NAH (Jakarta)

R7: Rdy (Sumatra)

R8: Rst (Sulawesi)

Five respondents were aged 28–38, and three were above 38. All were employed full-time while completing postgraduate study and expressed interest in entrepreneurship, though many felt hesitant or lacked confidence to begin.

The sample is suitable for this preliminary study because postgraduate students, less than 2% of Indonesia's higher-education population (Badan Pusat Statistik, 2025), hold strategic potential to translate academic knowledge into innovation and economic contribution. Sample size followed Creswell & Creswell's (2017) recommendation for achieving data saturation.

Data Collection Procedure

The variables Data were collected through a combination of semi-structured online and face-to-face interviews to capture diverse participant experiences across time and location. Initial online interviews were conducted via Zoom and Google Meet between January and May 2025, involving semi-structured, one-on-one sessions lasting approximately 45–60 minutes each. To enrich contextual depth and enhance data robustness, an additional four participants were interviewed through face-to-face, one-on-one sessions in Indonesia between August and October 2025. These in-person interviews followed the same guiding protocol to maintain methodological consistency.

The interview guide was developed in alignment with the research questions and explored four major areas:

1. understanding of entrepreneurship in the digital era;
2. perceived influence of AI-based learning on creativity and business readiness;
3. experiences of institutional and emotional support (PUS and POEM);
4. self-efficacy and perceived barriers to entrepreneurial action.

All interviews were conducted in Bahasa Indonesia, recorded with informed consent, transcribed verbatim, and translated into English using the back-translation method (Brislin, 1970) to ensure linguistic and conceptual accuracy. Ethical principles, including voluntary participation, confidentiality, and transparency of purpose, were strictly upheld throughout the data collection process.

Data Analysis

Thematic analysis was conducted following Creswell and Creswell's (2017) six-step analytic framework. After each interview was transcribed and translated, the research team manually reviewed, compared, and discussed the data to ensure analytical accuracy and conceptual clarity. The analytic process proceeded as follows:

1. Organising and preparing the data, All interview recordings were transcribed verbatim, translated using back-translation procedures, and compiled into a unified data set for analysis.
2. Reading and re-reading transcripts, The lead researcher and research partners, whose expertise spans entrepreneurship, artificial intelligence, and human resource behaviour, independently

familiarised themselves with the transcripts before engaging in team discussions.

3. Generating initial codes, Meaningful units of information were coded inductively to capture authentic participant expressions related to self-efficacy, leadership skills, digital competence, perceived university support, emotional motivation, and perceived stress. Coding was first conducted manually and later refined through collaborative discussions among the research partners to ensure interpretive consistency.
4. Developing thematic categories, Similar or overlapping codes were clustered into thematic categories. These categories reflected patterns that emerged naturally from the data and aligned with the conceptual logic of Entrepreneurial Education on Artificial Intelligence (EEOAIN).
5. Interpreting thematic patterns, Themes were interpreted in relation to the study's theoretical foundations, specifically Social Cognitive Theory (Bandura, 1991) and entrepreneurial intention literature. The team jointly evaluated how individual, emotional, and institutional factors interacted within participants' narratives.
6. Validating findings, Validation involved triangulation through team-based review, comparison of codes, and synthesis of interpretations. Member checking was conducted with selected participants to confirm the accuracy of emerging themes and refine interpretations when necessary.

This collaborative analytic approach, combining individual

coding, expert consultation, and team discussion, enhanced the depth, credibility, and theoretical alignment of the final themes.

Research Trustworthiness

The variables Trustworthiness was ensured through Creswell and Creswell's (2017) four criteria:

1. Credibility, Achieved through prolonged engagement with the data, iterative coding, peer debriefing, and member checking. Team-based discussions allowed cross-validation of interpretations and minimised researcher bias.
2. Transferability, Strengthened by providing rich descriptions of participant backgrounds, educational contexts, and regional diversity, enabling readers to determine the relevance of findings to other settings.
3. Dependability, Ensured through systematic documentation of analytic procedures, version tracking of codes, and a clearly maintained audit trail covering decisions made during translation, coding, and theme development.
4. Confirmability, Enhanced through peer audits involving research partners from entrepreneurship, AI technology, and human resource behaviour disciplines, as well as reflective memos that captured analytic decisions and reduced subjective influence.

The diverse academic, professional, and geographical backgrounds of the participants further enriched the representativeness and contextual depth of the findings. Reflexivity was maintained throughout all stages of the research. The lead researcher's prior experience in teaching entrepreneurship and

observing postgraduate learning behaviours necessitated continuous awareness of potential bias. To mitigate this:

- reflective journaling was used to monitor assumptions and positionality;
- discussions with supervisors and research partners provided external perspectives;
- analytic decisions were revisited to ensure neutrality and participant-centred interpretation

This reflexive, collaborative approach enriched the interpretation of data by aligning personal insights with theoretical grounding while ensuring that participants' voices remained central. The reflexive stance also helped situate findings within the socio-cultural and educational realities of Indonesian postgraduate learning environments.

RESULT

Findings Based on Research Questions

Thematic analysis produced four major themes that illuminate how postgraduate students interpret, experience, and negotiate entrepreneurial intention (EI) within the context of AI-based entrepreneurial education (EEOAIN). These themes respond directly to the three research questions.

RQ1: How does AI-based entrepreneurial education influence postgraduate students' entrepreneurial intention?

Theme 1. AI-Based Learning as a Catalyst for Entrepreneurial Awareness and Creativity

Across all eight participants, exposure to AI-integrated coursework and digital innovation modules increased awareness of entrepreneurship as a feasible career path. Students described EEOAIN as

"opening their perspective," "making entrepreneurship feel more possible," and stimulating curiosity through AI tools such as simulations, predictive analytics, and digital prototyping.

R1 (Yln) reported that AI-based learning *"made me braver to imagine building my own startup."*

R3 (RAb) noted that *"AI helps small businesses grow faster; learning it makes entrepreneurship feel attractive and relevant today."*

This aligns with prior research showing that digital exposure enhances entrepreneurial cognition and opportunity recognition (Duong et al., 2024; Ghouse et al., 2024). R2 (Hrd) added that digital tools gave him *"a clearer picture of how business decisions can be supported with data,"* making the idea of running a digital venture more concrete. He further stated, *"But of course, I want to learn more about new tools."* R4 (NMK), currently studying and working abroad, stated that exposure to AI-rich ecosystems *"increases competitiveness, and Indonesia must follow the trend if we want more startup founders."* He added, *"I plan to develop my business ideas further when I return to Indonesia for good."*

R5 (IMR) shared that AI applications in consumer behavior analysis *"sparked new business ideas I never thought of before,"* expressing excitement about the possibility of *"studying digital learning using AI for startup development."* R6 (NAH) emphasized that AI-based tasks encourage *"practical creativity,"* helping reduce the fear of experimenting with unfamiliar business concepts.

R7 (Rdy) noted that EEOAIN *"refreshes the way we think about entrepreneurship, not as something big and scary, but something we can start gradually using technology... though of course it*

requires commitment to the ethical use of AI tools." R8 (Rst) reported that AI-enhanced learning *"makes entrepreneurship feel closer and more logical, especially for beginners like me."*

Finding: EEOAIN not only increases technical digital readiness but also acts as a transformative trigger for entrepreneurial intention. EEOAIN also acts as a transformative trigger for entrepreneurial awareness, creativity, and perceived feasibility.

RQ2: What individual factors shape postgraduate students' intention to engage in entrepreneurship?

Theme 2. Self-Efficacy as the Psychological Bridge to Entrepreneurial Action

Self-efficacy emerged as the strongest psychological determinant of EI. Participants expressed that their hesitation did not stem from a lack of knowledge, but from insufficient confidence and leadership readiness.

Key Respondent Insights

R1 (Yln): *"I feel I can design ideas, but I'm not strong enough yet as a leader to run a business."*

R3 (RAb): *"Leadership and confidence are the most needed aspects; AI skills come after."*

R2 (Hrd) emphasized the role of work experience: *"Experience helps, but without stronger self-efficacy, it still feels difficult to start."* R4 (NMK) added that juggling work, study, and family responsibilities *"reduces the mental space to develop confidence."*

R5 (IMR) openly admitted fear of failure: *"My biggest problem is confidence. I understand the theory, but I sometimes doubt my ability to execute... especially for new products in this digital era."* R6 (NAH) described perceived stress (PST) as interconnected with self-belief: *"When stress increases, confidence drops; but AI-based tasks help me feel more*

capable." R7 (Rdy) viewed leadership skills as crucial for managing teams and stakeholders. R8 (Rst) stated: *"The more digital skills I acquire, supported by a good environment and good team members at work, the more confident I feel to start something small."*

These insights reinforce Bandura's Social Cognitive Theory (1991), which posits that self-efficacy is strengthened through:

mastery experiences (e.g., hands-on AI tasks),
vicarious learning (seeing peers or mentors succeed),
verbal persuasion (encouragement from lecturers or supervisors),
emotional regulation (managing stress and uncertainty).

Together, these mechanisms build the psychological foundation needed to initiate entrepreneurial action.

Finding: Entrepreneurial intention is shaped more by internal confidence structures than by technical competencies alone.

R1 (Yln): *"I feel I can design ideas, but I'm not strong enough yet as a leader to run a business."*

R3 (RAb): *"Leadership and confidence are the most needed aspects; AI skills come after."* (Robbins and Judge, 2013).

Bandura's Social Cognitive Theory (1991) explains this: mastery experiences and environmental reinforcement (such as EEOAIN) cultivate the belief that one *can* perform entrepreneurial tasks.

Self-efficacy here is influenced by:

leadership competence,
digital capability,
accumulated work experience,
and the ability to reinterpret stress as challenge (PST → SE).

Finding: EI is shaped more by internal confidence structures than by technical competencies alone.

RQ3: How do perceived institutional and emotional supports reinforce entrepreneurial readiness?

Theme 3. Perceived University Support (PUS) as an Enabling Context and Ideal Support System

Participants highlighted that university support, such as mentoring, structured entrepreneurship modules, AI laboratories, networking activities, and business incubation facilities, significantly enhanced their entrepreneurial readiness and reduced uncertainty. PUS was consistently described as the “bridge” that makes entrepreneurship feel achievable rather than overwhelming.

Supporting Evidence

R1 (Yln): “We really need entrepreneurship mentoring from the university or government, someone who can support us through the ups and downs of the process.”

R3 (RAb): “A structured curriculum with real-business mentors would increase national economic growth.” R2 (Hrd) explained that university support “gives clarity about where to start, and helps me believe that I can build an enterprise with confidence.”

R4 (NMK), who has experienced more advanced facilities abroad, stated that Indonesian universities “should strengthen digital incubation ecosystems.” R5 (IMR) emphasised the importance of “peer collaboration and access to practitioners to maintain our self-efficacy and spirit while building a business.”

R6 (NAH) stressed that PUS “reduces psychological burden and fear of failure.” R7 (Rdy) noted that institutional support “gives direction; otherwise, students feel lost.” R8 (Rst) viewed PUS as “moral support that makes entrepreneurship feel realistic, and gives

positive emotions whether the process is easy or challenging.”

These findings align with prior research demonstrating that PUS enhances students’ perceived behavioural control and strengthens entrepreneurial intention (Shi et al., 2020; Pan et al., 2025; Liñán et al., 2011; Manchanda & Arora, 2023; Mankevich & Svahn, 2021; Tsai et al., 2016).

PUS operates as:

An external enabler (mentors, resources, networks),

An emotional stabiliser (reducing fear and uncertainty),

A cognitive guide (clarifying steps, strengthening decision-making),

A motivational catalyst (sustaining persistence and hope).

Finding: PUS amplifies the effect of personal competencies on EI, validating its role as a moderating factor. For future research, this opens opportunities to examine how different forms of institutional support (digital, financial, emotional, or structural) interact with self-efficacy and AI-based learning to shape entrepreneurial behaviour.

Theme 4. Positive Emotions and Motivation (POEM) as Sustaining Energy for Entrepreneurial Intention

Participants consistently described emotional reinforcement, such as observing peers’ success, feeling proud of others’ achievements, receiving encouragement from mentors, and experiencing small personal wins, as a powerful source of motivation that sustained their entrepreneurial interest, even under stressful or uncertain conditions.

Respondent Insights

R1 (Yln): “Seeing my friends succeed in startups

motivates me, even if their businesses are small." R3 (RAb): *"Hearing tutors' stories makes me more motivated to try."* R5 (IMR):

"When I hear about friends who dare to start or when lecturers share their journey, I feel more excited and less afraid. It makes me think: maybe I can do it too." (Vahdat, 2022; Abdurahman et al., 2025).

R6 (NAH): *"Positive feedback from lecturers and peers helps me feel calmer and more confident, especially when tasks feel overwhelming."* R7 (Rdy): *"When people around me show enthusiasm, it affects me. I feel more optimistic and want to try harder."* R8 (Rst): *"Simple encouragement, like being told my ideas make sense, already makes a big difference to my motivation."*

These reflections align closely with Fredrickson's Broaden-and-Build Theory (2001), which posits that positive emotions broaden cognitive flexibility, strengthen psychological resilience, and help individuals reinterpret challenges more constructively. In the context of entrepreneurship, such emotional reinforcement helps students shift from *fear-based avoidance* to *curiosity-driven exploration*.

DISCUSSION

POEM supports entrepreneurial intention by:

- Transforming stress into curiosity,
- Turning fear into initiative,

- Reinforcing optimism,
- Maintaining motivation during failure, and
- Enhancing creative thinking in uncertain environments.

This validates the moderating role of POEM (we can use for next research in quantitative approach) showing that emotional states are not merely background influences but active psychological mechanisms that sustain entrepreneurial drive in the digital era.

Across all participants, entrepreneurial intention (EI) emerges from a holistic ecosystem where individual psychology, technology-based learning, institutional scaffolding, and emotional reinforcement operate together.

Key Integrative Insight, Entrepreneurial intention does not arise from:

- education alone, nor from
- personal attributes alone.

Instead, EI is the result of a dynamic interplay among:

- Belief (self-efficacy)
- Skill (digital readiness & leadership competence)
- Emotion (positive affect and motivation)
- Context (university/institutional support)
- Technology (AI-driven entrepreneurial learning through EEOAIN)

This integrated pattern supports all hypothesized pathways for next quantitative analysis confirming that EEOAIN serves as the central mediating bridge connecting internal capacities, emotional states, and external educational structures to entrepreneurial intention.

Integration With the Proposed Framework For Next Research

The interview findings provide strong qualitative support for the conceptual model and the 17-20 hypothesized pathways proposed for future quantitative validation. Overall, the students' narratives clearly illustrate how AI-based entrepreneurial education (EEOAIN) interacts with psychological, institutional, and emotional factors to shape entrepreneurial intention (EI).

1. EEOAIN Mediates the Relationship Between SE, LS, DS, WE, and PST → EI

Participants consistently described AI-based learning as a mechanism that translates internal capabilities into entrepreneurial readiness. EEOAIN enhanced confidence, stimulated creativity, sharpened digital skills, and reframed stress into challenge, thus confirming its mediating potential.

2. EEOAIN Directly Increases EI

Independent of other variables, students reported that exposure to AI tools (simulations, analytics dashboards, prototyping platforms) made entrepreneurship feel more achievable, realistic, and attractive, thus supporting the direct pathway.

3. PUS Moderates the Paths (SE/LS/DS/WE → EI)

University support, mentoring, AI laboratories, structured coursework, and incubation facilities, was repeatedly described as a confidence amplifier. PUS strengthens personal competencies, clarifies direction, reduces psychological burden, and enhances perceived behavioral control.

4. POEM Moderates the Effects of SE and PST on EI

Positive emotions, motivation, admiration, pride, and optimism, enhanced resilience and creativity during periods of uncertainty. These emotional states helped participants reinterpret anxiety, maintain momentum, and persist despite setbacks. This validates POEM as a meaningful emotional moderator, supporting both the SE → EI and PST → EI relationships.

Summary of Key Findings

Dimensi	What Students Said	Implication for the Model
AI-based learning	"Makes entrepreneurs hip feel more real."	Supports H1-H6
Self-efficacy (SE)	"I hesitate because I'm not confident enough."	Key predictor of EI
Leadership skills (LS)	"Leadership is the foundation; AI skills come after."	Supports leadership pathways
Digital skills (DS)	"Digital skills make me feel more capable to start something small."	Strengthens DS → EI link
University support (PUS)	"We need proper mentoring and real guidance."	Supports H7-H10
Positive emotions (POEM)	"Success stories motivate me."	Supports H11-H12
Work experience (WE)	"Experience matters, but	Supports H4-H5

AI skills push it further.”
“Stress lowers confidence, but AI tasks help me handle it.”
Perceive d stress (PST) Supports PST → SE → EI

How the Themes Converge Into a Unified Model

The findings show that entrepreneurial intention is not a linear outcome but a simultaneous convergence of:

1. Psychological Readiness

Self-efficacy was the strongest predictor of entrepreneurial intention. Students who felt more confident, even if only moderately skilled, were more willing to engage with entrepreneurial tasks. Leadership competence and digital capabilities served as psychological enablers.

2. Technological Empowerment Through EEOAIN

AI-enhanced learning environments provide mastery experiences and practical exposure that trigger belief, curiosity, and a sense of feasibility. EEOAIN acts as a cognitive and emotional accelerator, transforming hesitancy into capability.

3. Institutional Scaffolding (PUS)

Participants emphasized that entrepreneurship becomes more realistic when supported by structured resources. Universities play a pivotal ecosystem role, providing stability in the uncertain landscape of entrepreneurship.

4. Emotional and Motivational Reinforcement (POEM)

Positive emotions deepen students’ persistence, broaden their creativity, and counterbalance stress. Emotional reinforcement is not

peripheral; it is a core mechanism for sustaining entrepreneurial intention.

Across the dataset, entrepreneurial intention arises from the interaction of:

Belief (self-efficacy and leadership confidence)

Skill (digital competencies, work experience)

Emotion (positive affect and motivational triggers)

Context (university support structures)

Technology (AI-enabled entrepreneurial learning)

This confirms the logic of H1-H17, positioning EEOAIN as the central mediating bridge and PUS/POEM as contextual moderators in the entrepreneurial intention formation process.

Based on the results, The findings of this preliminary qualitative study offer several important theoretical, practical, and educational implications for the development of entrepreneurial intention (EI) among postgraduate students in the digital era, particularly within the context of AI-based entrepreneurial education (EEOAIN).

The study provides strong qualitative evidence that EEOAIN acts as a cognitive-behavioral bridge, translating psychological, technological, and experiential capacities into entrepreneurial intention. This supports the proposed hypotheses (H1-H17) and highlights the relevance of integrating Social Cognitive Theory with AI-enhanced entrepreneurship frameworks. Furthermore, narratives from participants reveal that self-efficacy, rather than digital skills alone, is the key psychological driver of entrepreneurial readiness. This adds

depth to existing entrepreneurial intention (EI) models by emphasizing the emotional and cognitive dimensions that are strengthened through AI-supported learning.

The study also underscores the importance of contextual moderators such as perceived university support (PUS) and positive emotions and motivation (POEM). These are not peripheral factors but essential components that significantly influence entrepreneurial intention. When these factors are present, they amplify intention; in their absence, they constrain it. This contributes to the growing body of research on the emotional and institutional contexts that shape entrepreneurial behavior.

Based on these findings, several recommendations are made for strengthening AI-integrated entrepreneurship curricula. Universities should incorporate AI-based learning modules, including simulations, analytics dashboards, and digital prototyping environments. These tools are seen as key catalysts for fostering creativity, confidence, and opportunity recognition among students. Additionally, mentorship from experienced entrepreneurs and practitioners plays a crucial role in nurturing student-led innovation. Institutions are encouraged to develop structured mentorship frameworks, coaching programs, and early-stage incubation systems.

Emotional well-being also emerges as a significant factor in entrepreneurial learning. Positive emotions, encouragement, and psychological reassurance are vital in shaping entrepreneurial readiness. Universities should create emotionally supportive learning environments,

offering feedback systems, peer collaboration, and stress-management resources. Leadership, communication, and digital competence are other essential areas for development. Workshops, leadership labs, and cross-disciplinary digital training can enhance students' readiness for real entrepreneurial challenges.

Finally, the study highlights the barriers faced by postgraduate students, many of whom balance full-time jobs and family responsibilities. Flexible program designs, hybrid learning options, and counseling services are recommended to alleviate stress and sustain engagement in entrepreneurial pathways

CONCLUSION

This preliminary qualitative study explored how postgraduate students in Indonesia interpret and develop entrepreneurial intention (EI) within the context of AI-based entrepreneurial education (EEOAIN). Through in-depth interviews with participants from diverse regions and academic backgrounds, the research reveals that EI emerges from a dynamic interplay of psychological readiness, technological exposure, emotional reinforcement, and institutional support.

The study concludes that:

EEOAIN is perceived as a transformative educational approach, enhancing confidence, stimulating creativity, and making entrepreneurship feel achievable and relevant in the digital era.

Self-efficacy remains the strongest internal predictor of EI, shaped by leadership readiness, digital capability, work experience, and stress regulation.

Perceived University Support (PUS) functions as a crucial external enabler, reducing fear, clarifying direction, and increasing perceived behavioural control.

Positive Emotions and Motivation (POEM) act as powerful psychological catalysts, sustaining entrepreneurial drive under uncertainty and reinforcing resilience.

Collectively, these findings offer a foundational qualitative understanding that supports the proposed conceptual model and lays

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- the groundwork for the next phase of research, quantitative validation using PLS-SEM with hypotheses exploring the mediating role of EEOAIN and the moderating influence of PUS and POEM. This study contributes to the growing field of digital entrepreneurship education by demonstrating that developing entrepreneurial intention in the AI era requires more than technical training. It necessitates a holistic learning ecosystem, one that nurtures belief, capability, emotional strength, and institutional scaffolding.
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