
| RESEARCH ARTICLE

Entrepreneurial Knowledge, Market Orientation, Digitalization, and Entrepreneurial Competencies: Evidence from SMEs in Indonesia

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| ABSTRACT

This study aims to acknowledge how Entrepreneurial Knowledge, Market Orientation, Digitalization, and Entrepreneurial Competencies are linked. The data for the study were analyzed using Partial Least Square (PLS). This research covers 142 SMEs in Indonesia based in Malang, East Java. The study used proxies such as creativity, problem-solving, skill, and leadership as a proxy for Entrepreneurial Knowledge, promotion, market needs, and cost analysis as a proxy for Market Orientation. Technology to promote and social media as a proxy for digitalization and Entrepreneurial Competencies variables, measured through identifying customers, wants, developing trust, and negotiating. This study indicates that Entrepreneurial Knowledge, Market Orientation, and Digitalization significantly affect SMEs' Entrepreneurial Competencies in Indonesia. This study recommends applying Entrepreneurial Knowledge, Market Orientation, and Digitalization in SMEs. Furthermore, this study suggests that the government pays more attention to digitalization development for SMEs in general and SMEs in Malang City. Especially during the current pandemic crisis, the role of using technology has dramatically helped SMEs survive. The supporting infrastructure for digitalization, such as easy internet access connectivity, especially in the country's remote areas, can be improved.

| KEYWORDS

Entrepreneurial Knowledge, Market Orientation, Digitalization, Entrepreneurial Competencies, SMEs

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1. Introduction

The economy is continuously experiencing growth and increasingly opening rapidly to create competition is getting tighter. Two significant forces underlie the pace of world economic change, namely globalization and technological progress. This strength has led to competition among various businesses becoming increasingly tight at domestic and international levels. The era of globalization has demanded the change of the old paradigm in every field, one of the only marketing areas.

Along with the development of the economy, people are faced with various choices in consuming their daily needs. Industrial development is getting higher and more complex. Increasingly high competition levels and conditions of uncertainty require companies to create to achieve excellence competitive (competitive advantage) to win the competition globally. To achieve that, companies have to apply the concept of modern marketing, whereby customers become the focus of the market's primary orientation because they are the tip of marketing's spear success.

SMEs are one of the business areas that give color to Indonesia's business because of Enterprises, Micro, Small, and Medium Enterprises (SMEs), which continue to grow given the opportunity to grow (Hartanto, 2016). Data Ministry of Cooperatives and SME Micro Small and Medium Enterprises (Ministry of Cooperative and SMEs) mention that SMEs in Indonesia have already penetrated 51.2 million business units. The amount is equivalent to 90% more total offender effort in groundwater. Demand consumers will continue to increase, and then the businessman should reap the higher revenue. Although the scale of the business is small, sectors Enterprises Micro Small and Medium Enterprises (SMEs) proved to be the most immune to the crisis. When the

sector businesses large and industries are oriented exports slumped due to the crisis's shock, SMEs can still survive because the market is loyal. To implement the effort conservation of the environment and achieve excellence competitive and increase financial performance, companies require the system to manage the company (corporate governance) are acceptable.

Data from the Asian Development Bank (ADB) Institute in 2015 said that Small and Medium Enterprises (SMEs) or the Small Medium Enterprise (SME) helped contribute to the total exports of Indonesia. Besides that, SMEs' role is undoubtedly very central to the growth of Indonesia's economy, such as the role of SMEs for the absorption of energy work and their contribution to the Product Domestic Bruto (GDP). Figure 1.1 shows the contribution of SMEs to the Indonesian economy. SMEs proved able to absorb the force of work of 97.2%, give a contribution to GDP that amounted to 57.8%, and its contribution to the total exports amounted to 15.8%.

In Indonesia, especially East Java, SMEs' role in the economy also shows a central role. Based on BPS data, as many as 414,000 SMEs grow in East Java each year, and SMEs' existence contributes 57.52% of East Java's Regional GRD. The role is essential, as well as the potential of SMEs. Java East has pushed the local government to conduct focus improvement of SMEs to climb the class. Unfortunately, as the city's most significant in Java East has approximately over 2764 SMEs, it is scattered into five sub-district. The number of SMEs in Malang has helped improve the economy of the city of Malang. Support Government participation and contribute to the improvement of the role of SMEs in Malang. In October 2019, the Malang City Government established the SMES Mall to market products from SMEs in Malang City.

SMEs' massive potential is expected to improve their performance by mapping market potentials, increasing competence, and entrepreneurial knowledge. SMEs that apply orientation on the market (market orientation) are SMEs that make customers the mecca for the company to run its business (customer orientation). The survival of the company is very dependent on customers. One of the efforts to retain customers is through understanding consumer behavior. By understanding in depth, marketers must draw up a strategy, and program marketing is proper to take advantage of every optimal opportunity.

The influence of market orientation on entrepreneurial competencies has been proven empirically in previous research. Research by Abdullah et al. (2019) and Ali et al. (2017) demonstrated the influence of market orientation on entrepreneurial competencies. The research is aimed to examine the effect of market orientation towards entrepreneurial competencies is based on the concept of the orientation of the market of Hasan (2018), which says that market orientation is an essential factor for the company.

Knowledge to develop a business is one of the keys to the success of developing SMEs in Indonesia. Unfortunately, the development of Knowledge or entrepreneurial Knowledge has not developed sufficiently in Indonesia. Global Summit 2017 said that from the survey results were carried out to SMEs in 30 cities, SMEs' primary problem is the lack of knowledge to develop business (Walfajri & Maizal, 2017). According to the Room of Commerce and Industry Indonesia or the Chamber of Commerce, the perpetrators of business SMEs still lack knowledge will be the ability to manage finances, especially in terms of bookkeeping and cash flow.

Effect of entrepreneurial Knowledge of the entrepreneurial competencies has been proven empirically by Mamun (2019) with a sample of 403 SMEs from Assembly Amanah Rakyat Kelantan and the Council of Islamic Religion and Traditional Customs Kelantan finds influence positively the entrepreneurial knowledge of the entrepreneurial competencies. This study examines entrepreneurial knowledge's effect on entrepreneurial competencies based on a Knowledge-based view derived from the Resource-Based Theory (RBT). Knowledge or knowledge in various forms is of resource interest (Grant, 1997).

The Effect of Digitalization on entrepreneurial competencies has been proven empirically by Pena, Lopez, and Garrido (2019). A sample of 828 companies in Spain discovered that digitization positively influences entrepreneurial competencies. The research examines digitalization's effect on entrepreneurial competencies based on the superiority competition theory (competitive advantage). Excellence competition can be summed up as a source of power and capability owned by the company, which is typical or to perform efficiently because companies in competitive industries can be more superior than the company's other (Mowen et al., 2014). Digitization could be the advantage that owned the company to compete with other companies. The existence of digitalization in various company lines is expected to create efficiency for the company. One of the forms of digitization is the digitization of marketing.

Seeing Indonesia's population amounted to 259 million is a chance big for SMEs to market their products. The 326 million users of mobile phones and more than 88 million users of the internet, and more than 79 million users of Facebook will increasingly open up opportunities and facilitate SMEs in doing promotion and developing a business through digital media (Partner, 2016). In Indonesia, the average person to spend time using the internet is 4.42 hours/day (desktop) and 3.33 hours/day via mobile phone. Using social media on average 2,51jam / day and watching television 2, 22 hours/day (We Are Social, 2016) indicates that using the internet and social media has become Indonesia's behavior.

The growth of internet users, mobile users, and social media users has shifted Indonesian digital consumers' shopping behavior towards online shopping. Trends in sales by internet increasingly rising, with so apparently, the behavior of consumers Indonesia started to get used to shopping online. E-commerce, Advertising, and Financial Services are the three main drivers of digital consumer growth in Indonesia. Digitalization will undoubtedly drive the commercialization of SMEs' products and encourage economic creativity as standard international.

By seeing the study results earlier, the study results before the variables are the same, but the different places and times will give the results of the same or different. Also, the combination of several variables, namely entrepreneurial Knowledge, market orientation, Digitalization, and entrepreneurial competencies, is a gap that allows empirically tested and research to be the novelty of this research.

2. Literature Review

Linan and Chen (2009) suggest that entrepreneurial competencies can specify who owns a quality characteristic representing an entrepreneur's capacity to support the work. Capability is entered in the unique category and is a resource/resource owned by someone. This uniqueness will create excellence compete with someone's perpetrators' business compared with its competitors (Barney, 1991; Grant, 1991).

Research that is done by Mamun, Fazal & Muniady (2019). The research results of Mamun, Fazal & Muniady (2019) stated that entrepreneurial knowledge, market orientation, and networking positively affect entrepreneurial competency. Research also produces mediation findings between entrepreneurial competency and entrepreneurial knowledge, market orientation, networking, and enterprise performance.

Research by Pena, Lopes, and Garido stated the effect of servitization and digitalization in the manufacturing sector. The study was conducted using data from 828 companies in Spain. The research also looks at digitalization as mediating the effect of servitization on company performance. Results of the study showed that servitization and digitalization positively and significantly the company's performance. Digitization is intended to mediate the effect of revitalization on company performance, either directly or indirectly.

Research by Bowman et al. (2018) explores the effect of technology and digitalization on small and medium enterprises (SMEs) on company performance. The study was conducted on 338 entrepreneurs in Europe who actively use social media and big data on their SMEs. This study analyzes digitalization's effect, particularly the impact of social media and big data on company performance. Results of the research show that digitalization can positively and significantly influence the company's performance.

Abdullah et al.'s (2017) research investigate and analyzes market orientation's effect on entrepreneurial competencies. Research carried out to entrepreneurs of small and medium-sized processors grass sea in Sulawesi, Indonesia. Results of the study showed the effect of market orientation was positively and significantly to the entrepreneurial competencies.

Research Ali et al. (2017) informs that when this market orientation is important among academics that examined the business practitioners' business. Since the business environment has become increasingly competitive, market orientation is crucial in determining a businessman's competence. Research Abdullah et al. (2017) shows that market orientation positively and significantly influences entrepreneurial competencies.

Theory Resource-Based Theory (RBT) is relevant to explain the research. RBV first time put forward by Warnerfelt (1984) in an article which is entitled ' A resource-based view of the firm ' 'which incorporates the idea of distinctive competencies ' belongs Selznick (1957) and the work of Penrose (1959) on the ' definition of the firm as a system of productive resources ' (Nothnagel, 2008). Barney and Arikan (2001) state that: " Resources are the tangible and intangible assets firms use to conceive and implement their strategies." Perspective RBT explained firm resources include the total assets, capabilities, processes of the organization, attributes of the company, information, knowledge, and others which are controlled by a company that enables companies to understand and implement strategies to improve the efficiency and effectiveness of the firm (Barney, 1991).

Knowledge-Based View (KBV) is the existence of a new view-based source power / Resource-Based View (RBV). KBV shows that knowledge is of resource interest in its various forms (Grant, 1997). The KBV approach involves human capital in the company's routine activities. It is to be achieved by increasing employees' involvement in formulating the purpose of operating and run-length companies. Companies develop new knowledge essential for the company's profit (Nelson and Winter, 1982).

Porter (1985) in Awwad (2013) stated that superiority competition (competitive advantage) is the capability that is obtained through the characteristics and sources of the power of a company to have a performance that is higher than the company's other

on industry or market the same. Issues of excellence competition became very popular after Porter developed concepts such. Competitive advantage comes from the company's ability to utilize its internal strengths to respond to external environmental opportunities while avoiding external threats and internal weaknesses (Mooney, 2017).

3. Methodology

3.1 Type of Research, Population, and Sample

The research includes research explanatory with a quantitative approach. This study's population is the population of all SMEs actors in East Java, Indonesia. The total population included in the category is 1,294 SMEs. Mechanical non-probability sampling is used in taking samples of the research is to use the technique purposive sampling. Based on the sampling criteria, the sample used was 142 people in Malang. Malang City, the second-largest city in East Java, is considered sufficient to represent SMEs' conditions in East Java. The total sample of this research is 142 SMEs in Malang. In terms of quantity, it meets the minimum sample requirements. Table 1 below shows a population and a sample of the research is.

Table 1. Population and Sample

Category	Unit
SMEs in East Java are Export-oriented	1,294
Export -oriented SMEs outside Malang	1,152
Number of research observations	142

Source: Malang City Trade Office, processed by researchers (2020)

3.2 Data Collection and Measurement of Constructs

The types of data in this study are primary data and secondary data. Primary data was obtained by direct than 142 SME -oriented exports were scattered in Malang. Primary data is collected explicitly through a questionnaire containing statements related to the study. Meanwhile, secondary data in this study include supporting data in this study. Data are obtained from various sources such as the Department of Cooperatives and SMEs province of East Java, the Ministry of Commerce, Ministry of Industry, and institutions more relevant research.

Construct of variable entrepreneurial Knowledge in research uses dimensions compiled based on the study of Al-Mamun et al. (2019), who developed a measurement construct of entrepreneurial knowledge. Researchers used four indicators for the construct of entrepreneurial knowledge, namely creativity, problem-solving, skills, and leadership. At the same time, measurement construct or variable market orientation in the research uses dimensions arranged based on studies Ali et al. (2017) and Abdullah et al. (2017). They developed a measurement construct of market orientation. Researchers used three indicators for market orientation, namely promotion, market needs, and cost analysis.

To measure the construct or variable digitalization in the research, dimensions were prepared by Bowman (2017) and Pena et al. (2018). He developed a measurement construct of organizational culture. Researchers used two indicators for the digitalization construct, namely, technology to promote and social media. While measuring the construct or variable entrepreneurial competencies in research uses, dimensions are compiled based on studies by Man et al. (2000) and Mamun, Fazal, and Muniady (2019). They developed a measurement construct of entrepreneurial competencies. Researchers used three indicators for entrepreneurial competencies: identifying customer wants, developing trust, and negotiating.

The study of the theory and framework of thought can be formulated hypothesis of the study as follows.

Hypothesis 1: Entrepreneurial Knowledge effect against Entrepreneurial Competencies.

Hypothesis 2: Market Orientation effect against Entrepreneurial Competencies.

Hypothesis 3: Digitalization effect against Entrepreneurial Competencies.

The entire construct of the study and the model hypotheses are outlined in Figure 1 below it.

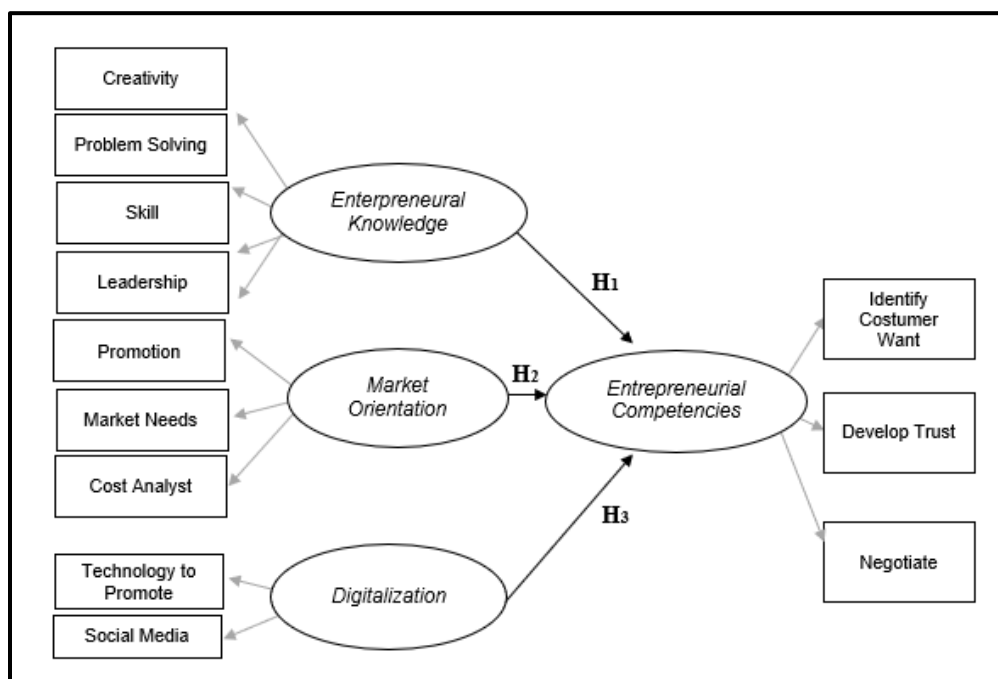


Figure 1 Diagram of the Research Path Analysis and Hypothesis Model
 Source: processed by researchers (2020)

4. Results and Discussion

4.1 Profile of Respondents

The questionnaire processing results obtained the profile of the respondents who were the samples in this study, as for the types of the sex of respondents consisted of two men and women. After the questionnaire was distributed to 142 respondents, the respondents who became the sample were identified as follows. Based on sex, respondents are dominated by men, 82 or 57.74% were women 60 or 42.25%.

4.2 Evaluation of Instrument Validity Testing

Based on the summary of the results of testing the validity of the research variables, it is known that all items have an item correlation coefficient value with a total score (r_{iT}) > table correlation value (0.361). With such an item questionnaire on each of the dimensions that measure variables entrepreneurial knowledge, market orientation, digitalization, and entrepreneurial competencies is declared invalid or can measure the variables, so it can be used to collect the data in a study. Table 2 at the bottom shows the validity of the instrument research.

Table 2. Testing Instrument Validity

Variable	Dimensions	Item	Correlation Coefficient	Information
Entrepreneurial Knowledge (X1)	Creativity (X1.1)	X1.1.1	0.882	Valid
		X1.1.2	0.887	Valid
		X1.1.3	0.801	Valid
	Problem Solving (X1.2)	X1.2.1	0.840	Valid
		X1.2.2	0.852	Valid
		X1.2.3	0.826	Valid
	Skill (X1.3)	X1.3.1	0.771	Valid
		X1.3.2	0.824	Valid
		X1.3.3	0.810	Valid
		X1.3.4	0.654	Valid
Leadership (X1.4)	X1.4.1	0.937	Valid	

Variable	Dimensions	Item	Correlation Coefficient	Information
		X1.4.2	0.828	Valid
		X1.4.3	0.886	Valid
Market Orientation (X2)	Promotion (X2.1)	X2.1.1	0.894	Valid
		X2.1.2	0.944	Valid
		X2.1.3	0.935	Valid
	Needs Market (X2.2)	X2.2.1	0.963	Valid
		X2.2.2	0.873	Valid
		X2.2.3	0.817	Valid
	Analysis of Costs (X2.3)	X2.3.1	0.861	Valid
		X2.3.2	0.898	Valid
		X2.3.3	0.887	Valid
Digitalization (X3)	Use of Technology (X3.1)	X3.1.1	0.993	Valid
		X3.1.2	0.993	Valid
		X3.1.3	0.974	Valid
	Social Media (X3.2)	X3.2.1	0.860	Valid
		X3.2.2	0.860	Valid
		X3.2.3	0.841	Valid
Entrepreneurial Competencies (Y)	Desire Customer (Y.1)	Y1.1.1	0.873	Valid
		Y1.1.2	0.785	Valid
		Y1.1.3	0.941	Valid
		Y1.1.4	0.847	Valid
		Y1.1.5	0.920	Valid
	Trust (Y.2)	Y1.2.1	0.882	Valid
		Y1.2.2	0.917	Valid
		Y1.2.3	0.822	Valid
	Negotiation (Y.3)	Y1.3.1	0.862	Valid
		Y1.3.2	0.836	Valid
		Y1.3.3	0.870	Valid
		Y1.3.4	0.614	Valid

Source: Data compiled by the author, 2020

Based on the summary of the results of testing the instrument research's reliability, in each of the dimensions that measure variables, entrepreneurial knowledge, market orientation, digitalization, and entrepreneurial competencies generate value Cronbach's Alpha > 0.6. With such an item questionnaire on each of the dimensions that measure variables entrepreneurial knowledge, market orientation, digitalization, and entrepreneurial competencies otherwise reliable or consistent in measuring the variables, it can be used to collect the data in a study. Table 3 below shows the reliability of the instrument research.

Table 3. Instrument Reliability Testing

Variable	Dimensions	Cronbach Alpha	Information
Entrepreneurial Knowledge (X1)	Creativity (X1.1)	0.820	Reliabel
	Problem Solving (X1.2)	0.768	Reliabel
	Skill (X1.3)	0.765	Reliabel

	Problem Solving (X1.2)	0.861	Reliabel
Market Orientation (X2)	Promosi (X2.1)	0.896	Reliabel
	Kebutuhan Pasar (X2.2)	0.856	Reliabel
	Skill (X1.3)	0.852	Reliabel
Digitalization (X3)	Pengunaan Teknologi (X3.1)	0.986	Reliabel
	Social Media (X3.2)	0.814	Reliabel
Entrepreneurial Competencies (Y)	Keinginan Pelanggan (Y.1)	0.910	Reliabel
	Leadership (X1.4)	0.834	Reliabel
	Negosiasi (Y.3)	0.805	Reliabel

Source: Data compiled by the author, 2020

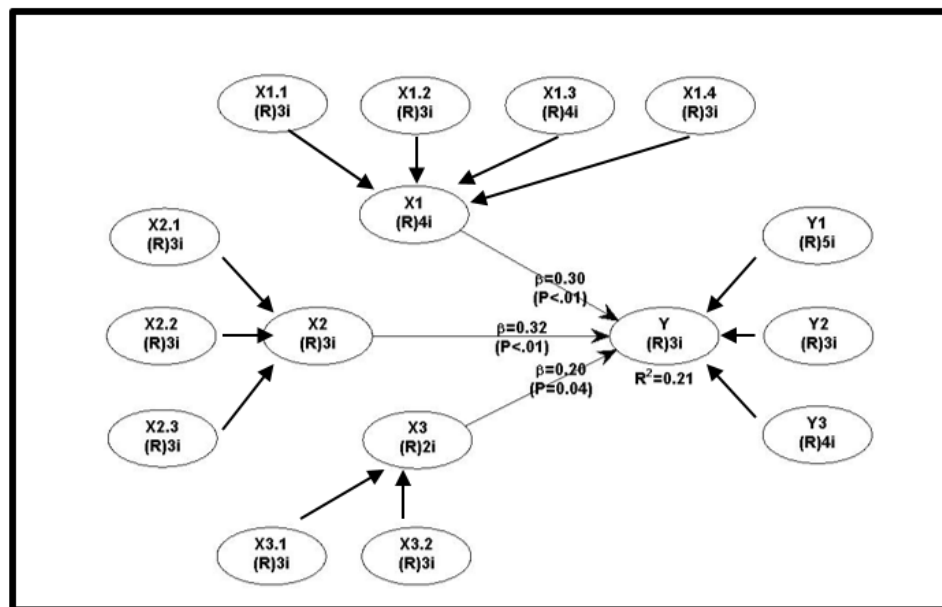


Figure 2. Research Path Diagram

Source: Data compiled by the author, 2020

Based on the Convergent Validity 2 nd Order test, which is intended to determine whether the dimensions are valid or not measuring variables. The size of the loading factor indicates the convergent validity of each dimension in measuring variables. A dimension is valid if the loading factor is positive and greater than 0. 6. All the dimensions that measure variables entrepreneurial Knowledge, market orientation, Digitalization, and entrepreneurial competencies generate value loading factor more substantially than 0.6. Thus, these dimensions are valid in measuring the variables Entrepreneurial Knowledge, market orientation, Digitalization, entrepreneurial competencies.

While Convergent Validity 1 st Order is intended to determine whether or not the indicators measure the dimensions. The size of the loading factor indicates the convergent validity of each indicator in measuring dimensions. An indicator is declared valid if the loading factor is positive and is greater than 0. 6. All the indicators that measure all dimensions create a value loading factor that is more substantial than 0.6. The indicator is declared valid in measuring the dimensions of creativity, problem-solving, skill, leadership, promotion, market needs, analysis of costs, use of technology, social media, customers' wishes, trust, and negotiation.4.3 Measurement Model

4.3.1 Entrepreneurial Knowledge Variable Measurement Model

Indicators measuring variables entrepreneurial knowledge can be viewed through the table at the bottom of this:

Table 4. Measurement of Entrepreneurial Knowledge Variables

Variable	Dimensions	Indicator	Loading Dimensions	Loading Indicator
Entrepreneurial Knowledge (EK)	Creativity (CR)	X1.1.1	0.909	0.920
		X1.1.2		0.908
		X1.1.3		0.899
	Problem Solving (PS)	X1.2.1	0.931	0.908
		X1.2.2		0.871
		X1.2.3		0.875
	Skill (SK)	X1.3.1	0.775	0.842
		X1.3.2		0.885
		X1.3.3		0.851
		X1.3.4		0.649
	Leadership (LD)	X1.4.1	0.890	0.944
		X1.4.2		0.897
X1.4.3		0.941		

Source: Data compiled by the author, 2020
 EK = 0.909 CR + 0.931 PS + 0.775 SK + 0.890 LD

Based on the measurement model, the measurement of creativity, problem-solving, and leadership skills indicators generate a value weight of each of 0.909, 0.931, 0.775, and 0.890. Thus, increasing the rise throughout indicator entrepreneurial knowledge on research can increase the variable entrepreneurial knowledge.

4.3.2 Market Orientation Variable Measurement Model

Indicators measuring variables Market Orientation can be seen through the table at the bottom:

Table 5. Measurement of Market Orientation Variables

Variable	Dimensions	Indicator	Loading Dimensions	Loading Indicator
Market Orientation (MO)	Promotion (PT)	X2.1.1	0.863	0.922
		X2.1.2		0.963
		X2.1.3		0.961
	Market Needs (MN)	X2.2.1	0.846	0.959
		X2.2.2		0.866
		X2.2.3		0.861
	Cost Analysis (CA)	X2.3.1	0.879	0.912
		X2.3.2		0.930
		X2.3.3		0.924

Source: Data compiled by the author, 2020

$$MO = 0.863 PT + 0.846 MN + 0.879 CA$$

Based on the measurement model, measurement of the promotion indicators, market's needs, and cost analysis generate the value of each of the weights of 0.863, 0.846, and 0.879. Thus, increasing the entire indicator market orientation can increase the variable entrepreneurial knowledge.

4.3.3 Digitalization Variable Measurement Model

Indicators measuring variables digitalization can be seen through the table at the bottom of this:

Table 6. Measurement of Variable Digitalization

Variable	Dimensions	Indicator	Loading Dimensions	Loading Indicator
<i>Digitalization (DG)</i>	Use of Technology (UT)	X3.1.1	0.963	0.944
		X3.1.2		0.977
		X3.1.3		0.978
	Social Media (SM)	X3.2.1	0.963	0.884
		X3.2.2		0.903
		X3.2.3		0.889

Source: Data compiled by the author, 2020

$$DG = 0.963 UT + 0.963 SM$$

Based on the model, the measurement of technology and social media indicators generates a weight value of 0.963 and 0.963. Thus, the entire indicator digitalization increase can increase the variable entrepreneurial knowledge.

4.3.4 Model of Measurement Variable Entrepreneurial competencies

Indicators measuring variables Entrepreneurial competencies can be seen through the table at the bottom of this:

Table 7. Measurement of Variable Entrepreneurial Competencies

Variable	Dimensions	Indicator	Loading Dimensions	Loading Indicator
<i>Entrepreneurial Competencies (EC)</i>	Customer Desire (CD)	Y1.1.1	0.966	0.825
		Y1.1.2		0.740
		Y1.1.3		0.959
		Y1.1.4		0.892
		Y1.1.5		0.953
	Trust (TS)	Y1.2.1	0.970	0.848
		Y1.2.2		0.921
		Y1.2.3		0.863
	Negotiation (NG)	Y1.3.1	0.950	0.838
		Y1.3.2		0.839
		Y1.3.3		0.824
		Y1.3.4		0.764

Source: Data compiled by the author, 2020
 EC = 0.966 CD + 0.970 TS + 0.950 NG

4.3.5 Goodness of Fit Model

The R- square of the Entrepreneurial Knowledge variable is 0.214 or 21.4%. R-square may indicate that the variable entrepreneurial knowledge can be explained by the variable entrepreneurial knowledge, market orientation, and the digitalization of 21.4%, or in other words, the contribution of the entrepreneurial Knowledge, market orientation, and the Digitalization of the variable entrepreneurial Knowledge amounted to 21.4%. The remaining 78.6 % is the contribution of other factors not discussed in this study. Then the Q- square variable Entrepreneurial Knowledge has a value of 0.218. It shows that the Entrepreneurial Knowledge, market orientation, and digitalization variables have a relatively strong predictive power for the Entrepreneurial Knowledge variable.

4.3.6 Hypothesis Testing

Testing the hypothesis influence is directly used to test whether the effect is variable exogenous to the variable endogenous. Criteria testing stated that if the p-value ≤ level of significance (alpha = 5%), the effect of the significant variables exogenous to the variable endogenous was declared. The results of hypothesis testing can be seen in the following table:

Table 8. Hypothesis Testing Results

Exogenous	Endogenous	Path Coefficient	SE	P-Value
<i>Entrepreneurial Knowledge</i>	<i>Entrepreneurial Competencies</i>	0.300	0.108	0.003
<i>Market Orientation</i>	<i>Entrepreneurial Competencies</i>	0.317	0.107	0.002
<i>Digitalization</i>	<i>Entrepreneurial Competencies</i>	0.200	0.111	0.038

Source: Data compiled by the author, 2020

The influence of Entrepreneurial Knowledge on entrepreneurial competencies produces a p-value of 0.003. The testing results show that the p-value < level of significance (alpha = 5%). It means that there is an influence that significantly entrepreneurial knowledge of the entrepreneurial competencies.

The effect of market orientation on entrepreneurial competencies produces a p-value of 0.002. The testing results show that the p-value < level of significance (alpha = 5%). It means that the significant market orientation is affected by entrepreneurial competencies.

The effect of digitalization on entrepreneurial competencies produces a p-value of 0.038. The testing results show that the p-value < level of significance (alpha = 5%). It means that there is an influence that significantly digitalization the entrepreneurial competencies.

Based on the table above can be known that the model of the structure that is formed is:

$$Y = 0.300 X1 + 0.317 X2 + 0.200 X3$$

1. From the above equation, it can be seen that.
2. Coefficient direct effect entrepreneurial knowledge of the entrepreneurial competencies for 0.300 states that the entrepreneurial knowledge positively and significantly affects entrepreneurial competencies. This means that the higher the entrepreneurial knowledge, the more likely it is to increase entrepreneurial competencies.
3. The coefficient of market orientation's direct effect towards entrepreneurial competencies for 0.317 states that the market-oriented has a positive and significant effect on entrepreneurial competencies. This means that the higher the market-oriented, the more likely it is to increase entrepreneurial competencies.
4. Coefficient direct effect digitalization of the entrepreneurial competencies of 0.200 states that digitalization positively and significantly affects entrepreneurial competencies. This means that the better digitalization, the more likely it will increase entrepreneurial competencies.

4.4 Discussion

4.4.1 The Influence of Entrepreneurial Knowledge on Entrepreneurial Competencies

Testing the hypothesis shows that the market's orientation towards its performance obtained a value p-value of 0.003. The testing results show that the p-value < level of significance (alpha = 5%). It means that there is an influence that significantly entrepreneurial knowledge of the entrepreneurial competencies. Value This indicates that the knowledge will be entrepreneurial positively and significantly to the company's performance partially to SMEs in Malang.

Many things need to be done to develop human resources in entrepreneurship, one of which is related to entrepreneurial competence. Kiggundu (2002) in Sarwoko et al. (2013) stated that the competence of entrepreneurship (entrepreneurial competencies) constitute the overall attributes of entrepreneurship, which includes the attitudes, beliefs, knowledge, skills, abilities, personality, and behavior that leads to the achievement of success in accordance destination early. The study of Man & Lau (2005) in Sarwoko et al. (2013) shows that entrepreneurial competence significantly influences business success.

The study on 142 SMEs in Malang shows that knowledge will positively and significantly influence their performance. This study strengthens the previously done research by Mamun, Fazal & Muniady (2019). Entrepreneurial knowledge is empirically proven to have a positive effect on entrepreneurial competency. Results of the study showed that entrepreneurial knowledge impacts Entrepreneurial Competencies significantly and positively.

Besides, there is some view of the results of research earlier that the success of the company depends on the ability of their (the owners/principals of business) to create, develop and use the assets of companies based Knowledge (Sveiby, 1997; Teece, 2000; Morrison, 2001; Hill, 2002 in Krumina et al., 2015). More specifically, the success of small businesses or, more commonly referred to, SMEs can be attributed to how well they manage Knowledge (Knowledge) (Dollinger, 1984, 1985; Brush, 1992; Brush & Vanderwerf, 1992 in; Desouza et al., 2006). Knowledge is increasingly seen as a source of business growth and is believed to determine business effectiveness (March & Sutton, 1997 in Krumina et al., 2015). In line with Herron & Robinson (1993), education, training, entrepreneur experience, and other demographic characteristics are considered factors that influence entrepreneurial competence. The results of other studies can become recommendations for further research to complement the study of Entrepreneurial Competencies.

4.4.2 The Effect of Market Orientation on Entrepreneurial Competencies

Testing the hypothesis shows that the market's orientation towards its performance obtained a value p-value of 0.002. The testing results show that the p-value < level of significance (alpha = 5%). It means that the significant market orientation is affected by entrepreneurial competencies. The value indicates that the market's orientation positively and significantly to its performance is partial to SMEs in Malang.

The study results have demonstrated that the market orientation (orientation markets) affects a significant positive towards entrepreneurial competencies 142 SMEs in Malang. The market orientation is instrumental in getting and maintaining excellence competitive, starting with planning and coordinating with all the parts within the organization to satisfy consumers' needs and desires. Narver et al. (2009: 11). Because the market's orientation should emphasize the importance of analyzing the needs and desires, target markets are more efficient and effective than competitors to achieve excellence compete. Emphasis orientation of the market towards the power's competitiveness is based on identifying the needs of the customer. each company is required to be able to answer the needs of the desired consumer good through the creation of a product that is new or the development of products that already exist, to create superior value for customers is sustainable and can be capital main for the company to be able to win the competition (Kohli et al., 2009: 14).

The study results strengthen research in advance that Mamun, Fazal & Muniady (2019) carried out that the market's orientation affects positively and significantly the company's performance. This research shows that 142 SMEs in Malang City pay attention to promotion to see market orientation as part of the company strategy. Through the promotion, SMEs in Malang will see whether the products are manufactured or sold according to society's needs. The research is also aligned with the research previously done by Abdullah et al. (2017). Respondents who became the respondents also believe that analyzing the business's cost is done to improve its performance. The study also confirms research previously performed by Ali et al. (2017). This study's results provide recommendations to SMEs in Malang City and other areas to pay attention to promotion, market needs, and cost analysis to improve company performance.

4.4.3 The Effect of Digitalization on Entrepreneurial Competencies

The results of testing the hypothesis show that the market's orientation towards its performance obtained a value p-value of 0.038. The testing results show that the p-value < level of significance (alpha = 5%). It means that there is an influence that significantly digitalization the entrepreneurial competencies. Value This indicates that digitalization positively and significantly affects the company's performance is partial to SMEs in Malang.

Digitalization in research on 142 export-oriented SMEs in Malang is significant and has a positive effect. Due to digitization, SMEs often bring disruptive changes in how a business runs and require some adjustments to continue maintaining and improving the excellence competitive against the competitor to another. Changes in business models in SMEs can better maximize the benefits of the various technologies that have been at the adoption of digital transformation activities. Social media can be a medium to communicate more closely and interact with customers. This study's results align with the research results by Pena, Lopes, and Garido (2019).

4.4.4 Research Limitations

The research will initially examine SMEs in Jawa Timur, yet because of constraints Pandemic-19, the researchers limit the take samples only performed on SMEs in Malang. The study is to be more comprehensive to add the study's location in time. Increasingly many areas that became the study's location would yield findings of more comprehensive research.

5. Conclusion

The analysis results show that the entrepreneurial knowledge variable has a positive and significant effect on SMEs' entrepreneurial competencies in Malang. This means that the better the entrepreneurial knowledge tends to increase entrepreneurial competencies. In this case, companies or SMEs in Malang City who invest and focus on developing their entrepreneurship knowledge will increase their competence. The results of this study are in line with Resourced Based Theory (RBV) and Knowledge-Based Theory, which are derivatives of RBV which involve human capital, especially workers who know about routine company activities.

The analysis results show that the market orientation variable has a positive and significant effect on SMEs' entrepreneurial competencies in Malang. This means that the better the market orientation, the more likely it is to increase entrepreneurial competencies. In this case, companies or SMEs in Malang City that pay attention to aspects of the company's market orientation will increase their competence. This study's results align with the Competitive Advantage Theory, where each company must have the competence to improve its performance and competence. Market orientation in which a company must see market needs to analyze costs for an existing business is a form of a competitive edge.

The analysis results show that the digitalization variable has a positive and significant effect on SMEs' entrepreneurial competencies in Malang. This means that the better digitizing who do SMEs is liable to increase entrepreneurial competencies. Companies or SMEs in Malang City that pay attention to digitalization aspects, such as using technology in every aspect of the company to use social media as an attribute of company promotion, will increase the company's competence. This study's results align with the Competitive Advantage Theory, where each company must have the competence to improve its performance and competence. The ability to develop in the digitalization era where companies must see adapting to the times is a company's competitive form.

Based on the research that has been conducted, and the results of the research were obtained, some advice can be given by investigators indicated by sector and grouped as follows:

5.1 Government

This research shows that digitalization positively and significantly affects entrepreneurial competencies. This research can be used as a basis for the government to pay more attention to digitalization development for SMEs in general and SMEs in Malang City. Especially during a pandemic, the role of technology, especially for marketing, helps SMEs survive. The supporting infrastructure for digitalization, such as easy internet access connectivity, can be improved in most remote areas.

5.2 MSME entrepreneurs

The research results show that entrepreneurial knowledge, market orientation, and digitalization's positive and significant effect on entrepreneurial competencies can be used for the business areas' perpetrators to focus on developing the three factors mentioned. The importance of knowledge about entrepreneurship, market orientation, and digitizing business can improve company performance. Facing a pandemic is that SMEs must continue to adapt to face changes in the environment business drastically. The use of technology and social media can increase company sales.

5.3 Academics / Further Research

The study can be further done by examining a company's entrepreneurial competencies and the direction of sustainability or stability of a company's performance in run length. The current is the direction policies of various companies related to how companies produce performance alone and how companies produce the performance that is qualified and stable in term length.

This research was only conducted on a small sample of SMEs in Malang City. The study further can take samples from other areas. Researchers subsequently compared the study results on SMEs in Malang with SMEs from other regions. Besides that, the more spacious area explored for the study will result in more comprehensive research findings.

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References

- [1] Ali, H. (2017). The model of market orientation, entrepreneurial orientation, and business performance of small and medium enterprises. *International Review of Management and Marketing*, 7(3).
- [2] Al Mamun, A., & Fazal, S. A. (2018). Effect of entrepreneurial orientation on competency and micro-enterprise performance. *Asia Pacific Journal of Innovation and Entrepreneurship*.
- [3] Abdullah, A. Chong, P., Ong, T., Abdullah, A., and Choo, W., 2019. Internationalization and innovation on balanced scorecard (BSC) among Malaysian small and medium enterprises (SMEs). *Management Science Letters*, 9(10), pp.1617-1632.
- [4] Adis, A. A. A., & Jublee, E. (2010). Market orientation and new product performance: The mediating role of product advantage. *African journal of marketing management*, 2(5), 91-100.
- [5] Appiah-Adu, K., & Ranchhod, A. (1998). Market orientation and performance in the biotechnology industry: An exploratory empirical analysis. *Technology Analysis & Strategic Management*, 10(2), 197-210.
- [6] Awwad, A., & Akroush, M. N. (2016). New product development performance success measures: exploratory research. *EuroMed Journal of Business*.
- [7] Barney. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 99-120.
- [8] BPS. (2019). *Annual Report Pertumbuhan Ekonomi Indonesia*. Jakarta: BPS.
- [9] Barney, J. B., & Arkan, A. M. (2001). The resource-based view: Origins and implications. *The Blackwell handbook of strategic management*, 124-188.
- [10] Bowman, D. C. (2018). Detecting lightning infrasound using a high-altitude balloon. *Geophysical Research Letters*, 45(14), 7176-7183.
- [11] Grant, R. M. (1997). The knowledge-based view of the firm: implications for management practice. *Long-range planning*, 30(3), 450-454.
- [12] Gunday, G., Ulusoy, G., Kilic, K., & Alpkan, L. (2011). Effects of innovation types on firm performance. *International Journal of Production Economics*. <https://doi.org/10.1016/j.ijpe.2011.05.014>
- [13] Hansen, D. R., & Mowen, M. M. (2014). *Cornerstones of cost management*. Nelson Education.
- [14] Hasan, M. M. (2018). Factors Persuading Female Participation in Entrepreneurial Activities and Its Impact on Employment Creation.
- [15] Hartanto (2016). Perancangan Website Public E-Marketplace Produk Usaha Mikro Kecil dan Menengah (UMKM) di Kabupaten Temanggung. Seminar nasional Ilmu Komputer.
- [16] Jabeen, R., & Mahmood, R. (2015). The effects of Total Quality Management and Market Orientation on Business Performance of Small and Medium Enterprises in Pakistan. *British Journal of Economics, Management & Trade* 5(4): 408-418.
- [17] Hassim, A. A., Asmat-Nizam, A. T., & Bakar, A. R. A. (2011). The effects of entrepreneurial orientation on firm organizational innovation and market orientation towards firm business performance. *International on Sociality ND Economics Development*. IPEDR, 10, 280-284
- [18] Ho, S. H., Wu, J. J., & Chen, Y. (2010). Influence of corporate governance and market orientation on new product preannouncement: evidence from Taiwan's electronics industry. *Asia Pacific Management Review*, 15(1).
- [19] Kotler, P., & Keller, K. L. (2009). *Marketing Management, Global Edition 15e*. United States of America: Pearson Education, Inc.
- [20] Kohli, A. K., & Jaworski, B. J. (1990). Market orientation: the construct, research propositions, and managerial implications. *The Journal of Marketing*, 1-18.
- [21] Liñán, F. (2014). The future of research on entrepreneurial intentions. *Journal of business research*, 67(5), 663-666.
- [22] Li, Y., Wei, Z., & Liu, Y. (2010). Strategic Orientations, Knowledge Acquisition, and Firm Performance: The Perspective of the Vendor in CrossBorder Outsourcing. *Journal of Management Studies*, 47(8), 1457-1482.
- [23] Martín-Peña, M. L., Sánchez-López, J. M., & Díaz-Garrido, E. (2019). Servitization and digitalization in manufacturing: the influence on firm performance. *Journal of Business & Industrial Marketing*.
- [24] Madrid-Guijarro, A., Auken, H. V., & García-Pérez-de-Lema, D. (2007). An analysis of factors impacting the performance of Spanish manufacturing firms. *Journal of Small Business & Entrepreneurship*, 20(4), 369-386.
- [25] Mooney, D. J. (2017). Mechanical forces direct stem cell behavior in development and regeneration. *Nature reviews Molecular cell biology*, 18(12), 728-742.
- [26] Nelson, R. R., & Winter, S. G. (1982). The Schumpeterian tradeoff was revisited. *The American Economic Review*, 72(1), 114-132.
- [27] Penrose, R. (1959, January). The apparent shape of a relativistically moving sphere. In *Mathematical Proceedings of the Cambridge Philosophical Society* 55(1). 137-139. Cambridge University Press.
- [28] Porter, M. E., & Millar, V. E. (1985). How information gives you a competitive advantage.
- [29] Selznick, P., McEwan, I., Yukl, G. A., & VanFleet, D. D. (1957). Leadership in organizations.
- [30] Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic management journal*, 5(2), 171-180.