

# ***IConEnt***

The 5<sup>th</sup> International Conference on Entrepreneurship

## **The Effect of Entrepreneurial Education on Internet Entrepreneurship Performance Mediated By Self-Efficacy (Empirical Study on Instagram Online Shop In Jakarta Province)**

Oscar Jayanagara<sup>a</sup>, Albert Dermawan Yusup<sup>b</sup>

<sup>a</sup>Pelita Harapan University, Tangerang, Banten

<sup>b</sup>Pelita Harapan University, Tangerang, Banten

### **ABSTRACT**

The development of social media not only helps people in building communication but also becomes a business opportunity for internet-based entrepreneurs. However, on the other hand, the topic that discusses internet entrepreneurship is still very rarely raised. Therefore, this study was conducted to determine what factors are able to improve or influence internet entrepreneurship performance. This study is included in the type of quantitative research, with the number of samples obtained as many as 500 respondents, the data collection technique used was a questionnaire and the data analysis technique used was PLS-SEM. The results of the study showed that entrepreneurial education had a significant and positive effect on internet entrepreneurial self-efficacy and internet entrepreneurship performance, especially financial, internal and learning and growth perspectives. Internet entrepreneurial self-efficacy was also found to have a significant and positive effect on all perspectives in internet entrepreneurship performance. Then internet entrepreneurial self-efficacy also has significant mediation between the influence of entrepreneurial education on all perspectives in internet entrepreneurship performance. However, entrepreneurial education was found to have no significant effect on internet entrepreneurship performance: customer perspectives.

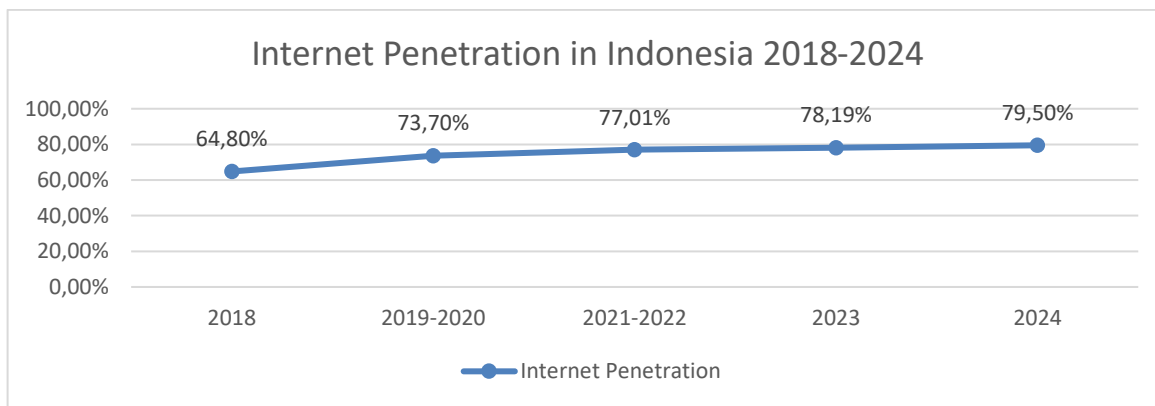
**Keywords** - Entrepreneurial Education, Internet Entrepreneurial Self-Efficacy, Internet Entrepreneurship Performance, Financial Perspectives, Customer Perspectives, Internal Perspectives and Learning and Growth Perspective.

# *IConEnt*

The 5<sup>th</sup> International Conference on Entrepreneurship

## Background

The development of technology, especially in the field of internet networks, has made it easier for people today to search for information and communicate. The convenience offered by using the internet has resulted in many people actively using the internet in their daily lives. Based on data collected from the Indonesian Internet Service Providers Association (APJII) in 2024, it was found that there were 221,563,479 internet users in Indonesia, where when compared to the population in Indonesia, internet penetration in society has reached 79.5% (Indonesian Internet Service Provider Association, 2024). Internet penetration in Indonesian society shows a trend that continues to increase consistently from year to year, as seen in Figure 1. below.



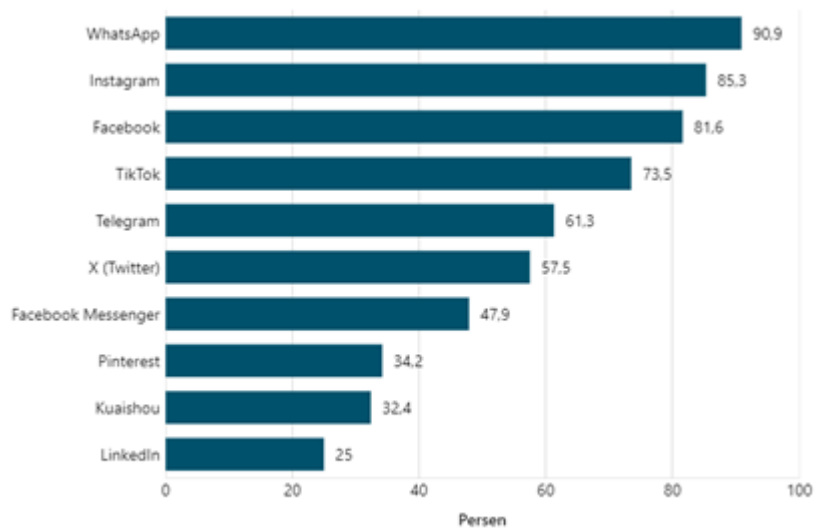
**Fig. 1. Internet Penetration in Indonesia 2018-2024**

**Source: APJII (2018-2024).**

The internet is often used to help communication between users through social media, in fact the growth of social media users cannot be separated from the number of internet users, where the two are correlated. Based on data collected by We Are Social (2023), it was found that the number of active social media users in Indonesia was 167 million people or equivalent to 60.4% of the total population in Indonesia, meaning that almost 3 out of 5 people in Indonesia are active social media users. In addition, it was also found that the average person in Indonesia spends 3 hours and 11 minutes per day accessing social media. A survey conducted by We Are Social and Databoks in 2024 (Figure 1.2 below) found that WhatsApp ranked first with 90.9% of internet users in Indonesia, followed by Instagram in second place with 85.3% of users. If associated with the number of social media users in Indonesia, it can be explained that there are approximately 142.45 million Instagram users in Indonesia. In addition, based on data also collected from We Are Social, it was found that the average Instagram user in Indonesia spends 16 hours and 10 minutes per month accessing Instagram.

# IConEnt

## The 5<sup>th</sup> International Conference on Entrepreneurship



**Fig. 2. Social Media Applications with the Most Users in Indonesia**

**Source: *We Are Social* and Databoks (2024).**

Along with the increasing number of social media users, especially Instagram, there are opportunities for business actors to carry out their business activities using Instagram, either to simply promote products (Silvira & Riswanto, 2023) or build communication with consumers (Rahmayanti & Fauzi, 2021), to carry out sales activities on social media (Tang & Raheem, 2023). Based on research by Chopra and Dev (2022), it was found that social media is very helpful for business actors, especially micro, small and medium enterprises (MSMEs) to expand their marketing reach, increase consumer awareness, and build close relationships with their consumers. The increase in sales on social media has even given rise to a new subcategory, namely social commerce, which is completely separate from e-commerce. Based on a report by Mckinsey & Company in 2017, online trade transactions in Indonesia amounted to \$8 billion, of which \$3 billion was made through social media or social commerce. These data show that social media is not only used to communicate between users, but has also become a platform to support business or company activities.

Data collected from the Ministry of Cooperatives and Micro, Small and Medium Enterprises in 2021 found that as many as 13.7 million MSME units out of 64 million MSME units in Indonesia have used the internet and sold online (CNN Indonesia, 2021). This number then increased again in 2023 to 23 million units out of a total of 65 million MSME units in Indonesia, with a target of 30 million MSME units that have switched to digital commerce in 2024 (INDEF, 2023). One of the areas with the largest number of online sellers in Indonesia is DKI Jakarta with the number of registered online business units based on data from the Central Statistics Agency (2022) of 253,261 business units (GoodStats, 2024). The high number of business units is not surprising because data collected by Databoks in 2024 shows that DKI Jakarta is one of the areas with the highest online shopping preferences in Indonesia, where as many as 32.32% of consumers stated that they prefer to shop online (Databoks, 2024).

**Table 1. Business Failure Ratio In the First Five Years of Business**

<b>Year</b>	<b>Failure Ratio</b>
First	20,6%
Second	31,3%
Third	37,9%
Forth	42,7%
Fifth	48%

**Source: Shopify (2024).**

However, the high number of online shopping enthusiasts does not necessarily provide certainty that a business can perform well if it switches to digital or online commerce. Data collected from Shopify (2024) explains that in the first five years of a newly established business, 20.6% will fail in the first year, 31.3% will fail in the second year, 37.9% will fail in the third year, 42.7% will fail in the fourth year and 48% will fail in the fifth year. The high rate of business failure is influenced by business performance that does not reach targets or even cover the capital that has been spent.

The performance of a business is generally seen from the financial aspect, but basically it can be assessed from several perspectives such as financial, customer, internal and learning and growth, especially in assessing internet entrepreneurship performance (Yeh et al., 2021). Meanwhile, when viewed from the factors that influence performance, there are many factors that are considered to be able to influence it, but specifically in this study, what is discussed is entrepreneurial education (Mahmood et al., 2021, Rahardjo et al., 2023, and Zhou et al., 2024) and entrepreneurial self-efficacy (Kimathi et al., 2019, Ayoub, 2022, and Caliendo et al., 2023).

Research by Mahmood et al. (2021) which took as subjects entrepreneurs from university graduates in Malaysia found that graduates who received entrepreneurship education tended to have better abilities in formulating and applying marketing strategies, making business decisions and positioning themselves in the market, which contributed directly and positively to their business performance. Then research by Zhao et al. (2024) who conducted research on entrepreneurs in China also found that the level of entrepreneurship education can contribute positively to their business performance. Finally, there is research by Hairudinor et al. (2020) which took as subjects MSMEs in Indonesia, where it was found that the level of entrepreneurship education of an entrepreneur will affect their knowledge, experience and ability in managing a business, thus directly affecting their business performance.

Meanwhile, in the context of the influence of self-efficacy on entrepreneurial performance, research by Kimathi et al. (2019) who conducted research on MSME entrepreneurs from Kenya found that the higher the level of self-efficacy of an entrepreneur, the higher the performance of his business, especially because with high self-efficacy an entrepreneur can make and implement decisions and policies quickly that contribute to improving their performance. Then another study by Ayoub (2022) who conducted research on MSMEs in Algeria also found that entrepreneurial self-efficacy is able to influence entrepreneurial performance significantly and positively.

# ***IConEnt***

## **The 5<sup>th</sup> International Conference on Entrepreneurship**

Although there have been many studies that discuss the influence of entrepreneurial education and entrepreneurial self-efficacy on entrepreneurial performance, there are still very few studies that specifically discuss in detail the performance of internet entrepreneurship, especially in Indonesia, therefore this study was conducted to prove the influence of entrepreneurial education and entrepreneurial self-efficacy on various aspects of the performance of online shops that use Instagram.

### **Literature Review**

#### **Internet Entrepreneurial Performance**

Entrepreneurial performance is a measurement of the overall results of a business or enterprise run by an entrepreneur, which includes financial and non-financial performance (Caliendo, 2023). Then according to Ayoub (2022), entrepreneurial performance can also be viewed as an assessment of the overall results or performance of a business unit within a certain period of time. Meanwhile, according to Yeh et al. (2021), entrepreneurial performance is an assessment of the actual results or performance of a business when compared to the results or performance expected at the beginning. In this study, the term internet entrepreneurial performance is used to refer to the research subject, namely the online shop on Instagram, although conceptually there is no difference between entrepreneurial performance and internet entrepreneurial performance. Performance assessment can be carried out using various methods or methods, but one of the most important is to use a balanced scorecard (Utami et al., 2020). In the balanced scorecard there are four perspectives in assessing the performance of a business unit or enterprise, namely financial, customer, internal and growth and learning perspectives (Yeh et al., 2021).

#### **Financial Perspectives**

Financial perspectives according to Winarto and Dewi (2019) are an analysis or assessment of performance that is measured based on how effective and efficient a company's ability is in managing its assets to generate income. Profit or financial performance is often seen as the main component in business performance, but in reality, the ideal assessment should not only focus on one aspect, but must combine financial and non-financial aspects to produce a good performance assessment (Mahmudova & Kovacs, 2018).

In this study, the measurement of financial perspectives was carried out using indicators adapted from research by Yeh et al. (2021), namely: 1) Market share, an indicator that measures how much financial performance is by looking at the market share of a business or business; 2) Return on investment, an indicator that assesses how much the level of return on profit is compared to the capital invested or used to fund a business or business; 3) Revenue increase, an indicator that measures whether there is an increase or development in the profits of a business unit compared to the previous year; 4) Net profit margins, an indicator that measures how much the level of profit margin is obtained by a business or business when compared to the costs or expenses that must be incurred or borne by the business.

# ***IConEnt***

The 5<sup>th</sup> International Conference on Entrepreneurship

## ***Customer Perspectives***

According to Kicova et al. (2023) in performance assessment based on the balanced scorecard, the consumer perspective is an assessment of the ability of a business or company to meet the needs and provide satisfaction to its consumers, as well as their ability to retain existing consumers. Then according to Gupta et al. (2020), customer perspective is an assessment of a company's performance by comparing the experiences of its consumers with the value or benefits generated by a company. Meanwhile, according to Mikula et al. (2021), customer perspectives are an assessment of the performance of a business or company that focuses on consumers, especially in terms of meeting needs, creating satisfaction and positive experiences, and in terms of consumer retention. In this study, the measurement of customer perspectives was carried out using indicators adapted from research by Yeh et al. (2021), namely: 1) Repurchase rate, an indicator that measures the level of repeat purchases from the same consumer; 2) Customer satisfaction, an indicator that measures the level of consumer satisfaction with a business or company whose products they have purchased and used; 3) Customer acquisition rate, an indicator that measures the actual level of purchases from a consumer compared to the number of people who view or ask about the products or services sold by a business.

## **Internal Perspectives**

Internal business process perspective is a measurement of the performance of a business or company by looking at the overall results of operational activities within a business, especially in meeting market needs and demands (Gupta et al., 2020). Then according to Al-Dweikat and Nour (2018), internal perspective is one part of measuring the performance of a company that focuses on the processes, activities or business activities within a company. Meanwhile, according to Mediaty et al. (2023), internal perspective is an assessment of the extent to which the management of a company is able to manage various business activities and processes within it, especially in order to meet market demand. In this study, measurements of internal perspectives were carried out using indicators adapted from research by Yeh et al. (2021), namely: 1) Frequency of return goods to supplier, an indicator that measures the level of return of products or services that have been purchased by a consumer; 2) Employee productivity, an indicator that measures the average productivity of the workforce in a business; 3) Order fulfillment within a week, an indicator that measures the level of fulfillment of orders from a consumer; 4) Time to process customer returns, an indicator that measures the average time required by a business to process returns submitted by a consumer.

## **Learning and Growth Perspectives**

Learning and growth perspectives are a view of how well a business is performing based on an assessment of a business's efforts to improve the skills and qualifications of its workforce (Dahal, 2022). This assessment is considered important because human resources are one of the main factors that influence all activities or activities in a business, without competent and appropriate human resources, it is impossible for a business to carry out its activities and activities properly (Tisu & Virga, 2021). Increasing human resource capabilities is seen as a form of success for a business, because basically the higher the human resource capabilities, the higher the performance (Utami et al., 2020). In this study, the measurement of learning and growth perspectives was carried out using indicators adapted from research

# *IConEnt*

## **The 5<sup>th</sup> International Conference on Entrepreneurship**

by Yeh et al. (2021), namely: 1) Employee skill training, an indicator that measures training or development of the skills of a workforce carried out by a business or company; 2) Knowledge management, an indicator that measures the level of performance of a business in managing the knowledge of its workforce; 3) Employee satisfaction, an indicator that measures the level of satisfaction of its workforce; 4) Turnover rate, an indicator that measures the level of the workforce turnover ratio, which shows whether in a business there is often or rarely a change of workforce.

### **Entrepreneurial Education**

Entrepreneurial education is a process of transmitting or transferring knowledge that includes the ability, awareness and understanding of entrepreneurship, which is carried out in a structured and formal manner through educational institutions or other institutions that have the appropriate competence (Widjaja et al., 2022). Then according to Arfah et al. (2023), entrepreneurial education is a process of providing or transferring knowledge related to entrepreneurship, with the aim of providing understanding and is expected to improve the entrepreneurial skills of the party receiving the knowledge. Meanwhile, according to Adu et al. (2020), entrepreneurial education can be defined as all activities carried out by an educational institution to provide theories and practices related to entrepreneurship to its students, with the aim of improving the ability and understanding of entrepreneurship. In conclusion, entrepreneurial education is all activities, activities or processes of transferring knowledge related to entrepreneurship, either in the form of theory, practice or a combination of both, with the aim of improving the ability and understanding of entrepreneurship. In this study, the measurement of entrepreneurial education was carried out using indicators adapted from research by Yeh et al. (2021), namely: 1) Entrepreneurship courses, an indicator that measures how much entrepreneurship material or classes a person has taken or has undergone; 2) Entrepreneurship comprehension, an indicator that measures the understanding, benefits and knowledge gained by a person after undergoing entrepreneurship education.

### **Internet Entrepreneurial Self-Efficacy**

Self-efficacy is a form of personal evaluation regarding a person's ability and confidence to be able to carry out an activity or activity well (Rino et al., 2023). Entrepreneurial self-efficacy is a measurement of how much confidence and determination a person has to become an entrepreneur or in other words to start and build their own business (Wang & Huang, 2019). Along with the development of technology and the growing adoption of the internet as a medium or means for entrepreneurship, a new perspective has emerged on entrepreneurial self-efficacy which is specifically related to internet-based businesses, namely the internet or cyber entrepreneurial self-efficacy (Yeh et al., 2021). According to Chang et al. (2020), internet entrepreneurial self-efficacy is a form of measurement of how much belief and confidence an entrepreneur has in his ability to start a business based on the internet or internet technology, which includes belief in his ability to use and adapt technology. In conclusion, internet entrepreneurial self-efficacy is a development of entrepreneurial self-efficacy which shows a person's belief and self-confidence in using internet-based technology to build their business or enterprise.

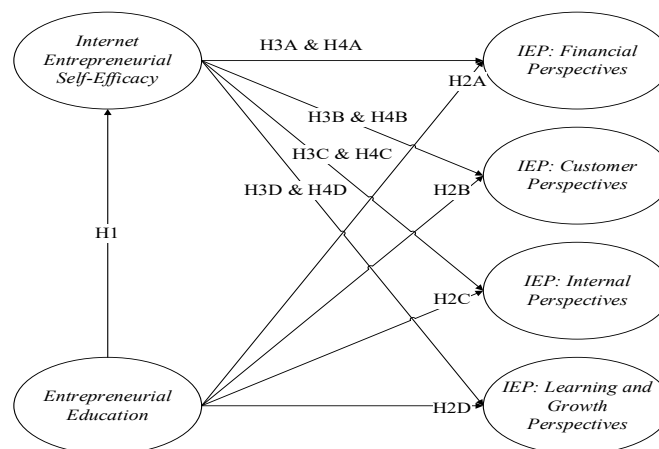
In this study, the measurement of internet entrepreneurial self-efficacy was carried out using indicators adapted from research by Yeh et al. (2021), namely: 1) Ability to lead, an indicator that measures how much confidence an entrepreneur has in his/her ability to lead the business he/she has built; 2) Ability to

# *IConEnt*

## The 5<sup>th</sup> International Conference on Entrepreneurship

persuade, an indicator that measures how much confidence an entrepreneur has in his/her ability to influence others in order to build his/her business; 3) Ability to communicate, an indicator that measures how much confidence an entrepreneur has in his/her ability to communicate with others who can help his/her business; 4) Ability to make a decision, an indicator that measures how much confidence an entrepreneur has in his/her ability to make business decisions; 5) Ability to operate computer and software, an indicator that measures how much confidence an entrepreneur has in his/her ability to operate computer devices and various supporting software for online businesses; 6) Ability to formulate internet marketing strategy, an indicator that measures how much confidence an entrepreneur has in his/her ability to design internet-based marketing strategies; 7) Ability to obtain necessary resources, indicator that measures how much confidence an entrepreneur has in his/her ability to obtain various resources needed for his/her business.

### Research Model



**Fig. 3. Research Model**

H1: Entrepreneurial Education has a positive and significant effect on Internet Entrepreneurial Self-Efficacy

H2a: Entrepreneurial Education has a positive and significant effect on Internet Entrepreneurial Performance: Financial Perspectives

H2b: Entrepreneurial Education has a positive and significant effect on Internet Entrepreneurial Performance: Customer Perspectives

H2c: Entrepreneurial Education has a positive and significant effect on Internet Entrepreneurial Performance: Internal Perspectives

H2d: Entrepreneurial Education has a positive and significant effect on Internet Entrepreneurial Performance: Learning and Growth Perspectives



# *IConEnt*

The 5<sup>th</sup> International Conference on Entrepreneurship

H3a: Entrepreneurial Self Efficacy has a positive and significant effect on Internet Entrepreneurial Performance: Financial Perspectives

H3b: Entrepreneurial Self Efficacy has a positive and significant effect on Internet Entrepreneurial Performance: Customer Perspectives

H3c: Entrepreneurial Self Efficacy has a positive and significant effect on Internet Entrepreneurial Performance: Internal Perspectives

H3d: Entrepreneurial Self Efficacy has a positive and significant effect on Internet Entrepreneurial Performance: Learning and Growth Perspectives

H4a: Entrepreneurial Self Efficacy Mediates the Influence of Entrepreneurial Education on Internet Entrepreneurial Performance: Financial Perspectives

H4b: Entrepreneurial Self Efficacy Mediates the Influence of Entrepreneurial Education on Internet Entrepreneurial Performance: Customer Perspectives

H4c: Entrepreneurial Self Efficacy Mediates the Influence of Entrepreneurial Education on Internet Entrepreneurial Performance: Internal Perspectives

H4d: Entrepreneurial Self Efficacy Mediates the Influence of Entrepreneurial Education on Internet Entrepreneurial Performance: Learning and Growth Perspectives

## **Methods**

This study uses the PLS-SEM method as an instrument for data analysis. The PLS-SEM method is used because this study has a large sample, has a research model that has been established and is based on existing theories.

## **Results**

The purpose of determining the respondent profile is to help researchers in compiling a general picture of the respondents or to help make a deeper and broader analysis related to the research results. In this study, the respondents used and met the requirements were 500 respondents, all of whom had online shops that sold on Instagram and all of whom were domiciled in the Jabodetabek area. The results of the analysis for other profiles are as follows:

# IConEnt

The 5<sup>th</sup> International Conference on Entrepreneurship

**Table 2. Respondent Gender**

Gender	Total	Percentage
Male	154	30,8%
Female	346	69,2%

**Source: Data is processed using Google Form (2025)**

The results of data collection using Google Forms show that of the 500 respondents in the study, 154 respondents (30.8%) were male and 346 respondents (69.2%) were female. Thus, it can be concluded that the majority of respondents in this study were female. These results are not surprising because based on a survey by the Central Statistics Agency and the Ministry of Trade in 2021, it was found that the majority of MSME actors are women with a proportion reaching 64.5% of the total number of MSMEs in Indonesia.

**Table 3. Respondent Age**

<i>Google</i>	Age	Total	Percentage
	18-25 years old	179	35,8%
	25-35 years old	219	43,8%
	36-45 years old	92	18,4%
	46-55 years old	9	1,8%
	> 55 years old	1	0,2%
<i>Table</i>	Education	Total	Percentage
	Senior High School	172	34,4%
	Diploma	48	9,6%
	Undergraduate	255	51%
	Master	23	4,6%
	Doctoral	2	0,4%
<i>Google</i>	Age of online shop	Total	Percentage
	Less than 1 year	35	7%
	1-2 year	162	32,4%
	3-4 year	215	43%
	> 4 year	88	17,6%

**Source: Data is processed using Forms (2025)**

## 4. Respondents' Education Level

**Source: Data is processed using Forms (2025)**

## 5. Age of Online Shop Respondents

**Source: Data is processed using Forms (2025)**

# IConEnt

The 5<sup>th</sup> International Conference on Entrepreneurship

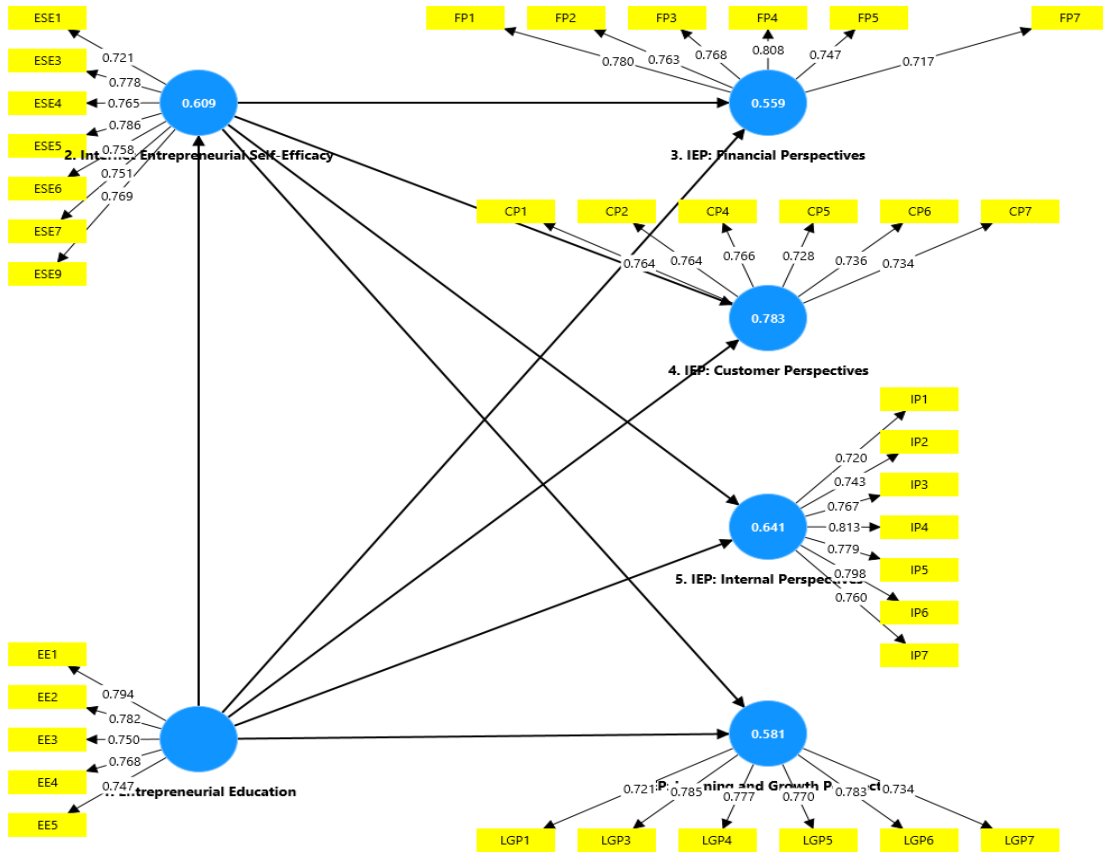


Fig. 4. Outer Model

Source: Data is processed using SmartPLS 4.0 (2025)

Table 6. Hypotheses Test

Hypothesis	Standardized Path Coefficient	T-Statistic		P-Value		Result
H1: Entrepreneurial Education → Internet Entrepreneurial Self-Efficacy	0,780	24,806	> 1,65	0,000	< 0,05	Supported
H2a: Entrepreneurial Education → IEP: Financial Perspectives	0,291	5,905		0,000		Supported

# IConEnt

The 5<sup>th</sup> International Conference on Entrepreneurship

Hypothesis	Standardized Path Coefficient	T-Statistic		P-Value		Result
H2b: Entrepreneurial Education → IEP: Customer Perspectives	0,022	0,520		0,302		Not Supported
H2c: Entrepreneurial Education → IEP: Internal Perspectives	0,308	6,234		0,000		Supported
H2d: Entrepreneurial Education → IEP: Learning and Growth Perspectives	0,287	5,830		0,000		Supported
H3a: Internet Entrepreneurial Self-Efficacy → IEP: Financial Perspectives	0,498	10,274		0,000		Supported
H3b: Internet Entrepreneurial Self-Efficacy → IEP: Customer Perspectives	0,868	23,752		0,000		Supported
H3c: Internet Entrepreneurial Self-Efficacy → IEP: Internal Perspectives	0,537	11,808		0,000		Supported
H3d: Internet Entrepreneurial Self-Efficacy → IEP: Learning and Growth Perspectives	0,516	10,969		0,000		Supported
H4a: Entrepreneurial Education → Internet Entrepreneurial Self-Efficacy → IEP: Financial Perspectives	0,389	9,182		0,000		Supported
H4b: Entrepreneurial Education → Internet Entrepreneurial Self-Efficacy → IEP: Customer Perspectives	0,677	16,237		0,000		Supported

# IConEnt

The 5<sup>th</sup> International Conference on Entrepreneurship

Hypothesis	Standardized Path Coefficient	T-Statistic		P-Value		Result
H4c: Entrepreneurial Education → Internet Entrepreneurial Self-Efficacy → IEP: Internal Perspectives	0,419	10,503		0,000		Supported
H4d: Entrepreneurial Education → Internet Entrepreneurial Self-Efficacy → IEP: Learning and Growth Perspectives	0,403	9,780		0,000		Supported

Source: Data is processed using SmartPLS 4.0 (2025)

The results of the data processing above show that almost all hypotheses are supported, except for hypothesis H2b. Because it was found that the t-statistic value is greater than 1.65 and the p-value is lower than 0.05 which indicates a significant influence, while the original sample value is between 0 and 1 which indicates a positive influence. While for hypothesis H2b it was found that the t-statistic value is lower than 1.65 and the p-value is greater than 0.05 which indicates an insignificant influence, causing the hypothesis to be rejected.

# IConEnt

The 5<sup>th</sup> International Conference on Entrepreneurship

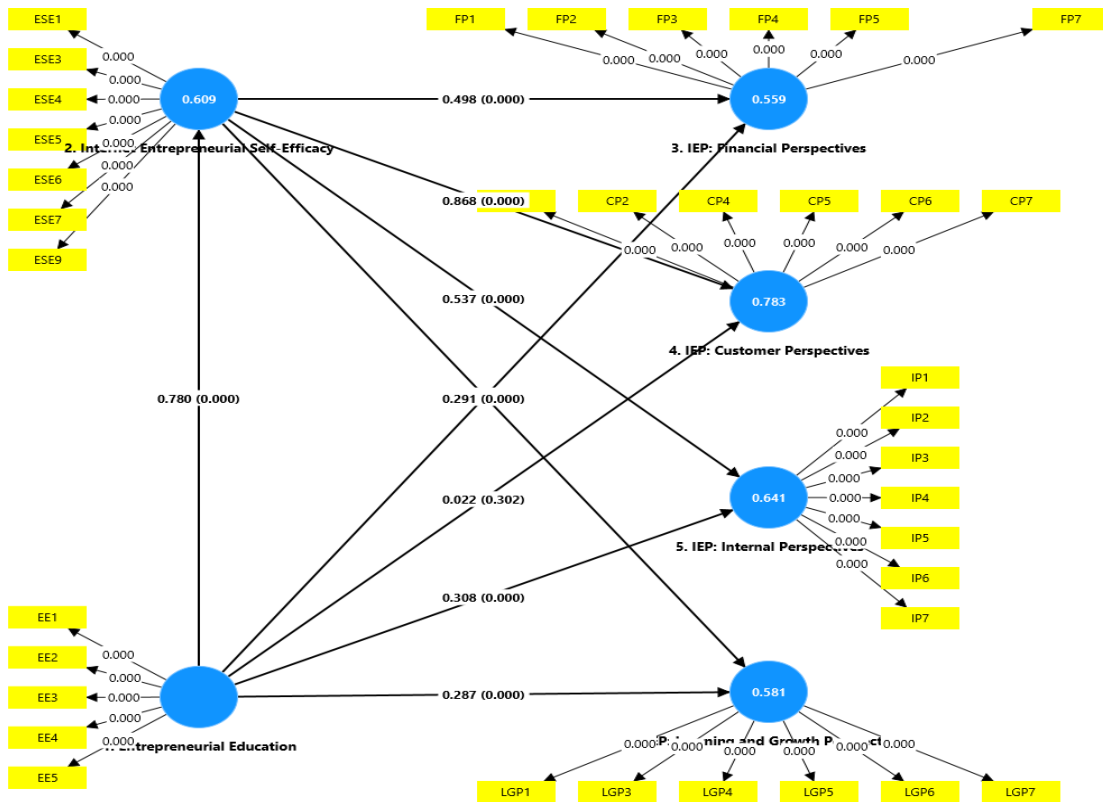


Fig. 5. Inner Model

Source: Data is processed using SmartPLS 4.0 (2025)

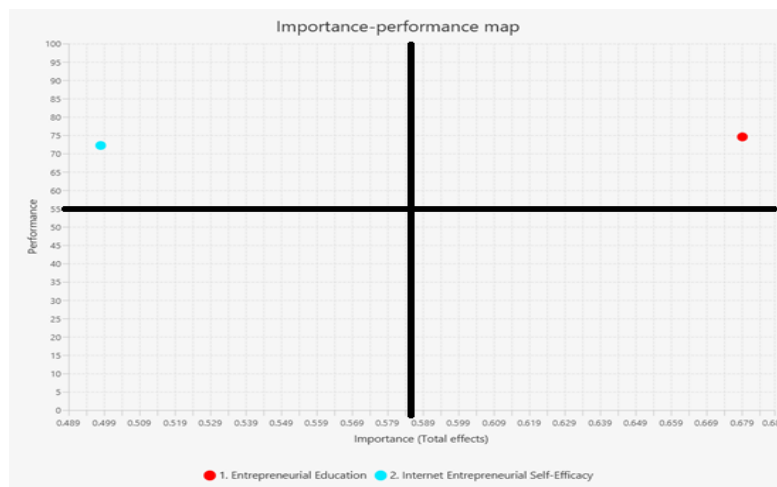


Fig. 6. IPMA IEP: Financial Perspectives

# ***IConEnt***

The 5<sup>th</sup> International Conference on Entrepreneurship

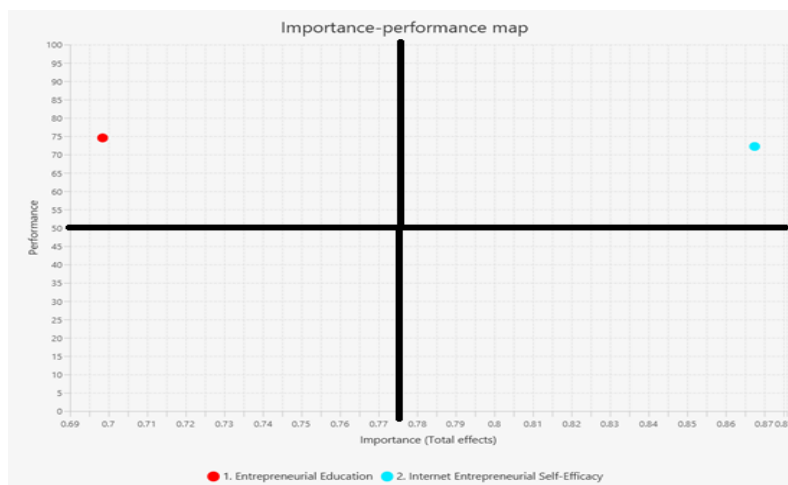
Source: Data is processed using SmartPLS 4.0 (2025)

## **Importance Performance Matrix**

Importance-performance matrix or more commonly known as IPMA is a data analysis used to identify areas that need to be improved or that are still lacking in a research model, the aim is for a researcher to know which areas or variables require more focus or attention than other variables (Ghozali, 2021). According to (Resdiansyah et al., 2019), in IPMA there are four main quadrants used, namely:

1. The first quadrant, shows variables that have a high level of importance but their performance is still low. This quadrant shows which variables should be the focus for improvement.
2. The second quadrant, shows variables that have a high level of importance and high performance. This quadrant shows which variables are good and can be maintained.
3. The third quadrant, shows variables that have a low level of importance and low performance. This quadrant shows which variables are performing poorly but are also not very important to the company.
4. The fourth quadrant, shows variables that have a low level of importance but with high performance. This quadrant shows variables that have performed well but are not considered important or a focus for the company.

Among the variables that affect internet entrepreneurial performance: financial perspectives, it was found that the variable internet entrepreneurial self-efficacy is included in quadrant I, indicating that this variable must be the main focus for online shop entrepreneurs to be able to improve their performance. Meanwhile, the variable entrepreneurial education is included in quadrant II, indicating that this variable is good, so entrepreneurs only need to maintain it. Therefore, it can be concluded that to improve internet entrepreneurial performance: financial perspectives, online shop entrepreneurs on Instagram must focus on internet entrepreneurial self-efficacy.



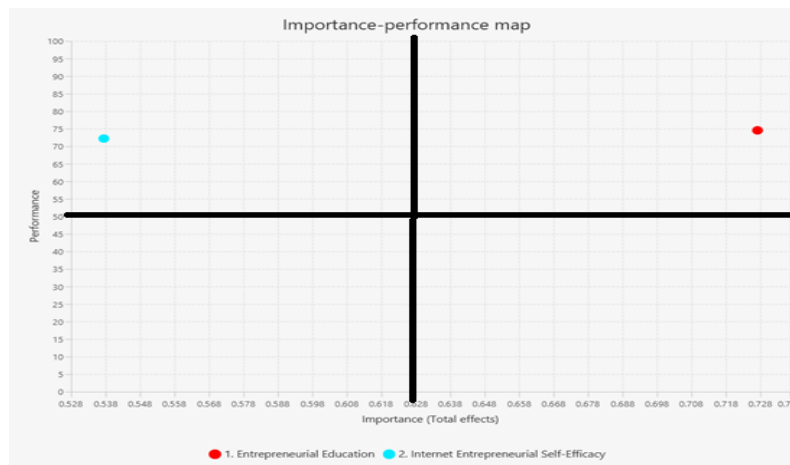
# *IConEnt*

The 5<sup>th</sup> International Conference on Entrepreneurship

**Fig. 7. IPMA IEP: *Customer Perspectives***

**Source: Data is processed using SmartPLS 4.0 (2025)**

Among the variables that affect internet entrepreneurial performance: customer perspectives, it was found that the entrepreneurial education variable is included in quadrant I, indicating that this variable must be the main focus for online shop entrepreneurs to be able to improve their performance. Meanwhile, the internet entrepreneurial self-efficacy variable is included in quadrant II, indicating that this variable is good, so entrepreneurs only need to maintain it. Therefore, it can be concluded that to improve internet entrepreneurial performance: customer perspectives, online shop entrepreneurs on Instagram must focus on entrepreneurial education.



**Fig. 8. IPMA IEP: *Internal Perspectives***

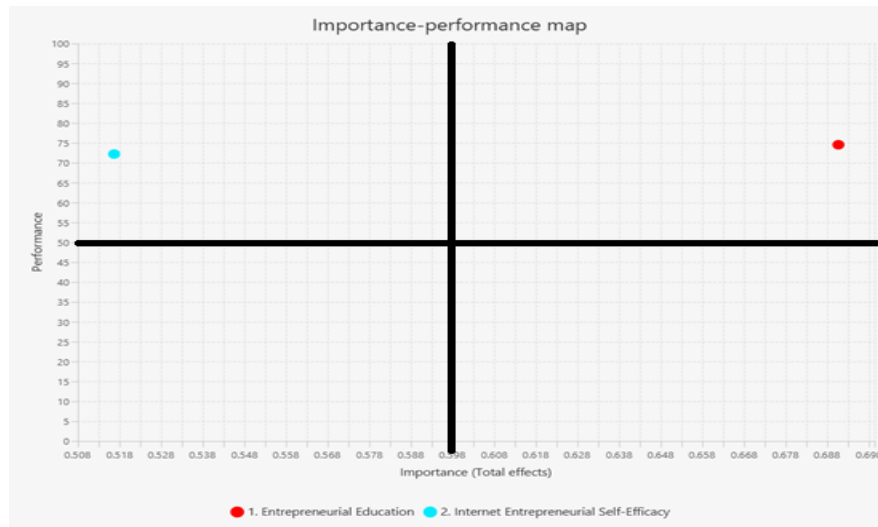
**Source: Data is processed using SmartPLS 4.0 (2025)**

Among the variables that affect internet entrepreneurial performance: internal perspectives, it was found that the variable internet entrepreneurial self-efficacy is included in quadrant I which indicates that this variable must be the main focus for online shop entrepreneurs to be able to improve their performance. While the variable entrepreneurial education is included in quadrant II which indicates that this variable is good, so entrepreneurs only need to maintain it. Therefore, it can be concluded that to improve internet entrepreneurial performance: internal perspectives, online shop entrepreneurs on Instagram must focus on internet entrepreneurial self-efficacy.



# *IConEnt*

The 5<sup>th</sup> International Conference on Entrepreneurship



**Fig. 9. IPMA IEP: *Learning and Growth Perspectives***

**Source: Data is processed using SmartPLS 4.0 (2025)**

Among the variables that affect internet entrepreneurial performance: internal perspectives, it was found that the variable internet entrepreneurial self-efficacy is included in quadrant I, indicating that this variable should be the main focus for online shop entrepreneurs to be able to improve their performance. Meanwhile, the variable entrepreneurial education is included in quadrant II, indicating that this variable is good, so entrepreneurs only need to maintain it. Therefore, it can be concluded that to improve internet entrepreneurial performance: learning and growth perspectives, online shop entrepreneurs on Instagram must focus on internet entrepreneurial self-efficacy.

## **Conclusion**

Of the thirteen hypotheses, twelve were supported, and only one hypothesis was not supported, namely hypothesis 2B regarding the relationship between Entrepreneurial Education and Internet Entrepreneurial Performance: Customer Perspectives.

## **Implikasi Manajerial**

The results of IPMA processing show that for the variables of internet entrepreneurial performance: financial, internal and learning and growth, the variable that must be the main concern of entrepreneurs in the online shop business on Instagram is internet entrepreneurial self-efficacy. These results show the importance for an entrepreneur, especially those who open or have a business in the online shop sector to have strong self-confidence in their ability to understand, operate and integrate internet-based technology for their business. Because along with the development of technology and communication, the role of the internet in business is becoming increasingly crucial, both in terms of finance, marketing, operations and even distribution. The results of IPMA processing also show that for the variable internet entrepreneurial

# ***IConEnt***

## **The 5<sup>th</sup> International Conference on Entrepreneurship**

performance: customer perspectives, the variable that should be the main concern of entrepreneurs in online shop businesses on Instagram is entrepreneurial education. These results show the importance for an entrepreneur who wants to improve their marketing performance to equip themselves with knowledge both formally and informally. Especially to understand how to communicate, interact, meet needs and handle complaints from consumers.

### **Future Research**

For further researchers, it is expected to conduct research on entrepreneurs in other areas to obtain comparisons or to expand the scope of the research. It is also expected to add data collection using observation or interviews so that the research results can be more in-depth. For the community and entrepreneurs, this study shows the importance of education, especially entrepreneurship education in building a business that can perform well. Therefore, it is recommended for people who want to become entrepreneurs or for entrepreneurs themselves to continue to improve their abilities and business performance by getting or undergoing entrepreneurship education.

# *IConEnt*

The 5<sup>th</sup> International Conference on Entrepreneurship

## REFERENCES

- Adu, I. N., Boakye, K. O., Suleman, A. R., & Bingab, B. B. (2020). Exploring the factors that mediate the relationship between entrepreneurial education and entrepreneurial intentions among undergraduate students in Ghana. *Asia Pacific Journal of Innovation and Entrepreneurship*, 215-228.
- Al-Dweikat, M. F., & Nour, M. I. (2018). Balanced Scorecard Critical Success Factors of Jordanian Commercial Banks and Its Effect on Financial Performance. *Accounting and Finance Research*, 146-153.
- Arfah, A., Mapparenta, & Serang, S. (2023). The Influence of Entrepreneurship Education and Family Environment on Students' Interest in Entrepreneurship. *Al-Ishlah: Jurnal Pendidikan*, 157-170.
- Ayoub, M. (2022). The effect of entrepreneurial self-efficacy on the performance of small business in Algeria: a case study of Skikda. *Modern Management Review*, 67-78.
- Caliendo, M., Kritikos, A. S., Rodriguez, D., & Stier, C. (2023). Self-efficacy and entrepreneurial performance of start-ups. *Small Business Economics*, 1027-1051.
- Chang, C. Y., Panjaburee, P., Lin, H. C., Lai, C. L., & Hwang, G. H. (2021). Effects of online strategies on students' learning performance, self-efcacy, self-regulation and critical thinking in university online courses. *Educational Technology Research and Development*, 1-20.
- Cho, Y. H., & Lee, J. H. (2018). Entrepreneurial orientation, entrepreneurial education and performance. *Asia Pacific Journal of Innovation and Entrepreneurship*.
- CNN Indonesia. (2021, Juli 29). *13,7 Juta UMKM Sudah Jualan Online, Masih Terfokus di Jakarta*. Retrieved from cnnindonesia.com: <https://www.cnnindonesia.com/teknologi/20210729213131-206-674057/137-juta-umkm-sudah-jualan-online-masih-terfokus-di-jakarta>
- Dahal, R. K. (2022). Effectiveness of learning and growth performance metrics in the Nepalese telecommunications industry for organizational success. *Problems and Perspectives in Management*, 238-249.
- Elert, N., Andersson, F., & Wennberg, K. (2014). The impact of entrepreneurship education in high school on long-term entrepreneurial performance. *Journal of Economic Behavior & Organization*, 1-29.
- Ghozali, I. (2021). *Konsep, Teknik Dan Aplikasi Menggunakan Program SMARTPLS 3.2.9*. Semarang: Badan Penerbit Universitas Diponegoro.
- GoodStats. (2024). *e-Commerce Semakin Eksis! Jumlahnya Capai 2,9 juta*. Retrieved from indonesiabaik.id: <https://indonesiabaik.id/infografis/e-commerce-semakin-eksis-jumlahnya-capai-29-juta>

# *IConEnt*

## **The 5<sup>th</sup> International Conference on Entrepreneurship**

- Gupta, A. K., Maheshwari, M., & Sharma, S. (2020). Customer Perspective of Balanced Scorecard: An Empirical View of Company's Performance from Customer Outlook (An Inter-Bank and Inter-Sector Comparison of Public and Private Sector Banks in India). *Pacific Business Review International*, 1-9.
- Gupta, A. K., Maheshwari, M., & Sharma, S. (2020). Internal business process perspective of balanced scorecard: driver to oushine in front of customers and shareholders (an empirical study on inter-bank and inter-sector comparison of public and private sector banks in India). *Journal of Critical Reviews*, 255-261.
- Hairudinor, Daradjat, A., & Asman, N. (2020). The impact of entrepreneurial education and competitiveness on business performance of Indonesian SMEs: moderating role of self efficacy. *Cypriot Journal of Educational Sciences*, 1732-1743.
- Jiatong, W., Murad, M., Bajun, F., Tufail, M. S., Mirza, F., & Rafiq, M. (2021). Impact of entrepreneurial education, mindset and creativity on entrepreneurial intention: mediating role of entrepreneurial self-efficacy . *Frontiers in Psychology*, 1-13.
- Kicova, E., Rosnerova, Z., Ponisciakova, O., & Gajanova, L. (2023). Concept for the Customer Perspective of the Balanced Scorecard (BSC) System in Bus Transport Companies in the Slovak Republic. *Systems*, 1-20.
- Kimathi, B. M., Mukulu, E., & Odhiambo, R. (2019). Effect of self-Efficacy on the Performance of Small and Medium Enterprises in Kenya. *Journal of Entrepreneurship & Project Management*, 1-16.
- Mahmood, R., Zahari, A. S., Ibrahim, N., Jaafar, N. F., & Yaacob, M. N. (2021). The Impact of Entrepreneur Education on Business Performance. *Asian Journal of University Education*.
- Mahmudova, L., & Kovacs, J. K. (2018). Definiting the performance of small and medium enterprises. *Network Intelligence Studies*, 1-10.
- Malebana, M. J. (2017). Knowledge of Entrepreneurial Support and Entrepreneurial Intention in the Rural Provinces of South Africa. *Development Southern Africa*, 74-89.
- Mediaty, Usman, A., Selvi, F., Ningsih, L., & Putri, D. R. (2023). The Implementation Of Balanced Scorecard In Indonesian Companies Companies: A Systematic Literature Review. *International Journal of Economics, Business and Innovation Research*, 282-301.
- Miao, C., Qian, S., & Ma, D. (2017). The Relationship between Entrepreneurial Self Efficacy and Firm Performance: A Meta-Analysis of Main and Moderator Effects. *Journal of Small Business Management*, 87-107.
- Mikula, B., Vajdova, I., & Tobisova, A. (2021). Application of the balanced scorecard customer perpespective in an airport environment. *Acta Avionica*, 35-41.

# *IConEnt*

## **The 5<sup>th</sup> International Conference on Entrepreneurship**

- Muslimawati, N. (2024, Mei 5). *Belanja Online di RI Meningkat, Metode Pembayaran COD Masih Digemari Masyarakat*. Retrieved from Kumparan.com: <https://kumparan.com/kumparanbisnis/belanja-online-di-ri-meningkat-metode-pembayaran-cod-masih-digemari-masyarakat-22g7KLbVAo4>
- Newman, A., Obschonka, M., Schwarz, S., Cohen, M., & Nielsen, I. (2019). Entrepreneurial self-efficacy: A systematic review of the literature on its theoretical foundations, measurement, antecedents, and outcomes, and an agenda for future research. *Journal of Vocational Behavior*, 1-17.
- Nowinski, W., Haddoud, M. Y., Lancaric, D., Egerova, D., & Czegledi, C. (2017). The impact of entrepreneurship education, entrepreneurial self-efficacy and gender on entrepreneurial intentions of university students in the Visegrad countries . *Studies in Higher Education*, 1-10.
- Rahardjo, I., Ausat, A., Risdwiyanto, A., Gadzali, S., & Azzaakiyyah, H. (2023). Analysing the Relationship between Entrepreneurship Education, Self-Efficacy, and Entrepreneurial Performance. *Journal on Education*, 11566-11574.
- Resdiansyah, J. F., Nurgaha, T. A., & Nahdiyah, N. (2019). Importance performance matrix analysis (IPMA) sebagai alat evaluasi kepuasan dan kepentingan pengguna jalan di Kota Mandiri Tangerang Selatan. *Jurnal Perkotaan*, 14-46.
- Rino, Sabrina, D., Ismail, A., Kurniawati, T., & Darni, M. (2023). Employability in the context of career change: utilizing social cognitive career theory. *Problems and Perspectives in Management*, 459-469.
- Sekaran, U., & Bougie, R. (2020). *Research Methods for Business: A Skill Building Approach*. Trento: Print Trento.
- Sugiyono. (2021). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: CV Alfabeta.
- Sujarweni, V. W. (2014). *SPSS Untuk Penelitian*. Yogyakarta: Pustaka Baru Press.
- Tisu, L., & Virga, D. (2021). Growth Opportunities and Entrepreneurial Performance: Testing Strengths Use and Meaning-Making as Moderators of the Relationship. *Journal of Career Development*.
- Usman, O., & Widyanti, J. (2020). The Impact of Entrepreneurship Education, Entrepreneurial Self-Efficacy, and Gender on Entrepreneurial Intention. *SSRN Electronic Journal*, 1-16.
- Utami, W. B., Prastiwi, I. E., & Ningsih, S. (2020). The balances scorecard method for assesing company performance (case study at PT Salatiga State Electricity Company). *International Journal of Economics, Business, and Accounting Research (IJEBAR)*, 131-142.

# *IConEnt*

## **The 5<sup>th</sup> International Conference on Entrepreneurship**

- Wang, L. Y., & Huang, J. H. (2019). Effect of Entrepreneurial Self-Efficacy on the Entrepreneurial Intentions of Students at a University in Hainan Province in China: Taking Social Support as a Moderator. *International Journal of Learning, Teaching and Educational Research*, 183-200.
- Widjaja, S. U., Wibowo, A., Narmaditya, B. S., Wardoyo, C., & Saptono, A. (2022). Identifying factors affecting entrepreneurship education and entrepreneurial intention among Indonesian university students. *Entrepreneurial Business and Economics Review*, 89-104.
- Winarto, D., & Dewi, S. P. (2019). Faktor-Faktor Yang Mempengaruhi Financial Performance Pada Perusahaan Manufaktur Di BEI. *Jurnal Multiparadigma Akuntansi*, 1122-1132.
- Yeh, C.-H., Lin, H.-H., Wang, Y.-M., Wang, Y.-S., & Lo, C.-W. (2021). Investigating the relationships between entrepreneurial education and self-efficacy and performance in the context of internet entrepreneurship. *The International Journal of Management Education*, 1-11.
- Zhou, X., Ma, C., Su, X., Zhang, L., & Liu, W. (2024). Knowledge is power: The impact of entrepreneurship education on the international entrepreneurship performance. *The International Journal of Management Education*.