



## The Influence of Entrepreneurial Knowledge, Competence, and Information Technology Development on Small Medium Enterprises Success

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### **Abstract**

In running their business, business owners need to have entrepreneurial knowledge to add quality to achieve business success. A successful entrepreneur must also have the knowledge, skills, attitudes, motivation, and behavior necessary for his business to develop properly. This study aims to determine the influence of Entrepreneurial Knowledge, Competence, and IT Development on the Success of SMEs. The population of this study is all SMEs in Lampung. It was studied by taking samples by purposive sampling of as many as 80 SMEs in Bandar Lampung. The data collection technique in this study was carried out by distributing questionnaires both online and offline to related samples. The data that has been obtained is then processed using the help of Smart PLS-SEM software. The results showed that the hypothesis of study 1 which said, "There is a significant positive influence between entrepreneurial knowledge on the success of SMEs" is not accepted. The hypothesis of research 2 which says, "There is a significant positive influence between the competencies possessed by an entrepreneur on the success of SMEs" is accepted. On the track that shows the influence of IT Development on SME Success, it shows that the hypothesis of research 3 which says, "There is a significant positive influence between IT Development on SME success " is accepted. Thus, it is hoped that SMEs can continue to improve IT competence and development because these two things will encourage the success of SMEs.

**Keywords:** *Entrepreneurial Knowledge; Competence; IT Development; MSME Success*

### **Introduction**

The rapid population growth in Indonesia has caused an increasing number of workers. However, the growth in the number of workers that occurred was not offset by the availability of employment. So that the growth in the number of workers occurs faster than the growth of employment. As a result, many companies make very strict selection rules when conducting employee admissions. This is done so that they can ensure that the employees who have been accepted do have qualified competencies in themselves, this will result in an increase in unemployment in Indonesia.

Based on this, people need to be able to develop an entrepreneurial attitude themselves, so that in the future they can contribute to helping the government reduce unemployment. By entrepreneurship, an entrepreneur can create new jobs for the community around them so that at the end indirectly, the establishment of a business such as MSE, startup, or other businesses can help the economy of the surrounding community.

Basically, Micro, Small, and Medium Enterprises have indeed become a development priority in every country. In running a business, owners need to have entrepreneurial knowledge to add quality and achieve business success. A successful entrepreneur must have the knowledge, skills, attitudes, motivation, and behavior necessary for his business to develop properly. Entrepreneurial knowledge plays an important and profound role in improving the ability of potential entrepreneurs to recognize opportunities (Roxas, 2013) describes entrepreneurial learning as an ongoing process of promoting knowledge development, which is essential for the effective creation and management of new businesses. De Boer et al. (1999) claim that knowledge is the most important resource if an enterprise acquires a competitive advantage. This can be achieved through the construction of knowledge networks (Nordhaug, 1993), defined by Leonard-Barton (1995) as an interdependent knowledge system. The knowledge that a person has can be role as a link to the success they want to achieve, especially in achieving the entrepreneurial success that they have established and developed before.

The success of a business is determined by competence in that business (Mitchelmore & Rowley, 2010). Competence will be able to increase innovation, competitive advantage (Meutia & Ismail, 2012), and performance (Ahmad, 2018). Entrepreneurial competence itself is a knowledge, attitude, and skill that exists in an individual, where the three things are interconnected and are indispensable for entrepreneurs to produce the best performance and management in running their business, therefore these three things need to be trained and developed further (Zuhriyah et al., 2013). Competence is one of the important factors that become the competitiveness of SMEs. In a competitive business environment, entrepreneurs are required to be more competent in various fields such as attitudes, intellectuals, behavior, and managerial because business processes are considered very important today (Wichramaratne, Kiminami & Yagi, 2014). Having developed the knowledge in himself, this entrepreneur must also have competence and creativity in himself to be able to create something new that has a distinctive point of difference from their competitors. Therefore, an individual needs to improve their competence so that they can support business activity.

In a competitive SME environment, information technology infrastructure such as the Internet, websites, free application software (*Open Office*) is needed which can provide many and inexpensive opportunities for SMEs to compete with large companies. Many SMEs have adopted information technology infrastructure to conduct business. Martin (1999) revealed that information technology is not limited to computer technology, but is a combination of users with devices in the computer that can be used to process and store information. Information technology is also related to the technology used to transmit, and disseminate information. Beley & Bhatarkar (2013) reveals that technology has a very deep impact on most industries. Information technology that has a significant impact on the operations of Small and Medium Enterprises is claimed to be very important for the sustainability and growth of the economy in general. IT infrastructure provides opportunities to increase revenue, reduce costs, and improve customer response. Information technology infrastructure can develop new products and services that have a high level of knowledge component in them with the addition of improved skills can lead to a significant increase in productivity and competitiveness.

The difference between this research and previous research is that this research focuses more on uncovering the influence of information technology developments on the development of SMEs, while previous research has only focused on the impact of using Information Technology in a company. In fact, Information Technology continues to experience dynamic development from year to year, so it is

important to study further with previous theories that are appropriate. In addition, many students prefer to work as opposed to opening a business. This is of course because some students do not have sufficient competence in managing a business and still have a great fear when they want to run their business, especially if the student feels that he does not have knowledge about entrepreneurship, qualified creativity, or other things so that the business that is established will be overshadowed by losses that can cause failure in opening a business. This can certainly threaten the development of SMEs in the future. For this reason, this study aims to determine that entrepreneurial knowledge affects the success of SMEs in Bandar Lampung, the competence possessed by an entrepreneur affects the success of SMEs in Bandar Lampung, IT developments affect the success of SMEs in Bandar Lampung

## ***Literature Review***

Entrepreneurship knowledge is a learning process obtained through the five senses and memories so that an individual can obtain new intellectual things that they get through the Entrepreneurship Education process that can help individuals innovate and take advantage of opportunities in carrying out their business activities. Research conducted by Winarso (2019) tested the influence of entrepreneurial knowledge on the success of MSMEs in Sleman. Finding that entrepreneurial knowledge has a significant positive effect on the success of small micro-enterprises.

Emron, Yohny, and Imas (2017) competence is the ability of an individual to carry out a job correctly and have advantages that are based on matters concerning knowledge, expertise, and attitudes. Meanwhile, according to (Bortkeviciene, 2015) entrepreneurial competence is an individual characteristic such as special knowledge, motives, features, self-image, roles, and social abilities. Competence has a positive impact on the survival of entrepreneurship and is a predictor of the continuity and success of SME businesses (Gerli, 2011; Griffin, 2012). Ahmad (2010) proposes a direct relationship between entrepreneurial competence and business success in SMEs by considering the various roles that entrepreneurs have in managing their businesses. In other words, entrepreneurs need to equip themselves with relevant competencies that will ultimately improve the survival and performance of their businesses (Ahmad et al2010)

Rintho (2018) explained that information technology is a technology that is related to the management of data information and the process of distributing data or information within the limits of time and space. Information technology has made communication a faster and more approachable process and has increased our dependence on such forms of communication. Information technology applications, such as shared databases, networks, and telecommunications, can meet the need for closer coordination in the business arena. The shared database greatly facilitates the process of disseminating information, providing an online environment for those seeking the information as well as standardizing the format in which all receive the information. Flexibility and efficiency are qualities valued by customers, and we also find that IT improves customer relationships.

Success is also defined as getting the results of his efforts. According to (Gyimah,2020) Successful effort means the achievement of action in a certain period or within specified parameters, or it can also mean completing a goal or achieving a goal. Cader and Leatherman (2011) state that the longevity of a business's existence and its ability to survive a forced cessation of activity is indicative that it can achieve success. Reijonen & Komppula (2010), offer a brief meaning concerning survival by defining success as a sustainable business activity and the probability of failure occurring is smaller. Beley & Bhatarkar (2013) stated that Information technology that has a significant impact on the operations of Small and Medium Enterprises is claimed to be very important for the sustainability and growth of the economy in general. Rintho (2018) note that companies invest in information technology to

be successful in market competition. Therefore, the development of IT is considered an important factor in the progress and success of a business.

An SME that has successfully worked on the 3 things mentioned above; entrepreneurial knowledge, the competence of an entrepreneur, and technological development. These three things are the main keys to the success of an SME because the three points complement each other. If a person can know about entrepreneurship, then that person will be competent in running his business, his business will continue to grow and with the presence of technological developments that continue to advance, all goals can be achieved more easily.

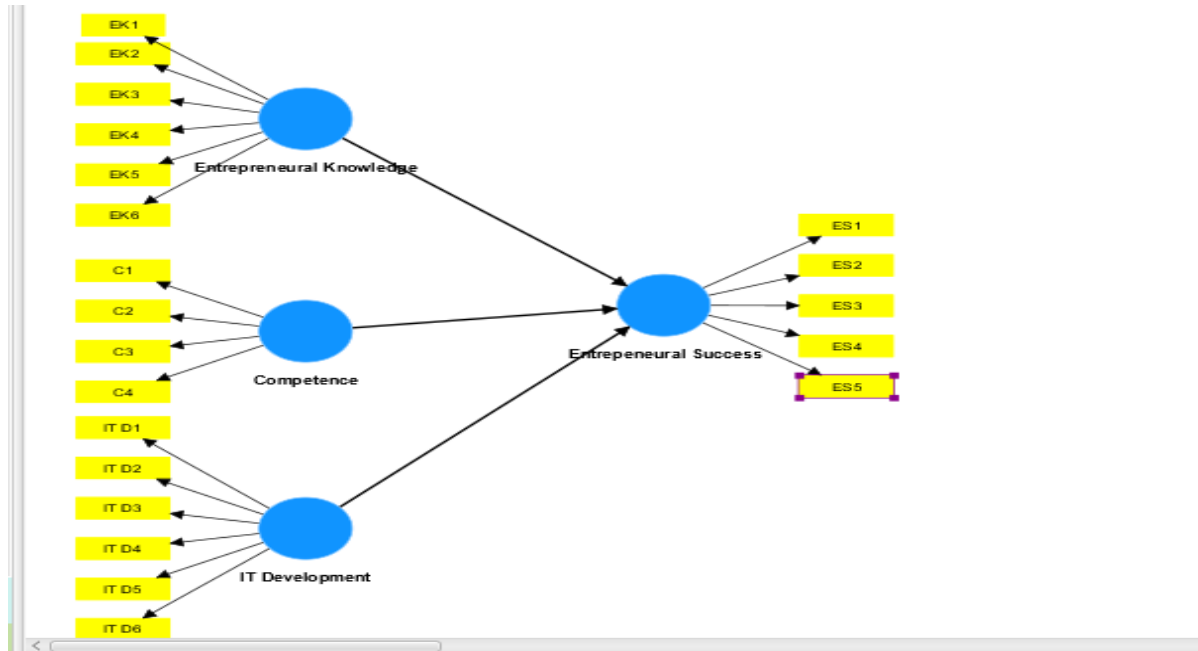


Figure 1 Research Model

## Hypothesis

1. H1: There is a significant positive influence between entrepreneurial knowledge on SME success.
2. H2: There is a significant positive influence between the competencies possessed by an entrepreneur on the success of SMEs.
3. H3: There is a significant positive influence between IT Development and SME success.

## Research Methods

The population in this study was all SMEs domiciled in Bandar Lampung and who had used technology in their activities. This study used samples. The sample selection method uses side purposive, using certain criteria: a). is a craft business b) Is a business that has been running for at least 3 years when this research period was carried out c). Have at least 2 employees. Sample size 80 SME. In measuring Entrepreneurial Knowledge, using indicators of as many as 6 items.: To measure *competence*, as many as 4 items. To measure *IT development*, as many as 5 items. To measure *the success of SMEs* as many as 5 items. Data collection techniques by distributing questionnaires through google forms. SEM analysis technique using Smart PLS.

## Results and Discussion

### Respondent Profile

Of the 80 respondents used in this study, the majority of respondents were female as much as 81.25%, aged between 30 to 40 years 50%, and high school education level and below as much as 43.75%. And most business life is over 4 years as much as 37.5%

### Analysis

Research data processing using PLS-SEM software which consists of two analyses, namely the outer model and the inner model.

### Outer Model

Based on the analysis of the results of the measurement model (*Outer Model Analysis*) it was found that all indicators used to measure research variables are valid and reliable so that they can represent research variables and can be trusted and relied upon.

#### a. Convergent Validity

Table 1. AVE Value Results

Variables	Average Variance Extracted
Entrepreneurial knowledge	0.696
Competence	0.827
IT Developments	0.629
Entrepreneurial success	0.709

It is known that the AVE value of each variable has a value above 0.5 which has met the convergent validity criteria as measured by the AVE value. This shows that the variables in this study have met the criteria.

#### b. Discriminant Validity:

Table 2. Discriminant Validity

Variables	Entrepreneurial knowledge	Competence	IT Developments	Entrepreneurial success
Entrepreneurial knowledge	0.834	-0.160		-0.233
Competence		0.909		0.737
IT Developments	-0.259	0.748	0.793	0.783
Entrepreneurial success				0.842

The results of the discriminant validity analysis in the Table show that the magnitude of the *Heteroite-Monotrait Ration* value in each variable indicator has a value smaller than 0.90 (<0.90) so that all indicators of each variable can be accepted.

### c. Composite Reliability Testing

Sekaran and Bougie (2016) state that the reliability of measurement indicates that the indicator is consistent to use over time. Reliability testing by looking at the magnitude of *composite reliability* and *Cronbach's Alpha*. If each item used in measuring the variable has a *composite reliability* value of  $>0.60$  then the variable is declared reliable, if each item used in measuring the variable has a *Cronbach's Alpha* value of  $>0.60$  then the indicator or *item* to measure the variable is declared reliable (Malhotra, 2015).

Table 3. Cronbach's Alpha and Composite Reliability

Variables	<i>Cronbach's Alpha</i>	<i>Composite Reliability</i>
Entrepreneurial knowledge	0.918	0.932
Competence	0.790	0.905
IT Developments	0.883	0.910
Entrepreneurial success	0.863	0.907

The results of the reliability analysis in the Table show that the magnitude of *Cronbach's Alpha* and *Composite Reliability* values in each variable indicator has a value greater than 0.60 ( $>0.60$ ) so that all indicators of each variable have met the requirements and are declared reliable.

### Inner Model

#### a. Coefficient of Determination Test ( $R^2$ )

##### The Result of the Value of the Coefficient of Determination

The value of R-Square ( $R^2$ ) is used to determine the determination coefficient and measure the degree of variation of change in independent variables against dependent variables. *R-Square* values have 3 criteria, which are as follows: values 0.75 – 1 indicate (influence is strong), values 0.5 – 0.74 indicate (influence is moderate/moderate), then values 0.25 - 0.49 indicate (influence is weak).

Table 4 R-Square Coefficient of Determination

	R-square	R-square adjusted
Kesuksesan wirausaha	0.868	0.854

Based on the results of the coefficient of determination ( $R^2$ ) test shown in the Table, it can be explained that the R-s square value for the company's innovation variable is 0.514 which means that 51.4% of the company's innovation dependent variable can be explained by the variables in this study, the remaining 48.6% is explained by other variables that were not studied in this study.

Inner Model Testing

The result of *bootstrapping*. Is

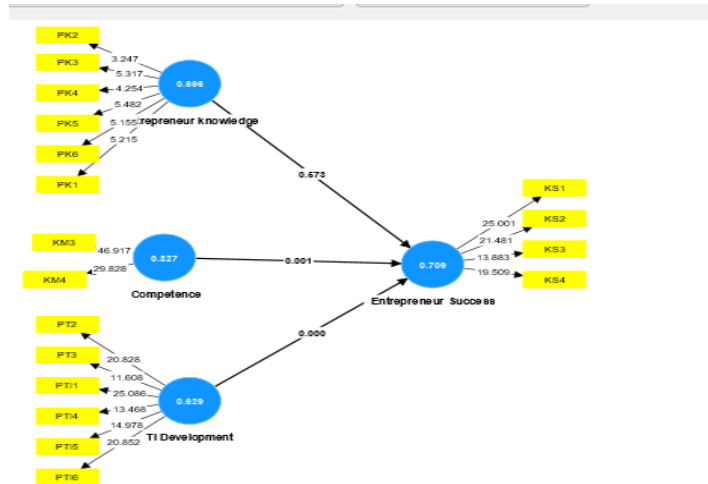


Figure 2. Bootstrapping Test Results

Based on the results of the bootstrapping test which can be seen in Figure 2, can be summarize and presented in Table 5 to explain the results of *bootstrapping*.

Table 5 Bootstrapping Test

	<i>Original Sample (O)</i>	<i>Sample Mean (M)</i>	<i>Standard Deviation (STDEV)</i>	<i>T-Statistics</i>	<i>p-values</i>
Entrepreneurial Knowledge -> SME Success	-0.044	-0.056	0.079	0.564	0.573
SME Success Competencies >	0.345	0.338	0.104	3.345	0.001
IT Development -> SME Success	0.513	0.518	0.103	4.992	0.000

Based on the results of the hypothesis testing above, the following test results are obtained:

- 1). On the path that shows the influence of Entrepreneurial Knowledge -> SME Success, the p-value obtained is 0.573 with a statistical T of 0.564 and a negatively marked path coefficient of -0.044. Because the p-value of the > path is 0.05, the statistical T is <1.96 and the coefficient path is negatively marked, it can be concluded that Entrepreneurial Knowledge has a negative and insignificant influence on the success of SMEs. This suggests that the hypothesis of study 1 which says, "There is a significant positive influence between entrepreneurial knowledge on the success of SMEs" is not accepted.
- 2). In the path that shows the effect of competence on SME Success, the p-value obtained is 0.001 with a statistical T of 3.345 and the positively marked path coefficient of 0.345. Therefore, the p-value of the < path is 0.05, the statistical T > 1.96 and the coefficient of the path are positively marked, it can be concluded that competence has a positive and significant influence on the success of SMEs. This suggests that the hypothesis of research 2 which says, "There is a

significant positive influence between the competencies possessed by an entrepreneur on the success of SMEs" is accepted.

- 3). In the path that shows the effect of IT Development on the success of SMEs, the p-value obtained is 0.000 with a statistical T of 4.992 and a positively marked path coefficient of 0.513. Since the p-value of the < path is 0.05, the statistical T is >1.96 and the coefficient path is positively marked, it can be concluded that IT Development has a positive and significant influence on SME success. This suggests that the hypothesis of research 3 which says, "There is a significant positive influence between IT Development on SME success " is accepted

## ***Discussion***

SMEs must have behaviors in increasing entrepreneurial success. The role of entrepreneurial knowledge, competence, and development of information technology is very important in encouraging entrepreneurial success. The knowledge that a person has can be role as a link to the success they want to achieve, especially in achieving the entrepreneurial success that they have established and developed before. Entrepreneurship Knowledge is a learning process obtained through the five senses and memories so that an individual can obtain new intellectual things that they get through the Entrepreneurship Education process that can help individuals innovate and take advantage of opportunities in carrying out their business activities. By developing entrepreneurial knowledge, it can make entrepreneurial capabilities also develop. Research by Arfan, and Beni, found that entrepreneurial knowledge has a significant positive effect on the success of small micro-enterprises in Ngaglik District, Sleman Regency. This study does not support the previous findings. In this study, the knowledge of entrepreneurship has a negative and insignificant influence on entrepreneurial success. This condition can occur where the SMEs studied already know, especially skilled in making products, so that is the reason SMEs condition on other things in influencing them to achieve entrepreneurial success such as incompetence and IT development.

Meanwhile, the results of research on the influence of competence on entrepreneurial success, have a positive and significant influence, this is supported by previous research such as that carried out by Al-Mamun (2016) found entrepreneurial competence has a significant positive influence on the success of a business that a person establishes. Meanwhile, Bortkeviciene, 2015 found entrepreneurial competence to individual characteristics such as special knowledge, motives, features, self-image, roles, and social abilities. Competence has a positive impact on the survival of entrepreneurship and is a predictor of the continuity and success of SME businesses (Gerli, 2011; Griffin, 2012)

The results of the research are related to the development of technology used to transmit and disseminate information. Beley & Bhatarkar (2013) reveals that technology has a very deep impact on most industries. Information technology that has a significant impact on the operations of Small and Medium Enterprises is claimed to be very important for the sustainability and growth of the economy in general. Rintho (2018) note that companies invest in information technology to be successful in market competition. Therefore, the development of IT is considered an important factor in the progress and success of a business.

## ***Conclusion***

Entrepreneurial knowledge has a negative and insignificant influence on the success of SMEs. This means that the greater knowledge that SMEs have will not increase their success and will even decrease.



1. Competence has a positive and significant influence on the success of SMEs. This means that the competencies contained in SMEs will be able to influence the success of SMEs. If SMEs improve their competence, they will encourage change in the same direction as their success.
2. The development of IT has a positive and significant influence on the success of SMEs. This means that the development of information technology will have a unidirectional effect on the success of SMEs. If IT development is carried out to the fullest, it will provide a meaningful change to the success of SMEs.

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