

## Conceptual Understanding of Critical Factors That Drive Technopreneur Success in West Java

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### ABSTRACT

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**Objectives:** *Technology-based entrepreneurship is required in the globalization age. To accomplish this achievement, researchers must understand what factors might impact it. The purpose of this research is to identify what factors can drive the success of digital entrepreneurs (technopreneurs) in West Java.*

**Methodology:** *This study use explanatory statistics, with Structural Equation Model analysis technique through SMART PLS 2.0. Sampling technique chosen was accidental sampling with 400 respondents.*

**Finding:** *Partially and simultaneously, all factors have a positive and significant effect on business success. Therefore they have identified the following factor variables: entrepreneurial behavior, skills, educational background, and service quality.*

**Conclusion:** *Technopreneurs in West Java are encouraged to continue to improve all factor variables as a capital for success. Considering that this research is only conducted on digital entrepreneurs in West Java, other researchers who want to conduct research with similar variables are advised to choose different objects with a wider scope for comparison.*

**Keywords:** *Business Success; Entrepreneurial Behavior; Skills; Educational Background; Service Quality.*

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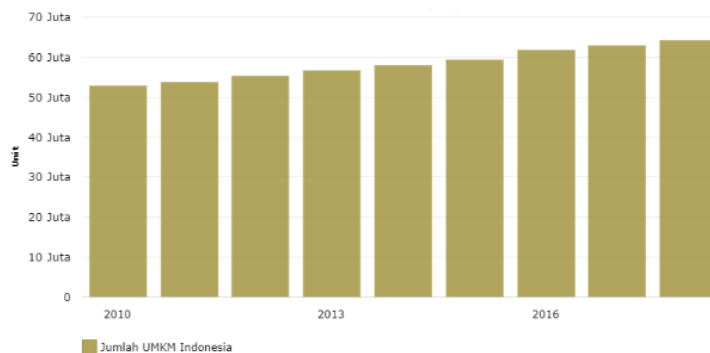
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## INTRODUCTION

Technology-based entrepreneurship is required in the globalization era to establish or develop a business, it is greatly expected that an entrepreneur will be able to provide a superior product or create a job (Castro et al., 2019). The government heavily supports entrepreneurs through a variety of initiatives that promote the entrepreneur's presence (Giudice et al., 2019). Micro, small, and medium-sized companies (MSMEs) are an economic sector in a country that serves as a backbone for diverse individuals in boosting their well-being in Indonesia and it has been demonstrated that the MSMEs sector can endure an economic crisis (Tambunan, 2019).

The number of Indonesia's digital MSME industry entrepreneurs is the largest among other countries, especially since 2014 (Anggadwita & Palalić, 2020). In that year Indonesia became one of the countries with the largest number of digital MSMEs compared to other neighboring countries. The number of Indonesia's digital entrepreneurs increased from 0.24% to 1.56% of the overall population (Ariyanti, 2018). As seen in the accompanying graph, the number of digital MSMEs in Indonesia increased from 2010 to 2018:

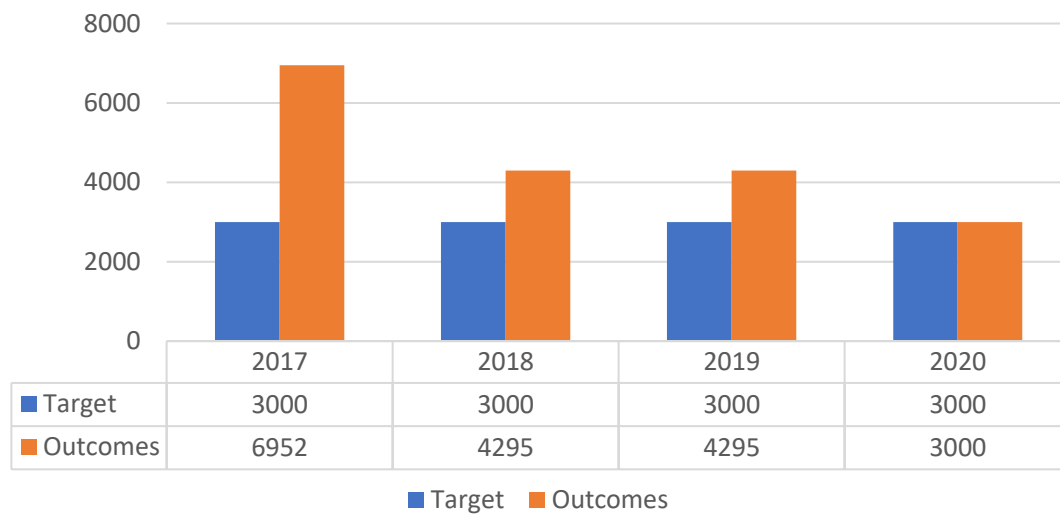


**Figure 1.** Data of Digital MSMEs in Indonesia

Source: databoks.katadata.co.id (Jayani, 2020)

Based on the graph above, it can be explained that the development of digital MSMEs in Indonesia will continue to rise each year. This is why the Indonesian government must continue to support digital MSMEs with funding and expertise. Until 2018, the number of digital MSMEs in Indonesia was estimated to reach 64.2 million. Data from the Central Statistics Agency in 2014 showed that West Java Province ranked second in terms of the number and types of SMEs in each village or sub-district, with a total of 16,405 SMEs. This data proves that SMEs have a tremendous potential to drive the community's economy (Anggara & Anggadwita, 2018).

According to a Ministry of Cooperatives and Small Businesses report, the number of entrepreneurs in Indonesia has climbed from 1.67% to 3.1% of the country's total population around 252 million (Khaerunnisa, 2018). According to BPS data for 2016, there are 7.8 million or 3.1% of non-agricultural businesses residing in a population of 252 million (Danil & Septina, 2019). As a result, the degree of entrepreneurship in Indonesia topped 2% of the population, which is considered the minimum for social success. The start-up rate of 3.1 percent remains low when compared to other nations such as Malaysia (5%), China (10%), Singapore (7%), Japan (11%), and the United States (12%) (Berita Pemerintahan, 2017).



**Figure 2.** New Entrepreneurs in West Java

Source: Internal Data of West Java Government (2021)

Based on data from Cooperatives and MSMEs Office of West Java Province, until 2020 there are already 129,191 new entrepreneurs. This means that the program to create 100,000 new entrepreneurs in West Java has exceeded expectations. Since its inception in 2013, the West Java Provincial Government has surpassed its aim of 100,000 new entrepreneurs. There will be 129,000 new entrepreneurs registered by the end of 2020. Economic orientation has shifted considerably from the rural to the industrialized ages, as well as the transition to the information economy period and several new breakthroughs in technology, information, telecommunications, and economic globalization (Alam et al., 2020). The benefits of the creative economy include providing sustainable growth and providing a wonderful potential for both established and developing countries to continue to expand their economies, as the key resources of this economy are ideas, skills, and creativity. These three items are always renewed and have an infinite supply of resources, so the creative economy becomes important and always interesting to develop (Midayanti et al., 2017).

In recent years technopreneurship terms have been frequently encountered and heard in various media, both print and electronic (Naik et al., 2018). Etymologically, the term technopreneurship comes from two words, namely technology and entrepreneurship. Technopreneurship is likened to a technology-based business incubator, which has the insight to develop an entrepreneurial spirit among the younger generation (Hartono, 2011). Besides that, it may be a venue for enhancing the quality of human resources in scientific and technology expertise, in order to develop dependable individuals in the face of global competitiveness (Koe et al., 2021). After acquiring technology expertise and an entrepreneurial spirit, the final step is to integrate it to assist the growth of the business unit. The major factors in fostering the spirit of technopreneurship are creativity and proper use of technology (Machmud et al., 2020).

A technopreneur must create the most recent and finest inventions in order to remain competitive in the market, since competition will undoubtedly arise over time (Bakar et al.,

2020). Every competitor will definitely create superior and innovative products rather than existing ones, competitors are working hard to ensure this (Liu & Atuahene-Gima, 2018). We also need to know how to spot market possibilities and capitalize on them when they arise in high-tech enterprises (Balboni et al., 2019).

Success in business is a goal shared by all business players, even technopreneurs, and they will go to any length to accomplish it. In achieving this success, it is necessary to know what factors can influence it (Santos et al., 2018). Running a business will certainly not be separated from a problem or obstacle (Kubiček & Machek, 2019). Business success is the achievement of a company's goals by an entrepreneur with a sharp, creative mind who keeps up with technical changes and can use them proactively (Anggraeni et al., 2017). This may be noticed in a person's commerce, where his trade situation is better than in the previous time. It may also be noticed from the generation handle's proficiency, which is based on specialized efficacy and financial effectiveness (Yun et al., 2020).

A person who succeeds in becoming an entrepreneur is due to his willingness, ability and knowledge (Suryana, 2019). Willingness is described as a choice or goal, as well as a high level of motivation. The primary assets that must be present first are determination, intention, and motivation, sometimes known as willpower. To grow and succeed, willingness and ability (skills) are not enough, but must be equipped with knowledge (Păunescu et al., 2018). Entrepreneurial competency is defined as a person's willingness, ability, and expertise in business. Successful entrepreneurs are people who have competence, especially those who have information, aptitudes, and personal traits such as demeanors, inspirations, values, individual values, and behavior that are required to execute tasks or activities (Bird, 2019).

Failure to meet business goals is always within the scope of the firm and cannot be prevented. However, this may be addressed in order to reduce the technopreneur's losses and enhance revenue turnover in accordance with the planned aim. Specifically, by detecting problematic joints in the technopreneur's wheels on the business being managed and analyzing any perceived performance supporting variables that are less capable of contributing to the business success (Collins et al., 2018). Evaluation is also important in carrying out business operations since examining the outcomes of each action becomes the primary emphasis in enhancing the performance results that have been achieved. So that the weaknesses of each strategy within the entrepreneurs can be detected and corrected for sustainable success. Then the goals of the entrepreneurs can be achieved, especially in achieving the target of the turnover that has been set (Covin et al., 2020).

Therefore, based on the phenomenon of business failure that has been described previously, there is a need for an understanding of the success factors of technopreneurs in West Java in the current digitalization era. Business success may be measured when an entrepreneur achieves the organization's aims or objectives. Some of the firm's goals or objectives include higher income, increased corporate productivity, high competitiveness, and a favorable image in the eyes of customers (Nikolova-Alexieva & Angelova, 2020). Everyone in business wants to be successful, to achieve these goals it is necessary to know what factors can impact it (Malecki, 2018). According to (Zimmerer & Scarborough, 2008), factors that influence business success are: Entrepreneurial Behavior; Skills; Educational Background; and Service Quality.

The aims of this results study can be taken into consideration for digital entrepreneurs or technopreneurs in West Java to identify what factors can drive the success of their business.

The results of this study can also be used as reference material for subsequent research, especially those related to business success. Then the factors that drive the success of technopreneurs which consist of entrepreneurial behavior, skills, educational background, and service quality. Of the various phenomena that have been described in the background, this problem is worth investigating with the title “Conceptual Understanding of Critical Factors That Drive the Digital Entrepreneurs or Technopreneur Success in West Java”.

## LITERATURE REVIEW

Entrepreneurial behavior is one of the aspects that contribute to the success of the initial enterprise. According to (Suryana, 2019), entrepreneurial behavior could be a teacher that thinks about a person's values, capacities, and behavior in confronting life's challenges and how to induce openings with different dangers which will be confronted. Entrepreneurship is a discipline in its own right, has a systematic process, and can be applied in the form of the application of creativity and innovation (Acar et al., 2019). Research on entrepreneurial behavior conducted by (Munir et al., 2019; Wijaya, 2008) is important to analysts in different Asian and European nations when achieving business success. Entrepreneurs must have good entrepreneurial behavior to achieve success (Bhatia & Levina, 2020). Internal factors that influence business success are entrepreneurial attitudes and behavior. This attitude includes their attitude towards themselves as well as towards competitors. The second is entrepreneurial behavior which is very complex both individually, socially and environmentally while working with risk and in leadership (Toms et al., 2020). Based on this opinion, it can be concluded that entrepreneurial behavior has an effect on determining business success. So that entrepreneurs in improving their business are required to have entrepreneurial behavior (Arya et al., 2021). If an entrepreneur already has entrepreneurial behavior, then the entrepreneur has confidence in planning, organizing, mobilizing, and monitoring, supported by creativity, innovation, and the courage to take risks (Chiles et al., 2021).

***H1** : The entrepreneurial behaviour has a positive and significant effect on business success of technopreneurs in West Java.*

The second factor that affects the success of a business is skills, because knowledge alone is not enough if it is not equipped with skills (Akhmetshin et al., 2019). Business skills are specific skills for running a business, such as combining resources, producing new products, marketing, calculating risks, accounting, administering, and other specific skills (Suryana, 2019). Meanwhile, according to (Irawan & Mulyadi, 2016), entrepreneurial skills have a positive influence on business success. Based on empirical research, it is found that the application of entrepreneurial skills has a positive effect on the success of business, including into strong category (Banerji & Reimer, 2019). This shows that the higher the entrepreneurial skills possessed, the more it will have an influence on business success (Cho & Lee, 2018).

***H2** : Skill factor has a positive and significant effect on business success of technopreneurs in West Java.*

The third factor that affects business success is educational background. This view was put forward by (Rahayu, 2014), the levels of education that have been taken by entrepreneurs are different. Education for entrepreneurs is important in coaching and developing a business, because the success or failure of a business depends on the level of education (Ahadi & Kasraie, 2020). Therefore in order for a business to be successful and grow, entrepreneurs must have enough education (Boldureanu et al., 2020). There are many great entrepreneurs in Indonesia, but many of them just graduated from elementary, junior high, or senior high school, and there

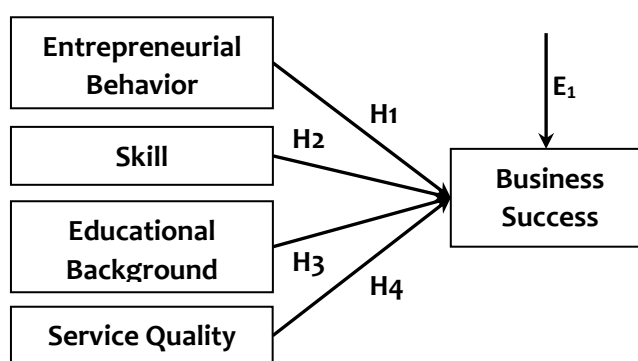
is even a successful entrepreneur who did not attend school at all (Setia, 2018). Those with only low education can become successful entrepreneurs because they can read the opportunities around them and never give up in the face of failure (Dijkhuizen et al., 2018). Meanwhile (Marti'ah et al., 2015) emphasizes that education is critical to the entire development of both the human person and Indonesian society. Furthermore, human education is expected to produce individuals capable of actively engaging in the evolution of Indonesian society as a whole (Putriana Dewi et al., 2019). Formal education plays a strategic role in development of business success (Asongu & Odhiambo, 2019). It is vital to strike a balance between infrastructure development and people or human resource education while constructing the country's success (Chen, 2019). This phenomenon shows that education, especially entrepreneurial-oriented education, is a factor that determines the success of growth (Hakim & Kartajaya, 2012).

**H3** : Educational background has a positive and significant effect on business success of technopreneurs in West Java.

The fourth factor that affects business success is service quality. The advancement of a business will increasingly lead to social functions, not only in material concerns, but also in human matters, especially in the form of services or services to prospective consumers (Vătămănescu et al., 2020). According to (Kotler & Keller, 2016), service quality is the overall features and service characteristics that are owned by its ability to meet implied needs. This is clearly a customer-oriented definition when it provides quality service that meets or exceeds the expectations of its customers. According to (Lupiyoadi, 2013), one of the variables that decide the level of victory and quality of a company is the company's service quality to the clients. The research results of (Tresani & Haryati, 2015) show that service quality has a significant effect on business success. Thus, the results of this study are in line with (Lupiyoadi, 2013) that service quality has an influence on business success.

**H4** : Service quality factor has a positive and significant effect on business success of technopreneurs in West Java.

The conceptual framework can be shown at the end of the literature review (see figure 3).



**Figure 3.** Conceptual Framework

Source: Modified by Researcher (2021)

## METHOD

This research is designed as a case study that uses a descriptive quantitative technique to gather and describe data currently available about the item to be investigated. Our research used

quantitative research methods with explanatory approaches. Data analysis is quantitative or statistical, with the aim of testing predetermined hypotheses (Sugiyono, 2013). According to (Indrawan & Yaniawati, 2014), the explanatory relationship could be a relationship between factors where changes in one variable cause changes in other factors without the plausibility of the inverse effect. The researcher attempts to characterize the research subject in terms of overall behavior, namely the behavior itself and the things that surround it, in the case study. The benefit of a case study is that it can learn more about the factors that impact successful entrepreneurs in depth.

The populace in this ponder were all digitally equipped entrepreneurs (technopreneurs) domiciled in West Java, where the entire number of the think about populace was not known with certainty. Then we used non-probability sampling technique with accidental sampling, a technique of sampling that doesn't give equivalent occasions to each component or individual from the populace to be chosen as tests (Sugiyono, 2017). Given the number of population isn't known with certainty, so to decide the least test estimate whose population is obscure by utilizing the Lemeshow equation (Marcelino, 2020). If the confidence level determined is 95% with error rate 5%, then from the calculation this study will use a minimum 385 (H400) sample respondents.

The strategy of examination utilized in this inquiry is Basic Condition Modeling (SEM), may be a multivariate strategy that combines different relapse angles and calculate examination to assess a arrangement of reliance connections at the same time (Hair et al., 2010). Hypothesis testing is carried out SmartPLS version 2.0.M3 program to analyze the causality relationship in the proposed structural model between the dependent and independent variables, as well as checking the validity and reliability of the research instrument as a whole. According to (Ghozali, 2017) revealed that Structural Equation Modeling (SEM) allows one to be able to answer research questions that are regressive and dimensional, namely measuring the dimensions of a concept.

## RESULTS AND DISCUSSION

### *Results*

***Measurement or Outer Model Test Results.*** According to (Ghozali, 2014) the outer model show is regularly moreover called the external connection or estimation demonstrate characterizes how each pointer square relates to its idle factors. The point of the external show is to portray an idle variable relationship with each marker. In external or estimation demonstrations, it is essential to test the legitimacy and unwavering quality of markers utilized. Tests were carried out utilizing SmartPLS 2.0.M3 computer program. External demonstrate is appeared in this figure:

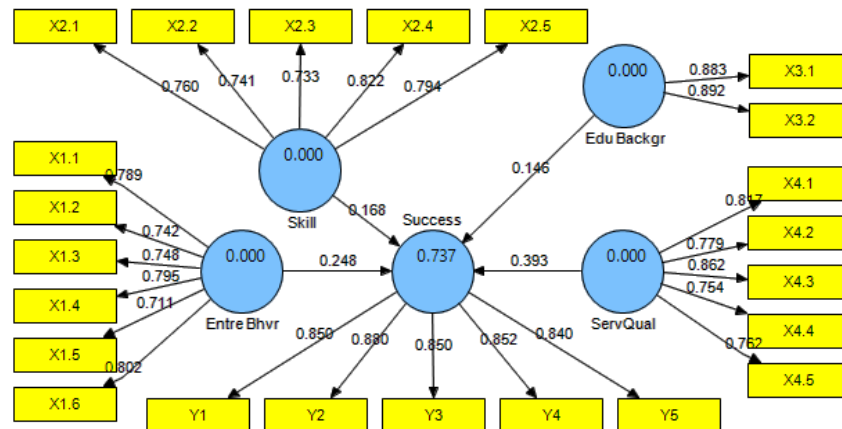


Figure 4. SEM Outer Model

Source: Processing by SmartPLS (2021)

Convergent validity is established when the scores acquired by instruments assessing the idea or by measuring the concept using multiple approaches have a good correlation. The correlation between the indicator and variable score is a measure of the measuring model's convergent validity. If the value of AVE is more than zero, the indicator is considered to be valid (Average Variance Extracted) higher than 0,50 so it can be said that it has fulfilled the requirement for convergent validity (Ghozali, 2014). The result of convergent validity test using SmartPLS 2.0.M3 software is below:

Table 1. Result of Convergent Validity (Outer Loading Test)

Latent Variable	Dimension Item	Indicator Measurement Statement	Results	Conclusion
<b>Entrepreneur Behavior</b> (Anggara & Anggadwita, 2018)	Discipline	I always finish my work on time because I utilize technology in every process.	0,7889	Valid
	High Commitment	A technopreneur must be committed to utilizing technology appropriately.	0,7424	Valid
	Hard Work	I do my job seriously by taking advantage of the facilities of technology.	0,7482	Valid
	Creative and Innovative	Technopreneurs have the will to use technology to create and think about new things.	0,7951	Valid
	Independent	A technopreneur must be able to make his own decisions and not depend on others.	0,7113	Valid
	Realistic	I think with full calculation in utilizing technology for every work process.	0,8020	Valid
	Technical Skill	Technopreneurs must have competence in using the technology to manage their business.	0,7596	Valid
<b>Skill</b> (Suryana, 2019)	Human Relations Skill	A technopreneur must be able to establish relationships with other people through technology.	0,7410	Valid
	Conceptual Skill	A technopreneur must be able to analyze situations using technology so that they can get opportunities.	0,7335	Valid
	Decision Making Skill	A technopreneur must have skills in using technology to formulate problems.	0,8223	Valid



Latent Variable	Dimension Item	Indicator Measurement Statement	Results	Conclusion
<b>Education Background</b> (Anggara & Anggadwita, 2018)	Time Management Skill	Technopreneurs must have the skills to use technology in order to use time efficiently.	0,7941	Valid
	Formal Education	Technopreneurs who have a background in technology can achieve business success more easily.	0,8826	Valid
	Non-formal Education	Technology training attended by technopreneurs has a positive impact on business success.	0,8915	Valid
<b>Service Quality</b> (Kotler & Keller, 2016; Lupiyoadi, 2013)	Tangible	The existing technology-based facilities and equipment are functioning properly.	0,8166	Valid
	Reliability	Technopreneurs have provided technology-based services as promised (accurate).	0,7787	Valid
	Responsiveness	Technopreneurs have provided fast response technology-based services to their customers.	0,8623	Valid
	Assurance	Technopreneurs have the ability to foster customer confidence in new or developing technologies.	0,7540	Valid
<b>Business Success</b> (Irawan & Mulyadi, 2016; Murniati et al., 2021)	Empathy	Technopreneurs also help convey clear and precise information about technology to consumers.	0,7622	Valid
	Profit	My business has seen an increase in revenue (income) in recent years.	0,8497	Valid
	Productivity and Efficiency	My business has experienced an increase in production in recent years.	0,8803	Valid
	Competitiveness	My business has managed to survive in the face of business competition.	0,8496	Valid
	Competence and Business Ethics	My business has built a good (positive) image of everyone in the company.	0,8523	Valid
	Building a Good Image	My business has earned the trust of all stakeholders (consumers, suppliers, government, competitors).	0,8396	Valid

Source: Data Processing by SmartPLS (2021)

Table 1 is showing that all statements (total of 23 items) were declared are valid because loading factor values of the items statement or can be called as “AVE” are greater than 0,50. Then, we can use all of the item statements as research instruments because they have met the requirements of convergent validity. Discriminant validity is seen by measuring the cross loading factor with the comparison of AVE and the correlation between variables in a study. Discriminant validity can represent the extent to which constructs empirically differ from other constructs (Ghozali, 2014). The following is the result of cross loading factors:

**Table 2.** Result of Discriminant Validity (Cross Loading Test)

Indicators	Entrepreneurial Behavior	Skill	Educational Background	Service Quality	Business Success	Conclusion
Discipline	0,7889	0,5890	0,5657	0,5905	0,5871	Valid
High Commitment	0,7424	0,5145	0,4508	0,4717	0,5224	Valid
Hard Work	0,7482	0,5586	0,5159	0,5130	0,5719	Valid
Creative and Innovative	0,7951	0,5799	0,4582	0,5484	0,5669	Valid
Independent	0,7113	0,4937	0,4050	0,4834	0,4834	Valid
Realistic	0,8020	0,6311	0,5635	0,6239	0,6659	Valid
Technical Skill	0,5861	0,7596	0,5901	0,6003	0,6132	Valid

Indicators	Entrepreneurial Behavior	Skill	Educational Background	Service Quality	Business Success	Conclusion
Human Relations Skill	0,5139	0,7410	0,5015	0,5013	0,5504	Valid
Conceptual Skill	0,4985	0,7335	0,5783	0,5479	0,5369	Valid
Decision Making Skill	0,6510	0,8223	0,5993	0,6277	0,6031	Valid
Skill of Time Management	0,5802	0,7941	0,5354	0,6036	0,5884	Valid
Formal Education	0,5408	0,6172	0,8826	0,6954	0,6430	Valid
Non-formal Education	0,6103	0,6742	0,8915	0,7005	0,6673	Valid
Tangible	0,5748	0,6111	0,5960	0,8166	0,6415	Valid
Reliability	0,4966	0,5439	0,6171	0,7787	0,6189	Valid
Responsiveness	0,5939	0,6556	0,6702	0,8623	0,6336	Valid
Assurance	0,5528	0,5458	0,5915	0,7540	0,7056	Valid
Empathy	0,5949	0,6258	0,6549	0,7622	0,6063	Valid
Profit	0,6338	0,6139	0,6054	0,6974	0,8497	Valid
Productivity & Efficiency	0,6352	0,6726	0,6583	0,7347	0,8803	Valid
Competitiveness	0,6209	0,6178	0,6168	0,6393	0,8496	Valid
Competence & Business Ethics	0,6458	0,6499	0,6257	0,6956	0,8523	Valid
Building a Good Image	0,6475	0,6553	0,6482	0,6881	0,8396	Valid

Source: Data Processing by SmartPLS (2021)

According to the data in table 2, the value of the cross loading factor on each indication is greater than the value in the other constructions. As a result, the indicators employed in this study satisfied the requirements. Based on the findings of the previous two validity tests, namely convergent and discriminant validity, it is possible to infer that 23 statement items may be employed as research instruments. A reliability test is also required for each variable, in addition to the validity test. Reliability test will utilize two strategies, to be specific Composite Reliability and Cronbach's Alpha. The esteem that must be satisfied of each variable is more prominent than 0,70 for the composite unwavering quality to be pronounced solid. At that point esteem must be more prominent than 0,60 for Cronbach alpha esteem (Ghozali, 2014). Following are the reliability test results:

**Table 3.** Result of Reliability Test (Composite Reliability and Cronbach's Alpha)

Latent Variables	Composite Reliability	Cronbach's Alpha	Conclusion
Entrepreneurial Behavior	0,8944	0,8583	Reliable
Skill	0,8796	0,8286	Reliable
Educational Background	0,8807	0,7293	Reliable
Service Quality	0,8960	0,8544	Reliable
Business Success	0,9311	0,9075	Reliable

Source: Data Processing by SmartPLS (2021)

Based on the results of the reliability test data in table 3, the value of Composite Reliability and Cronbach's Alpha for each variable has a value of more than 0.7 and 0.6 so it can be said

that the data has high reliability. Then it can be said that all variable statements in the research questionnaire are declared reliable or consistent. So all indicators in each variable of this study can be used in the next step to calculate and test the structural or inner model.

**Structural or Inner Model Test Results.** According to (Ghozali, 2014), the inner model, which is sometimes referred to as inner relations, structural models, and substantive theories, describes the relationship between latent variables based on the substantive theory. (Ghozali, 2014) explains that the structural model is evaluated using the R-square for the dependent construct. Q-square test for predictive relevance and t test and significance of structural path parameter coefficients. Estimate for Path Coefficients is the value of the coefficient or the magnitude of the relationship or influence that is seen. Estimate for Path Coefficients is carried out through the Bootstrapping procedure. Inner model of this study is shown in figure 5 below.

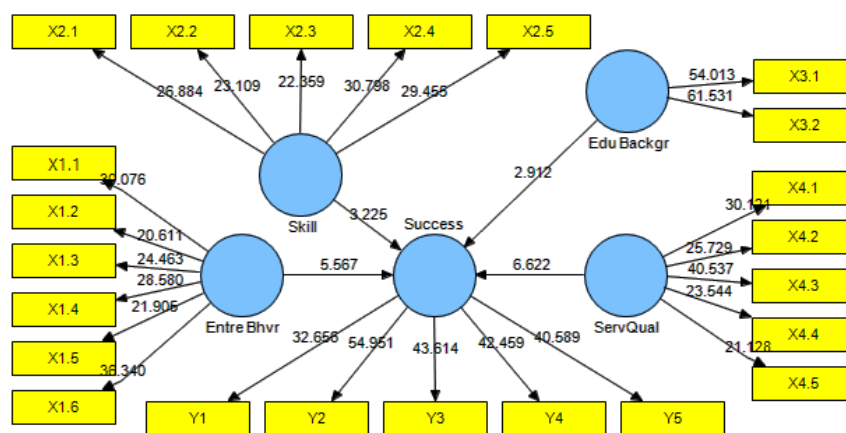


Figure 5. SEM Inner Model

Source: Processing by SmartPLS (2021)

According to (Ghozali, 2014), characterizes bootstrapping as how frequently the show is recalculated with haphazardly produced test information so that analysts can indicate how numerous cases are included in each arbitrary test within the trust that the test speaks to the actual population information. We are able to see the result of t-statistic esteem each exogenous to the endogenous inactive variable in figure 5. In testing the hypothesis, researchers must compare the t-statistic value ( $t_0$ ) with the t-table value ( $t()$ ). In this study, researchers used a relatively small alpha level of 5%. So by using t table ( $\alpha/2$ ) and  $df(n-k)$ , the value of t table = 5% (two-way test), and  $df(400-2) = df(398) = 1.9659$ . This calculation shows that the t-table in this study is 1.9659. The PLS (Partial Least Square) analysis used in this study used the SmartPLS Version 2.0.M3 program which was run on computer media. To survey the noteworthiness of the forecast show in testing the basic show, it can be seen from the t-statistic esteem between the autonomous variable and the subordinate variable within the way coefficient table on the SmartPLS output in table 4.

**Table 4.** Hypothesis Test Result (t-Test)

Relationship Each Variable	t-Statistic Value	Parameter Coefficient t	Critical Value	Conclusion
Entrepreneurial Behavior – Business Success	5,5667	0,2483	1,9659	Ho rejected, H1 accepted
Skill – Business Success	3,2252	0,1679	1,9659	Ho rejected, H2 accepted
Educational Background – Business Success	2,9119	0,1458	1,9659	Ho rejected, H3 accepted
Service Quality – Business Success	6,6223	0,3932	1,9659	Ho rejected, H4 accepted

Source: Data Processing by SmartPLS (2021)

A hypothesis can be said to be accepted if the calculated t-statistic value is higher than the critical value (in this study is 1,9659). From table 4 above, all exogenous latent variables have significant and positive influence on endogenous latent variables. Then the coefficient parameter value will be used to calculate the partial and simultaneous effect between the variables. In this model there are four independent or exogenous latent variables, namely Entrepreneurial Behavior, Skill, Educational Background, and Service Quality. Then the dependent or endogenous latent variable is Business Success. For the equation the formula used is  $Y = 0,2483X_1 + 0,1679X_2 + 0,1458X_3 + 0,3932X_4 + 0,2627$ .

The results calculation in table 5 below give several objective information as follows. The influence of Entrepreneurial Behavior which partially affects Business Success is 6,17%. Then the contribution of Skill has a partial effect on Business Success equal to 2,82%. Educational Background has a partial effect on Business Success as 2,13%. And Service Quality also has a 15,46% partially effect on Business Success. By simultaneously, all of the independent variables (Entrepreneurial Behavior, Skill, Educational Background, and Service Quality) have 73,73% effect on Business Success. The remaining 26,27% affected by other factors that's not explained in this research.

**Table 5.** Relationship Between Each Variables

Variables	Coefficient	Through	Partial Influence	Simultaneous Influence
Entrepreneurial Behavior	0,2483	$X_1 \rightarrow Y$	$0,2483 \times 0,2483 \times 100\% = 6,17\%$	0,7373 x 100% = 73,73%
Skill	0,1679	$X_2 \rightarrow Y$	$0,1679 \times 0,1679 \times 100\% = 2,82\%$	
Educational Background	0,1458	$X_3 \rightarrow Y$	$0,1458 \times 0,1458 \times 100\% = 2,13\%$	
Service Quality	0,3932	$X_4 \rightarrow Y$	$0,3932 \times 0,3932 \times 100\% = 15,46\%$	
Error 1	$1 - 0,7373 = 0,2627$	-	-	-

Source: Data Processing by SmartPLS (2021)

Business success is not only shown by the achievement of goals, which are described by real goals, but the attitude or behavior also shows an entrepreneur who has high performance so as

to achieve success. A technopreneur is someone who has the characteristics of an entrepreneurial spirit such as self-confidence, task and result-oriented, courage to take risks, leadership, originality and future orientation. It can also be used as a benchmark for achieving success.

## Discussion

Based on the results of structural equation model testing regarding the conceptual understanding of critical factors that drive technopreneur's business success, the factors studied are entrepreneurial behavior, skills, educational background, and service quality. The discussion that can be interpreted is as follows.

***Hypothesis 1 testing, entrepreneurial behavior affects business success.*** The results of the study state that there is a positive and significant influence between the entrepreneurial behavior variable on the business success variable partially. This proves that entrepreneurial behavior has a major effect on business success. That way every business actor needs to pay attention to the entrepreneurial behavior of technopreneurs when running a business. The statement above is in accordance with the research conducted by (Masykuri & Soesatyo, 2014) where there is a positive and significant influence between entrepreneurial behavior on the success of the songkok craftsmen SME in Bungah District, Gresik Regency. As well as supporting the results of research by (Rante, 2011) where entrepreneurial behavior has a strategic role in the success of Micro, Small, Agribusiness enterprises in Papua Province.

***Hypothesis 2 testing, skill affects business success.*** The results of the study indicate that there is a positive and significant influence between the skills variable on the business success variable partially. This proves that the higher the skills in managing the business, the more successful the business is being run. The skills in managing and running a business will greatly affect the success or failure of a business. With good skills, be it the ability in terms of managing, coordinating, and in building relationships, if all of these are fulfilled, the possibility for the success of a business will run well, and the business will grow rapidly. The statement above supports the results of research conducted by (Irawan & Mulyadi, 2016) where skills have a positive influence on business success, this is based on empirical research that it is found that the application of skills has a positive effect on business success, including in the strong category. This shows that the higher the skills you have, the higher the effect on the success of the business among distribution members of the KICK community (Creative Independent Clothing Community).

***Hypothesis 3 testing, educational background affects business success.*** The results of the study state that there is a positive and significant influence between the educational background variable on the business success variable partially. This proves that the educational background of a technopreneur is influential in determining the success of a business being run. The third factor that influences business success was educational background. This view was advanced by (Rahayu, 2014), the degrees of schooling that have been taken by business visionaries are obviously unique. This is because of the fluctuated life foundations. Training for business people is significant in instructing and building up a business, in light of the fact that the achievement or disappointment of a business relies a ton upon the degree of schooling. Hence, all together for the business to be hurried to be fruitful and create, business visionaries must have satisfactory arrangements, specifically instruction. In Indonesia there are numerous effective business visionaries, yet not a couple of them doesn't go to class. Those with just low schooling can become effective business visionaries since they can pursue the open doors that are around them and furthermore never surrender despite each disappointment. Then, (Marti'ah et al., 2015) clarifies that education has a significant part in the improvement of the entire

individual and the advancement of Indonesian culture all in all. Furthermore, human improvement is additionally expected to deliver people who are proficient and fit for assuming a functioning part in creating Indonesian culture all in all. Watchman in his exploration expressed that proper instruction assumes a vital function in the public turn of events. In building up the nation's advancement, it is important to have a harmony between foundation improvement and people (human asset training). This marvel shows that schooling, particularly training focused towards business venture, is a factor that decides the accomplishment of business development (Hakim & Kartajaya, 2012).

***Testing hypothesis 4, service quality affects business success.*** The results of the study state that there is a positive and significant influence between the service quality variable on the business success variable partially. This proves that the quality of services provided by technopreneurs can determine the level of success of the business being run. Based on the results of research and discussion conducted by (Tresani & Haryati, 2015), it can be concluded as follows: based on the partial test, service quality has a significant effect on the success of the shop business unit. So that the results of this study are in line and do not contradict the results of previous studies. Previous research by (Halimah & Murniaty, 2019) found that the success of cooperatives is shown by proper management of cooperatives.

## CONCLUSION

Based on the results of the research that has been done, several conclusions can be drawn which are expected to provide answers to the research questions that have been formulated in this study. Some of the conclusions are as follows. Entrepreneurial behavior has a positive and significant influence on business success partially. Then the contribution of skill has a positive and significant effect partially. Educational background also has a positive and significant effect on business success partially. And in part, service quality has a positive and significant effect on business success. Then simultaneously, all of the independent variables (entrepreneurial behavior, skill, educational background, and service quality) have an effect on business success.

Technopreneurs in West Java to maintain or improve their entrepreneurial behavior in order to increase the ability to recognize opportunities that can produce innovation. This can be done by providing initial training such as entrepreneurship counseling programs and holding workshops or sharing sessions to technopreneurs so that they have sufficient expertise, knowledge and experience in entrepreneurship (especially technology-based), then these technopreneurs are also advised to find out and learn how to do this. It is hoped that Technopreneurs in West Java will better understand the business environment with the expertise or skill that they have to find out which innovations they need to find. It is also hoped that Technopreneurs in West Java will continue to increase their knowledge in their field so that later on from their previous knowledge (past educational background) from adding various knowledge in their field, they can help find more opportunities. Technopreneurs in West Java should improve cooperation and enlarge networks through better service quality with customers, distributors and suppliers in their business environment to make it easier to achieve business success. Deliver excellent service to consumers so that it is in accordance with the principle of service quality.

It is necessary to study more in-depth other variables that can significantly influence the success of the business. So that an alternative model can be developed for solving problems such as entrepreneurial behavior, skills, educational background, service quality and other matters related to increasing business success. Given this research was only conducted in one research object namely technopreneurs or digital entrepreneurs in West Java. Therefore, other researchers who want to do research with the same variables are advised to choose different objects with a wider scope.

## REFERENCES

- Acar, O. A., Tarakci, M., & van Knippenberg, D. (2019). Creativity and Innovation Under Constraints: A Cross-Disciplinary Integrative Review. *Journal of Management*, 45(1). <https://doi.org/10.1177/0149206318805832>
- Ahadi, S., & Kasraie, S. (2020). Contextual factors of entrepreneurship intention in manufacturing SMEs: the case study of Iran. *Journal of Small Business and Enterprise Development*, 27(4). <https://doi.org/10.1108/JSBED-02-2019-0074>
- Akhmetshin, E. M., Mueller, J. E., Yumashev, A. V., Kozachek, A. V., Prikhodko, A. N., & Safonova, E. E. (2019). Acquisition of entrepreneurial skills and competences: Curriculum development and evaluation for higher education. *Journal of Entrepreneurship Education*, 22(1).
- Alam, G. M., Forhad, A. R., & Ismail, I. A. (2020). Can education as an 'International Commodity' be the backbone or cane of a nation in the era of fourth industrial revolution? - A Comparative study. *Technological Forecasting and Social Change*, 159. <https://doi.org/10.1016/j.techfore.2020.120184>
- Anggadwita, G., & Palalić, R. (2020). Entrepreneurship in Indonesia: some contextual aspects. In *Research Handbook on Entrepreneurship in Emerging Economies*. <https://doi.org/10.4337/9781788973717.00018>
- Anggara, R. G., & Anggadwita, G. (2018). Analisis Faktor-Faktor Yang Mempengaruhi Keberhasilan Technopreneur : Studi Kasus Pada Bandung Techno Park Analysis the Factors That Influence Technopreneur ' S Success : Case Study At Bandung Techno Park. *EProceedings of Management*, 5(2), 1601–1608. <https://core.ac.uk/reader/299923320>
- Anggraeni, N. M. D., Sujana, I., & Zukhri, A. (2017). ANALISIS FAKTOR – FAKTOR YANG MEMPENGARUHI KEBERHASILAN USAHA KECIL DAN MENENGAH PADA PENGRAJIN TENUN SONGKET DI DESA JINENGDALEM KECAMATAN BULELENG. *Jurnal Pendidikan Ekonomi Undiksha*, 9(1), 158–166. <https://doi.org/10.23887/jjpe.v9i1.20000>
- Ariyanti, F. (2018). *Jumlah Wirausaha RI Siap Kejar Malaysia*. Liputan6. [www.liputan6.com](http://www.liputan6.com)
- Arya, B., Horak, S., Bacouel-Jentjens, S., & Ismail, K. (2021). Leading entrepreneurial sustainability initiatives in emerging economies. *International Journal of Emerging Markets*. <https://doi.org/10.1108/IJOEM-08-2020-0951>
- Asongu, S. A., & Odhiambo, N. M. (2019). Basic formal education quality, information technology, and inclusive human development in sub-Saharan Africa. *Sustainable Development*, 27(3). <https://doi.org/10.1002/sd.1914>

- Bakar, M. A., Bakar, A. A., Noor, A. M., & Mohamad, N. M. (2020). Islamic Technopreneurship In The Midst Of Covid-19 Pandemic: A Malaysia Review. *PalArch's Journal of Archaeology of Egy[T, 17(9)*.
- Balboni, B., Bortoluzzi, G., Pugliese, R., & Tracogna, A. (2019). Business model evolution, contextual ambidexterity and the growth performance of high-tech start-ups. *Journal of Business Research, 99*. <https://doi.org/10.1016/j.jbusres.2019.02.029>
- Banerji, D., & Reimer, T. (2019). Startup founders and their LinkedIn connections: Are well-connected entrepreneurs more successful? *Computers in Human Behavior, 90*. <https://doi.org/10.1016/j.chb.2018.08.033>
- Berita Pemerintahan. (2017). *Peluang Besar Jadi Pengusaha Di Era Digital*.
- Bhatia, A. K., & Levina, N. (2020). Diverse rationalities of entrepreneurship education: An epistemic stance perspective. *Academy of Management Learning and Education, 19(3)*. <https://doi.org/10.5465/AMLE.2019.0201>
- Bird, B. (2019). Toward a theory of entrepreneurial competency. In *Advances in Entrepreneurship, Firm Emergence and Growth* (Vol. 21). <https://doi.org/10.1108/S1074-754020190000021011>
- Boldureanu, G., Ionescu, A. M., Bercu, A. M., Bedrule-Grigoruță, M. V., & Boldureanu, D. (2020). Entrepreneurship education through successful entrepreneurial models in higher education institutions. *Sustainability (Switzerland), 12(3)*. <https://doi.org/10.3390/su12031267>
- Castro, M. P., Scheede, C. R., & Zermeño, M. G. G. (2019). The impact of higher education on entrepreneurship and the innovation ecosystem: A case study in Mexico. *Sustainability (Switzerland), 11(20)*. <https://doi.org/10.3390/su11205597>
- Chen, S. (2019). Investment in Education and Human Resource Development in Postwar Taiwan. In *Cultural Change in Postwar Taiwan*. <https://doi.org/10.4324/9780429040870-7>
- Chiles, T. H., Crawford, B., & Elias, S. R. S. T. A. (2021). Mind, Body, and Soul: A Spiritual Perspective on the Entrepreneurial Imagination. *Organization Theory, 2(2)*. <https://doi.org/10.1177/26317877211005786>
- Cho, Y. H., & Lee, J.-H. (2018). Entrepreneurial orientation, entrepreneurial education and performance. *Asia Pacific Journal of Innovation and Entrepreneurship, 12(2)*. <https://doi.org/10.1108/apjie-05-2018-0028>
- Collins, P., Mahon, M., & Murtagh, A. (2018). Creative industries and the creative economy of the West of Ireland: evidence of sustainable change? *Creative Industries Journal, 11(1)*. <https://doi.org/10.1080/17510694.2018.1434359>
- Covin, J. G., Rigtering, J. P. C., Hughes, M., Kraus, S., Cheng, C. F., & Bouncken, R. B. (2020). Individual and team entrepreneurial orientation: Scale development and configurations for success. *Journal of Business Research, 112*. <https://doi.org/10.1016/j.jbusres.2020.02.023>
- Danil, L., & Septina, N. (2019). Entrepreneurship and small medium enterprises in ASEAN. In *Global Competitiveness: Business Transformation in the Digital Era*.



<https://doi.org/10.1201/9780429202629-9>

- Dijkhuizen, J., Gorgievski, M., van Veldhoven, M., & Schalk, R. (2018). Well-Being, Personal Success and Business Performance Among Entrepreneurs: A Two-Wave Study. *Journal of Happiness Studies*, 19(8). <https://doi.org/10.1007/s10902-017-9914-6>
- Ghozali, I. (2014). Structural Equation Modeling, Metode Alternatif Dengan Partial Least Square (PLS), Dilengkapi Software Smartpls 3.0, Xlstat 2014, dan WarpPLS 4.0 Edisi 4. In *Badan Penerbit Universitas Diponegoro*.
- Ghozali, I. (2017). Model Persamaan Struktural. Konsep dan Aplikasi Dengan Program AMOS 24.0. Update Bayesian SEM. In *Universitas Diponegoro*.
- Giudice, M. Del, Garcia-Perez, A., Scuotto, V., & Orlando, B. (2019). Are social enterprises technological innovative? A quantitative analysis on social entrepreneurs in emerging countries. *Technological Forecasting and Social Change*, 148. <https://doi.org/10.1016/j.techfore.2019.07.010>
- Hair, J., Black, W., Babin, B., & Anderson, R. (2010). Multivariate Data Analysis: A Global Perspective. In *Multivariate Data Analysis: A Global Perspective* (Vol. 7th).
- Hakim, A., & Kartajaya, H. (2012). Supply Chain Economic: Rekonstruksi Inovasi Daya Saing Increasing Return. In *Penerbit ANDI*.
- Halimah, D. N., & Murniaty, I. (2019). Pengaruh Kualitas Pelayanan Dan Manajemen Koperasi Terhadap Keberhasilan Toko Koperasi Mahasiswa. *Economic Education Analysis Journal*, 8(1), 257–272.
- Hartono, W. (2011). Pengembangan Technopreneurship: Upaya Peningkatan Daya Saing Bangsa di Era Global. *Seminar Nasional Teknologi Informasi Dan Komunikasi Terapan 2011 (Semantik 2011)*, 1(1), 96–100.
- Indrawan, R., & Yaniawati, P. (2014). Metodologi Penelitian: Kuantitatif, Kualitatif, dan Campuran untuk Manajemen, Pembangunan, dan Pendidikan. In *PT. Refika Aditama*.
- Irawan, A., & Mulyadi, H. (2016). PENGARUH KETERAMPILAN WIRAUSAHA TERHADAP KEBERHASILAN (Studi Kasus pada Distro Anggota Kreative Independent Clothing Kommunity USAHA di Kota Bandung). *Journal of Business Management Education (JBME)*, 1(1), 216–226. <https://doi.org/10.17509/jbme.v1i1.2290>
- Jayani, D. H. (2020). *Pemerintah Beri Stimulus, Berapa Jumlah UMKM di Indonesia?* KataData. [databoks.katadata.co.id](http://databoks.katadata.co.id)
- Khaerunnisa, I. (2018). Measuring Job Performance of The Economic Creative Business upon Women Entrepreneurs Base (Case Study at Online Bunda Community Bogor Branch Using Balance Scorecard Approach). *The Accounting Journal of Binaniaga*, 3(1). <https://doi.org/10.33062/ajb.v3i1.179>
- Koe, W. L., Mahphoth, M. H., Alias, N. E., Krishnan, R., & Arham, A. F. (2021). Factors influencing intention towards technopreneurship among university students. *Journal of Educational and Social Research*, 11(1). <https://doi.org/10.36941/jesr-2021-0016>
- Kotler, P., & Keller, K. L. (2016). Marketing Mangement. In *Pearson Edition Limited* (15th ed.).
- Kubiček, A., & Machek, O. (2019). Gender-related factors in family business succession: a systematic literature review. In *Review of Managerial Science* (Vol. 13, Issue 5).

<https://doi.org/10.1007/s11846-018-0278-z>

- Liu, W., & Atuahene-Gima, K. (2018). Enhancing product innovation performance in a dysfunctional competitive environment: The roles of competitive strategies and market-based assets. *Industrial Marketing Management*, 73. <https://doi.org/10.1016/j.indmarman.2018.01.006>
- Lupiyoadi, R. (2013). Manajemen Pemasaran Jasa Teori dan Praktik. In *Salemba Empat*.
- Machmud, A., Nurhayati, D., Aprilianti, I., & Fathonah, W. N. (2020). Effect of self efficacy ICT on technopreneurship intention of technopreneurial learning mediation: The case young generation in Indonesia. *Journal of Entrepreneurship Education*, 23(1).
- Malecki, E. J. (2018). Entrepreneurship and entrepreneurial ecosystems. *Geography Compass*, 12(3). <https://doi.org/10.1111/gec3.12359>
- Marcelino, D. (2020). Green Purchase Intention Pada Konsumen Nutrifood di Bandung: Peran Environment Concern Dengan Mediasi Green Trust. *Jurnal Sekretaris & Administrasi Bisnis (JSAB)*, 4(1), 01. <https://doi.org/10.31104/jsab.v4i1.152>
- Marti'ah, S., Satria, B., & Haryono, S. (2015). Pengenalan Technopreneurship Melalui Dunia Pendidikan. *Semnasteknomedia Online*, 3(1), 5–12. <https://www.ojs.amikom.ac.id/index.php/semnasteknomedia/article/view/709>
- Masykuri, A. A., & Soesatyo, Y. (2014). Analisis Perilaku Kewirausahaan Terhadap Keberhasilan Usaha Pada Usaha Kecil Menengah (UKM) Pengrajin Songkok di Kecamatan Bungah Kabupaten Gresik. *Jurnal Pendidikan Ekonomi (JUPE)*, 2(3), 1–19. <http://jurnalmahasiswa.unesa.ac.id/index.php/jupe/article/view/9403>
- Midayanti, N., & et al. (2017). Laporan Penyelenggaraan Penyusunan Data Statistik Dalam Rangka Big Data Ekonomi Kreatif: Tenaga Kerja Ekonomi Kreatif 2011-2016. In *Badan Pusat Statistik*.
- Munir, H., Jianfeng, C., & Ramzan, S. (2019). Personality traits and theory of planned behavior comparison of entrepreneurial intentions between an emerging economy and a developing country. *International Journal of Entrepreneurial Behaviour and Research*, 25(3). <https://doi.org/10.1108/IJEBr-05-2018-0336>
- Murniati, M., Maski, G., Noor, I., & Ekawaty, M. (2021). Entrepreneurship in the Tourism Industry: Implication on Sustainable Economic Development. *International Symposia in Economic Theory and Econometrics, Vol. 29B*, 137–156. <https://doi.org/10.1108/s1571-03862021000029b030>
- Naik, B. K. R., Khan, A., Kumar, A., & Mohite, J. (2018). Promotion of Techno-entrepreneurship Programs in different Countries: A Review. *2018 IEEE Technology and Engineering Management Conference, TEMSCON 2018*. <https://doi.org/10.1109/TEMSCON.2018.8488387>
- Nikolova-Alexieva, V., & Angelova, M. N. (2020). Opportunities for raising the entrepreneurial culture - A factor for competitiveness of the Bulgarian economy. *International Journal of Entrepreneurship and Small Business*, 40(3). <https://doi.org/10.1504/IJESB.2020.107803>
- Păunescu, C., Popescu, M. C., & Duennweber, M. (2018). Factors determining desirability of

- entrepreneurship in Romania. *Sustainability (Switzerland)*, 10(11).  
<https://doi.org/10.3390/su10113893>
- Putriana Dewi, D., Nurfajar, A. A., & Dardiri, A. (2019). *Creating Entrepreneurship Mindset Based on Culture and Creative Industry in Challenges of The 21st Century Vocational Education*. <https://doi.org/10.2991/icovet-18.2019.18>
- Rahayu, S. M. (2014). Analisis Faktor Ekonomi , Tingkat Pendidikan Dan Kemampuan Berwirausaha Terhadap Keberhasilan Usaha Bagi Masyarakat. *Jurnal Ilmiah STKIP PGRI Ngawi*, 13(1), 72–81.
- Rante, Y. (2011). Pengaruh Budaya Etnis dan Perilaku Kewirausahaan Terhadap Kinerja Usaha Mikro Kecil Agribisnis di Provinsi Papua. *Jurnal Manajemen Dan Wirausaha*, 12(2), 133–141. <https://doi.org/10.9744/jmk.12.2.pp.133-141>
- Santos, G., Afonseca, J., Lopes, N., Félix, M. J., & Murmura, F. (2018). Critical success factors in the management of ideas as an essential component of innovation and business excellence. *International Journal of Quality and Service Sciences*, 10(3).  
<https://doi.org/10.1108/IJQSS-05-2017-0051>
- Setia, S. (2018). Personality profile of successful entrepreneurs. *Journal of Economics, Business & Accountancy Ventura*, 21(1). <https://doi.org/10.14414/jebav.v21i1.1004>
- Sugiyono. (2013). Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, dan R&D. In *Alfabeta*.
- Sugiyono. (2017). Statistika untuk Penelitian. In *Alfabeta*.
- Suryana. (2019). Kewirausahaan Pedoman Praktis: Kiat dan Proses Menuju Sukses. *Journal of Chemical Information and Modeling*.
- Tambunan, T. (2019). Recent evidence of the development of micro, small and medium enterprises in Indonesia. *Journal of Global Entrepreneurship Research*, 9(1).  
<https://doi.org/10.1186/s40497-018-0140-4>
- Toms, S., Wilson, N., & Wright, M. (2020). Innovation, intermediation, and the nature of entrepreneurship: A historical perspective. *Strategic Entrepreneurship Journal*, 14(1).  
<https://doi.org/10.1002/sej.1310>
- Tresani, S., & Haryati, Y. T. (2015). PENGARUH KUALITAS PELAYANAN DAN KESESUAIAN KEBUTUHAN TERHADAP KEBERHASILAN UNIT USAHA TOKO KOPERASI MAHASISWA UNIVERSITAS NEGERI SEMARANG TAHUN 2014. *Economic Education Analysis Journal*, 4(3).
- Vătămănescu, E. M., Cegarra-Navarro, J. G., Andrei, A. G., Dincă, V. M., & Alexandru, V. A. (2020). SMEs strategic networks and innovative performance: a relational design and methodology for knowledge sharing. *Journal of Knowledge Management*, 24(6).  
<https://doi.org/10.1108/JKM-01-2020-0010>
- Wijaya, T. (2008). Kajian Model Empiris Perilaku Berwirausaha UKM DIY dan Jawa Tengah (Empirical Model Study of Entrepreneurship Behavior of SMEs DIY and Central Java). *Jurnal Manajemen Dan Kewirausahaan (Journal of Management and Entrepreneurship)*, 10(2), 93–104.
- Yun, J. J., Zhao, X., Park, K. B., & Shi, L. (2020). Sustainability condition of open innovation: Dynamic growth of alibaba from SME to large enterprise. *Sustainability (Switzerland)*, 12(11). <https://doi.org/10.3390/su12114379>

Zimmerer, T. W., & Scarborough, N. M. (2008). Kewirausahaan dan Manajemen Usaha Kecil. In *Salemba Empat* (5th ed.).