



Entrepreneurial ecosystem and intentions of students in multidisciplinary universities: A study in Can Tho, Mekong Delta, Vietnam

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ABSTRACT

This study used both qualitative and quantitative research methods, surveying 325 respondents. Initially, the research model included seven factors that could influence students' entrepreneurial intentions: university, government, support organizations, funding providers, research organizations, large enterprises, and service providers. The results from the multivariate regression analysis identified four significant factors: universities, funding providers, research organizations, and large enterprises. The study also found that three variables—government, support organizations, and service providers—were not statistically significant. In conclusion, the key factors within the entrepreneurial ecosystem of multidisciplinary universities that influence students' entrepreneurial intentions are the university, funding providers, research organizations, and large enterprises.

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1. Introduction

Entrepreneurship is an important factor in economic development around the world, including in Vietnam. It offers individuals the chance to create personal wealth and also helps to boost economic growth and create jobs. As [Goetz et al. \(2012\)](#) pointed out, entrepreneurship can increase the income of entrepreneurs and raise a country's average GDP per person. Additionally, entrepreneurship helps a nation grow by reducing poverty levels. It encourages technological innovation, refreshes the labor market, and opens new business opportunities, which all support economic growth and increase national wealth ([Holmgren et al., 2005](#)). A strong entrepreneurial ecosystem is essential for promoting and supporting entrepreneurship. Vietnam's entrepreneurial ecosystem ranks 48th out of 132 economies, placing it in the top 50 globally and second among 36 lower-middle-income economies, as well as 10th among 17 economies in Southeast Asia and the Pacific.

According to the Business Registration Management Agency, the number of newly

established enterprises in 2022 is 148,533, an increase of 27.1% compared to 2021, 1.1 times the average for the period 2017-2021 (129,611 enterprises). This indicates that Vietnam's entrepreneurial ecosystem is developing, although still at a relatively low level. Therefore, there is a need for changes to help Vietnam's entrepreneurial economy develop further, with universities playing a crucial role. Universities are not only a factor in the entrepreneurial ecosystem but can also be considered as an entrepreneurial ecosystem. According to [Morris et al. \(2017\)](#), universities operate at two levels in the entrepreneurial ecosystem, serving as one of the most valuable factors in the regional entrepreneurial ecosystem while simultaneously operating their internal entrepreneurial ecosystem.

Universities play a key role in fostering entrepreneurial ambitions, with [Kent \(2020\)](#) stating that the goal of promoting entrepreneurship at universities is to educate students to become job creators rather than job seekers. This study aims to evaluate students' understanding of the entrepreneurial ecosystem and its influence on the entrepreneurial intentions of university students from various disciplines in Can Tho. The research will also offer recommendations to strengthen the entrepreneurial ecosystem at the university, helping students take advantage of these conditions for their entrepreneurial efforts. Additionally, it will suggest management strategies to improve the

entrepreneurial ecosystem in universities more broadly, contributing to the growth of students' entrepreneurial intentions.

2. Theoretical framework and research methodology

2.1. Theoretical framework and research model

Entrepreneurship is understood as the action of entrepreneurial individuals who transform keen perceptions of business, finance, and innovation into economically viable products (Hassan et al., 2020). According to Bird (1988), entrepreneurship is a work attitude that values independence, autonomy, creativity, continuous innovation, and risk-taking to create new value in the current business. Entrepreneurial intention is the individual's inclination to initiate a business (Souitaris et al., 2007), involving the process of planning and implementing a business establishment plan (Gupta and Bhawe, 2007). An individual's entrepreneurial intention arises from their recognition of opportunities, utilization of available resources, and environmental support to establish their own business (Kuckertz and Wagner, 2010). Students' entrepreneurial intentions stem from their ideas and are appropriately directed by educational programs and mentors (Schwarz et al., 2009).

Choo and Wong (2006) considered research actions and information-seeking to become entrepreneurs, as well as the process of establishing a business, as indicators of entrepreneurial intention. Therefore, entrepreneurial intention is the desire and readiness to establish one's own business.

An entrepreneurial ecosystem is a collection of potential and existing business actors linked to one another, including business entities such as companies, venture capitalists, angel investors, banks, university-affiliated institutions, state-owned agencies, financial entities, and business processes such as startup rates, the number of high-growth companies, continuous entrepreneurial activities, the level of corporate venture capital, and business ambition, all formally and informally converging to connect, organize, and influence activities within the local business environment (Mahfud et al., 2020). The entrepreneurial ecosystem is formed by three main factors: A large number of entrepreneurs, companies, and organizations concentrated in a specific location; the development of dense relationship networks among the actors; and a cultural background where the elements come together (Vamvaka et al., 2020).

The entrepreneurial ecosystem comprises hundreds of specific factors grouped into six general areas: Favorable culture, policies and leadership capabilities, appropriate financial capabilities, high-quality human resources, business-friendly product markets, and support scope for institutional and infrastructure settings (Shwetzter et al., 2019). According to the Finnish organization Startup Commons, an entrepreneurial ecosystem is formed

by individuals, startup businesses in various developmental stages, and different types of organizations within a region (geographical or network space), interacting with each other as a system to create new startup ventures. These organizations can be categorized into groups such as universities, funding organizations, support organizations (incubators, accelerators, coworking spaces, etc.), research organizations, service providers (legal services, financial services, etc.), and large corporations. Different organizations specialize in different functions of the entrepreneurial ecosystem and/or different developmental stages of startup ventures.

The entrepreneurial ecosystem is a closed-loop chain where startup enterprises play a central role and are the focus of all activities within the entrepreneurial ecosystem (Gueguen et al., 2021). Other relevant entities in the chain serve to support startup activities and include capital funding organizations (venture capital funds, angel investors), large enterprises, universities/research institutes, service providers supporting startups (organizational and management consulting, legal services, etc.), and the state, which plays a role in creating a legal environment and investing in the development of the entrepreneurial ecosystem. All these components in the ecosystem form a tightly interconnected and mutually supportive chain. Therefore, the entrepreneurial ecosystem is a collection of factors, including universities, research organizations, capital funding organizations, businesses, service providers, support organizations, and the state. All these organizations have close-knit relationships with each other and provide support for startup enterprises.

The entrepreneurial ecosystem within a university, as outlined by Greene et al. (2010), is an organization with multiple facets aimed at fostering the entrepreneurial spirit of a nation through teaching, research, and technology transfer. The university's entrepreneurial ecosystem is designed to provide knowledge through entrepreneurial education, support technology development and transfer, and foster the creation of startup companies. Rideout and Gray (2013) suggested that key components of the university-based entrepreneurial ecosystem include entrepreneurial education, alumni engagement, incubators, seed funding, academic research, and other supporting services (Miller and Acs, 2017; Amofah and Saladrighes, 2022). From the first perspective of the contextual environment theory, the entrepreneurial environment, including practical business environment factors such as access to finance, information and support, government regulatory policies, culture, economic conditions, socio-political factors, and the institutional framework of countries, can influence individuals' entrepreneurial intentions, the entrepreneurial ecosystem affects students' entrepreneurial intentions. According to the Startup Commons Organization, the entrepreneurial ecosystem includes universities, funding

organizations, support organizations, research organizations, service providers, large companies, and the government.

In summary, the entrepreneurial ecosystem is a focus for researching the entrepreneurial intentions of students at a multi-disciplinary university, specifically examining how the entrepreneurial ecosystem within the university impacts the entrepreneurial intentions of students at Can Tho University. This includes factors such as the university, the government, support organizations, funding organizations, research organizations, large companies, and service providers.

The university environment significantly influences students' attitudes toward entrepreneurship. Universities frequently engage in extensive research projects, making them a primary source of societal knowledge and entrepreneurial ideas. Entrepreneurship education encompasses all activities aimed at promoting entrepreneurial thinking, attitudes, and skills, covering various aspects such as idea generation, startup, growth, and innovation. Entrepreneurship education is associated with developing specific personal qualities and does not necessarily focus solely on creating new businesses. Entrepreneurship education is academic or formal education aimed at sharing the overarching goal of providing individuals with entrepreneurial thinking and skills to support their engagement in entrepreneurial activities (Shah et al., 2020).

Research by Delmar and Davidsson (2000) has demonstrated a positive correlation between entrepreneurship education at universities and colleges and the enhancement of the attractiveness and accessibility of business-minded individuals. University teaching programs can help students not only acquire knowledge for future employment but also serve as a foundation for their future entrepreneurial ventures. Tomy and Pardede (2020) argued that education enhances an individual's managerial abilities, thereby increasing entrepreneurial capabilities. According to Alvarez et al. (2006), university education is a crucial environmental force that enables and provides a way for students to acquire the necessary business and technical skills to foster confidence in their abilities to initiate new business projects.

Entrepreneurship education through courses also influences students' entrepreneurial intentions. It not only has the potential to develop the knowledge and skills needed to manage a business but also increases individuals' readiness to consider entrepreneurship as a career choice (Elnadi and Gheith, 2021). Linnan and Birken (2006) argued that intellectual capital is the knowledge students acquire from university training activities, with curriculum content linked to students' entrepreneurial activities.

Additionally, entrepreneurial competitions influence entrepreneurial intentions as they provide students with exposure to entrepreneurship. Stevenson and Lundström (2007) argued that

entrepreneurial competitions can be considered a selective tool for entrepreneurial spirit, screening innovative and feasible business ideas. Moreover, they indirectly encourage the establishment of new enterprises by relying on softer policy measures rather than financial rewards, currency, or tangible assets. Universities play a crucial role in fostering entrepreneurial spirit among students, as educational institutions are ideal places to transmit culture, mindset, and innovative thinking, encouraging risk-taking behavior in entrepreneurship (David et al., 2007). Empirical evidence demonstrates that universities with high rates of student entrepreneurship create an environment that encourages entrepreneurial initiatives.

H1: Knowledge from the University has a positive impact on entrepreneurial intentions.

Kim and Cho (2009) observed that institutional support for newly established companies leads to an increase in the number of self-employed individuals. Additionally, the government can directly influence businesses through its regulatory measures. Some studies have found that regulations, taxes, and the rigidity of the labor market tend to combine as barriers to entrepreneurship (Volery et al., 1997; Choo and Wong, 2006). Complex regulations and delays in obtaining necessary licenses may extend the startup process (Klapper et al., 2006).

H2: The government has a positive impact on entrepreneurial intentions.

Entrepreneurial support organizations are clearly established entities with the purpose of promoting entrepreneurial activities and providing assistance to entrepreneurs, including business incubators, science and technology parks, accelerator programs, and, more recently, various manufacturing spaces and coworking spaces (Bergman and McMullen, 2022). Boubker et al. (2021) defined "entrepreneurial support" as the provision of valuable resources to entrepreneurs by individuals or organizations, implementing structured activities to create favorable conditions for establishing a new independent company, increasing chances of survival, or promoting long-term growth. Entrepreneurial support organizations can be understood as entities primarily aiming to assist individuals and groups in seeking and initiating business ventures (Cook et al., 2014; Fuzi, 2015).

H3: Support organizations have a positive impact on entrepreneurial intentions.

Financial access is the ability of individuals or businesses to obtain financial services, including credit, deposits, payments, insurance, and other risk management services (Demirgüç-Kunt et al., 2008). Financial access has been identified as a crucial determinant of the success or failure of small and

medium-sized enterprises (SMEs) in both developing and developed countries (Matshekga and Urban, 2013). Seghers et al. (2012) demonstrated that sufficient financial access is essential as it enables SMEs to invest in productive assets and the latest technology.

In universities, financial support for entrepreneurship can come from different sources. Organizations like the Youth Union and Student Association may offer loans to students to start businesses. Additionally, universities may have entrepreneurial support funds that provide financial assistance for student startups. The Creative Entrepreneurship Support Fund is a non-profit, collective fund within a university or organization that is part of a larger support system. Its main goal is to encourage and develop innovative skills, helping students turn their entrepreneurial ideas into reality.

Student loans are another means to provide students with capital for small entrepreneurial projects. Hassan et al. (2021) highlighted the relationship between student loans and entrepreneurial intentions. Furthermore, universities can assist their students in seeking financial support from investment funds affiliated with the university or other loan options from banks and credit organizations.

Therefore, financial access is a crucial factor in entrepreneurial intentions, as startup enterprises often face financial constraints, such as the inability to mobilize sufficient funds needed for projects and investments in new ventures to expand their business. The greater the financial access for businesses, the more opportunities there are to convert financial capital into other resources that enterprises require, such as advanced technology and talented human resources.

H4: Financial support organizations have a positive impact on entrepreneurial intentions.

Research and implementation organizations are structured in various forms, such as research and implementation institutes, research and implementation centers, laboratories, observation stations, test stations, and other research and implementation facilities. The tasks of these research and implementation organizations vary depending on the organization's scale, the scope of activities, and the administrative management hierarchy. These tasks may include scientific and technological research, workforce training, and talent development.

Research organizations within the university's entrepreneurial ecosystem comprise research centers, laboratories, and other facilities that provide the physical infrastructure for students' scientific research, enabling them to develop their entrepreneurial ideas.

H5: Research organizations have an impact on entrepreneurial intentions.

The primary reasons leading to the failure of startup businesses are mainly attributed to a lack of experience, primarily because the startup teams are predominantly composed of young individuals. The vulnerability in business requires support and integration with other components of the ecosystem, where large enterprises play an extremely important role. Large companies are particularly crucial for startup businesses; they can act as investors or customers for these startups, both roles being vital for the survival of the startup. Large companies often cannot independently innovate their own technology to ensure a competitive advantage, and one alternative solution is to acquire technology from startup businesses. Businesses within the university's entrepreneurial ecosystem can include those directly affiliated with the university, businesses in partnership with the university, and businesses originating from the university. These businesses can serve as investors, advisors, customers, share market experience, and provide guidance on capital management to avoid common financial pitfalls. Moreover, they can become sustainable investors, acting as customers by incorporating startup products into the solution chain offered to the market. Overall, it can be said that large enterprises provide a foundation for startups to leverage and grow.

H6: Enterprises positively impact entrepreneurial intentions.

While the startup team may include individuals with expertise in law, accounting, and labor recruitment, the entrepreneurial process involves complex and wide-ranging legal, accounting, financial, and labor-related issues that often surpass the specialized skills of startup team members. In such situations, startup enterprises need to engage professional service providers in the market, such as lawyers, accountants, banks, labor recruiters, consultants, and advisory staff. Therefore, service providers play a crucial role in facilitating the success of the entrepreneurial process. Economic consulting centers have advisors specialized in entrepreneurship. Entrepreneurial advisors are essential for the success of entrepreneurs, providing advice on business and management issues.

Market research services can benefit startup enterprises because "Market research allows companies to plan for a successful business project or uncover non-standard issues before making any investment" (Wiedersheim-Paul et al., 1978). Business and academic literature have emphasized the importance of understanding the market (customers and competitors) and adjusting organizational capabilities to achieve appropriate results (Day, 1998). Legal consulting services are also necessary for startup enterprises. According to Hassan et al. (2021), entities preparing to implement their business ideas and those in the early stages of business operations, as well as entities already active in the market, require legal knowledge of civil law

issues. It helps startup enterprises address legal issues and contracts, given the specific nature of the business field. Additionally, services such as vocational training, on-demand scientific research, and tax accounting can also help businesses save time and costs.

H7: Service providers have a positive impact on entrepreneurial intentions.

The proposed research model containing all hypotheses is illustrated in Fig. 1.

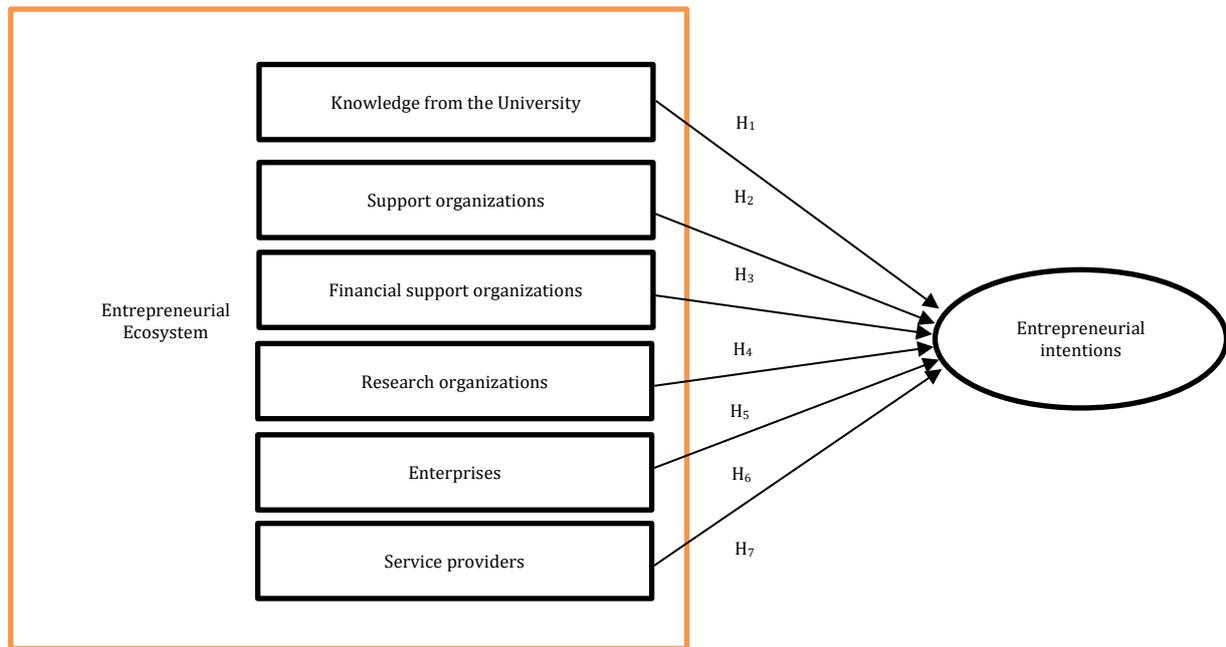


Fig. 1: Research model

2.2. Research methodology

The research determines the sample size based on formulas from various studies. According to Green (1991), the minimum sample size for a multiple regression model is given by $N > 50 + 8m$, where N is the sample size, and m is the number of independent variables. Meanwhile, Hair et al. (2021) proposed the required sample size for research as $N = 5m'$, where N is the sample size, and m' is the number of observed variables.

Considering the study involves 36 observed variables, the required sample size, according to the formulas, is 180. Fabrigar et al. (1999) suggested that the sample size should satisfy the condition of being five times the number of observed variables, and at least 100 samples are necessary for exploratory factor analysis (EFA). Hence, the author decides that the sample size should exceed 180.

Tho (2017) emphasized that in quantitative research for testing scientific theories, sample selection is a crucial step influencing the quality of research results. The convenience sampling method is chosen for this study. Convenient sampling is a type of non-probability or non-random sampling where the survey targets meet specific practical criteria, such as easy accessibility, geographical proximity, availability at a certain time, or willingness to participate in the research. Although convenient sampling can save costs and time, Hassan et al. (2021) pointed out its clear disadvantage of potential bias. Primary data collection method: Data were collected through a survey questionnaire

administered to students currently enrolled at Can Tho University. The survey instrument utilized a 5-point Likert scale to measure responses. This type of scale is designed to depict the attitudes and opinions of the surveyed individuals regarding a specific economic or social issue. The Likert scale is named after the American social scientist Rensis Likert and includes the following levels: 1-strongly disagree; 2-disagree; 3-neutral; 4-agree; and 5-strongly agree.

Data analysis method: Descriptive statistics involve summarizing and describing data to enhance understanding. Descriptive statistics provide concise observations and summaries of specific data sets, aiding in their comprehension (Awwad and Al-Aseer, 2021). To test the reliability of the scales used in the study, the author employed Cronbach's Alpha coefficient and item-total correlation. Unreliable variables were excluded from the research model and not considered in the EFA. A scale is considered reliable if Cronbach's Alpha falls within the range of [0.70-0.80]. A value greater than or equal to 0.60 is acceptable for Cronbach's Alpha in terms of reliability (Nunnally and Bernstein, 1994; Soomro and Shah, 2022). Another important index is the Corrected Item-Total Correlation, representing the correlation between each observed variable and the remaining variables in the scale. According to Cristobal et al. (2007), a scale is considered good if the Corrected Item-Total Correlation values are 0.3 or higher. Therefore, during the reliability testing with Cronbach's Alpha, observed variables with a Corrected Item-Total Correlation coefficient less than 0.3 should be considered for removal.

According to [Fabrigar et al. \(1999\)](#), the technique of EFA originates from Spearman's work in 1904. Factor analysis is understood as a series of multivariate statistical techniques aimed at condensing data and gaining a more precise understanding of measured variables by identifying the numbers and the essence of the correlation between common factors ([Williams et al., 2010](#); [Abdelfattah, 2022](#)).

To examine the relationships among factors influencing entrepreneurial intention, coefficients are assessed using the Pearson correlation coefficient, denoted by the symbol "r." The correlation coefficient has values within the range of $-1 \leq r \leq +1$.

Following EFA, factors are extracted and transformed into new variables. These variables replace the original set of variables in regression analysis. The multivariate regression analysis method is employed to estimate the extent of influence of factors (independent variables) on the satisfaction of instructors (dependent variable).

3. Results and discussion

The research collected data from 325 students, as shown in [Table 1](#), indicating a notable variation in

the distribution of students across academic years. Specifically, there are 34 fourth-year students, accounting for 10.5%; 95 third-year students, representing 29.2%; 67 second-year students, making up 20.6%; and the highest proportion is among first-year students, comprising 38.5% with 125 students. In terms of gender, there are 176 male students, constituting 54.2%, and 149 female students, making up 45.8%, indicating a relatively balanced distribution between the two gender groups. Regarding the educational programs, 264 students are in the general program, representing 81.2%, while 61 students are in the high-quality program, accounting for 18.8%. It is evident that the number of students in the general program is significantly higher than those in the high-quality program, leading to a considerable imbalance in the distribution.

Regarding gender, there are 176 male students, constituting 54.2%, and 149 female students, making up 45.8%, indicating a relatively balanced distribution between male and female student groups. In terms of academic programs, 264 students are enrolled in the regular program, comprising 81.2%, while 61 students are in the high-quality program, representing 18.8%.

Table 1: Descriptive statistics

Criteria	Content	Frequency (observation)	Percentage (%)
Year	4	34	10.5
	3	95	29.2
	2	67	20.6
	1	125	38.5
	Others	4	1.2
Total		325	100
Gender	Male	176	54.2
	Female	149	45.8
Total		325	100
Program	Regular program	264	81.2
	High-quality program	61	18.8
Total		325	100

Based on [Table 2](#), the presented outcomes reveal a distribution of students across various academic disciplines within the sample. Electronics and Telecommunications attract 9 students, constituting 2.8%, while Finance and Banking enroll 14 students, representing 4.3%. Control Engineering and Automation attract 9 students, making up 2.8%, and Construction Engineering has 8 students, contributing 2.5%. The field of Law accounts for 6 students, comprising 1.8%. Notably, the Business Administration major reports the highest enrollment, with 106 students, representing 32.6%. Business Trade and Tourism Service Management consist of 14 and 21 students, contributing 4.3% and 6.5%, respectively. Commercial Law comprises 19 students, making up 5.8%, and Statistics involves 7 students, representing 2.2%. Agricultural Economics enrolls 13 students, constituting 4.0%, and Veterinary Medicine attracts 37 students, contributing to 11.4%. Other majors collectively account for 62 students, representing 19.1%. These figures underscore the diversity of academic fields within the survey sample. However, it is crucial to

note that Business Administration constitutes nearly one-third of the overall sample, potentially exerting an influence on the research outcomes.

Through [Table 3](#), it can be observed that the majority of students believe that Family Influence is the most impactful on entrepreneurship, with 83.4% of students endorsing this view. Following this, factors such as Knowledge from the University, Service Providers, Government Policies and Regulations, and Support Organizations have respective endorsement rates of 62.8%, 4.1%, 41.8%, and 37.8%. Subsequently, other factors such as Businesses have a rate of 32.3%, Research Organizations at 29.5%, and, finally, other factors with a rate of 2.8%.

The EFA analysis ([Table 4](#)) reveals a Kaiser-Meyer-Olkin (KMO) measure of 0.918, surpassing the threshold of 0.5, indicating the suitability of the EFA analysis. Bartlett's test yields a Sig value of 0.000, less than 0.05, signifying that the observed variables are correlated with each other in the factor. The Eigenvalue is a common criterion for determining the number of factors in EFA. Only factors with

Eigenvalues ≥ 1 are retained in the analysis, and in this case, the Eigenvalue is 1.002, which is greater than 1. The total variance explained is 63.342%,

exceeding 50%, indicating the appropriateness of the EFA model. These 7 factors explain 62.342% of the variance in the observed variables.

Table 2: Results of academic discipline information

Major	Frequency (observation)	Percentage (%)
Electronics and telecommunications	9	2.8
Finance and banking	14	4.3
Control engineering and automation	9	2.8
Construction engineering	8	2.5
Law	6	1.8
Business administration	106	32.6
Business trade	14	4.3
Tourism service management	21	6.5
Commercial law	19	5.8
Statistics	7	2.2
Agricultural economics	13	4.0
Veterinary medicine	37	11.4
Other majors	62	19.1
Total	325	100

Table 3: Influence levels of factors on entrepreneurial intention

Criteria	Content	Frequency (observation)	Percentage (%)
Knowledge from the university	Yes	204	62.8
	No	121	37.2
Total		325	100
Government policies and regulations	Yes	136	41.8
	No	189	58.2
Total		325	100
Capital	Yes	271	83.4
	No	54	16.6
Total		325	100
Support organizations	Yes	123	37.8
	No	202	62.2
Total		325	100
Businesses	Yes	105	32.3
	No	220	67.7
Total		325	100
Research organizations	Yes	96	29.5
	No	229	70.5
Total		325	100
Service providers	Yes	140	43.1
	No	185	56.9
Total		325	100
Other factors	Yes	9	2.8
	No	316	97.2
Total		325	100

Through the EFA analysis, seven factor groups influencing the entrepreneurial intention of Can Tho University students were identified: University, government, support organizations, capital providers, research organizations, businesses, and service providers.

The EFA analysis for the dependent variable reveals a factor extracted from the observed variables included in the EFA. The explained variance is 63.749% with an Eigenvalue of 3.187, exceeding 1 (Table 5). The KMO coefficient is 0.819, and Bartlett's test with a value of 0.000, less than 0.05, indicates correlations among the variables. No variable has a factor loading below 0.5, so all are retained. This factor is called "Entrepreneurial Intention."

The outcomes of the multivariate regression analysis revealed that the R squared is 0.249, signifying that 24.9 % of the variance is explained. Consequently, the independent variables incorporated into the regression model elucidate merely 24.9% of the fluctuations in the dependent variable (Y). The residual 86.9% is ascribed to external variables that were not taken into account in the model, along with random error. The

significance value (Sig.) for the F-test in the ANOVA table is 0.000, falling below the 0.05 threshold. Hence, the regression model is deemed appropriate.

Multicollinearity assessment: The regression analysis reveals that the variance inflation factor (VIF) for all seven variables is below 2, precisely equal to 1.000 for each. Hence, we can assert that there is no multicollinearity issue among the observed variables incorporated into the model.

The normality assumption of residuals check: Referring to the Histogram chart if the mean value approximates 0, the standard deviation is close to 1, and the distribution curve exhibits a bell-shaped appearance, we can reasonably conclude that the residual distribution approximates a normal distribution. Consequently, the assumption of normality for the residuals remains unviolated.

Model hypotheses testing and regression results: A scrutiny of the regression results in Table 6 indicates that the Sig coefficients for four variables—University, Capital provider organization, Research organization, and Businesses—are all below 0.05. The standardized Beta coefficients are positive, signifying a positive impact on entrepreneurial intention. Conversely, the Sig coefficients for three

variables—Government, Support organization, and Service provider—are greater than 0.05, suggesting that these three variables insignificantly affect the

entrepreneurial intention of students at Can Tho University.

Table 4: EFA results

	Component						
	1	2	3	4	5	6	7
SP2	0.761						
SP1	0.751						
SP4	0.729						
SP3	0.725						
SP5	0.679						
G03		0.820					
G02		0.758					
G04		0.753					
G05		0.664					
G01		0.573					
F01			0.743				
F03			0.707				
F02			0.697				
F05			0.644				
F04			0.573				
UN2				0.727			
UN4				0.695			
UN1				0.660			
UN5				0.659			
UN3				0.650			
C02					0.821		
C03					0.785		
C01					0.708		
C04					0.572		
S06						0.746	
S04						0.734	
S05						0.627	
S03						0.614	
R03							0.719
R01							0.675
R04							0.622
R05							0.530
			Eigenvalue				1.002
			Total variance extracted				63.342
KMO							0.918
Sig.							0.000

Table 5: Results of entrepreneurial intention scale EFA

	Component
	1
EI5	0.830
EI4	0.815
EI2	0.810
EI3	0.808
EI1	0.724
Eigenvalue	3.187
Total variance extracted	63.749
KMO	0.819
Sig.	0.000

Table 6: Result of the multivariate regression analysis

Independent variables	Beta	t	Sig	Multicollinearity analysis	
				Tolerance	VIF
Coefficient		0.000	1.000		
X1	0.238	4.593	0.000	1.000	1.000
X2	0.046	0.892	0.373	1.000	1.000
X3	0.047	0.914	0.361	1.000	1.000
X4	0.194	3.749	0.000	1.000	1.000
X5	0.170	3.279	0.001	1.000	1.000
X6	0.111	2.146	0.033	1.000	1.000
X7	0.097	1.868	0.063	1.000	1.000
		R squared			0.249
		Sig.			0.000

Based on the standardized coefficients, the regression model can be articulated as follows:

$$Y = 0.238 * X1 + 0.194 * X4 + 0.170 * X5 + 0.111 * X6$$

This regression model elucidates that the entrepreneurial intention of students at Can Tho

University is contingent on four factors, ranked in descending order of influence: University (0.238), Capital provider organization (0.194), Research organization (0.170), and Businesses (0.111). The regression outcomes signify that the three factors—Government, Support organization, and Service provider—do not make a significant contribution to

entrepreneurial intention, leading to the rejection of hypotheses H2, H3, and H7.

4. Conclusion

The research has presented an overview of students' perceptions regarding entrepreneurship, its role, and entrepreneurial intentions, along with their understanding of the entrepreneurial ecosystem. It has identified factors within the entrepreneurial ecosystem that either positively facilitate or hinder the development of entrepreneurial intentions among Can Tho University students. The study's findings indicate that the factors influencing the entrepreneurial intentions of these students are ranked in descending order of impact as follows: (1) University, (2) Capital provider organizations, (3) Research organizations, and (4) Businesses.

The research emphasizes the substantial positive impact of the University factor on the entrepreneurial intentions of Can Tho University students. To amplify this influence, the University might consider integrating entrepreneurship courses into the mandatory curriculum instead of offering them as electives. Such courses impart essential knowledge for students interested in entrepreneurship. Furthermore, survey statistics reveal that students attribute significant importance to the knowledge acquired at the university in shaping their entrepreneurial intentions. Hence, the university should sustain and enhance the delivery of this knowledge within the curriculum. Moreover, there should be a focus on extracurricular activities and practical internships to allow students to apply theoretical knowledge to real-world contexts.

Concerning government support policies, such as the "Support for the National Startup and Innovation Ecosystem by 2025" initiative, the study recommends swift implementation to assist startup enterprises. The research also indicates a positive impact of capital provider organizations on the entrepreneurial intentions of Can Tho University students. To bolster the effectiveness of these organizations, the university could implement measures to provide capital for student startups, including the establishment of a startup investment fund within the university, mirroring the model at Hanoi University of Science and Technology. Additionally, collaboration with regional venture capital funds like FUNDGO could serve as a conduit for students seeking bank loans for their startup ventures.

The research results indicate that research organizations have a positive impact on the entrepreneurial intentions of Can Tho University students. However, students have not fully utilized these research facilities. Therefore, the university should take measures such as allowing students to register for the use of research facilities and enabling general students to utilize the High-Tech Building and Complex Building. Enhancing scientific research activities and commercializing research and

inventions from research facilities is crucial. Initiatives such as research competitions and the application of science into production should be established to allow students to access and apply research findings in entrepreneurial activities.

The university should also strengthen collaboration with businesses across various sectors to provide students with internship opportunities and establish relationships with enterprises, facilitating entrepreneurial endeavors. Establishing more university-affiliated enterprises, startup ventures, and similar entities can support students in entrepreneurship, serving as models, clients, or partners for students' startup ventures. Additionally, creating spaces for collaborative work among startup enterprises, such as shared workspaces and technology parks, would foster cooperation and innovation in the entrepreneurial ecosystem.

Compliance with ethical standards

Ethical considerations

All participants provided informed consent, and their confidentiality and anonymity were maintained throughout the study. The research followed ethical guidelines, with data used solely for academic purposes.

Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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