Risk Acceptance, Technology Absorption, And Internationalization Key Determinants In Global Entrepreneurship Advantage

[1] **Partono Thomas** [*] , [2] **P. Eko Prasetyo**

[1] *Department of Economics Education, Faculty of Economics, Universitas Negeri Semarang (email: partono.thomas@mail.unnes,ac,id)*
[2] *Department of Development Economics, Faculty of Economics, Universitas Negeri Semarang (pekoprasetyo@mail.unnes.ac.id)*

Abstract

This research aims to evaluates technology absorption capacity as the main key to achieving sustainable and successful global entrepreneurial excellence full of uncertain risk. The methodologies used to collect and analyze the objective's direct, indirect, and total effects are the global entrepreneurship Index (GEI) and path analysis. The results showed that three main determinants, namely risk acceptance (RA), technology absorption (TA), and internationalization (It), dominantly affect the success of global entrepreneurship. This further emphasizes that technology absorption capacity is the most dominant key to achieving successful global entrepreneurial competitiveness, either directly, indirectly, or totally. The theoretical contribution of this research confirms that mastery, risk, technology, and global knowledge are the main determinants of business owners' ability to accept risk. However, this research has empirical limitations and broader practical specifications, therefore, future studies need to focus more on examining the empirical and in-depth specifications about the new technology absorption capacity of entrepreneurs related to interest, creativity, innovation, and adaptive attitude.

Keywords: Risk acceptance, technology absorption, internationalization, global entrepreneurship.

1. Introduction

The absorption of technology has become an important driving force for the competitive advantage performance of global entrepreneurship (Atiase, 2021). The absorption of resource-based, input-output and institutional technology has also become the main source of driving sustainable regional economic growth (Prasetyo, 2020a). The role of technology absorption in the internationalization of companies also supports the success of new products (Prasetyo & Dzaki, 2021; Guerra, 2016). Today, more and more companies are investing heavily in the use of digital technology to build new modern business models to enhance their performance capabilities (Climent, 2021). Their overall global entrepreneurial performance has similar dimensions of similarity, particularly in terms of risk acceptance, cultural support, technology uptake and innovation processes used in various country groups (Acs, 2019). Therefore, the business management approach must be able to be more aware of the advantages of mastering dynamic technological changes, the cultural and social environment as well as the impact of economic cycles in achieving business competitive advantages (Adiguzel, 2020). The problem is, which strategic dominant factor can be used as the main key to success in encouraging the competitive advantage of sustainable global entrepreneurship. The urgency of this research is increasingly important to better understand the main key success factors, in order to be able to mitigate the risks that occur into success.

The key to high global entrepreneurial performance depends on the strength of an entrepreneur's aspirations or ambitions (Prasetyo, 2020). Furthermore, Prasetyo (2020) stated that entrepreneurs should have self-awareness, build a

positive attitude, and increase their capacity to absorb innovative technology for proper risk management. This means that the key to achieving sustainable entrepreneurial performance and competitive advantage is the ability, technology absorption, global thinking, and good risk management. Entrepreneurial risk management is a decision-making process amid uncertainty that could be positive (benefit or gain) or negative (threat or loss). To achieve this, competitive advantage should be identified and assessed based on the analysis of benefits and costs. In this case, a competitive advantage is realized when the positive results outnumber the negative (Ratajczak-Mrozek, 2017). Recent research showed that the aggregate negative effect on search engines manifests differently on the company and product brands, affecting performance. This implies that negative online information is more harmful to the company's brand than product reputation in the long run (Liu, Enxi, and Wenkai 2021).

One prominent dimension of measuring global entrepreneurial performance is the courage to take risks and the ability to manage. Some empirical studies show that entrepreneurs consider themselves more willing to take risks than non-entrepreneurs (Koudstaal, Sloof, and Praag 2014). Furthermore, perceived attitudes towards risk correlated with risk and loss aversion (Koudstaal, Sloof, and Praag, 2014). This raises new questions of whether positive attitudes, aspirations, and perceptions are only theoretical. Moreover, what are the attitudes, aspirations, and abilities of global entrepreneurs in managing risk acceptance? Therefore, these questions form the basis of the subject studied in this paper.

Previous research stated that the drivers of entrepreneurship and technological innovation are the strongest forces for internationalization. They influence elements in the information age and weaken the effect of institutional challenges (Lima, and Keller 2021). The development of innovative technology results in new products (NPD) various methods (Prasetyo, Setyadharma, and Kistanti, 2021, 2022; Prasetyo and Dzaki, 2020). Therefore, internationalization is considered the best dimension of measuring aspirations or the big dream of entrepreneurs in achieving successful global entrepreneurial excellence. Other results show that positive and significant technology absorption (TA) is the main determinant in increasing global

entrepreneurial excellence (Prasetyo, 2020a). Furthermore, recent studies have shown that capability is a source of entrepreneurial competitive advantage that builds over time and is difficult to imitate or replace (Yuthas, Sarason, and Azis, 2021).

This means that the role of attitudes, aspirations, perceptions, and abilities is an essential index in deciding to start and continue an entrepreneurial business during the COVID-19 pandemic. Therefore, it is urgent to study further the role of resources, such as risk acceptance, technology absorption, and internalization, in promoting sustainable competitive advantage in global entrepreneurship. Previously, this performance could be achieved and has been explained using 31 variables integrated into 14 pillars, three main index values, and one large GEI index (Acs, et al., 2019). In contrast, this study uses a simpler model with three dominant resources and three main indexes to explain successful competitive advantage in sustainable global entrepreneurship. Furthermore, it reviews the relevance of economic theory, which states that entrepreneurs as business owners are more able to accept risks and uncertainty than non-entrepreneurs (Cantillon, 1755; Ardichvili, Cardozo and Ray, 2003; Sarason, Dean and Dillard, 2006; Smith and Chimucheka, 2014; Prasetyo, 2020a, 2020b). The policy implications are expected to serve as good scientific references and reinforce the important role of entrepreneurship in sustainable development.

2. Literature Review

Cantillon (1755) invented the first theory to examine the important economic role of entrepreneurship, which stated that economic structures could fail when built without entrepreneurs. Furthermore, J.A. Schumpeter (1949) emphasized the importance of innovation in entrepreneurship, while William J. Baumol (1961, 1993) stressed the role of human capital and institutions (Prasetyo, Setyadharma, and Kistanti, 2021, 2022; Prasetyo and Dzaki, 2020; Prasetyo and Kistanti, 2020). However, Cantillon, Schumpeter, and Baumol made the same conclusion and emphasized the important role of entrepreneurship in economic development. Empirically, the spread of the COVID-19 pandemic risk has affected entrepreneurial attitudes, aspirations, and abilities globally. However, many entrepreneurs and tradespeople still see new opportunities due to the pandemic and its

implications (Megits, Neskorodieva, and Schuster 2020; Bosma et al., 2021). Based on the Global report, (Bosma et al., 2021) showed that, during a pandemic, entrepreneurial activities around the world still exist through their attitudes and perceptions. Therefore, it is necessary to introduce innovative strategies to ensure entrepreneurial competitiveness (Megits, Neskorodieva, and Schuster, 2020). A new and powerful wave of creative destruction could occur, leading to a major global business transformation. Furthermore, it could provide an impetus for a new, innovative generation to discover new opportunities caused by COVID-19 (Zahra, 2021).

The opportunity entrepreneurship appear to be procyclical, with new ventures increasing as unemployment declines (Neymotin, 2021). Prominent individual experience theoretically indicates a new understanding of the entrepreneur's self-perception. This means that personal perceptions may conflict with their understanding of risks and opportunities. Practically, the results enable entrepreneurs, managers, educators, venture capitalists, and others to take more appropriate action (Berglund, 2005). Furthermore, other studies show that international entrepreneurship is still developing. However, this field is rich with new dynamic ideas and concepts and provides an impetus for researchers to explore international entrepreneurial orientation and internationalization (Megit, Reverchuk, and Chyzh, 2014; Allen, 2016; Wales et al. al., 2019; Yi, Amenuvor, and Boateng, 2021). The latest empirical research found that international market and product innovation knowledge and institutional networks are critical for the successful internationalization of Indonesia's small and medium enterprises (Handoyo, Yudianto, and Fitriyah, 2021).

The global economy involves large and dynamic internationalization activities with untapped opportunities for entrepreneurs and businesses (Jafari-Sadeghi et al., 2021). Therefore, this research examines the advantages of internationalization of global entrepreneurship influenced by various resource factors. These factors include perception, risk acceptance, technology absorption, attitudes, abilities, and aspirations of internationalization. Recent theoretical and prospective studies underlying this research are the theory of corporate behavior (BTF) and resource-based views in international entrepreneurship (Huang and Knight, 2017; Nason and Wiklund, 2018; Jafari-Sadeghi et al., 2021). BTF emphasizes the way companies assess performance according to perceived levels and selectively learn and update routines. Additionally, the theory stresses how companies incorporate the learning of others, which is increasingly being observed in internationalization decisions (Benito, Surudu, and Greve, 2021).

The achievement of a successful global entrepreneurial competitive advantage is built dynamically over time based on the exchange theory model. Huang and Knight (2017) discussed the implications of developing an exchange theory model on resources and their relationship to the growth of new entrepreneurial ventures. The research recommended that the theory could guide future studies and provide a better understanding of entrepreneurship. Similalrly, Nason's (2018) theory is based on Penrosean and Barnean resources in forming a dominant theoretical model to understand entrepreneurial growth better. Penrosean theory is concerned with the versatility of resources, while Barnean theory focuses on their uniqueness. Nason and Wiklund (2018) offered new insights into the characteristics of alternative resources based on the same conceptualization of entrepreneurship. Moreover, it added greater specificity to performance construction and paved the way for new theories on entrepreneurial growth that are more in line with Penrosean theory.

Jafari-Sadeghi et al. (2021) developed a view based on managerial resources and dynamic capabilities in three categories to support the successful internationalization of SMEs in emerging markets. The three categories include internationalization network, vision and experience, and competence. The results recommended a conceptual framework to investigate further managerial abilities related to their interrelationships based on the three categories. Based on the three new theoretical bases, this research examines the managerial ability of global entrepreneurship in managing three resource determinants. These determinants are risk acceptance, technology absorption, and internationalization and are the main keys to competitive advantage for global entrepreneurship. Risk acceptance, technology absorption, and internationalization are related to entrepreneurial attitude, ability, and aspiration dimensions of sustainable global entrepreneurship.

3. Materials and Methods

This research used secondary data obtained from the Global Entrepreneurship Index (GEI) and Global Entrepreneurship Monitor (GEM). Quantitative research designs were derived by measuring the GEI and GEM index values, while data were analyzed using the path analysis method. The methodology in this research started with the derivative of the variable and the dimensions of the fixed ratio measure of GEI and GEM. The derivative method employed the multiple correlation-regression model experiment technique with SPSS to determine the standard coefficient values. Furthermore, a path analysis structure equation model was developed to explain the direct and indirect effects of the studied resource factors on global entrepreneurial success measured by the GEI index value.

Technological advances lead to data sources that could be archived and used to prove other studies. Therefore, scientific utilization of existing data for research is generally accepted (Johnston, 2014, Martins and da_Cunha, 2018). The variable measurement dimensions in this research used secondary data from the Global Entrepreneurship Index (GEI) or GEDI & RIERC (Acs et al., 2019) and the Global Entrepreneurship Monitor 2020/2021 Global Report (Bosma et al., 2019). al., 2021). Furthermore, more resources from the Global Entrepreneurship Index were used to establish a basic model of experimental analysis (Acs et al., 2019). The Global Entrepreneurship Monitor was used as a reference to actualize the model development analysis (Bosma et al., 2021).

This research is based on the GEI database sources (Acs et al., 2019), using 137 countries as a sample. Furthermore, the index value was derived from 31 variables, comprising 17 GEM and 14 other data sources. Of the 31 variables integrated into 14 pillars, only three are dominant and remain in the three main sub-indices and one super index. The sub-indices are Entrepreneurship Attitudes (ATT), Entrepreneurship Abilities (ABT), and Entrepreneurship Aspirations (ASP), while the super index is Global Entrepreneurship Index (GEI). Furthermore, the three main pillars or resources variables that are representative and most dominant are selected based on the experimental technique results. They include risk acceptance (RA), technology absorption (TA), and internationalization (It). The operational measurement dimensions of the three pillars are explained as follows. (Source: GEI Index, Acs et al, 2019).

1) Risk acceptance (RA) captures the inhibitory effect of the population's fear of failure on entrepreneurship and a measure of country risk.
2) Technology absorption (TA) reflects the intensity of a country's initial activities and capacity for enterprise-level technology uptake.
3) Internationalization (It) captures the degree to which a country's entrepreneurs are internationalized. It is measured by the export potential of the business weighed against the level of the country's economic complexity.

The competitive advantage of global entrepreneurship is the dynamic interaction capability institutionally embedded in entrepreneurial attitudes, abilities, and aspirations. Furthermore, attitude is the nature or behavior and general expression of entrepreneurs towards risk acceptance, business opportunities, and skills for profit. Entrepreneurial abilities are the activities based on the ability to absorb new technologies, accept and manage risks, and internationalize to achieve sustainable global entrepreneurial excellence. Aspiration is an entrepreneurial effort to realize a dream by introducing more new products or services to penetrate the export market (internationalization). Furthermore, the validity of the dimensions of (ATT), (ABT), and (ASP) were measured and analyzed using the same three resource pillars of (RA), (TA), and (It).

Quantitative calculation of the resource sub-index value was used to build the index pillars of (ATT), (ABT), and (ASP). The value of the resource sub-index and the index or pillar for any country is the arithmetic mean of the adjusted resource potential for that sub-index multiplied by 100 (Equations 1.1, - 1.3 and their modifications). In this study, the resource sub-index value is between zero and one. Moreover, the main maximum sub-index value is 100, and the minimum potential is 0. They both reflect the relative position of a country in a particular sub-index (Acs et al., 2019). Furthermore, the three selected resources of (RA), (TA), and (It) are representative fundamental resources for building the main index blocks (ATT), (ABT), and (ASP) in this paper. To facilitate the assessment, the building of the main index blocks is formulated as follows:

$$ATT_i = 100 \sum_{j=1}^{5} hj \text{ ...} (1.1) \text{ becomes to } ATT_i = 100 \sum_{j=1}^{3} f = (RA) + (TA) + (It) \text{ ...} (1.1a)$$

$$ABT_i = 100 \sum_{j=1}^{5} hj \text{ ...} (1.2) \text{ becomes to } ABT_i = 100 \sum_{j=1}^{3} f = (RA) + (TA) + (It) \text{ ...} (1.2a)$$

$$ASP_i = 100 \sum_{j=1}^{5} hj \text{ ...} (1.3) \text{ becomes to } ASP_i = 100 \sum_{j=1}^{3} f = (RA) + (TA) + (It) \text{ ...} (1.3a)$$

Where; (i) is the number of countries, (j) is the number of pillars, and (h) is the modification of the selected pillar. The global entrepreneurship index calculation reflected in (GEI) as a super index is the average value of the three main sub-indices in the preceding equation. Furthermore, the maximum index value of 100 represents the theoretically available limit. Therefore, the GEI point measures the entrepreneurial resource efficiency in this paper, whose formula is written as follows (Acs, 2019).

$$GEI_i = \frac{1}{3} (ATT_i + ABT_i + ASP_i) \text{ ...} (2.1)$$

This paper uses the multiple regression model (OLS) experimental method, then formulated into path analysis. Therefore, to facilitate understanding, the path analysis structural equation model is written as follows:

$$ATT_i = \rho ATT_i . AR_i + \rho ATT_i . TA_i + \rho ATT_i . It_i + \varepsilon_{1a} \text{ ... } (3.1a)$$
$$GEI_i = \rho GIE_i . AR_i + \rho GEI_i . TA_i + \rho GEI_i . It_i + \varepsilon_{1b} \text{ ...} (3.1b)$$
$$ABT_i = \rho ABT_i . AR_i + \rho ABT_i . TA_i + \rho ABT_i . It_i + \varepsilon_{2a} \text{ ...} (3.2a)$$
$$GEI_i = \rho GEI_i . AR_i + \rho GEI_i . TA_i + \rho GEI_i . It_i + \varepsilon_{2b} \text{ ...} (3.2b)$$
$$ASP_i = \rho ASP_i . AR_i + \rho ASP_i . TA_i + \rho ASP_i . It_i + \varepsilon_{3a} \text{ ...} (3.3a)$$
$$GEI_i = \rho GEI_i . AR_i + \rho GEI_i . TA_i + \rho GEI_i . It_i + \varepsilon_{3b} \text{ ...} (3.3b)$$
$$GEI_i = \rho GEI_i . ATT_i + \rho GEI_i . ABT_i + \rho GEI_i . ASP_i + \varepsilon_4 \text{ ...} (3.4)$$
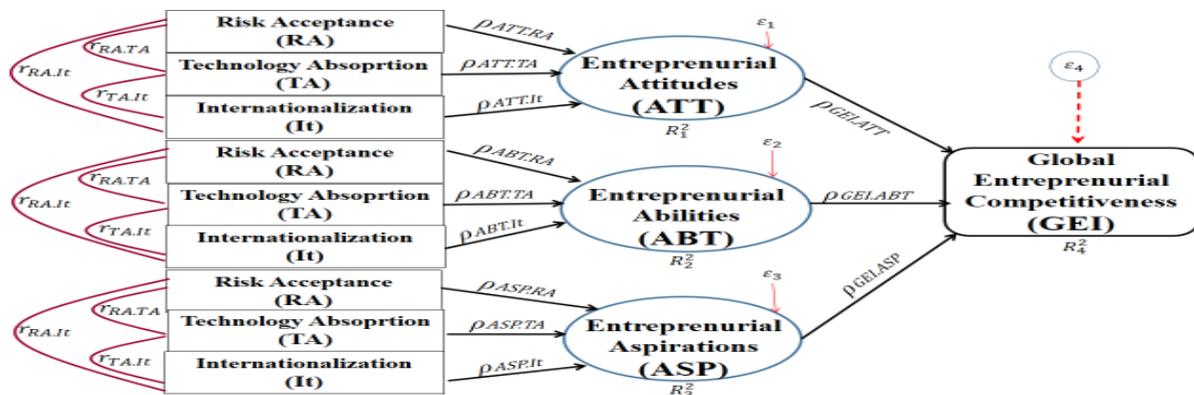

Figure 1: RA, TA, and It resource models as the main keys to the competitive advantage of global entrepreneurship

Source: Developed by authors

4. Results and Discussion

The results in Table 1 statistically show that the performance of global entrepreneurial competitiveness is strong, with R multiple and R2 values above 0.80, respectively. This implies a close relationship and strong influence between resources and global entrepreneurial competitiveness

performance. Also, the partial correlation value is strong in each of the models built. Table 1 shows the respective values of models 1b, 2b, and 3b. These are the values of the role function model of resources directly on the competitiveness of global entrepreneurial performance reflected by the GEI value. Similarly, models 1a, 2a, and 3a are the values of model equations directly related to the three main indices of ATT, ABT, and It. Furthermore, the magnitude of the difference in R2 between models 1a with 1b, 2a with 2b, and 3a with 3b show the magnitude of the direct contribution of (ATT), (ABT), and (ASP) to the performance of global entrepreneurial competitiveness (GEI).

Table 1: The Results of the Determinants of the Role Models of RA, TA, and It Resources on ATT, ABT, ASP, and GEI

Model	R Multiple	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1a	.897	.805	.800	8.302278	.805	182.893	3	133	.000	1.715
1b	.979	.959	.958	3.982512	.959	768.433	4	132	.000	1.805
2a	.936	.877	.874	7.203347	.877	316.020	3	133	.000	1.678
2b	.985	.971	.970	3.368744	.971	1087.071	4	132	.000	1.883
3a	.915	.836	.833	8.666831	.836	226.751	3	133	.000	1.712
3b	.981	.963	.962	3.770451	.963	861.118	4	132	.000	1.824
4	1.000	1.000	1.000	.033371	1.000	1.522E7	3	133	.000	1.938

Source: Developed by authors

The results in Table 1 and the preceding explanation show that the three main resource factors of (RA), (TA), and (It) selected in the model are the most dominant variables. They significantly influence entrepreneurial attitudes, abilities, and aspirations. Therefore, the three resource factors encourage human resource performance in the competitive advantage of sustainable global entrepreneurship. The small value of the difference between R2 and Adjusted R2, and the value of Durbin Waston, which is close to 2.0, show that the model is statistically good and acceptable.

Table 2 shows that the Risk Acceptance (RA) resource factor positively and significantly contributed to the global entrepreneurs' attitude by 63.4%. It implies that a successful entrepreneur should accept, manage, and convert risk into an opportunity and profit. This attitude is the main key to achieving a competitive advantage in sustainable global entrepreneurship. Therefore, global market risks during the current COVID-19 pandemic should be faced, accepted, and properly managed as a challenge, an opportunity, and an advantage. These findings support (Megits, Neskorodieva, and Schuster, 2020; Rout, Das, and Inamdar, 2020; Das and Rout, 2021; Bosma et al., 2021).

The research results of Megits (2020) state that the high risk of the virus must be faced and a study of economic-virus-risk efficiency is needed to predict economic developments taking into account the risks. The results of this research support Megits' research, by confirming that the attitude of an entrepreneur who can be successful is those who can accept risk and manage it well into a market opportunity and business profit. This means that the results of this research are also in

line with the results of Rout (2020) and Das (2021) research which states that the impact of the virus is considered a market risk and an economic risk that must be accepted and managed properly. Meanwhile, the results of this research confirm that the ability to be able to see opportunities depends on the magnitude of the positive attitude and behavior of entrepreneurs to dare to take risks because they have human and social capital resources as well as the ability to absorb innovation technology well to be able to manage risk into profitable business opportunities. Thus, the results of this research support the research results of Bosma et al. (2021) which states that the decision to continue to run a business in times of pandemic risk tends to be influenced by its ability to see opportunities and a positive attitude to risk taking, individual ambitions, goals and levels of self-confidence as well as access to various resources and social support**.**

Table 2: The Value of the Path Analysis Coefficient of Resources on Entrepreneurial Attitudes, Abilities, and Aspirations, and on the Competitive Advantage of Global Entrepreneurship

Model		Unstandardized Coefficients		Standardized Coefficients	t-stc.	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1a	(Constant)	14.601	1.159		12.594	.000		
	RA	39.429	3.676	.634	10.726	.000	.420	2.381
	TA	18.242	4.261	.285	4.281	.000	.331	3.022
	It	2.337	3.543	.042	.660	.511	.367	2.726
2a	(Constant)	9.799	1.006		9.742	.000		
	RA	21.818	3.190	.321	6.840	.000	.420	2.381
	TA	38.000	3.697	.543	10.278	.000	.331	3.022
	It	9.471	3.074	.155	3.081	.003	.367	2.726
3a	(Constant)	9.212	1.210		7.612	.000		
	RA	17.015	3.838	.240	4.434	.000	.420	2.381
	TA	26.532	4.449	.364	5.964	.000	.331	3.022
	It	25.571	3.698	.400	6.914	.000	.367	2.726
4	(Constant)	-.006	.006		-.921	.359		
	ATT	.334	.000	.321	925.036	.000	.195	5.125
	ABT	.333	.000	.350	696.513	.000	.123	8.128
	ASP	.333	.000	.365	893.090	.000	.164	6.115

Source: Developed by authors.

Table 2 shows that the Technology Absorption (TA) resource factor positively and significantly contributed to the global entrepreneurs' ability by 54.3%. This means that a superior entrepreneur in the globalization era should absorb modern innovation technology, such as start-ups, to achieve a competitive advantage in sustainable global entrepreneurship. The ability to

absorb innovation technology and digitalization is the main key to achieving a successful competitive advantage of sustainable global entrepreneurship. Therefore, these findings support (Prasetyo, 2020b; Yuthas, Sarason, and Azis, 2021). The results of Yuthas' research (2021) have provided clues that capability is a source of entrepreneurial competitive advantage that is built over time to be imitated and replaced. Based on table-2 and table-3, the results of this research confirm that the process of achieving successful performance of entrepreneurial competitive advantage has been built by relying on the capabilities of the three basic factors of fundamental resources, namely; willingness to accept risk, ability to absorb technology and have global aspirations (internationalization).

The Internationalization (It) resource factor positively and significantly contributed to the global entrepreneur's aspirations by 40.0%. This means that an entrepreneur should dream or aspire to participate in international trade through product development or export markets. Therefore, these findings support (Migits, Neskorodieva, and Schuster, 2020; Benito, Surudu, and Greve, 2021; Handoyo, Yudianto, and Fitriyah, 2021; Jafari-Sadeghi et al., 2021). However, Table 2 and the preceding explanation show that, of the three resource factors, the largest contribution is made by RA, followed by TA, and It. This means that an entrepreneur should have the courage to accept and properly manage risks in uncertain conditions. The second key is the capacity to absorb innovative technology to achieve dreams and aspirations for the successful performance of sustainable global entrepreneurial excellence.

Based on the description of the results of this research in figure-4, it has been explained that to be able to achieve superior performance in sustainable global entrepreneurship competitiveness, entrepreneurs must have knowledge, attitudes, traits and abilities as well as internationalization aspirations in any situation, even if it is full of business risks, must can still be accepted and dealt with, based on institutional collaboration capabilities as well as the capacity of human capital and social capital. That is, the results of this research support the research results of Handoyo et al. (2021) which states that institutional networks and market knowledge of internationalization are critical success factors for global business. Because the global economy is dynamic and provides business opportunities and benefits (Jafari-Sadeghi, 2021). In addition, the success of internationalization is based on the behavior of the theory of corporate resources and collaboration that strengthens internationalization decisions (Benito et al., 2021).

Entrepreneurs should have big aspirations and dreams to gain export market share to continuously improve global entrepreneurship excellence. This is based on their capacity to absorb innovation technology, especially start-ups in every business venture. However, entrepreneurs should have the attitudes, traits, behaviors, and perceptions to accept and properly manage risks and achieve sustainable global entrepreneurial competitive advantage. The findings supporting the explanation argument are shown in model 4 in Table 2. They show that entrepreneurs' aspirations make the first largest contribution to the competitive advantage of global entrepreneurship. Furthermore, the business ability and entrepreneurial aspiration factors are competitors. This implies that entrepreneurs should still have a dream or aspiration to succeed by taking the global market. However, it requires the role of the main resources, including the ability to absorb technology and an attitude of accepting and managing risks as opportunities and benefits.

Table 3: The Value of the Path Analysis Coefficient of Resources, and Attitudes, Abilities, and Aspirations Towards the Competitive Advantage of Global Entrepreneurship

	Model	Unstandardized Coefficients		Standardized Coefficients	t-stc.	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1b	(Constant)	1.693	.823		2.056	.042		
	ATT	.652	.042	.626	15.665	.000	.195	5.125

	RA	.437	2.408	.007	.181	.856	.225	4.441
	TA	15.674	2.180	.235	7.189	.000	.291	3.438
	It	10.939	1.702	.188	6.427	.000	.366	2.735
	(Constant)	3.305	.616		5.367	.000		
	ABT	.806	.041	.847	19.886	.000	.123	8.128
2b	RA	8.535	1.734	.132	4.921	.000	.311	3.219
	TA	-3.083	2.316	-.046	-1.331	.185	.184	5.422
	It	4.824	1.488	.083	3.242	.002	.342	2.921
	(Constant)	5.299	.631		8.399	.000		
	ASP	.641	.038	.703	17.001	.000	.164	6.115
3b	RA	15.216	1.789	.235	8.507	.000	.366	2.733
	TA	10.545	2.179	.158	4.840	.000	.261	3.830
	It	-3.938	1.876	-.068	-2.099	.038	.270	3.706

Source: Developed by authors.

The preceding explanation is based on the results in Tables 2 and 3. In Table 3, model-1b shows that the direct contribution of (RA) to GEI is positive but insignificant. Moreover, in models 2b and 3b, the contribution of (TA) and (It) directly to (GEI) is negative and insignificant. These results show that resources (RA), (TA), and (It) cannot directly guarantee the competitive performance of sustainable global entrepreneurial excellence without the three main pillars (ATT), (ABT), and (ASP). The results in Table 3 are described in Figures 2, 3, and 4. The figures show that the three main indices directly and significantly contribute to the competitive advantage of global entrepreneurship. This is given by the entrepreneurial ability factor of 84 .7%, followed by aspirations with 70.3%, attitude with 62.6%. Therefore, achieving sustainable global entrepreneurial excellence should be based on capacity in business activities.
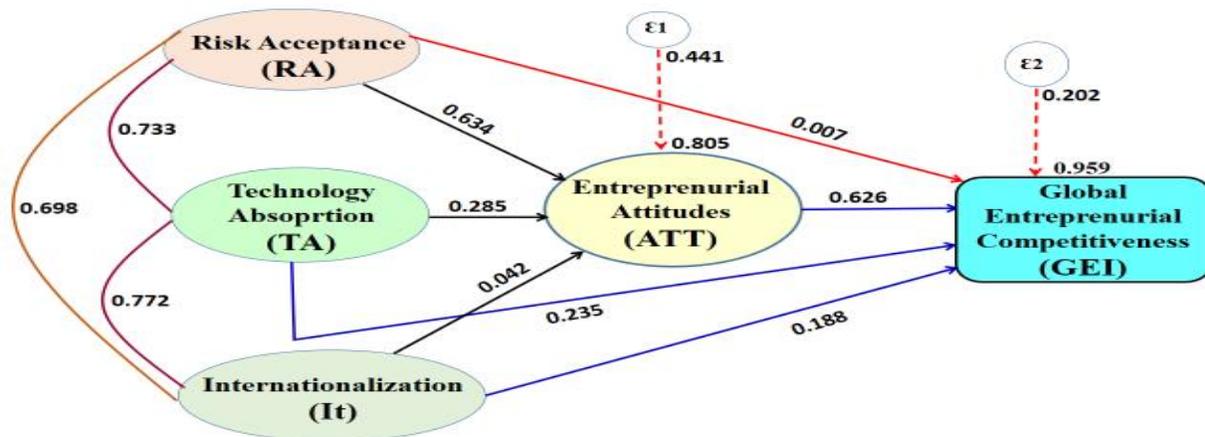

Figure 2. Description of the direct role of RA, TA, It, and ATT resources on GEI.
Source: Developed by authors.

Figure 2 shows that the direct contribution of the risk acceptance resources to entrepreneurial attitudes was initially the most dominant, positive, and significant. However, it contributes the least and is not directly significant to the performance of global entrepreneurial excellence. This means that there are still direct differences in risk acceptance among entrepreneurs in every country worldwide. Furthermore, the generally positive attitude towards risk acceptance and opportunities in global entrepreneurship is the same. However, the attitudes towards risk acceptance and global risk management capabilities are different. This is in line with Acs et al. (2019), which stated that risk-taking is not correlated with social value creation but rather because they create new combinations of economic activity. Acceptance of risks associated with start-ups requires specific skills to launch a business and reduce losses successfully. Moreover, entrepreneurs in each country have different special abilities. The more modern and advanced countries, such as European nations, have a better understanding, willingness, and ability to accept and manage business risks. This implies that the economic theory, which states that entrepreneurs as business owners are more able to accept risk and uncertainty than non-entrepreneurs, is still relevant and well-accepted.

The specific weakness is the limited proxy data on the nature, spirit, and motivation of entrepreneurship in developing countries. Entrepreneurs in these countries tend to avoid risks and exploit opportunities with limited skills and understanding. For instance, data on achievement efforts and control in decision-making is still limited. Furthermore, quantitative literature on this theory is limited and lacks convincing scientific findings on becoming an excellent global entrepreneur. Therefore, the question is whether entrepreneurs in developing countries prefer risk avoidance to reduce business losses. This paper has not determined the answer academically and convincingly.
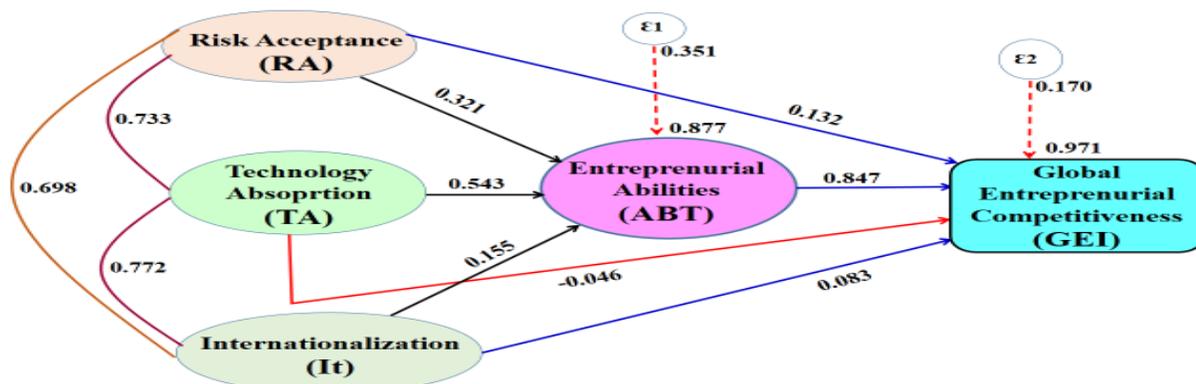

Figure 3. Description of the direct role of RA, TA, It, and ABT resources on GEI
Source: Developed by authors.

Figure 3 shows that the initial intensity of the ability to absorb new technologies globally, such as start-ups, is not balanced with technological developments and their needs. This ability reflects the intensity of activities such as start-ups and the entrepreneurs' capacity. Additionally, it reflects the related institutional and entrepreneurial environments as important elements in encouraging superior global entrepreneurship performance. However, the extent to which the intensity of technology absorption capability associated with existing opportunities is still contradictory. Consequently, this results in a direct negative influence of technology absorption on the achievement of sustainable global entrepreneurial competitive advantage performance. This implies that the ability to absorb new, great, local technologies is not a positive and significant guarantee of high performance in a more complex and broad global competition.
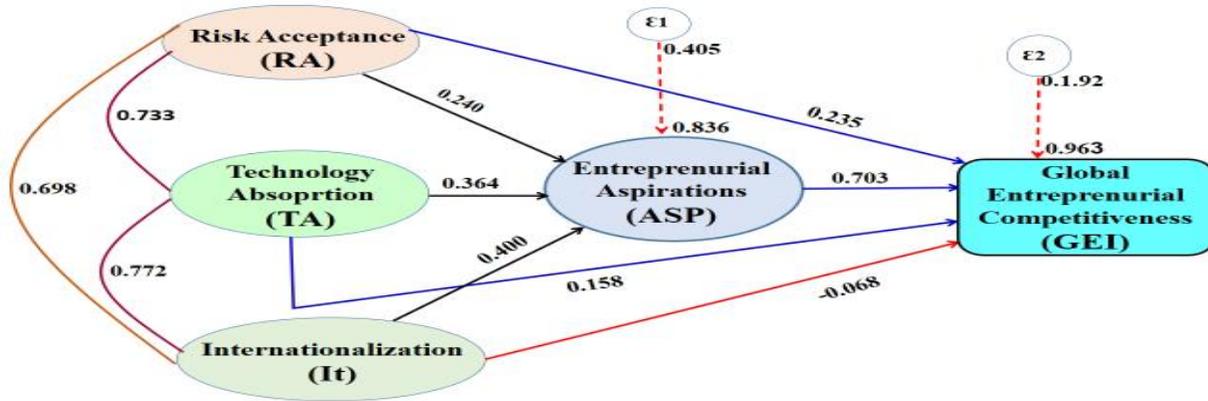
Figure 4: Description of the direct role of RA, TA, It, and ASP resources on GEI.
Source: Developed by authors.

Every entrepreneur should have big aspirations and dreams to develop their market and products globally. However, the realization of entrepreneurial internalization aspiration is different in each country. A greater global market opportunity is achieved when the ability to absorb new technologies is high and supported with a positive attitude towards risk acceptance and management. In this case, internationalization is the ability to capture the extent to which entrepreneurs

in each country are internationalized. It is measured by the export potential of their business against the economic complexity of that country. Therefore, a high internationalization orientation of entrepreneurs by their country increases exportability and business development in the globalization era. However, the internationalization orientation of each entrepreneur is different and weak in most developing countries. Consequently, it negatively affects the competitive advantage of sustainable global entrepreneurship.
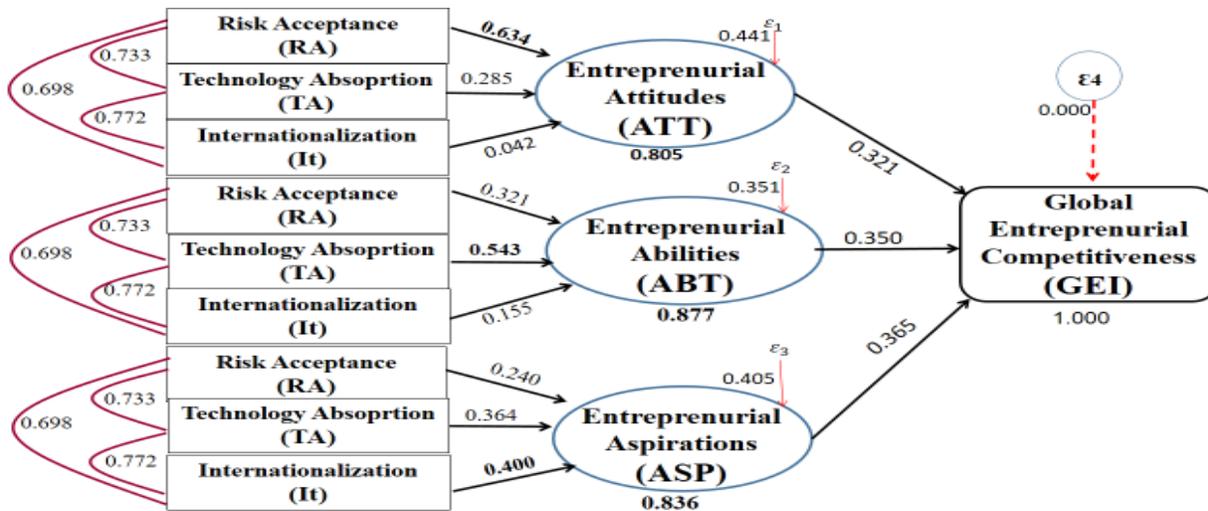

Figure 5: Description of the path analysis model results of RA, TA, and It resources as the main keys to achieving global entrepreneurial competitiveness.

Source: Developed by authors

Figure 5 describes the best model chosen as the key to achieving success in global entrepreneurial performance. Also, the figure summarizes a simple explanation describing efforts to achieve sustainable global entrepreneurial excellence. Figure 5 has been representatively summarized to better re-describe Figures 2, 3, and 4. It shows a strong linkage between the roles of the resources (RA, TA, and It) and the value of the main pillar indexes (ATT, ABT, and ASP). This linkage is essential in achieving competitive advantage in global entrepreneurship, as measured by a large index (GEI). In this case, capabilities are formed and built over time from the local to the global level. Therefore, the model results in Figure 5 have important implications and contribute to a good scientific reference. The simple success model could be a guideline for institutional policies in business development and a reference for global business decision-making in a pandemic era full of risks and uncertainty.

5. Conclusions

This paper has been able to identify three main determinants that affect the competitive advantage of sustainable global entrepreneurial performance, namely; risk acceptance, technology absorption and internationalization. The results of this research support the implications of the theory which states that large entrepreneurs as business owners are more able to accept risk than entrepreneurs who have never owned a business before, which is true and acceptable. However, the ability to accept risk alone is not enough, because the most important thing is to be able to have a better capacity to absorb dynamic and risky technological changes. The results of the research confirm that the capacity for technology absorption, both direct, indirect and total, is able to provide the main and first largest contribution in achieving sustainable global entrepreneurship competitive advantage performance. This means that technology absorption capacity is the main key to achieving sustainable global competitive advantage performance.

In critical and practical implications, the results of this research emphasize, in order to be able to further develop to achieve excellence in global competitive performance, entrepreneurs must still have big dreams or awareness of adaptive aspirations to succeed by daring to take the global market. However, big dreams are not enough and are difficult to realize, without a good awareness and capacity to absorb new technologies that are dynamic and full of risks. Having an awareness of the attitude of being willing to accept risk and the ability to manage risk into opportunity and profit is an absolute must. Furthermore, the results of this research can be used as a reference for good scientific fundamentals in making decisions on global business competition. However, this research still has limited interpretation with broader empirical data. Therefore, this research recommends that the model can still be used as a good scientific reference material. However, it still needs to be specifically identified further. If future research aims to distinguish between entrepreneurial behavior in various developed and developing countries, it is better to focus more on the nature, attitudes and characteristics of local wisdom but can still be applied globally.

References

[1]   Acs, Z.J., Szerb, L., Lafuente, E., & Markus G. 2019. The Global Entrepreneurship Index. GEDI & RIERC, Development Institute, Washington, D.C., USA

[2]   Adiguzel, Z. 2021. Competitiveness of International Business: Management, Economics, Technology, Environment, and Social Study of Cultural Perspective, Chapter-4, 47-63; Springer. doi:10.4018/978-1-7998-2559-3.ch004

[3]   Allen, I. 2016. International Entrepreneurship Theory: Past, Present and Way Forward. Entrepreneurial Business and Economics Review, 4(4), 93-103, doi: http://dx.doi.org/10.15678/EBER.2016.04 0406

[4]   Ardichvili, A., Cardozo, R. & Ray, S. 2003. A theory of entrepreneurial opportunity identification and development. Journal of Business Venturing, 18(1): 105–123.

[5]   Attiase, V.Y., Dzansi, D.Y. & Ameh, J.K. 2021. Technology absorption capacity and

firm growth in Africa. International Journal of Technology Transfer and Commercialisation, 18(2), 201-229

[6] Baumol, William J., 1961. Economic Theory and Operations Analysis. New York: Prentice Hall.

[7] Baumol, W. J. 1993. The Entrepreneur in Economic Theory. This chapter is scanned for the purposes of RaN 2013: MIT Press.

[8] Benito G.R.G., Surudu, I., & Greve, H.R. 2021. Back to basics: Behavioral theory and internationalization. Journal of International Business Studies, 52(3), 1-22. doi:10.1057/s41267-021-00425-2.

[9] Berglund, H. 2005. Toward a theory of entrepreneurial action: Exploring risk, opportunity and self in technology entrepreneurship, Dissertation, Chalmers University of Technology

[10] Bosma, N., Hill, S., Ionescu-Somers, A., Kelley, D., Guerrero, M., & Schott, T. 2021. Global Entrepreneurship Monitor 2020/2021 Global Report. Published by the Global Entrepreneurship Research Association, LBC, Regents Park, London NW1 4SA, UK

[11] Cantillon, R. 1755. Essai Sur la Nature Général. London Macmillan.

[12] Climent, R.C., & Haftor, D.M. 2021. Business model theory-based prediction of digital technology use: An empirical assessment. Technological Forecasting & Social Change, 173(2021), 121174. doi:10.1016/j.techfore.2021.121174

[13] Das, M.N., & Rout, B.S. 2021. Impact of COVID-19 on Market Risk: Appraisal with Value-at-risk Models. The Indian Economic Journal, 68(3), 396–416.

[14] Guerra, R.M.A. & Marques, R. 2016. The Role of Technological Capability in the Internationalization of the Company and New Product Succes. Escola Superior de Propaganda e Marketing, 11(1), 49-62.

[15] Handoyo, S., Yudianto, I., & Fitriyah, F.K. 2021. Critical success factors for the internationalisation of small–medium enterprises in Indonesia. Cogent Business & Management, 8(1), 1-20.

[16] Huang, L., Knight, A.P. 2017. Resources and Relationships in Entrepreneurship: An Exchange Theory of The Development and Effects of The Entrepreneur-Investor Relationship. Academy of Management Review, 4291, 80-102. http://dx.doi.org/10.5465/amr.2014.0397

[17] Jafari-Sadeghi, V., Mahdiraji, H.A., Bresciani, S., & Pellicelli, A.C. 2021. Context-specific micro-foundations and successful SME internationalisation in emerging markets: A mixed-method analysis of managerial resources and dynamic capabilities. Journal of Business Research, 134(2021), 352–364.

[18] Johnston, M.P. 2014. Secondary Data Analysis: A Method of which the Time Has Come. Qualitative and Quantitative Methods in Libraries, (3), 619-626.

[19] Koudstaal, M., Sloof, R., & Praag, Mv. 2014. Risk, Uncertainty and Entrepreneurship: Evidence from a Lab-in-the-Field Experiment. Discussion Paper No. 8577. IZA: Germany

[20] Lima, A.C., & Keller, P. 2021. Digital Information Product Development: Lessons from a Small-Sized German Enterprise. Innovation & Management Review, 18(1), 2515-8961.

[21] Liu, R., Enxi, An & Wenkai., Z. 2021. The effect of online search volume on financial performance: Marketing insight from Google trends data of the top five US technology firms, Journal of Marketing Theory and Practice, 29(1), 1-12. doi:10.1080/10696679.2020.1867478)

[22] Martins, F.S., & da-Cunha, A.C. 2018. Secondary Data in Research Uses and Opportunities. Iberoamerican Journal of Strategic Management, 17(3), 1-5. doi:10.5585/ijsm.v17i4.2723.

[23] Migits, N., Neskorodieva, I., & Schuster, J. 2020. Impact Assessment of the Covid-19 on Trade between Eastern Europe and China. Journal of Eastern European and Central Asian Research, 7(3), 383-399.

[24] Megits, N., Reverchuk, S., & Chyzh, l. 2014. Investment Risks and Insurance in The Gold Market. Journal of Easter European and Central Asian Research, 1(1), 1-8.

[25] Nason, R. S., & Wiklund, J. 2018. An Assessment of Resource-Based Theorizing on Firm Growth and Suggestions for the

Future. Journal of Management, 44(1), 32–60.

[26] Neymotin, F. 2022. Necessity and Opportunity Entrepreneurship in Canada. Review of Economic Analysis. 13(2), 235-251. 1973-3909/2021235

[27] Prasetyo, P. E, Setyadharma, A., & Kistanti, N. R. 2022. The role of institutional potential and social entrepreneurship as the main drivers of business opportunity and competitiveness. Uncertain Supply Chain Management, 10(1), 101–108. doi: 10.5267/j.uscm.2021.10.006

[28] Prasetyo, P. E, Setyadharma, A., & Kistanti, N. R. 2021. Integration and collaboration of determinants of entrepreneurial competitiveness. Uncertain Supply Chain Management, 9(3), 585–594. doi: 10.5267/j.uscm.2021.6.002

[29] Prasetyo, P.E., & Dzaki, F.Z. 2020. Institutional performance and new product development value chain for entrepreneurial competitive advantage. Uncertain Supply Chain Management, 8(4), 753–760. https://doi.org/10.5267/j.uscm.2020.7.004

[30] Prasetyo, P. E., & Kistanti, N. R. 2020. Human Capital, Institutional Economics and Entrepreneurship as a Driver for Quality & Sustainable Economic Growth. Entrepreneurship and Sustainability Issues, 7(4), 2575-2589. http://doi.org/10.9770/jesi.2020.7.4(1).

[31] Prasetyo, P. E. 2020a. Technology Absorption as a Main Indicator of Global Entrepreneurship Performance. Journal of Economics and Policy, 13(2), 410-420.

[32] Prasetyo, P.E. 2020b. Human Capital as the Main Determinant of Regional Economic Growth, International Journal of Advanced Science and Technology, 29(03), 6261–6267. http://sersc.org/journals/index.php/IJAST/issue/view/261

[33] Prasetyo, P.E., Setyadharma, A., & Kistanti, N.R. (2020). Social Capital: The Main Determinant of MSME Entrepreneurship Competitiveness. International Journal of Scientific & Technology Research, 9(3), 6627-6637.

[34] Prasetyo, P.E. (2019). The Reliability of Entrepreneurial Productivity as Driver of Economic Growth and Employment. International Journal of Entrepreneurship, 23(4), 1-15.

[35] Ratajczak-Mrozek, M. 2017. Network Embeddedness. Examining the Effect on Business Performance and Internationalization. Cham: Palgrave Macmillan. https://doi.org/10.1007/978-3-319-56511-8.

[36] Rout, B.S., Das, N.M., & Inamdar, M.M. 2020. COVID-19 and market risk: an assessment of the G-20 nations. Journal of Public Affairs, 2590, 1-19.

[37] Sarason, Y., Dean, T., & Dillard, J. 2006. Entrepreneurship as the nexus of individual and opportunity: a structuration theory. Journal of Business Venturing, 21(3): 286–305.

[38] Smith, W., & Chimucheka, T. 2014. Entrepreneurship, Economic Growth and Entrepreneurship Theories. Mediterranean Journal of Social Sciences, 5(4), 160-168. doi:10.5901/mjss.2014.v5n14p160

[39] Schumpeter, J. A. 1949. Economic theory and entrepreneurial history in Change and the entrepreneur. Research Center in Entrepreneurial History, Cambridge, Massachusetts: Harvard University Press.

[40] Wales, W., Gupta, V.K., Marino, L., & Shirokova, G. 2019. Entrepreneurial orientation: International, global and cross-cultural research. International Small Business Journal: Researching Entrepreneurship, 37(2), 95-104. doi: 10.1177/0266242618813423

[41] Yi, H-T., Amenuvor, F.E., & Boateng, H. 2021. The Impact of Entrepreneurial Orientation on New Product Creativity, Competitive Advantage and New Product Performance in SMEs. Sustainability, 13, 3586. https://doi.org/10.3390/su13063586

[42] Yuthas, K., Sarason, Y., & Aziz. A. 2021. Strategic Value Creation through Enterprise Blockchain. The Journal of The British Blockchain Association, 4(1), 1-10. https://doi.org/10.31585/jbba-4-1-(7)2021

[43] Zahra, S.A. 2021. International Entrepreneurship in The Post Covid World.

Journal of World Business. 56(1),   1-7.
doi:10.1016/J.Jwb.2020.101143.