The Effect of Entrepreneurial Passion and Entrepreneur Managerial Competencies on Digital Entrepreneurial Intention with Entrepreneur Training as Moderation in Generation Z

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ABSTRACT

Gen Z entrepreneurs have increased in the current VUCA and Industry 4.0 era. Why these young people are interested in becoming entrepreneurs is an exciting thing to research, given that they tend to think instantaneously. This study was conducted to analyze the relationship between personal factors and entrepreneurial intention among Gen Z. This study is quantitative research. This quantitative study investigates the relationship between independent variables (entrepreneurial passion and entrepreneurial managerial competencies) with digital entrepreneurial intention as the dependent variable and a moderating variable (entrepreneurial intention). The data was analyzed by PLS-SEM (Partial Least Square-Structured Equation Modelling). This study confirmed that entrepreneurial passion positively influences digital entrepreneurial intention in Universitas Negeri Malang students. Of all managerial competencies, only administration competency and knowledge and technology competency are proven to affect digital entrepreneurial intention among Universitas Negeri Malang students. Although this study could not prove the role of entrepreneurial training as a moderator in the relationship between entrepreneurial passion and entrepreneurial intention, this study was able to show the direct relationship between entrepreneurial training and digital entrepreneurial intention in Universitas Negeri Malang students.

Keywords: digital entrepreneurial intention, entrepreneurial passion, entrepreneur managerial competencies, entrepreneurship training, Gen Z

1. INTRODUCTION

The growth of the internet has become an essential part in providing life changes. This has increased internet user growth every year, especially in Indonesia. According to data from Internet World Stats, the growth of internet users in Indonesia is in seventh position in Southeast Asia, which has reached 76.8% as of June 2021, which means that domestic internet users reach 212.35 million people from an estimated population of 276.35 million. According to data from We Are Social, the growth in the number of internet users in Indonesia in January 2022 reached 204.7 million people. The Internet users increased rapidly to 73.7% of the total population at the beginning of 2022. We Are Social said the increase in the number of internet users in Indonesia grew by 2.1 million people or 1.03% from 2021 to 2022, which was recorded in January 2021 as 202.6 million. In the last five years, internet users have jumped by 54.25% compared to 2018.

The growth of internet users in Indonesia has influenced digitalization in various sectors such as economy, finance, and transportation. This has an impact on the emergence of startups in Indonesia today. A startup is an organization with innovation, always making the latest products and services in uncertain circumstances (Ries, 2011). Currently, startups are more narrowed down to a startup company that refers to technology-based businesses. According to the startup ranking report, Indonesia ranks first in Southeast Asia as the country with the most startups, with 2,346 startups. That number beats Singapore in second place with 1,030 startups. That number beats Singapore in second place with 1,030 startups. In third and fourth place are the Philippines and Malaysia, with 308 and 307 startups.

Based on data from CB Insight, Indonesia has three companies in the top 10 Unicorns in ASEAN. Grab is still the largest valuation in ASEAN, with an IPO plan that reached US$ 14.3 billion as of September 30, 2021. Meanwhile, in second place is a logistics company from Indonesia, namely J&T, with a valuation of US$ 7.8 billion. J&T's investors include Hillhouse Capital Management, Boyu Capital, Sequoia Capital China. Then in third place is a company from Singapore, Hyalroute, with a US$ 3.5 billion valuation. In 2017, Hyalroute officially became a startup valued at US$ 1 billion. In the fourth and fifth rank are two companies from Indonesia, Traveloka, with a valuation level of US$ 3 billion, and OVO, with a valuation level of US$ 2.9 billion.
The presence of startups significantly contributes to Indonesia's Gross Domestic Product (GDP). Based on INDEF research on Indonesia's GDP in 2018, the digital economy has contributed 5.5% or around Rp 814 trillion. The digital economy sector has also contributed by opening up around 5.7 million new jobs. This also has a positive impact on driving the Indonesian economy. Based on a report compiled by Google, Temasek, and Bain & Company on the SEA e-Conomy in 2021, it shows significant growth with the e-commerce sector as the main driver of 52% year on year (yoy). In the sixth annual report titled "Roaring 20's: The SEA Digital Decade", Indonesia's overall digital economy has a Gross Merchandise Value (GMV) of US$ 70 billion in 2021 and is expected to double to US$ 146 billion by 2025.

Although many startups fail, the success of startups built by the younger generation has inspired many young people to establish new startups. This condition has encouraged interest in entrepreneurship in the digital field. According to [1], entrepreneurial interest is a person's willingness to do something to create value and new businesses in entrepreneurship. Entrepreneurship as the ability to be creative in the results of creative thinking in realizing innovation towards opportunities for success or a predetermined goal [2]. This also encourages the emergence of startup incubators such as Indigo Incubator, BNV Lab, Kolaborasi, and others. The success of startups that have reached unicorn or even decacorn has also encouraged government support through mentoring or funding programs. One of the programs launched by the government to support the development of new startups is the 1000 Startup Movement, Student Digital Entrepreneurship Innovation, and others. All of these programs are aimed at advancing digital entrepreneurship in Indonesia.

Many studies have examined entrepreneurial intention [3]–[7]. However, few studies specifically examine digital entrepreneurship. Digital entrepreneurship uses opportunities using digital media, the internet, and other information technology [8]. According to [9], Digital entrepreneurship involves creating value with digital products or services in digital markets, workplaces, digital channels, and or a combination of these. Previous research has examined various factors influencing entrepreneurial intentions, such as entrepreneurial passion, entrepreneurial managerial competencies, and entrepreneurial training. In entrepreneurship, entrepreneurial competencies are related to understanding a rapidly changing environment and reading market opportunities, competitor threats, and weaknesses in internal organizations [10]. According to [11], the positive influence between entrepreneurial managerial competencies and start-up intention.

Although it must be recognized that not all entrepreneurial competencies are obtained in entrepreneurship training, several studies have tested that entrepreneurship training influences entrepreneurial intention. Individual who have attended entrepreneurship training have a higher influence than individual who have never attended entrepreneurship training in creating a new business [12]. Entrepreneurship education and training are vital in developing young individual related to entrepreneurial competencies in business startup intentions [13]. In addition to competence and training, passion is an important factor in shaping entrepreneurial intentions. Entrepreneurial passion is a typical emotional passion that is common among [14]. Entrepreneurial passion is the beginning of understanding the concept of entrepreneurship in every individual activity related to entrepreneurship [15], [16]. A great passion for individual is vital in creating a business and becoming a successful entrepreneur, so entrepreneurial passion is essential in creating a business opportunity [17].

Based on the background described above, the authors would like to conduct a study entitled "The Effect of Entrepreneurial Passion and Entrepreneur Managerial Competencies on Digital Entrepreneurial Intention with Entrepreneur Training as Moderation in Generation Z." This research will focus on Generation Z in Universitas Negeri Malang. The generation born in the nineteenth century is known as generation Z [18].

2. RESEARCH METHOD

This study is quantitative research that investigates the relationship between the independent variables (entrepreneurial passion and entrepreneurial managerial competencies) with the dependent variable (digital entrepreneurial intention) and the moderating variable (entrepreneurial training). Data was collected through a questionnaire that distributed in some universities in Malang. The researchers directly collected with paper-base-questionnaire. In sampling method, the researchers used purposive sampling with some criteria:

1) Born in 1997-2012 (Gen Z), but aged 17-26 years old.
2) The age of 17-26 years is the first stage of career choice in the career stages theory. This stage is the starting point for people to develop their vision and identity.
3) Do not have a business yet
4) Currently pursuing education, high school / vocational high school equivalent, diploma, bachelor degree, master degree, and doctoral degree.

PLS-SEM (Partial Least Square-Structured Equation Modelling) to analyze the data because it is most widely applied in management science research. PLS-SEM allows researchers to estimate complex models with many constructs and paths without enforcing distributional assumptions to the records. It also provides a comprehensive method for testing and analyzing selected research results [22]. There are two stages in model evaluation in PLS: outer model evaluation or measurement model (measurement) and inner model evaluation or structural model (structural measurement). The first of the PLS-SEM result assessments involves examining the measurement model. After that, further robustness checks are run to check the validity of the results.

![Figure 1. Research Model](image)

Based on this research model, four hypotheses will be tested.
H1. Entrepreneurial passion has a significant effect on digital entrepreneurial intention among Gen Z.
H2. Entrepreneurial managerial competencies have a significant effect on digital entrepreneurial intention among Gen Z.
H3. Entrepreneurial training has a significant effect on digital entrepreneurial intention among Gen Z.
H4. Entrepreneur training moderates the effect of entrepreneurial passion on digital entrepreneurial intention among Gen Z.
H5. Entrepreneur training moderates the effect of entrepreneurial managerial competencies on digital entrepreneurial intention among Gen Z.

Entrepreneur managerial competencies consist of administrative competency, knowledge and technology competency, communication skills, network building competency, business model development competency, creativity and innovativeness, dan attaining finance capability.

Entrepreneurial passion variable, researchers used items developed by [19]. entrepreneurial training variable question items using [20] reference with a total of 8 questions, entrepreneurial managerial competencies items using [11] and entrepreneurial intention items belonging to [21].

3. RESULT AND DISCUSSION

3.1. Demographic Respondent

This study uses 341 respondents from students of universities in Malang who have taken entrepreneurship classes. Based on gender, 74.7% of the respondents were female, and 25.3% were male. The majority of respondents came from the faculty of economics and business, and the rest came from other faculties.

3.2. Validity and Reliability Test

This study's initial data processing stage is validity and reliability testing. An indicator with an outer loading value ≥ 0.7 is said to be ideal, which means that the indicator is valid to measure the construct it forms [23]. From the data processing, the researcher found that all items of all variables had an outer loading value of more than 0.7. All items are declared valid (outer loading > 0.7). In reliability test, this study used Cronbach’s alpha, construct reliability and average variance extracted (AVE) indicators for all variables. Variables will be reliable with a Cronbach’s alpha and composite reliability (CR) ≥ 0.7. When AVE ≥ 0.5, it indicates a good measure of convergent validity. Table 2 declares all variables reliable because all variables have an AVE value > 0.5, Cronbach’s alpha value > 0.7, and CR > 0.7.
Adjusted R Square is 0.698 and it can be interpreted as indicating that the effect of independent variables (entrepreneurial passion, entrepreneurial managerial training, etc.) on the dependent variable (digital entrepreneurship) is significant. The squared value of 0.698 suggests that 69.8% of the variance in the dependent variable is accounted for by the independent variables in the model.

### Table 1. Cronbach’s Alpha, Composite Reliability, and AVE

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach's Alpha</th>
<th>rho A</th>
<th>CR</th>
<th>AVE</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADMIN</td>
<td>0.959</td>
<td>0.960</td>
<td>0.968</td>
<td>0.859</td>
<td>Reliable</td>
</tr>
<tr>
<td>ATTAIN FIN</td>
<td>0.945</td>
<td>0.947</td>
<td>0.958</td>
<td>0.821</td>
<td>Reliable</td>
</tr>
<tr>
<td>BUSI DEV</td>
<td>0.948</td>
<td>0.950</td>
<td>0.960</td>
<td>0.828</td>
<td>Reliable</td>
</tr>
<tr>
<td>COMMU</td>
<td>0.929</td>
<td>0.931</td>
<td>0.947</td>
<td>0.780</td>
<td>Reliable</td>
</tr>
<tr>
<td>ENTRE INTE</td>
<td>0.951</td>
<td>0.953</td>
<td>0.959</td>
<td>0.722</td>
<td>Reliable</td>
</tr>
<tr>
<td>ENTRE PASS</td>
<td>0.894</td>
<td>0.903</td>
<td>0.927</td>
<td>0.760</td>
<td>Reliable</td>
</tr>
<tr>
<td>ENTRE TRAIN</td>
<td>0.945</td>
<td>0.947</td>
<td>0.954</td>
<td>0.722</td>
<td>Reliable</td>
</tr>
<tr>
<td>INNOV CREA</td>
<td>0.934</td>
<td>0.934</td>
<td>0.950</td>
<td>0.791</td>
<td>Reliable</td>
</tr>
<tr>
<td>KNOW TECH</td>
<td>0.933</td>
<td>0.935</td>
<td>0.950</td>
<td>0.790</td>
<td>Reliable</td>
</tr>
<tr>
<td>NETWORK</td>
<td>0.900</td>
<td>0.908</td>
<td>0.927</td>
<td>0.719</td>
<td>Reliable</td>
</tr>
</tbody>
</table>

Sources: Data Processed by SmartPLS. Note: AVE = Average Variance Extracted, CR = Composite Reliability, ADMIN = administration competency, ATTAIN FIN = attaining financial competency, BUSI DEV = business development competency, COMMU = communication competency, ENTRE INTE = entrepreneurial intention, ENTRE_PASS = entrepreneurial passion, ENTRE_TRAIN = entrepreneurial training, INNOV CREA = Innovation & creativity competency, KNOW TECH = knowledge & technology competency, NETWORK = networking competency.

### 3.3. Statistics Descriptive

Descriptive statistical analysis is carried out to determine the existence of independent variables without comparing them and looking for relationships with other variables [24]. As shown in Table 2, all variables are in the “high” category.

### Table 2. Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTRE_INTE</td>
<td>1</td>
<td>6</td>
<td>4.024</td>
<td>0.938</td>
</tr>
<tr>
<td>ENTRE_TRAIN</td>
<td>1</td>
<td>6</td>
<td>3.868</td>
<td>0.948</td>
</tr>
<tr>
<td>ENTRE_PASS</td>
<td>1</td>
<td>6</td>
<td>4.497</td>
<td>0.896</td>
</tr>
<tr>
<td>ADMIN</td>
<td>1</td>
<td>6</td>
<td>3.911</td>
<td>1.065</td>
</tr>
<tr>
<td>KNOW_TECH</td>
<td>1</td>
<td>6</td>
<td>4.087</td>
<td>0.880</td>
</tr>
<tr>
<td>COMMU</td>
<td>1</td>
<td>6</td>
<td>3.989</td>
<td>0.903</td>
</tr>
<tr>
<td>NETWORK</td>
<td>1</td>
<td>6</td>
<td>4.008</td>
<td>0.943</td>
</tr>
<tr>
<td>BUSI_DEV</td>
<td>1</td>
<td>6</td>
<td>3.966</td>
<td>0.902</td>
</tr>
<tr>
<td>INNOV_CREA</td>
<td>1</td>
<td>6</td>
<td>3.501</td>
<td>1.011</td>
</tr>
</tbody>
</table>

Sources: Data Processed by IBM SPSS. Note: ADMIN = administration competency, ATTAIN FIN = attaining financial competency, BUSI DEV = business development competency, COMMU = communication competency, ENTRE_INTE = entrepreneurial intention, ENTRE_PASS = entrepreneurial passion, ENTRE_TRAIN = entrepreneurial training.

### 3.4. Hypotheses Test

This test will use a statistical T value ≥ 1.96 and a p-value ≤ 0.05. From the hypothesis tests, researchers found that H1a, H1b, H1e, and H2 have a P value ≤ 0.05 and T statistics ≥ 1.96 so H1a, H1b, H1e, and H2 are accepted. This concludes that administrative competency and knowledge and technology competency positively affect digital entrepreneur intention. In addition, entrepreneurial training is also proven to affect digital entrepreneur intention positively. However, researchers could not confirm the effect of business model development competency, communication competency, networking competency, innovation creativity, and attaining competency to positively influence digital entrepreneur intention, or H2c, H2d, H2e, H2f, and H2g were rejected.

### Table 3. Direct Effect Test

<table>
<thead>
<tr>
<th>Original Sample (O)</th>
<th>T Statistics (O/STDEV)</th>
<th>P Values</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTRE_PASS -&gt; ENTRE_INTE</td>
<td>0.251</td>
<td>3.579</td>
<td>0.000</td>
</tr>
<tr>
<td>ADMIN -&gt; ENTRE_INTE</td>
<td>0.192</td>
<td>2.526</td>
<td>0.012</td>
</tr>
<tr>
<td>KNOW_TECH -&gt; ENTRE_INTE</td>
<td>0.183</td>
<td>2.270</td>
<td>0.024</td>
</tr>
<tr>
<td>BUSI_DEV -&gt; ENTRE_INTE</td>
<td>0.079</td>
<td>0.824</td>
<td>0.410</td>
</tr>
<tr>
<td>COMMU -&gt; ENTRE_INTE</td>
<td>0.003</td>
<td>0.040</td>
<td>0.968</td>
</tr>
<tr>
<td>NETWORK -&gt; ENTRE_INTE</td>
<td>0.044</td>
<td>0.546</td>
<td>0.585</td>
</tr>
<tr>
<td>INNOV_CREA -&gt; ENTRE_INTE</td>
<td>0.047</td>
<td>0.554</td>
<td>0.579</td>
</tr>
<tr>
<td>ATTAIN_FIN -&gt; ENTRE_INTE</td>
<td>0.029</td>
<td>0.443</td>
<td>0.658</td>
</tr>
<tr>
<td>ENTRE_TRAIN -&gt; ENTRE_INTE</td>
<td>0.121</td>
<td>2.616</td>
<td>0.009</td>
</tr>
</tbody>
</table>

Sources: Data Processed by SmartPLS. Note: ADMIN = administration competency, ATTAIN_FIN = attaining financial competency, BUSI_DEV = business development competency, COMMU = communication competency, ENTRE_INTE = entrepreneurial intention, ENTRE_PASS = entrepreneurial passion, ENTRE_TRAIN = entrepreneurial training, INNOV_CREA = Innovation & creativity competency, KNOW_TECH = knowledge & technology competency, NETWORK = networking competency.

It can be seen in Table 4 above that the value of Adjusted R Square is 0.698 and it can be interpreted as indicating that the effect of independent variables (entrepreneurial passion, entrepreneurial managerial...
competencies and entrepreneurial training) on the dependent variable (entrepreneurial intention in digital startups) is 69.8% while the remaining 40.2% is influenced by other variables not included in this study.

<table>
<thead>
<tr>
<th>Table 4. R Square &amp; R Square Adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTRE_INTE</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

3.4. Moderation Test

Table 5. Moderation Test

<table>
<thead>
<tr>
<th>Moderating Effect</th>
<th>Original Sample (O)</th>
<th>T Statistics (O/STDEV)</th>
<th>P Values</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTRE_INTE</td>
<td>-0.034</td>
<td>1.057</td>
<td>0.291</td>
<td>H4 rejected</td>
</tr>
</tbody>
</table>

Sources: Data Processed by SmartPLS

3.5. Discussion

Entrepreneurial passion has a significant effect on digital entrepreneurial intention among Gen Z

The current digital era is closely related to Generation Z, a generation that is more adaptive to technological advances and fast-paced conditions, making this generation unique. Generation Z tends to prioritize flexibility in work time and location. They often look for jobs that allow them to work remotely or with flexible hours. The condition can be found exclusively in startups. This reason makes Gen Z prefer to work in startups or build their startup.

This study successfully confirmed the influence of entrepreneurial passion on digital entrepreneurial intention in Gen Z or student in Universitas Negeri Malang. Research by [25] argues that individual who have a solid entrepreneurial emotional passion have intense positive feelings about entrepreneurial activities [14]. They are involved and have a strong motivational drive to follow these feelings. Furthermore, entrepreneur training is an activity that includes a series of deliberate actions in the form of assistance from professionals to share knowledge and experience [26]. This research is in line with previous research which also shows a positive relationship between entrepreneurial passion and entrepreneurial intention [17], [27].

Entrepreneurial managerial competencies have a significant effect on digital entrepreneurial intention among Gen Z.

This study successfully confirmed that administration competency and knowledge & and technology competency affect digital entrepreneurial intention in Gen Z. Based on previous research conducted by [11], entrepreneurial managerial competencies has significant effect on entrepreneurial intentions. The entrepreneurial managerial competencies in there are administrative competency, knowledge and technology competency, communication skills, network building competency, business model development competency, creativity and innovativeness, and attaining financial capability [11]. Entrepreneurial managerial competencies encourage Gen Z to feel more confident with their abilities, so they will have stronger motivation to entrepreneurial start-up intentions. Digital business has become an attraction for Gen Z students. Startups are a means of expressing their idealism to run a business according to their passion. The availability of wide access to information on developing managerial competencies has helped them a lot.

The various competencies that have been built have prepared them for startup development. Generation Z has grown up in the digital era, so they are very familiar with and utilize technology in their work tasks. They frequently use various apps and digital platforms to communicate with coworkers and complete tasks. Generation Z tends to be innovative and creative in solving problems and carrying out their work tasks. They often have new ideas and are open to the possibility of unconventional solutions.

Entrepreneurial training has a significant effect on digital entrepreneurial intention among Gen Z.

This study proved the effect of entrepreneurial training on digital entrepreneurial intention in Gen Z or student in Universitas Negeri Malang. This research aligns with previous research, showing a positive relationship between entrepreneurial training and entrepreneurial intention [20], [28].
Researchers confirmed an influence between entrepreneurship training and digital entrepreneur intention. The influence of entrepreneurship training on digital entrepreneur intention proves that entrepreneurship training in the form of formal training in entrepreneurship courses or non-formal influences digital entrepreneurial intention among students who have attended. This study's results align with previous research, which states that entrepreneurship training influences entrepreneurship intention [20]. In addition, research by [30] also states that entrepreneur training affects entrepreneurial intention. Individual who have attended entrepreneurship training have a higher motivation than individual who have never attended entrepreneurship training in creating a new business [12]. Entrepreneurship training is a program or process carried out by students to develop attitudes and skills in the entrepreneurial field. Entrepreneurship training in the form of formal education can be obtained through entrepreneurship courses in campus. Entrepreneur training also can be obtained from informal training such as workshop, seminar, non-degree training, or startup incubator. The various online training available has become a free training alternative for startup developers. The training startup incubators offer is also more attractive, with funding for potential startups.

Entrepreneurial passion positively influences digital entrepreneurial intention among Gen Z. This study failed to prove how entrepreneurship training as a moderating variable on the effect of entrepreneurial passion on digital entrepreneur intention in Gen Z student. This result is not in accordance with previous research that confirms motivation, opportunity identification, resources, and ability positively and significantly influence entrepreneurial readiness through the moderating variable of entrepreneurship training [12]. There are empirical findings that entrepreneurship training as a moderating variable has a positive influence on the dependent variable. [12] argued that individual who have attended entrepreneurship training have a higher influence than individual who have never attended entrepreneurship training in creating a new business. Entrepreneurship education and training have an essential role in developing young individual related to entrepreneurial competencies in business start-up intentions [13].

4. CONCLUSION

This study confirmed that entrepreneurial passion positively influences digital entrepreneurial intention. From all managerial competencies, only administration competency and knowledge and technology competency are proven to affect digital entrepreneurial intention. Although this study could not prove the role of entrepreneurial training as a moderator in the relationship between entrepreneurial passion and entrepreneurial intention, this study was able to show the direct relationship between entrepreneurial training and digital entrepreneurial intention in Z. From these results, researchers found practical implications that entrepreneurship training is a program or process carried out by students to develop attitudes and skills in the entrepreneurial field. Startup development has been accommodated in various courses at universities. Many universities offer concentrations and study programs specifically for digital business. Outside universities, various incubator institutions provide mentoring and training in the form of startup accelerators and startup incubators. Many also offer startup competitions such as the Astra Startup Challenge, Hyundai Startup Challenge, and student digital entrepreneurial innovation.

REFERENCES


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