

## Original Article

Pages: 1-13

# Performance of Knowledge-Based Companies and its Impact on Shaping Entrepreneurial Behaviors for Sustainable Economic Development

Ziba Pazirofteh <sup>1</sup> Reza Yousefi Saidabadi <sup>2\*</sup> Majid Fattahi <sup>3</sup>

*1 Ph.D Student, Department of Entrepreneurship, Sari Branch, Islamic Azad University, Sari, Iran.*

*2 Assistant Professor, Department of Management, Sari Branch, Islamic Azad University, Sari, Iran.*

(Corresponding Author) Email: ruosefi@yahoo.com

*3 Assistant Professor, Department of Management, Sari Branch, Islamic Azad University, Sari, Iran.*

**Received:** 2020/09/10    **Revised:** 2020/11/18    **Accepted:** 2020/12/02    **Published:** 2021/01/01

---

**ABSTRACT:** Present research examines the effect that knowledge company performance has on shaping entrepreneurial behaviors in the company. The statistical population included the members of the scientific committees at Sharif University of Technology. The estimated sample size, according to Cochran's formula, was set at 100 the individual members of which were selected using simple random sampling. This is an applied research conducted through a descriptive-correlational survey. The actual data were collected using standard questionnaires. Adopting the scale applied by Panahi Vanayee (2016), the dimensions of the company performance BB was measured and the standard questionnaire of Zampetakis (2007) was used to measure the variables of entrepreneurial behaviors. Research reliability was measured based on Cronbach's alpha. All data analyses, both descriptive and inferential, were performed in PLS3 software. We tested the research hypotheses using structural equation modelling. The results indicated that performance of the knowledge-intensive enterprise did have a positive and significant effect on entrepreneurial behaviors.

**KEYWORDS:** Performance; Knowledge-Based Company; Entrepreneurship; Entrepreneurial Behavior.

---

## HOW TO CITE THIS ARTICLE:

Pazirofteh, Z., Yousefi, R., & Fattahi, M. (2021). Performance of Knowledge-Based Companies and its Impact on Shaping Entrepreneurial Behaviors for Sustainable Economic Development. *Journal of Resistive Economics (OAJRE)*, 9(1), 1-13.

## COPYRIGHT

THIS IS AN OPEN ACCESS ARTICLE DISTRIBUTED UNDER THE TERMS OF THE CREATIVE COMMONS ATTRIBUTION (CC BY 4.0)



## 1. INTRODUCTION

The high unemployment rate in the economy may have different reasons, including low competition at work, low education, and lack of job opportunities. One effort which is made to reduce unemployment is providing job opportunities through creating entrepreneurs (Tentama and Paputungan, 2019). Entrepreneurship is considered one of the ways to raise employment level (Tunali and Sense, 2019) which can encourage economic growth and promote the nation-wide effort toward sustainable development (Bozhikin, Macke, and da Costa, 2019).

Entrepreneurial behavior refers to the ability of people to put to practice the entrepreneurship concepts in the form of identifying opportunities, taking initiative, and managing risk (Neto et al, 2018). Entrepreneurship behavior is demonstrated as a set of behaviors actualized by those people who manage an entrepreneur. Entrepreneurial behavior can also be defined as a series of developed activities by entrepreneurs for creative use of sources and pursuit of opportunities to eventually realize the valuable creativity (Cai, Peng, and Wang, 2018). There is a variety of factors that influence entrepreneurial behaviors. These factors include access to resources, ability of entrepreneurs to identify job opportunities, willingness to learn, and positive attitude to entrepreneurship. Entrepreneurial incentives underlies start of a business. This incentive encourages people to make efforts regarding the entrepreneurial behavior they desire to initiate and adopt. Individuals with high entrepreneurial drive will have an incentive to use the existing resources and develop them into job opportunities (Mulasari et al, 2020).

Entrepreneurship is important in that it can increase productivity and employment. Thus, development of entrepreneurial behaviors can serve as a criterion to measure progress and development of a nation. The more the entrepreneurial behaviors grow in a society, the more economic progress it will enjoy (Arnis et al, 2018). Entrepreneurial behavior is also important for organization since it helps it to respond to a quickly changing organizational environment and differentiate itself for financing purposes. Entrepreneurial behavior is recommended to organizations for three reasons: to improve their financial sustainability, to meet new demands in their operating environment, to respond to new opportunities to create social value (Svensson et al, 2020).

Performance of knowledge companies has gained momentum as an increasingly interesting topic, since these companies are highly efficient and are able to face the competition which is expected to promote growth and success in business. To find out about company performance, it is necessary to identify the influential factors (both internal and external) that manifest entrepreneurial behaviors. These factors involve individual and environmental factors, as well as entrepreneurial behaviors that determine performance of knowledge-intensive enterprises (Arnis et al, 2018).

Performance of knowledge-based company, as a precondition for an organization willing to engage in entrepreneurship, can affect shaping and development of entrepreneurial behaviors in that organization. Company performance has been found the most important driving force in research on entrepreneurial behaviors. It was shown that formation and development of entrepreneurial behaviors are influenced by company performance (Anderson et al, 2018). To achieve performance advantage relative to competitors, companies pursue entrepreneurial behaviors. Manifest behaviors and the behaviors that are associated with performance advantage are the actions that take advantage of product in continuity. There are concrete results from entrepreneurial activities producing performance knowledge for the firm. This knowledge is



critical as it helps company identify specific changes in the environment and facilitate organizational adaptation to these changes. Innovation in product and interaction between these innovations and company's customers are of the highest innate, strategic value to company (Eshima and Anderson, 2017).

Firm performance has effect on shaping entrepreneurial behaviors. Therefore, the potential of business players should reach its highest level, especially at the level of creativity, because, in reality, their success in achieving high performance is not determined only by process (efficiency) but also by the business player's ability or potential to innovate (or re-innovate based on a previous success from introduction of a new product or service or formula). The attitude, knowledge, and real skills that lead to creativity may occur anywhere at any point in a process extending from the choice of raw materials to the marketing of manufactured product. One of the entrepreneurial behaviors which is of key importance for business development is creativity, since with creative attitude one works out novel ideas which are the source of new innovations to meet the growing needs (Arnis et al, 2018).

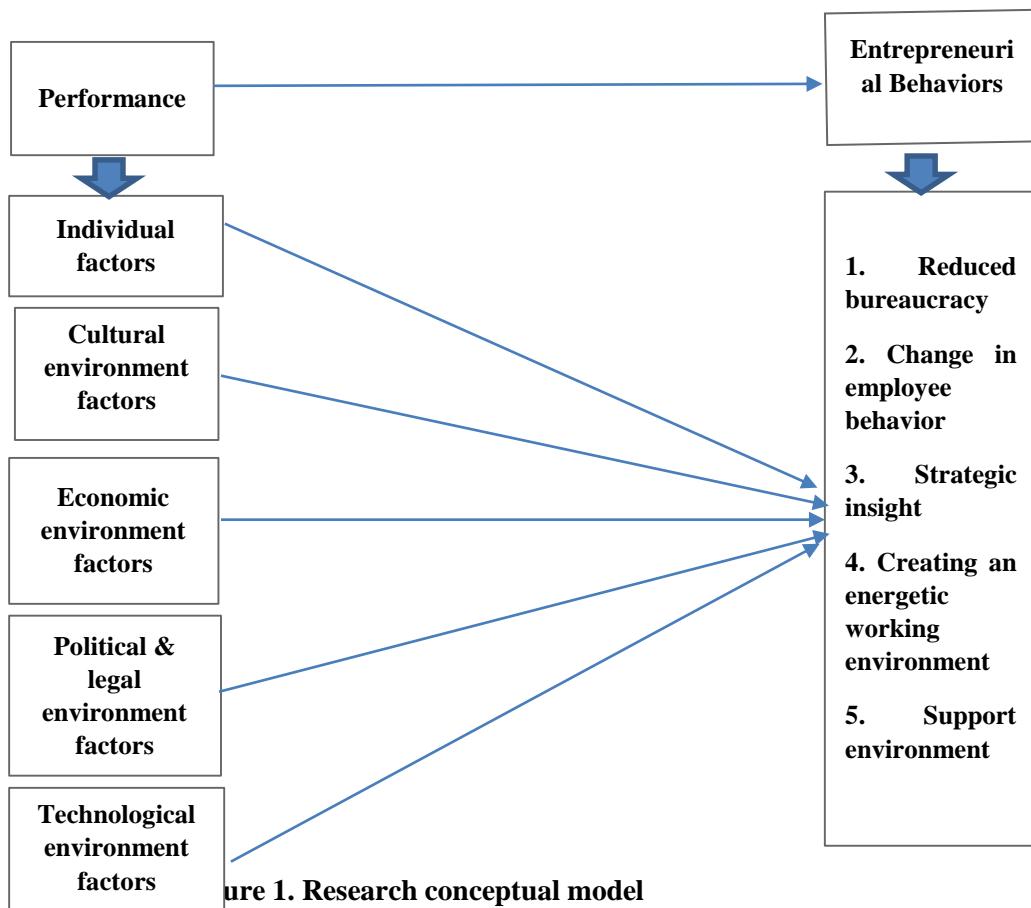
The companies with high entrepreneurial performance look for inventions and flexibility in order to seize upon opportunities and achieve the intended goals. Entrepreneurial tendency is expressed by leadership skill, integrating initiatives, and making competitive environment favorable to their advantage. These companies can quickly respond to changing environment. Entrepreneurial attitudes and behaviors are crucial for new investment to facilitate the use of new and existing knowledge to explore new market opportunities. Creative companies may tend to support new ideas and information and engage more in development of new products, services, and (operational) process. Transforming knowledge into customers gives added value and boosts firm's competitive advantage. Such organizations create a new combination of resources and products which are considered (aimed) in view of future changes (Vidic, 2018).

In a stable economic environment, the change may be slow, and the organization would have time to react and maintain its competitive advantages. In contrast, in a knowledge-based economy, the economic environment changes rapidly and the response is not the best alternative; in order to succeed, the organizations must be proactive, to anticipate, to be directed towards learning and permanent development. The main resource of a knowledge-based company is the knowledge. This company is focused on knowledge creation, acquisition, learning, use, sharing, integration, exploitation and protection in order to secure economic and social performance. From these considerations, it is clear that the knowledge-based company is the learning organization that develops over time as the result of commitment and management processes applied and constantly pursued (Dorinela, 2011). Given the above background and the importance of the topic entrepreneurship, and the limited number of the studies conducted so far on the impact of performance on shaping entrepreneurial behaviors in knowledge companies, present research was conducted to fill this gap in the prior research and meet the need felt currently for further research in this area.

## **2. RESEARCH METHODOLOGY**

This is an applied research conducted through an analytical, descriptive-correlational survey. The statistical population in this research included all the 134 members of the scientific committees at Sharif University of Technology. Cochran formula gave a sample size of 100 respondents. The individual members of this sample were selected using simple random sampling. For data collection, both documentary and survey methods were used. To collect the field data, standard questionnaires were used. The query items about the

variable "performance of knowledge-based company" are derived from the research work of Gholamrezaei, Daraie, and Panahi Vanani (2016) and the query items regarding the variable "entrepreneurial behaviors" are adopted from the questionnaire of Zampetakis (2007). Performance of knowledge-based company is considered as the independent variable and entrepreneurial behaviors as the dependent (criterion) variable. The items in both questionnaires are designed in Likert scale. The variable performance was measured by 5 dimensions (subscales) and 35 query items, and the variable entrepreneurial behaviors by 5 dimensions (subscales) and 12 query items. For performance of Knowledge Company, five areas are identified: individual factors, cultural environment factors, economic environment factors, political and legal environment factors, and technological environment factors. Based on the earlier conceptualized relationships between the involved (classes of) variables, the research model is drawn as follows:



Based on this model that assumes causal relationships between the factors, the following statements were made:

**Hypothesis 1.** Individual factors have a significant effect on entrepreneurial behaviors.

**Hypothesis 2.** Cultural environment factors have a significant effect on entrepreneurial behaviors.

**Hypothesis 3.** Economic environment factors have a significant effect on entrepreneurial behaviors.

**Hypothesis 4.** Political-legal environment factors have a significant effect on entrepreneurial behaviors.

**Hypothesis 5.** Technological environment factors have a significant effect on entrepreneurial behaviors.



### 3. FINDINGS

Data are considered adequate for analysis when their KMO index is greater than the threshold 0.6 and close to 1 and their Sig. value from Bartlett's test is smaller than the minimum acceptable level 0.05. KMO is used to assess sample adequacy. A KMO of greater than 0.6 indicates sample adequacy, otherwise it is inadequate for a factor analysis.

**Table 1.** Bartlett's test and KMO for questionnaire items

	<b>KMO test</b>	<b>0.903</b>
<b>Bartlett's test</b>	<b><math>\chi^2</math></b>	<b>4047.483</b>
	<b>df</b>	<b>1081</b>
	<b>Sig</b>	<b>0.000</b>

In the above table, KMO is higher than 0.6 in all three cases, which is acceptable, indicating that the selected sample is adequate for factor analysis.

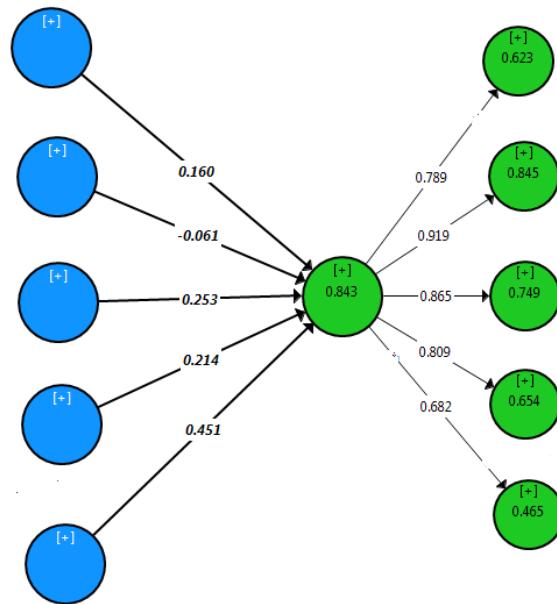
In table 2, Cronbach's alpha for all contracts is higher than 0.7, which indicates high composite reliability of the constructs. The composite reliability reported for all the constructs is higher than 0.7 (table 2), indicating that the constructs have an acceptable level of composite reliability. To examine convergent validity of the constructs, average variance extracted (AVE) was calculated. There is convergent validity when composite reliability is greater than 0.7 and AVE is greater than 0.5, meanwhile composite reliability is required to be greater than AVE. In this case, the conditions for existence of convergent validity are met.

**Table 2.** Composite reliability (CR) and convergent validity of constructs

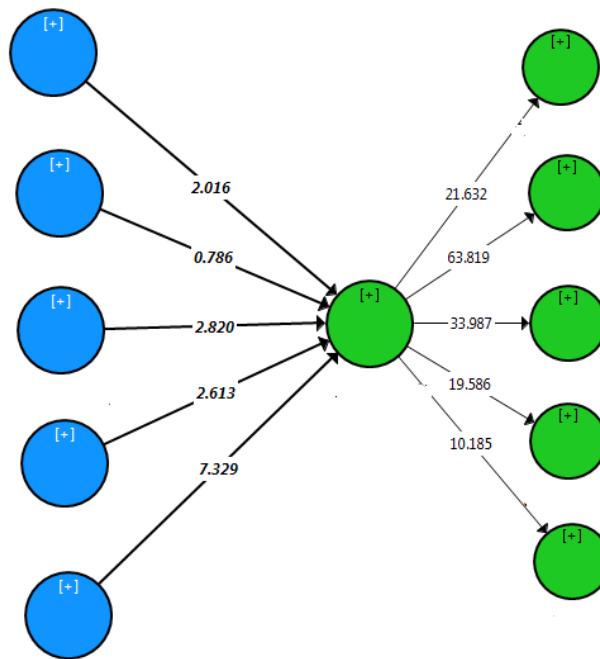
Variables	Cronbach's alpha	CR	(AVE)
<b>Creating energetic working environment</b>	0.911	0.958	0.919
<b>Strategic insight</b>	0.795	0.831	0.712
<b>Change in employee behavior</b>	0.767	0.843	0.519
<b>Individual factors</b>	0.888	0.922	0.748
<b>Economic environment factors</b>	0.835	0.901	0.752
<b>Technological environment factors</b>	0.942	0.949	0.509
<b>Political-legal environment factors</b>	0.882	0.919	0.738
<b>Cultural environment factors</b>	0.894	0.922	0.703
<b>Support environment</b>	0.752	0.890	0.802
<b>Reduced bureaucracy</b>	0.800	0.909	0.833

Given the results in tables 1 and 2, all the three conditions exist, hence convergent validity of the questionnaires is confirmed.

Having examined the measurement model, the research structural model is tested next. The graphical output of the model is presented in figures 1 and 2 as follows:



**Figure 1.** Standard path coefficients of conceptual model



**Figure 2.** The t-student test of significance for path coefficients

According to figure 1,  $R^2$  for the endogenous constructs of shaping "entrepreneurial behaviors" is 0.843 which, given the standard threshold, confirms the structural model fit.

The measure  $Q^2$  determines the model predicting power and is evaluated in light of three standard values, with 0.02, 0.15, and 0.35 representing weak, moderate, and strong prediction power of the model for



endogenous construct(s), respectively. The obtained value for this measure indicated high prediction power of the structural model regarding the endogenous constructs and confirms the structural model fit.

Another criterion proposed by Tenenhaus et al (2005) to measure the model overall fit is goodness of fit (GOF) index which is calculated as follows:

$$GOF = \sqrt{communality} \times R^2 = .723$$

**Table 3.** Communality and  $R^2$  for research variables

Variables	R Square	Communality
<b>Creating energetic working environment</b>	0.465	0.919
<b>Sstrategic insight</b>	0.654	0.712
<b>Change in employee behavior</b>	0.845	0.519
<b>Shaping entrepreneurial behaviors</b>	0.843	1.000
<b>Individual factors</b>	-	0.748
<b>Economic environment factors</b>	-	0.752
<b>Technological environment factors</b>	-	0.509
<b>Political-legal environment factors</b>	-	0.738
<b>Cultural environment factors</b>	-	0.703
<b>Support environment</b>	0.749	0.802
<b>Reduced bureaucracy</b>	0.623	0.833
<b>Mean</b>	0.697	0.749

SEM experts consider a GOF smaller than 0.1 low, between 0.1 and 0.25 moderate, and greater than 0.36 high. Given the obtained GOF (0.723), it is concluded that the tested model of the understudy sample is highly fit.

**Table 4.** Test of hypotheses using structural equation modeling (path analysis)

From variable	To variable	Path	Path coefficient ( $\beta$ )	t-value	Final decision
Individual factors	Shaping entrepreneurial behaviors		0.160	2.016	Confirm
Cultural environment factors	Shaping entrepreneurial behaviors		- 0.061	0.786	Reject
Economic environment factors	Shaping entrepreneurial behaviors		0.253	2.820	Confirm
Political-legal environment factors	Shaping entrepreneurial behaviors		0.214	2.613	Confirm
Technological factors	Shaping entrepreneurial behaviors		0.451	7.329	Confirm

The significance measure or t-value for the path between individual factors and shaping entrepreneurial behaviors, which is greater than 1.96, indicates that the effect of individual factors on shaping entrepreneurial behaviors is significant at 95 percent confidence interval. In addition the path coefficient



(0.160) for this relationship indicates the degree to which individual factors positively contribute to shaping entrepreneurial behaviors. As a result, the first hypothesis is accepted.

The significance or t-value and path coefficient for the path cultural environment factors - shaping entrepreneurial behaviors are 0.786 and - 0.061, respectively, indicating that the effect of cultural factors on shaping entrepreneurial behaviors is not significant at 95 percent confidence interval. This means that factors of cultural environment have no effect on forming entrepreneurial behaviors in the understudy organization. Hence, the research second hypothesis is not confirmed.

The significance measure (t-value) for the role of economic environment factors in shaping entrepreneurial behaviors (2.820) is greater than the threshold 1.96, indicating that the effect of economic environment factors on shaping entrepreneurial behaviors is significant at 95 percent confidence interval. In addition, the path coefficient (beta) between the two variables (0.253) shows the degree to which economic environment factors positively affect shaping entrepreneurial behaviors. That is to say, one unit change in factors of economic environment results in 0.253 unit change in entrepreneurial behaviors in the understudy organization. Hence, the research third hypothesis is accepted.

According to table 4, the significance measure (t-value) for the relationship between political-legal environment factors and shaping entrepreneurial behaviors (2.613) is greater than the minimum acceptable standard value 1.96, indicating that the effect of the factors in the political-legal environment of the organization on shaping entrepreneurial behaviors in the organization is significant at 95 percent confidence interval. In addition, the beta coefficient for the two variables (0.214) is the degree to which political-legal environment factors positively affect shaping entrepreneurial behaviors among the members of the scientific committees at this university. That is to say, one unit change in political-legal environment causes 0.214 unit change in entrepreneurial behaviors in the members of the scientific committees in this institute. This means that the political-legal environment factors significantly contribute to shaping entrepreneurial behaviors. Hence, the research fourth hypothesis is accepted.

The significance statistic (t-value) of the path between technological environment factors and shaping entrepreneurial behaviors (7.329) is greater than the standard threshold 1.96, indicating that the effect of technological environment factors on shaping entrepreneurial behaviors is significant at 95 percent confidence interval. In addition, the path coefficient (beta) for the two variables (0.451) shows the degree to which technological environment factors positively affect shaping entrepreneurial behaviors. That is to say, one unit change in factors of technological environment is followed by 0.253 unit change in entrepreneurial behaviors in the same direction in the understudy organization. This means that the technological environment factors significantly promote entrepreneurial behaviors among the members of the scientific boards in this institute. Therefore, the research fifth hypothesis is accepted.

#### **4. DISCUSSION AND CONCLUSION**

Today, entrepreneurship is referred to as the main stimulator of economy, competition and organization quality. In this regard, management and implementation of entrepreneurial behaviors are of special importance. Entrepreneurship is considered a chief factor contributing to development and a major organizational goal and a top priority to organizations, which lay grounds for evolvement, growth, and higher productivity in them. The importance of entrepreneurial behaviors for organization is in the fact that



it helps organization quickly react to a quickly changing organizational environment, but also differentiate themselves to attract finds with more favorable terms. Entrepreneurial behavior is recommended to organizations for three reasons: to improve their financial sustainability, to respond and meet new demands in their operating environment, and to seize upon new opportunities, creating thereby social values.

Knowledge-based companies seek to create a desirable condition to establish effective relationship of the owners of knowledge-intensive enterprises for commercializing innovative ideas and generating knowledge and technology in service of national wealth and development. Performance of knowledge companies can affect entrepreneurial behaviors, and shape and develop them. Performance of Knowledge Company as the prerequisite to an organization willing to engage in entrepreneurship can affect shaping and development of entrepreneurial behaviors. Firm's performance has been the most important finding in studies of entrepreneurial behaviors, i.e. it has been shown that shaping and development of entrepreneurial behaviors is mostly influenced by company performance. Performance has effect on shaping entrepreneurial behaviors. Therefore, potential of business players should reach its maximum, especially at the level of creativity. Because, in reality, their success in achieving high performance is not determined only by process (efficiency) but also by the business player's ability or potential to innovate. There is few research of value and good quality investigating the effect of performance on entrepreneurial behaviors in knowledge-intensive enterprises. Present research included one main hypothesis and five sub-hypotheses. The obtained results from test of the hypotheses indicate a positive and significant relationship between performance and shaping entrepreneurial behaviors in the understudy knowledge-intensive organization. In other words, a rise in performance of Knowledge Company is accompanied with a corresponding rise in its score for shaping entrepreneurial behaviors. Hence, the relationship of the two variables is confirmed as significant. Considering that entrepreneurial behavior serves as a strategic tool to realize organizational goals and outlooks, and given the role that performance of knowledge-based companies has in attaining these goals, modern-day organizations should give high importance to the role of performance in shaping knowledge-based behaviors, if they are going to survive in the today's highly competitive environment. Evidently, the companies that overlook these principles are destined to fail.



## REFERENCES

- Abdullahi, S (2020). Entrepreneurship Education in Humanities for Poverty Alleviation and Sustainable Economic Growth in Nigeria. **International Journal of Management, Entrepreneurship**. 13(1): 12-14.
- Anderson, B & Eshima, Y & Hornsby, J (2018). Strategic entrepreneurial behaviors: Construct and scale development. **Strategic Entrepreneurship Journal**. 8(13): 4-6.
- Arnis, N, Baga, L & Burhanuddin, B (2018). The Effect of Entrepreneurial Behavior on Salted Fish Business Performance at Muara Angke. **Indonesian Journal of Business and Entrepreneurship**. 4(1):3-6.
- Avazpour, N, Shirazi, M & Naghi, A (2019). Evaluating the Characteristics of Knowledge-Based Companies. **International Business Management**. 11(3): 279-287.
- Baloch, A (2020). The emergence of scientific research to run a knowledge-based company: nano novin polymer. **International Journal of Scientific & Technology Research**. 14(2): 12-21.
- Bozhikin, I, Macke, J & da Costa, L (2019). The role of government and key non-state actors in social entrepreneurship: A systematic literature review. **Journal of Cleaner Production**. 226: 730-747.
- Cai, L, Peng, X & Wang, L (2018). The characteristics and influencing factors of entrepreneurial behavior: The case of new state-owned firms in the new energy automobile industry in an emerging economy. **Technological Forecasting and Social Change**. 13(5): 14-16.
- Chahine, Y (2020). The Impact of Entrepreneurship on Economic and Social Development. **Journal of Public Administration and Governance**. 10(2): 297.
- Cross, O & Daniel, C (2020). The Effect of Corporate Strategy to Company Performance. **Asian Journal of Business and Management**. 7(8): 2321-2802.
- Diogo, J, Carvalho, C, Parreira, P, Baptista, F & Mónico, L (2019). Entrepreneurship and business internationalization. **SocioEconomic Challenges**, 11(2): 21-24.
- Dorinela, C (2020). Knowledge Based Company – a Theoretical Approach. **Ovidius University Annals, Economic Sciences Series**. 11(2): 307-310.
- Eltaria, A & Wahyu, A (2018). THE IMPACT OF ENTREPRENEURIAL BEHAVIOR ON SALES VOLUME. **International Journal of Management, Entrepreneurship, Social Sciences, and Humanities**. 14(1): 1.
- Eshima Y & Anderson B S (2017). Firm growth, adaptive capability, and entrepreneurial orientation. **Strategic Management Journal** 38 (3): 770–779.
- Hilmersson, M & Johanson, M (2016). Speed of SME Internationalization and Performance. **Management International Review**. 56 (1): 67-94.
- Isatayeva, G, Seitova, V, Koptayeva, G, Turlybekova, A, & Mutaliyeva, A (2019). Financing of young knowledge-based companies after the financial crisis: The case of Kazakhstan. **Entrepreneurship and Sustainability Issues**. 15(2): 1226-1234.



Lans, T (2020). Entrepreneurship: Opportunity Identification and Entrepreneurial Behavior. 10.1007/978-3-319-71058-7\_40-1.

Mulasari, S A, Tentama, F, Kusuma, R, Sukesi, T & Sulistyawati, S (2020). Entrepreneurial Behavior In Entrepreneurial Pioneer In Ngalang Village. **International Journal of Scientific & Technology Research**. 8: 2038-2045.

Neto, R, Rodrigues, V, Stewart, D, Xiao, A & Snyder, J (2018). The influence of self-efficacy on entrepreneurial behavior among K-12 teachers. **Teaching and Teacher Education**. 72.

Neto, R, Rodrigues, V & Lusinchi, D (2020). Entrepreneurial Behavior Scale: A Validation Study with Teachers. 13(2): 27-46.

Setiaji, K (2020). A Measure of Entrepreneurial Behavior of University Students: A Theory of Planned Behavior Approach, **Journal of Management and Leadership**, 14(3):12-15.

Steinbruch, F, Nunes, M & Nascimento, L (2020). Companies' performance on the internationalization process, **Journal of business Management**, 12(1):14-17.

Svensson, P, Andersson, F & Faulk, L (2020). Organizational capacity and entrepreneurial behavior. **Nonprofit Management and Leadership**. 10(1): 1002

Tentama, F & Paputungan, T (2019). Entrepreneurial intention of students reviewed from self-efficacy and family support in vocational high school. **International Journal of Evaluation and Research in Education**. 8(2): 557.

Tunali, C & Şener, S (2019). The Determinants of Entrepreneurship in Turkey. **Procedia Computer Science**. 15(8): 648-652.

Vidic, F (2018). Entrepreneurial Orientation and Knowledge Creation and Their Impact on Company Performance. **SocioEconomic Challenges**. 12(2): 37-48.

Zeng, Q, Beelaerts van Blokland, W, Santema, S C & Lodewijks, G (2020). Composite Indicators of Company Performance: A Literature Survey. **Performance Improvement Quarterly**.

Zhang, L & Luo, G (2020). Risk Assessment for Product-oriented and Knowledge-based Companies. International , **Journal of Evaluation and Research in Education**. 18(3): 55-67.



#### JOURNAL DESCRIPTION

Name: *Journal of Resistive Economics (OAJRE)*.

Homepage: [www.oajre.ir](http://www.oajre.ir)

e-ISSN: [2345-4954](#)

Volume & Issue: *Vol 9, No 1, Jan 2021*

Publisher: *Imam Hossein University*

Publisher Address: *No 19, 36th Street, Shahr Ara, Jalal Ale Ahmad High Way, Tehran, Iran.*

Publisher Phone: +989214240452

#### JOURNAL STATISTICS

No of Figures: 2

No of Tables: 4

No of References: 29

No of Authors: 3

No of Pages: 13

#### How to Cite This Article

Pazirofteh, Z., Yousefi, R., & Fattahi, M. (2021). Performance of Knowledge-Based Companies and its Impact on Shaping Entrepreneurial Behaviors for Sustainable Economic Development. *Journal of Resistive Economics (OAJRE)*, 9(1), 1-13.

#### OPEN REVIEW PROCESS (IN ABSTRACT)

Submitted for Reviewer(s): 25/09/2020

First Reviewer	Second Reviewer	Final Reviewer
Acceptance of Review: 25/09/2020	Accept of Review: 05/10/2020	Acceptance of Review: 25/10/2020
Review Result: 18/11/2020	Review Result: 19/10/2020	Review Result: 13/11/2020
Result: <input checked="" type="radio"/> Acceptance without Amendment <input type="radio"/> Require to Amend (Literal, Substantial, etc.) <input type="radio"/> Rejection	Result: <input type="radio"/> Acceptance without Amendment <input checked="" type="radio"/> Require to Amend (Literal, Substantial, etc.) <input type="radio"/> Rejection	Result: <input checked="" type="radio"/> Acceptance <input type="radio"/> Rejection
Back to Author(s): 20/11/2020		
Amendment by Author: 25/10/2020		

#### COPYRIGHTS

© 2021 The Author(s). This is an open access article distributed under the terms of the Creative Commons Attribution (CC BY 4.0), which permits unrestricted use, distribution and reproduction in any medium, as long as the original authors and source are cited. No permission is required from the authors or the publishers.



#### AUTHOR (S) BIOSKETCHES

##### Ziba Pazirofteh

Ph.D Student, department of entrepreneurship, Sari Branch, Islamic Azad University, Sari, Iran. **Email:**z.mahan889@gmail.com

##### Reza Yousefi Saidabadi

Assistant Professor, department of management, Sari Branch, Islamic Azad University, Sari, Iran.

**(Corresponding Author)** **Email:** ruosefi@yahoo.com **Phone:**+989128893899

##### Majid Fattahi

Assistant Professor, department of management, Sari Branch, Islamic Azad University, Sari, Iran.

**Email:** Majid.fattahi59@gmail.com



#### **ACKNOWLEDGMENTS**

We would like to thank to Dr. Teymour Hosseini (Department of accounting and finance, Rotterdam School of Management, Erasmus University of Rotterdam, the Netherlands) for their expert advice and comments on this paper.

#### **ETHICAL CONSIDERATION**

Authenticity of the texts, honesty and fidelity has been observed.

#### **AUTHOR CONTRIBUTIONS**

R.Yousefi developed the theoretical formalism, performed the analytic calculations and performed the numerical simulations. Both Z.Pazirofteh and R.Yousefi authors contributed to the final version of the manuscript.M.Fattahi supervised the project.

#### **CONFLICT OF INTEREST**

Author/s confirmed no conflict of interest.