




# Modeling Entrepreneurial Interests Students of Management Study Program UNP Kediri based on Digital Literacy and E-commerce Usage

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**Abstract.** The development of information and communication technology has changed various aspects of life, one of which is the world of business and entrepreneurship. Nowadays, digital literacy is the main key that must be owned by an entrepreneur. Not only that, the presence of e-commerce has also helped business development more rapidly. Kediri City is one of the cities that shows considerable potential in the development of entrepreneurship among students. However, not all students have utilized digital literacy and the use of e-commerce properly to develop or start a business. Therefore, this study aims to analyze the effect of digital literacy and the use of e-commerce on entrepreneurial interest among students, especially students of management study program in Universitas Nusantara PGRI Kediri who are familiar with the field of entrepreneurship but still need in-depth case studies related to their interest in entrepreneurship. The approach in this study uses a quantitative approach, which examines the relationship between exogenous variables and endogenous variables. The analysis used in testing the model and hypothesis is Structural Equation Modeling (SEM) analysis SmartPLS program. The SEM results of this study concluded that Digital Literacy and E-Commerce have a significant and positive impact on the Entrepreneurial Interests Students of Management Study Program in Universitas Nusantara PGRI Kediri.

**Keywords:** Digital literacy, E-commerce, Entrepreneurial Interests.

## 1 Introduction

The development of information and communication technology has changed various aspects of life, including the world of business and entrepreneurship. Digital literacy is an important skill that students must have in this digital era. Digital literacy includes the ability to search, evaluate, utilize and create information using digital technology effectively and ethically. Good digital literacy allows students to access and utilize information optimally, which in turn can increase their interest and ability in entrepreneurship.

E-commerce has become a very important platform in the modern entrepreneurial world [1]. E-commerce allows businesses to market their products and services more widely and efficiently, without geographical restrictions. E-commerce can also improve the consumer experience [2] and encourage business innovation [3]. For students, e-commerce provides an opportunity to start a business with lower capital

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and less risk compared to conventional businesses. Through e-commerce platforms, students can learn to manage businesses, understand consumer behaviour, and develop effective marketing strategies [4].

Kediri City, as one of the developing cities in Indonesia, shows great potential in entrepreneurship development among students. Improved digital infrastructure and increased access to information technology provide great opportunities for students in Kediri City to develop their businesses through e-commerce. This phenomenon can be seen from various initiatives and activities held in the city, such as business idea competitions and entrepreneurial incubation programs that aim to increase entrepreneurial interest and capabilities among young people.

However, despite the huge opportunities, there are still a number of challenges faced by students in utilizing digital literacy and e-commerce for entrepreneurship. These challenges include a lack of knowledge about digital marketing strategies, online transaction security, and adequate business management skills. These challenges need to be addressed so that students can utilize digital technology and e-commerce platforms to their full potential in developing their businesses.

Previous research has shown a positive relationship between digital literacy and entrepreneurial interest. Digital literacy has a significant influence on entrepreneurial interest among students in the COVID-19 pandemic era [5]. The use of e-commerce can increase entrepreneurial interest among students through increased market access and operational efficiency [6]. Digital literacy and innovation play an important role in encouraging students' entrepreneurial interest [7].

This study aims to analyze the effect of digital literacy and e-commerce usage on entrepreneurial interest among students, especially students of management study program in Universitas Nusantara PGRI Kediri who are certainly familiar with the field of entrepreneurship but still need in-depth case studies related to their interest in entrepreneurship. This research will identify factors that support and hinder the development of entrepreneurship among students, and provide recommendations for the development of policies and programs that support entrepreneurship among students in Kediri City.

It is hoped that this research can provide deeper insights into the role of digital literacy and e-commerce in encouraging students' entrepreneurial interests. In addition, the results of this study are expected to be a reference for educational institutions and the government in designing programs and policies that support the development of entrepreneurship among students.

The theoretical studies that form the basis for determining indicators in this study are:

### A. Digital Literacy

Digital literacy is the ability to understand and use information in various formats from various sources presented through computers [8]. It includes the ability to search, evaluate and organize digital information critically and to understand and apply information technology in the context of everyday life and work. Glistler also categorizes digitalization into four core competencies as follows:

- 1) **Internet Searching:** Ability to search for information on the internet effectively and efficiently using various search engines and online tools.
- 2) **Hypertextual Navigation:** Ability to navigate hyperlinked information, understand the structure and flow of digital information.
- 3) **Content Evaluation:** Ability to evaluate the credibility, relevance and quality of information found online.
- 4) **Knowledge Assembly:** The ability to combine information from multiple sources to form new knowledge or complete a specific task [9].

### B. E-commerce

E-commerce is a mechanism for business transactions over the inter-net that involves various aspects of communication, business processes, services, and online. Communication involves the exchange of information through digital media, business processes include activities to complete transactions electronically, services include customer support and other value-added online, and business presence on the internet through online stores or other digital platforms. It is classified into several perspectives [10]:

- 1) **Communication:** The process of sending and receiving messages through digital media to support business transactions.
- 2) **Business Process:** Activities involved in completing business transactions electronically, including supply chain management and payment processing.
- 3) **Services:** Provision of customer service, support, and other value-added services online.
- 4) **Online:** Business presence on the internet, including online stores, websites, and other digital platforms used to interact with customers and conduct transactions.

### C. Entrepreneurial Interests

Entrepreneurial interests are a mental state that reflects a person's feelings of pleasure, interest, attention, and involvement in entrepreneurial activities. Feelings of pleasure refer to the satisfaction and excitement felt when undergoing entrepreneurial activities, interest is a strong desire to engage in entrepreneurship, attention is a focus on entrepreneurial opportunities, and involvement includes active participation in entrepreneurial activities [11]

## 2 Methods

This research is designed to answer the problems that have been formulated and includes a causality research design. On this look at, the method used is a quantitative approach, which examines the relationship among exogenous variables and endogenous variables. This study was conducted on students of Management Study Program in Universitas Nusantara PGRI Kediri. Records collection was accomplished with the aid of dispensing questionnaires along with indicators forming studies variables and sorts of Likert scales with responses 1 (strongly disagree) to five (strongly agree). Before distributing questionnaires and accumulating facts, the device changed into disbursed to pilot respondents and tested for validity and reliability. The research version includes 2 exogenous variables and 1 endogenous variable.

The population in this study were all students of class 2020 to class 2022 of the Management Study Program in Universitas Nusantara PGRI Kediri, totally 989 students, while the sample was 100 students who were calculated using the formula for determining the sample size and were part of the Management Study Program students. The sampling technique used is proportional stratified random sampling. The evaluation utilized in testing the model and hypothesis is Structural Equation modeling (SEM) evaluation SmartPLS application. Parameter estimates in SEM-PLS are obtained through the following three-stage new release method: the first level: determining the load estimate used to assign latent variable rankings; 2nd stage: determining course estimates that join latent variables and loading estimates among latent variables and their indicators; third level: determining the suggest and place estimates of parameters (regression regular values, intercepts) for indicators and latent variables [12,13].

## 3 Results and Discussion

The validity of indicators in forming latent variables is determined by means of appearance at the convergent validity fee inside the model at some point of the evaluation of the measurement version (outer model) through the loading component. If there are indicators in the model that do not meet the convergent validity criteria (absolute loading element  $> 0.7$ ), then the indicator is removed from the version. The convergent validity results are as follows:

**Table 1.** Result of Convergent Validity

	Digital Literacy			E-Commerce		Entrepreneurial interest			
	Internet searching	Content Evaluation	Communication	Business process	Services	Good feeling	interests	Attention	Engagement
X1.1.1	0,895								
X1.1.2	0,897								
X1.2.1		0,787							
X1.2.2		0,786							
X1.2.3		0,858							
X2.1.1			0,853						
X2.1.2			0,781						
X2.1.3			0,750						
X2.2.1				0,816					
X2.2.2				0,853					
X2.2.3				0,857					
X2.3.1					0,919				
X2.3.2					0,931				
Y1.1						0,868			
Y1.2						0,905			
Y2.1							0,892		
Y2.2							0,905		
Y3.1								0,889	
Y3.2								0,860	
Y4.1									0,871
Y4.2									0,859

Source: PLS Output

Primarily based on table 1, all indicators have an outer loading more than 0.700, therefore no signs must be removed from the version. Average Variance Extracted (AVE) and composite reliability also can be used to asses the measurement model (outer model). The results of Average Variance Extracted (AVE) and composite reliability are shown below:

**Table 2.** Result of Average Variance Extracted

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Digital Literacy (X1)	0,820	0,821	0,874	0,582
E-commerce (X2)	0,872	0,879	0,900	0,533
Entrepreneurial interest (Y)	0,877	0,880	0,903	0,539

Source: PLS Output

The outcomes of Average Variance Extracted (AVE) and composite reliability values can be seen in table 2. The encouraged AVE value must be extra than 0.5, and the AVE effects from this examine are recognized to be more than 0.5, which implies that the indicator can give an explanation for more than half of the variance. Composite reliability is used to assess the consistency or reliability of latent variables or constructs. If the composite reliability value is more than 0.7, the latent variable is considered dependable. Based on table 2, all latent variables on this study have a composite reliability value greater than 0.7.

### Result of the Model

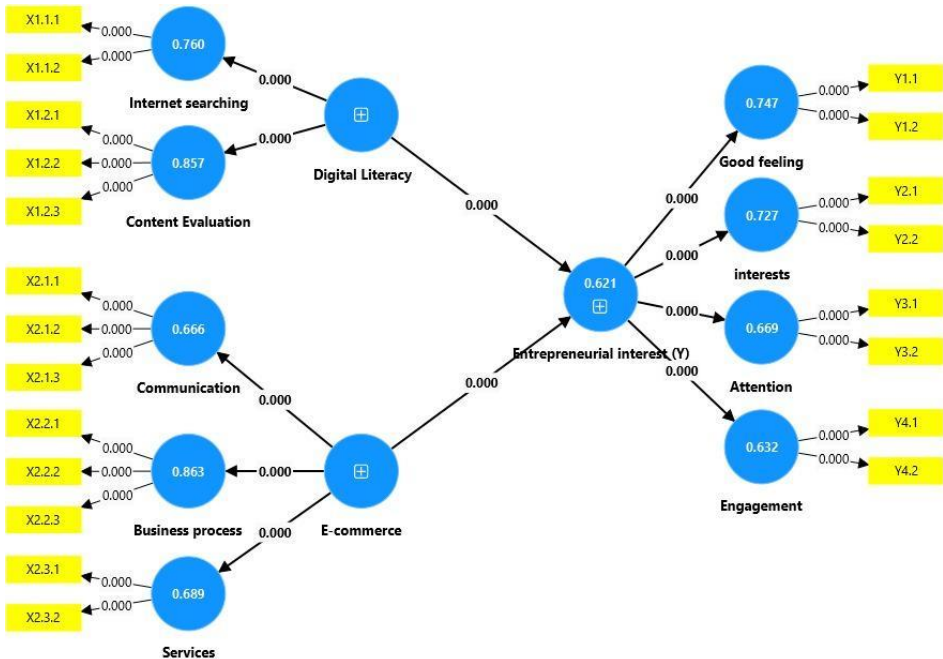
Partial least square model for tax compliance used in this study is as follows:

**Table 3.** Partial least square Entrepreneurial interest model's estimation results

	Original sample (O)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values
Digital Literacy (X1) -> Entrepreneurial interest (Y)	0,510	0,062	8,201	0,000
E-commerce (X2) -> Entrepreneurial interest (Y)	0,450	0,070	6,475	0,000

Source: PLS Output

This study's causation result can also be seen in the figure below:



**Fig. 1.** Model of Entrepreneurial interests

The research model estimation results are:

$$y_1 = 0.510x_1 + 0.450x_2 \tag{1}$$

1. The latent variable Digital Literacy has a positive and significant impact at the latent variable Entrepreneurial Literacy interests, with a path coefficient of 0.510 and a p-value of 0.000. As a result, it means that the better the Digital Literacy, the higher the Entrepreneurial Interests college students of Management Study Program at Universitas Nusantara PGRI Kediri.
2. The E-commerce latent variable has a positive and significant effect on the Entrepreneurial Interests latent variable, with a path coefficient of 0.450 and a p-value of 0.000. Thus, it means that if E-commerce will increase, then Entrepreneurial Interests also increases.

Based on the results of research on the Digital Literacy variable (X1) has a positive value on the Entrepreneurial Interests variable (Y). This shows that digital literacy has a positive and significant influence on student Entrepreneurial Interest. That is, the better the digital literacy of students, the higher their interest in entrepreneurship. This is based on the results of research with a path coefficient of 0.510 and a p-value of 0.000. So it can be concluded that digital literacy has an effect on Student Entrepreneurial Interest.

Based on the results of the questionnaire collected, information can be obtained that respondents rely more on the use of the internet as a source of information, respondents also have knowledge about searching on the internet using various existing media, and are able to evaluate the content or information that has been obtained. This

is in accordance with the principles of digital entrepreneurship proposed by Scott Gerber where a digital entrepreneur needs to master digital competencies, one of which is digital literacy. With this ability and knowledge, it will be able to create a creative and innovative business idea. Digital literacy has a significant influence in mediating the effect of entrepreneurial knowledge on techno-prenuership [14].

Based on the results of the E-commerce variable research ( $X_2$ ) is also positive value to variable entrepreneurial interests ( $Y$ ). This shows that e-commerce has a positive and significant influence on student entrepreneurial interests. This is based on the results of research with a path coefficient of 0.450 and a p-value of 0.000. So it can be concluded that e-commerce affects Students Entrepreneurial Interests. In other words, increasing the ability in E-commerce will increase students' interest in entrepreneurship.

Based on the results of the questionnaire collected, information can be obtained that respondents are able to use e-commerce well as seen from the use in terms of communication that is facilitated without being bound by distance, time, and cost. In addition, respondents also feel that they are able to adapt to the website that has been provided. Respondents also acknowledged that the business processes carried out in e-commerce are easy to do and the stages are easy to learn and complete in a short time. Finally, respondents also agreed that in terms of services, the existence of e-commerce is able to fulfil needs easily. From this, it illustrates that the use of e-commerce is able to influence student entrepreneurial interests.

The results show that both variables, namely Digital Literacy and E-commerce, have a positive and significant influence on Entrepreneurial Interest. This means that an increase in digital literacy and e-commerce usage among university students is directly related to an increase in their interest in entrepreneurship. The very low p value (0.000) indicates that this result is highly statistically significant. In the context of statistics, a low p value (typically less than 0.05) indicates that the observed results are highly unlikely to have occurred by chance alone. In other words, there is very strong confidence that the observed relationship between digital literacy and e-commerce and entrepreneurial interest is real and not the result of random variability in the data.

More specifically, Digital Literacy where students' ability to use digital technology, such as searching for information on the internet, evaluating content, and compiling knowledge from various sources of information shows that this increase in digital literacy is related to an increase in their interest in entrepreneurship in the digital world. Reading various information from the internet can be an effective way to increase entrepreneurship-related knowledge [14]. In addition, E-commerce where students' ability to use e-commerce platforms and tools for online transactions and business shows an increase in this ability is also related to an increased interest in digital entrepreneurship.

The very low p-value (0.000) indicates that these results have a very strong level of statistical significance, giving high confidence in the conclusion that digital literacy and e-commerce skills do positively affect students' interest in entrepreneurship. Students' interest in digital entrepreneurship is positively impacted by their level of digital literacy. Students' interest in digital entrepreneurship is positively impacted by the use of e-commerce [15].



#### 4 Conclusions and Recommendations

The SEM results of this study concluded that Digital Literacy and E-Commerce have a significant and positive impact on the Entrepreneurial interest Student of Management Study Program in Universitas Nusantara PGRI Kediri. This study provides recommendations that improving digital literacy and e-commerce capabilities need to be a focus in the educational curriculum. Educational institutions are advised to integrate digital literacy and e-commerce training in the study program to increase entrepreneurial interest and ability among students. This can be done through workshops, seminars, and practical projects that facilitate the understanding and application of digital technology in a business context.

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