The Influence of E-commerce Use, Entrepreneurial Knowledge, and Entrepreneurial Motivation on Entrepreneurial Interest

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Abstract: Entrepreneurial activity is one solution to reduce a country's unemployment rate, and has the potential to improve the country's economy. However, in reality there is a problem where teenagers’ interest in entrepreneurship is currently still relatively low. The aim of this research is to analyze the influence of e-commerce use, entrepreneurial knowledge, and entrepreneurial motivation on entrepreneurial interest. This research uses a saturated sampling technique with a sample of 143 teenagers in Mojokerto with a causal associative research method using a quantitative approach and multiple linear regression analysis with the help of IBM SPSS version 25 software. The results of the research show that simultaneously, the use of e-commerce, entrepreneurial knowledge and motivation entrepreneurship influence interest in entrepreneurship. Meanwhile, partially, the use of e-commerce and entrepreneurial motivation influence entrepreneurial interest, while entrepreneurial knowledge does not influence entrepreneurial interest. It is hoped that the results of this research can provide input to families and schools to provide support that can support teenagers’ interest in entrepreneurship so that they have the courage to open new businesses.


Introduction

Indonesia is one of the countries with the highest population. According to BPS (2023), in mid-2023, there will be 278.69 million Indonesians. Seeing this large population, of course the problem of unemployment cannot be eliminated. According to BPS (2023) publication data, the unemployment rate in Indonesia in 2023 will decrease compared to 2022. The BPS data shows that the number of working people increased by 3.02 million from February 2022, bringing the total number of working people to 138.63 million people. Apart from that, it is also known that employment opportunities that have experienced the greatest increase are in the accommodation industry, food and beverage supply industry, and other service activities. Despite the increase in employment opportunities, in reality the Open Unemployment Rate in Indonesia is still high. In February 2023, the highest open unemployment rate came from secondary education (high school and vocational), with the largest percentage of 8.41% of the total TPT. High school education students are classified as teenagers, namely 17 years to 19 years, where teenagers are the productive
age for someone to be able to improve their abilities to achieve a good career in the future. Therefore, to reduce the unemployment rate, especially among teenagers, efforts and actions need to be taken.

The government itself has made several efforts to overcome unemployment, starting from holding certified training, job training centers, and increasing job opportunities. This increase in employment opportunities can be optimized by increasing entrepreneurship among the community. Entrepreneurship is a government initiative to lower the unemployment rate by providing opportunities for every individual to be creative in creating jobs that suit their hopes, interests and skills. Quoting from DPR (2023), which presents data from the Global Entrepreneurship Index that 14% of people in developed countries are entrepreneurs. However, unfortunately, currently the number of Indonesian entrepreneurs is only 3.1%, the lowest in Southeast Asia. This received a response from the Deputy Chair of the State Financial Accountability Agency of the DPR RI, Anis Byarwati, who conveyed this in an FGD activity with the theme "Potential for Community Economic Independence as a Contribution to Improving the National Economy" in East Jakarta, Wednesday (8/03/2023). Anis Byarwati expressed his opinion, namely that he would support efforts to strengthen the Economic and Financial Digitalization program with Bank Indonesia by designing various outreach and workshops for business actors, so that it was hoped that it could increase other people’s interest in entrepreneurship. The fact that entrepreneurship requires material and mental readiness makes it difficult for everyone to do. Therefore, an understanding of entrepreneurship must be instilled from an early age so that the desire for entrepreneurship can develop.

Based on the previous explanation, the researcher made initial observations with informants, namely several teenagers aged 17 to 19 years. In the initial observations that were carried out, the results showed that teenagers were less interested in entrepreneurship and according to the respondents there were three factors that were the main reasons, namely entrepreneurial knowledge, e-commerce use, and entrepreneurial motivation. In the initial observations that were carried out, the results showed that the average teenager now uses e-commerce to meet their needs such as fashion, stationery and culinary delights. They said that they more often purchased goods through e-commerce, such as using social media, websites and e-commerce applications. However, when it comes to online product sales transactions or creating a new business, in fact they still don’t have the courage to try. Respondents also revealed that they were less interested and interested in creating a new business or carrying out entrepreneurial activities because they realized that their knowledge of entrepreneurship and motivation for entrepreneurship were still lacking or at a basic stage. Besides that, they also revealed that there is still a lack of understanding of the use of e-commerce in terms of marketing and selling products, even though it is currently known that the majority of people carry out buying and selling activities using the internet, so this makes teenagers afraid to try entrepreneurship.

Nowadays, the use of digital technology has been widely used in every activity, as well as entrepreneurial activities which have also utilized digital technology in the marketing process, for example using e-commerce and other social media. E-commerce is defined as commercial transactions carried out over computer networks, especially the internet, involving customers, suppliers, producers and intermediaries(Purwaningsih & dkk, 2018). According to (Badan Pusat Statistik, 2022), survey results on e-commerce usage up to 15 September 2022 show that only 34.10% of businesses have used e-commerce. This shows that businesses that accept orders or sell goods and services online in Indonesia are still very small and still dominated by conventional businesses. Even though the use of e-commerce is still lower compared to conventional types of
business, e-commerce is still popular with business people because it is more flexible and does not require large costs. This is in line with Sapitri & Fatimah (2020), who stated that the use of e-commerce has a significant effect on entrepreneurial interest. Thus, the use of e-commerce will be able to increase entrepreneurial interest among the public because of the many benefits obtained.

Other things that influence entrepreneurial interest include entrepreneurial knowledge and entrepreneurial motivation. According to Arifin & Qodariah (2023), entrepreneurial knowledge will help people analyze risks and read opportunities to be able to make the right decisions to overcome challenges to strike a balance between risks and advantages. This is same with Trisnawati (2017) which shows that entrepreneurial interest is positively influenced by entrepreneurial knowledge. So that with entrepreneurial knowledge, teenagers can express their creative ideas through entrepreneurship, and their entrepreneurial interest can be generated.

Apart from entrepreneurial knowledge, entrepreneurial motivation can be a factor that can influence entrepreneurial interest. One of the reasons people start their own businesses is driven by their entrepreneurial motivation. Entrepreneurial motivation can produce proactive sales where entrepreneurs are able to actively control a business in any condition, so that the business is not easily shaken even though it is experiencing many obstacles (Rajabi et al., 2018). Motivated entrepreneurs will be able to control and utilize opportunities very well and have proven to be successful in setting up a business. Entrepreneurial interest will also arise with encouragement or motivation for entrepreneurship. (Bartha et al., 2019; Eijdenberg et al., 2021) stated that entrepreneurial motivation is an important part of entrepreneurial activities which includes forming will, recognizing and understanding opportunities, self-advancement, goal setting, independence, encouragement, idea development, and taking action.

Looking at other things apart from the emergence of the phenomena previously mentioned, there are also gaps in research results in previous research, which is also the background for conducting this research. Research conducted by Puspitaningsih (2014) explains that entrepreneurial knowledge does not influence entrepreneurial interest. This is in contrast to research by Sapitri & Fatimah (2020) which explains that entrepreneurial knowledge has a positive effect on entrepreneurial interest. Apart from that, research conducted by Hendrawan & Sirine (2017) found that entrepreneurial motivation had no influence on students' interest in entrepreneurial activities. On the other hand, Saputri et al. (2016) found that motivation for entrepreneurship influences students' entrepreneurial interest in starting their business.

By considering the phenomenon and several previous research findings that show inconsistent results, researchers are interested in researching the influence of e-commerce use, entrepreneurial knowledge, and entrepreneurial motivation. The researcher hopes that the results of this research can contribute to the field of education and add references to factors that influence interest in entrepreneurship, namely the use of e-commerce, entrepreneurial knowledge, and entrepreneurial motivation.

Research Method

This research is quantitative with a causal associative approach. The population in this study were teenagers aged 17 to 19 years in Mojokerto City. The number of samples used was 143 people with a sampling technique, namely saturated samples, samples drawn from the whole population. Questionnaires and test instruments are used in the data collection. The questionnaire instrument was used on the variables of e-commerce use (X1), entrepreneurial motivation (X3), and entrepreneurial
interest (Y), while the test instrument in this study was used on the entrepreneurial knowledge variable (X2). The validity and reliability of the instrument will be tested before being distributed to actual samples. After data collection is complete, it will be processed using statistical methods. Data analysis techniques used include classical assumption test, multiple linear regression test, hypothesis test and coefficient of determination test (R) because it uses three independent variables, namely use of e-commerce (X1), entrepreneurial knowledge (X2), entrepreneurial motivation (X3) and one dependent variable, namely entrepreneurial interest (Y).

Result and Discussion
Multiple Linear Regression Test

Table 1. Multiple Linear Regression Test Results

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>(Constant)</td>
<td>17.237</td>
<td>3.314</td>
</tr>
<tr>
<td>E-commerce Use</td>
<td>.217</td>
<td>.070</td>
</tr>
<tr>
<td>Entrepreneurial Knowledge</td>
<td>.028</td>
<td>.148</td>
</tr>
<tr>
<td>Entrepreneurial Motivation</td>
<td>.243</td>
<td>.059</td>
</tr>
</tbody>
</table>

A. Dependent Variable: Entrepreneurial Interest
Source: Results processed by SPSS (2024)

Based on Table 1, multiple linear regression can be formulated:

\[ y = \alpha + b_1 X_1 + b_2 X_2 + b_3 X_3 + e \]

\[ y = 17.237 + 0.217 X_1 + 0.028 X_2 + 0.243 X_3 + e \]

This multiple linear regression equation can be explained as follows:
1. A constant value of 17.237 means that if the variables of e-commerce use, entrepreneurial knowledge and entrepreneurial motivation do not change, then entrepreneurial interest is 17.237.
2. The coefficient value for e-commerce use is 0.217, meaning that if the e-commerce use variable increases, then entrepreneurial interest will increase by 0.217 assuming other variables are constant.
3. The entrepreneurial knowledge coefficient value is 0.028, which can be interpreted as if the entrepreneurial knowledge variable increases, then entrepreneurial interest will increase by 0.028 assuming the other variables are constant.
4. The value of the entrepreneurial motivation coefficient is 0.243, which can be interpreted as if the entrepreneurial motivation variable increases, then entrepreneurial interest will increase by 0.243 assuming other variables are constant.
Hypothesis Test Results
T Test (Partial Test)

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>17.237</td>
<td>3.314</td>
<td>5.201</td>
<td>.000</td>
</tr>
<tr>
<td>E-commerce Use</td>
<td>.217</td>
<td>.070</td>
<td>.253</td>
<td>3.089</td>
</tr>
<tr>
<td>Entrepreneurial Knowledge</td>
<td>.028</td>
<td>.148</td>
<td>.016</td>
<td>.190</td>
</tr>
<tr>
<td>Entrepreneurial Motivation</td>
<td>.243</td>
<td>.059</td>
<td>.316</td>
<td>4.091</td>
</tr>
</tbody>
</table>

A. Dependent Variable: Entrepreneurial Interest
Source: Results processed by SPSS (2024)
Partial testing based on table 2, can be explained as follows:

The Influence of E-commerce Use on Entrepreneurial Interest

From the outcomes of hypothesis testing, it can be concluded that the variable use of e-commerce has a significant effect on entrepreneurial interest as indicated by the t count of 3.089 with the t table of 1.977, so that t count > t table, and looking at the sig value. equal to 0.002 < 0.05. This is also supported by the results of respondents’ answers, namely teenagers who stated that they often used e-commerce as a platform to purchase and sell their goods. Apart from that, respondents responded that using e-commerce optimally and according to needs, will provide benefits for its users. (Solihat & Sandika, 2022) stated that e-commerce use can provide many benefits for entrepreneurship. The convenience associated with using e-commerce itself is being able to carry out buying and selling transactions for products or services anywhere and at any time, and can make it easier for entrepreneurs to market products and reach consumers on a wider scale.

The study's findings are consistent with the Theory of Planned Behavior, where there is a concept of attitude towards the behavior which can be described through the variable use of e-commerce. This means that an individual's attitude in carrying out positive activities will certainly be an option to be used as an attitude that is implemented in daily life to obtain benefits. The attitude chosen by individuals, especially students, by using e-commerce in entrepreneurial activities, will certainly make it easier for students to become entrepreneurs.

The findings of this study are inversely related to Gultom (2021), namely that the use of e-commerce has no effect on entrepreneurial interest. The findings of this study are similar to those found by Arimbawa & Widhiyani (2021), Putri & Muzakki (2021), Erlinda & Astuti (2019), and (Sari & Wibawa, 2017) which states that the e-commerce use influences entrepreneurial interest. As stated by Yadewani & Wijaya (2017), individuals can make a business more developed through market competition to provide good quality products and reach consumers on a large scale.

The Influence of Entrepreneurship Knowledge on Entrepreneurial Interest

From the outcomes of the hypothesis test, it can be concluded that the entrepreneurial knowledge variable partially has no significant effect on entrepreneurial interest as indicated by the calculated t value of 0.190 with the t table of 1.977, so that the calculated t < t table, and looking at the sig value. amounting to 0.850 > 0.05. This is also supported by the results of respondents’
answers which stated that the entrepreneurial knowledge they had was still limited to knowing about entrepreneurship. They also said that they also needed entrepreneurial practices to balance out this entrepreneurial knowledge, because they realized that knowledge without experience would not be able to optimize a business.

The study's findings contradict with the Theory of Planned Behavior, which explains that there is one concept that shapes individual interests, namely behavioral control. This concept can be described through the entrepreneurial knowledge variable. In this theory, the entrepreneurial knowledge variable is used as an internal factor that can influence a person's behavior. However, in this research, it turns out that entrepreneurial knowledge has not been able to influence a person's entrepreneurial interest. The study's findings are similar with (Puspitaningsih, 2014; Rhamadhan & Aziz, 2021) which concluded that entrepreneurial knowledge does not influence entrepreneurial interest. On the other hand, the results of this research are inversely proportional to (Moelrine & Syarif, 2022; Trihudiyatmanto, 2019) which shows that entrepreneurial knowledge has effect on entrepreneurial interest.

According to the findings of this study, researchers explored further the causes of entrepreneurial knowledge which had no effect on entrepreneurial interest. These findings indicate that teenagers in the city of Mojokerto who have a high entrepreneurial interest are not caused by entrepreneurial knowledge but by other factors, such as the use of e-commerce and entrepreneurial motivation. This is also supported by findings in the field through interviews with respondents which show that several students are starting to use e-commerce as a medium to sell their products or provide goods they need. In addition, respondents revealed that at school they had often been given motivation to become successful entrepreneurs by their teachers. Apart from that, they also expressed the opinion that in entrepreneurship, a theory is not really needed when going directly into the field, but rather experience, the persistence of each individual, and direct practice have a big influence in starting and running a business.

This is also supported by research (Darsini et al., 2019) which states that experience is closely related to knowledge, where experience is a source of knowledge as a way to obtain the truth by repeating knowledge obtained in the past to solve problems. In general, the more experience a person has, the more knowledge they gain. In this case, teenagers have little experience in entrepreneurship, because they are still young and they still have the status of students who are still tied to formal education which prioritizes the learning aspect of enriching knowledge.

Apart from that, (Darsini et al., 2019) also concluded that a person's age is a factor that influences knowledge. Where age is something that influences a person's ability to understand and think patterns. A person's ability to understand things and their thought processes will increase with age, leading to an improvement in the knowledge they acquire. According to (Azmi, 2015), teenagers themselves have several problems in their thinking and emotional patterns, such as unstable thinking patterns, impulsiveness, experiencing attention disorders such as lack of concentration, anxiety, loss of hope, and other things. According to (Baron, 2008) which states that emotions can influence entrepreneurs' cognition, business decisions, and tolerance for stress. In difficult situations, older people are better able to control their emotions than younger ones, which makes them less likely to fail. In this case, respondents who are still teenagers are more vulnerable to problems in unstable thought patterns and emotions, so that their ability to grasp knowledge is not channeled properly.

This study is consistent with (Trisnawati, 2017) It demonstrates that entrepreneurial knowledge has no effect on entrepreneurial interest because knowledge alone is not enough to
become capital in running a business. In other words, teenagers must have the experience and ability to observe and understand situations that occur in the field so that they can find the right strategy for their business.

The Influence of Entrepreneurial Motivation on Entrepreneurial Interest

From the outcomes of the hypothesis test, it was concluded that entrepreneurial motivation variable had a significant effect on entrepreneurial interest as indicated by the calculated t value of 4.091 with a t table of 1.977, so that t calculated > t table, and looking at the sig value. equal to 0.000 < 0.05. These results are further strengthened by the answers of respondents, who stated that entrepreneurial motivation is needed to increase interest in entrepreneurship, because the higher the motivation a person has, the more interest in entrepreneurship will rise.

The study's findings are consistent with the Theory of Planned Behavior presented by (Ajzen, 1991), where there is a concept, namely subjective norms, which are described through entrepreneurial motivation variables. This means that the opinions and support given by other people will have a big influence on individuals, one of which is motivation for entrepreneurship. In the future, this support can influence individuals in making choices regarding interests, including career decisions as entrepreneurs or other jobs.

This research is in contrast to (Adam et al., 2020), namely that partially Interest in entrepreneurship is unaffected by motivation. This research agrees with (Hendrawan & Sirine, 2017; Armansyah & Yuritanto, 2021; Noor & Anwar, 2022) This displays the outcomes that entrepreneurial motivation has a positive effect on entrepreneurial interest, where motivation that each person has can give rise to entrepreneurial interest. This has the implication that families and schools can further optimize the provision of support and other positive motivation to students so that participants' entrepreneurial motivation can be stronger and increase their entrepreneurial interest.

F Test (Simultaneous Test)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>223.636</td>
<td>3</td>
<td>74.545</td>
<td>10.184</td>
<td>.000p</td>
</tr>
<tr>
<td>Residual</td>
<td>1017.447</td>
<td>139</td>
<td>7.320</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1241.083</td>
<td>142</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Entrepreneurial Interest
b. Predictors: (Constant), Entrepreneurial Motivation, E-commerce Use, Entrepreneurial Knowledge

Source: Results processed by SPSS (2024)

The outcomes of the F test computation above, may be described:
The Influence of E-commerce Use, Entrepreneurship Knowledge and Entrepreneurial Motivation on Entrepreneurial Interest

Based on the outcomes of the F test, it can be seen that the calculated F value of 10,184 > F table 2.67, and a sig. value of 0.000 < 0.05, this suggests that the factors of e-commerce use, entrepreneurial knowledge, and entrepreneurial motivation all have a strong simultaneous impact on entrepreneurial interest. If these three factors are applied simultaneously to teenagers, it will have a positive impact, namely increasing interest in entrepreneurship. Apart from that, the increasing development of technology will make it easier for every individual to try new things such as using e-commerce in buying and selling products and services. In line with research (Arimbawa & Widhiyani, 2021), (Erlinda & Astuti, 2019) the results show that the e-commerce use has a positive effect on entrepreneurial interest.

Besides that, entrepreneurial knowledge that is usually obtained through formal learning can now be obtained through various sources. Apart from that, according to Riadi et al., (2022), knowledge and understanding related to economics, especially entrepreneurship, will be able to provide benefits, so that this knowledge can be implemented in everyday life. However, entrepreneurial knowledge must also be followed by real work or practice, where entrepreneurial practice is the key to the successful application of an individual's entrepreneurial knowledge. And in this research, the results for entrepreneurial knowledge show that it does not affect entrepreneurial interest. Additionally, this is consistent with (Puspitaningsih, 2014; Rhamadhan & Aziz, 2021; Sundari & Nugroho, 2022) who concluded that entrepreneurial knowledge does not influence entrepreneurial interest and expressed the opinion that the entrepreneurial spirit and character are formed by experience, not just through theory.

The motivation for entrepreneurship can be obtained by building a positive environment and a spirit of perseverance in each individual. With motivation and future aspirations to become entrepreneurs, it will certainly influence today's teenagers to learn skills and develop talents and interests comfortably, including entrepreneurial interest. This research is the same with (Armansyah & Yuritanto, 2021; Noor & Anwar, 2022) which states that entrepreneurial motivation has an influence on entrepreneurial interest.

In connection with the Theory of Economic Development by Schumpeter in 1934, individuals, especially students, as agents of change have a major contribution to becoming business actors or entrepreneurs. Entrepreneurship increases economic growth by increasing the amount of products and services a nation produces. Increasing production of goods and services will certainly create more jobs, thereby reducing unemployment (Kurniati, 2015).

This is the same as research conducted by Khamimah (2021) which explains the significance of entrepreneurial activity in raising national and societal standards of living and of course there are various things that influence the increase in interest in entrepreneurship. According to Julius F. & Suhartatik (2019), there are two factors that can influence entrepreneurial interest, both originating from within the individual students themselves and also outside the students themselves. Thus, having a good level of entrepreneurial knowledge, wise use of e-commerce, and positive motivation or support from the surrounding environment, especially family and school, will influence students' interest in entrepreneurship.
Coefficient of Determination Test

Table 4. Coefficient of Determination Test Results

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.424</td>
<td>.180</td>
<td>.163</td>
<td>2.705506</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Entrepreneurial Motivation, Use of E-commerce, Entrepreneurship Knowledge
b. Dependent Variable: Entrepreneurial Interest

From the table 4, the Adjusted R Square value is 0.163, which explains that the influence of the independent variables, like entrepreneurial motivation, e-commerce use, and entrepreneurship knowledge is 0.163 or 16.3%.

Conclusion

Based on the outcomes of the study and discussions that have been carried out, it is concluded that the variable use of e-commerce partially influences entrepreneurial interest. The variable entrepreneurial knowledge partially has no effect on entrepreneurial interest. The variable motivation for entrepreneurship partially influences entrepreneurial interest. Apart from that, simultaneously the use of e-commerce, entrepreneurial knowledge and entrepreneurial motivation influence entrepreneurial interest. This implies that teens’ interest in entrepreneurship may be raised by making sensible use of e-commerce, having a solid knowledge of entrepreneurship, and having an entrepreneurial motivation.

Recommendation

Based on the study result obtained, the following suggestions can be put forward: 1) Teenagers in the city of Mojokerto are expected to learn additional skills beyond their academic abilities. It is hoped that teenagers as agents of change can bring change to the Indonesian economy as well as overcome the increasing number of unemployed people in Indonesia. Therefore, they should have motivation and consideration for a better future by taking entrepreneurial action. 2) Families and schools are expected to be able to contribute by providing knowledge, direction and entrepreneurial motivation to teenagers, so that teenagers can be more confident in opening their own businesses. 3) For other researchers conducting research on similar topics, it is recommended that they expand on the independent variables that are believed to influence interest in entrepreneurship.

Acknowledgment

The researcher would like to thank all parties, especially to respondents who were willing to spend their time answering a series of questions given by the researcher.

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