



## The impact of strategic dexterity in achieving leadership performance

**Assistant Lect. Mohammed Hammadi Jaber AL-bakhati1**

E-mail: [mohammed.hamadi@uomisan.edu.iq](mailto:mohammed.hamadi@uomisan.edu.iq)

<https://orcid.org/0000-0001-9642-1659>

**Assistant Lect. Murtaza Khachi Hayyawi2**

[murtadha.k@uomisan.edu.iq](mailto:murtadha.k@uomisan.edu.iq)

<https://orcid.org/0009-0004-6395-8993>

**Lect. Dr. Mohammed Ahmed Waham3**

E-mail: [mohammedwaham@uomisan.edu.iq](mailto:mohammedwaham@uomisan.edu.iq)

<https://orcid.org/0009-0007-8843-862X>

Department Business of Administration, College of Administration and Economics, University of Misan, Amarah, 62001, Misan, Iraq.

**Abstract:** The aim of the current research is to determine the effect of the independent variable, strategic ambidexterity, on Pioneering performance. A sample of Petrochina's administrative leadership was selected, represented by (67) managers in the company. A set of programs and statistical methods were used, represented by SPSS, EXCEL, Pearson's correlation coefficient, and Cronbach's alpha coefficient. The independent variable, strategic ambidexterity, was measured by two dimensions: (exploration, exploitation). As for the dependent variable, represented by Pioneering performance, it was measured by a set of dimensions: (Creativity...initiative, taking risks), as the research concluded with a set of results, the most important of which was that Petrochina operates on the concept of strategic ingenuity through the expertise and administrative skills present in the research sample company, and this enables it to keep up with competition with its counterparts. The research also reached a set of recommendations, the most important of which was the need for high attention to the concept of strategic ambidexterity in the company under study by intensifying training and qualification programs for its administrative leaders and enabling them to use the available technology to a greater extent.

**Keywords:** strategic dexterity, Pioneering performance

### Chapter one Research Methodology

#### Firstly: the research problem

All organizations seek to try to survive, to achieve distinction, and to try to create new horizons for development in order to confront the many economic and social challenges, including technological developments, intense competition, the development of new ways of working and methods, globalization, etc. So all organizations are concerned the performance Entrepreneurship because of its positive repercussions on the reality of organizations in the business environment, and successful organizations work The goal is to achieve strategic dexterity due to its great importance in strengthening and supporting organizations in the face of competition in today's



markets, as both Strategic dexterity And the performance Entrepreneurs have an influential role in the success, survival and distinction of organizations. From this standpoint, a group of questions emerge that our current research tries to answer, namely:

1. What is it The role of strategic dexterity in the work of organizations?
2. What is the role of strategic acuity in achieving the performance pioneer?
3. Does the research sample organization possess the dimensions of strategic ingenuity?
4. Does the organization have the dimensions of the research sample? the performance pioneer?

### **Secondly: the importance of research**

The importance of the research stems scientifically from the reality of highlighting the relationship of the variables represented by ( Strategic dexterity and performance Pioneer) which has not been studied or measured according to the researcher's knowledge, and this will reveal the extent of the correlation or influence between them to invest the relationship of the aforementioned variables in a correlation or other influence with related variables as well as supplying the administrative scientific side with the results of the current research, but in practice it is an important addition in the field Businesses and informing organizations of the importance and impact of these changes on the level of competition in the labor markets.

### **Third: Research objectives**

1. Standing on the role of strategic dexterity in work Research sample company.
2. Diagnosing the dimensions of strategic dexterity and availability in Research sample organization.
3. stand on Role Strategic dexterity in achieving leadership performance.
4. Determine the availability of dimensions Pioneering performance in Research sample organization.

### **Fourthly: Research Hypotheses:**

The research hypotheses were as follows:

- 1- The first main hypothesis** There is a statistically significant correlation between the variable of strategic prowess the performance entrepreneur in the research sample company.
- 2- The second main hypothesis** There is a statistical and significant effect of the strategic ingenuity variable in performance entrepreneur in the research sample company.

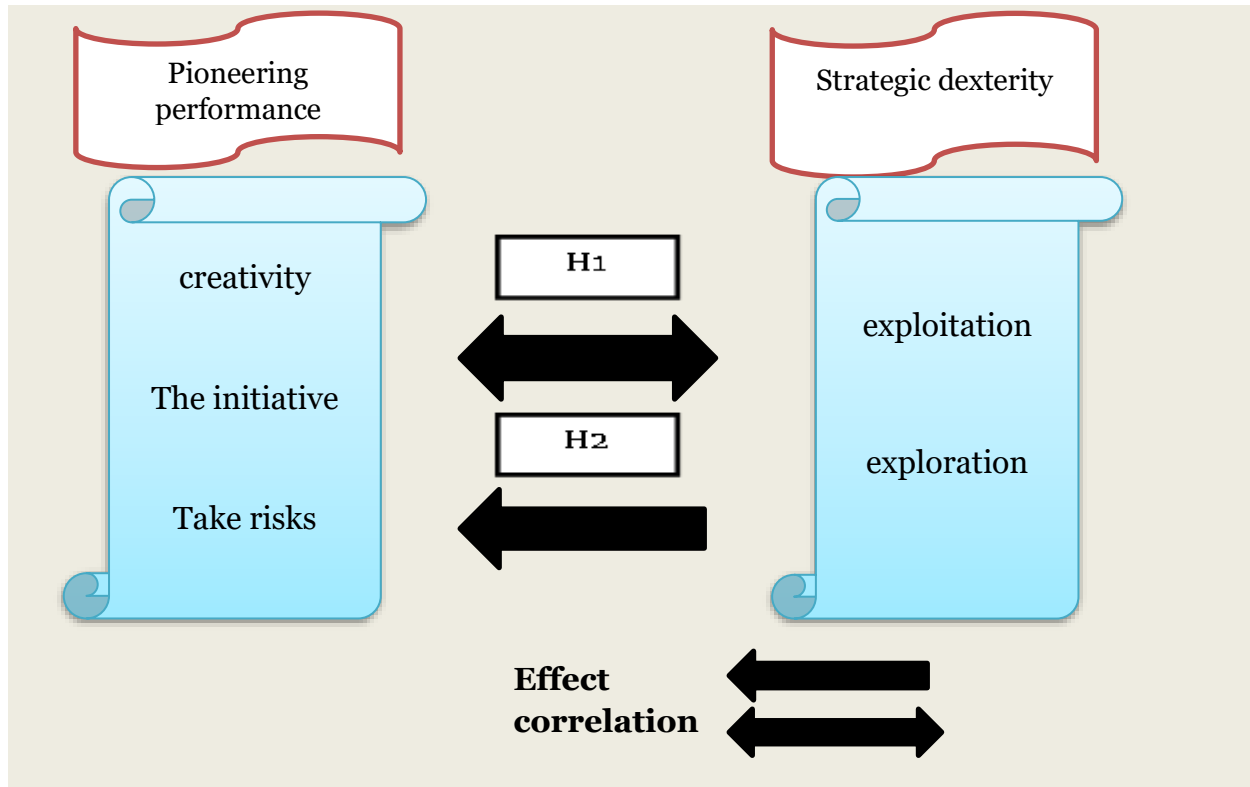


Figure (1) The hypothetical outline of the research prepared by the researcher based on a group of previous studies

### Chapter II Theoretical framework

#### Firstly : The concept of strategic dexterity

The ability of organizations to explore a specific competency related to a new achievement or to provide a new service while reducing risks, and this means that it is a purely exploratory process. (Peters, et al 2022: 4) That would search for all that is new of ideas and creations created from TC or a new service (Halevi, et al. 2015:229). As it is defined as a set of actions and activities that are taken to achieve a future response to any emergency circumstance and arm the organization with the ability to adapt to any subsequent changes and invest exploratory capabilities in creating new capabilities (Mashahadi, et al 2016:2). Hence, the main reason for strategic ingenuity is the organizational activities represented by the organization's capabilities and internal resources, as well as the implementation of the strategic decision through change (Qaiyum, et al, 2016:6). It was also defined as the ability to adapt to changes and manage the organization's business efficiently and effectively, as it is based on two main axes: exploration and exploitation of the organization's resources and available opportunities (Bustinza, et al, 2020:6). It has been defined as the ability to achieve compatibility in two strategies at the same time, namely exploration and exploitation, as exploration consists in searching for opportunities, testing them, and being flexible in applying



them and responding to them. As for exploitation, it is represented by the organization's selection and refinement of its resources in addition to implementation, and this certainly requires the support of senior management to ensure the achievement of goals (Alharafsheh, et al, 2021: 3992). From another point of view, it has been defined as the investment of the two strategic options, exploration and exploitation, to gain a competitive advantage that enables the organization to face the comparative competitive forces in the markets (Ciasullo, et al, 2022:4).

### **Secondly: The importance of strategic dexterity**

Strategic ingenuity is characterized by enabling the organization to learn exploratory and exploitative as well as to make the best use of its efficiency (Peters, et al, 2022: 4)). In addition to improving the quality of the product or service, reducing costs, and increasing reliance on modern technological means in all its activities (Halevi, et al, 2015:230) Knowing that this includes the current, medium and long-term performance at the industrial and service levels (Masahadi et al, 2016: 4). And to clarify the importance of strategic ingenuity through what it contains of two elements, which are exploitation and exploration, so at the level of the first element, which is represented by exploitation, it means developing a specific resource or ability in the organization and adding value to them, and it is the difference in the actual reality required of it, but at the level of the second element represented by exploration It means investing experiences Work to develop the current resources, capabilities and skills of the organization and thus build an organizational and strategic capacity that enables the organization to overcome the market competition race in the business environment (Ciasullo, et al, 2022: 4). So, knowing the requirements of customers and what are the requirements for services, enhancing the capabilities and competencies of the organization, discovering potential risks, and making the best use of current resources and skills is the most important characteristic of strategic ingenuity (Alharafsheh et al, 2021:3992). Hence, strategic ingenuity enables organizations to make decisions that change the general economic and development reality through optimal investment of opportunities and resources and the employment of modern technologies in a way that improves the general situation of organizations (Khanet al, 2020:4).

### **Third: Dimensions of strategic dexterity**

There are many points of view on the dimensions of strategic ingenuity, as the focus has been on non-technical creativity because it has become far from the lights of work in light of the development of technical innovations and innovations (Masahadi et al, 2016: 5). Also, the adoption of technological innovation, organizational design and organizational learning were among the dimensions that were adopted in the study (Bustinza, et al, 2020: 6). But according to the current research environment and what is compatible with the study (Alharafsheh, et al, 2021: 3992) And (Musigire et al, 2017) The following dimensions (exploitation, exploration) were approved:

**1- Exploration** It is the development of the organization's capabilities towards excellence and growth in order to ensure greater effectiveness by investing in the elements of knowledge it possesses (Oehmichen, et al 2017:284). It also promises that it is learning and thinking outside the box with the aim of acquiring new technical and market experiences (2016: 2, (Fu et al.) It also represents the acquisition of expertise and skills through experiences and learning from them with the aim of discovering new opportunities that will develop the reality of the organization (2015: 313, Sinha).



**2- Exploitation** Refers to the ability of the organization to exploit the set of means and applications of knowledge and technology and employ them in facing change, challenging risks and ensuring the achievement of the organization's goals of survival, growth and continuity (2017:4,Chen). It also represents the organization's ability to benefit from its current resources and turn them into opportunities for continuous success and creativity (Gastaldi, et al, 2022: 3)

### **Pioneering performance**

#### **Firstly: The concept of Pioneering performance**

The concept of Pioneering performance represents the ability to meet customer requirements and deliver in a timely manner through the ability of employees to realize these requirements (Laguador, 2013: 1). It is one of the important areas in the life of the organization, as it is a key factor in obtaining the initiative and getting ahead of competitors by creating a precedence for the organization and a competitive advantage by its ability to avoid risks and seize opportunities (2017: 4, Gao et al). From another point of view, awareness of the change at the level of the organization's culture and its values for success will lead to the development and improvement of its performance and the transition to Pioneering performance (Jelilov & Onder, 2016: 9). It also represents the process of translating and applying the captured ideas and converting them into competitive outputs (Tajvidi, 2015: 85). Since, through the organization's resources represented by human capital, it is possible to activate the Pioneering performance in investing in opportunities and gaining a competitive advantage (De Geest et al, 4: 2018) On the other hand, Pioneering performance is the extent of the individual's ability to perform and believe in the tasks entrusted to him. It represents (Setiawan, 236: 2014). So it is an analysis of the extent of the ability to create, introduce what is new, invest opportunities, and the ability to achieve (Sutanto et al, 254: 2018). It is also considered as the ability that the organization possesses in facing environmental uncertainty and developing social and economic realities: (Cho & Lee 2018 :128). In addition, it enhances the organization's ability to turn challenges into opportunities because it is based on improving the performance of the organization and exerting unremitting efforts in pursuit of the truth of leadership in competition, and therefore the Pioneering performance will lead to the development of strategic plans in a way that guarantees its success (Van Vuuren & Botha, 4: 2010) . It is also targeting the best opportunities through a set of efforts, strategic plans, capabilities and resources to achieve the highest results (Akande, 2012: 346). And the process of blending the strategic intent with the Pioneering orientation to achieve competitive goals (Rensburg, 2013: 16). Targeting new businesses through innovation and creativity in decision-making and the outcome is the general goal of the organization (Aliyu et al, 2015: 142). It is also a process of investing experiences and skills in adding Pioneering knowledge to the organization's work inputs. (Mcmullan & Thomas 2016:129) In another opinion, it is the process of linking the strategic function with emerging and new ideas by work teams or individuals (Arsic, 2017: 7). Where it represents a focused process on a number of activities, represented by identifying problems at work, choosing the appropriate method to solve or address them, identifying strengths and weaknesses, and setting standards for evaluation through joint and exemplary work based on achieving Pioneering goals (Jalod, 2021:96), and from here it can be considered the main factor for growth Sustainability and structural transformation towards proactive activities in achieving Pioneering performance (Brixiov et al, 2020:3).



### **Secondly : The importance of Pioneering performance**

Studies have shown that Pioneering performance is important in that it acquires new skills, capabilities and experiences for the organization, thus exploiting opportunities, creating new businesses and adding value to these businesses by entering new markets (Nordqvist & Zellweger, 2010:23) This is also done through creativity and innovation that ensure the survival, growth and continuity of the organization by providing it with greater profits (Gifford, 2017: 70). And in the work of organizations, the most important inputs of economic decisions is the Pioneering performance, as the group of countries that achieved a significant pioneering performance was reflected in the growth of their economy, which made them encourage the orientation towards Pioneering performance and provide the potentials of orientation for it to show the capabilities of individuals and their development in this field (Javad et al, 2015 :232). Among the challenges facing Pioneering performance is the availability of sufficient financing to achieve it, as well as the financial capabilities of the organization represented by the costs of technology and communication, the availability of information and the lack of human capital, experience and skill (Kamung et al, 2014: 77). It also represents the ability of organizations to create organizational and societal value.

### **Third : Pioneering performance dimensions:**

**Also, you have a group of different dimensions of Pioneering performance, but with the compatibility of the current research, a study was adopted (de Jongi et al.; 2011:5), represented in the following:**

**1- creativity** Organizations can gain the ability to grow and adapt to any changes that occur in their environment through creativity, as they are able to seize opportunities efficiently and effectively (Lee & Tan, 2012:985). as it considers facing challenges and addressing problems through creative tools and methods as well as making the best use of available opportunities (Zuber & Moody, 2018: 64), as it is the necessary tool in responding to market developments and developing the service or product and thus Increasing the market share of the organization (Balan & Lindsay, 2010: 4), and it is also at the level of employees, as it is represented by the relentless pursuit of individuals to perform tasks completely and proficiently, and at the level of the organization, it is represented by a group of activities that the organization excels in performing (Cardoso et al, 2012: 40), as Creativity is a key factor in stimulating the Pioneering performance of organizations (Dafel, 27:2012).

**2- The initiative** It is one of the most positive work approaches and has a fundamental role in raising the level of performance in general by motivating workers to address work problems and face challenges (Curcuruto et al, 2016: 4), and the organization whose performance is Pioneering is that organization that tries to stay ahead of the competition in order to obtain the highest possible market share (Callaghan & Venter 2011: 31), as the initiative is the factor associated with the Pioneering performance, which The researchers' interest in this regard increased (Callaghan, & Venter, 2011:32), where most researchers emphasized the role of the initiative in showing the organization's ability to produce a product or provide a service and identify work requirements through initiative, dialogue, and rapid response to environmental fluctuations in the labor market (Blocker et al, 2011: 218), and the initiative of the organization in the competitive field and sometimes is to monitor the competitor's moves and respond to them with a better competitive advantage than what the competitor offers and harvest a larger market share, but most often it is



in the form of a challenge to the competition directly or by entering the competitor's arena directly (Kusmawardhani, 2013:37).

**3- Take risks:** represents the possibility of difference in the expected results when the organization engages in a particular business or enters a particular market (Dafel, 2012:29), as it is defined as the possibility of the expected result differing from the reality obtained, or it is a group of threats that are likely to change the possible results (Boholm, 2019: 717), as it represents the warning that prompts the organization to seriously verify the its resources, energy, and performance to ensure overcoming environmental uncertainty (Kraus, et al,2012, 166), and environmental uncertainty imposes a set of risks that would make the results negative, but the organization's climate and organizational culture that stimulates creativity and innovation is able to face these risks and make the results positive and at a level Ambition (Garcia et al, 2015: 1096), as the organization takes actions that can not only lead to positive consequences but also do not lead to losses if the employee is unsuccessful. Specifically, the risks involved in entrepreneurship may be associated with reputational damage. , or peer resistance (Escrig-Tena, A etal: 2022:3),Also, risks would enhance innovative decision-making by trying to avoid environmental uncertainty by allocating the required resources (Boohene 2012: 79).

### Chapter III

#### Work side

##### Firstly: Structural stability test of the measuring instrument (Cronbach's Alpha)

To ensure the reliability of the data obtained from the researcher, the statistical method represented by the structural stability test is used, such as the results of the stability test for the dimensions and paragraphs of the questionnaire, and in order to determine the reliability and validity of the scale used in the research, the researcher relied on a test (Cronbach's Alpha), which is acceptable in behavioral studies at the standard of (70%) and schedule The following explains the above:

Table (1) for Cronbach's alpha coefficient

The main variables	Sub dimensions	Cronbach's alpha coefficient for dimension	Cronbach alpha coefficient for scale
Strategic dexterity	exploitation	.948	<b>.921</b>
	exploration	.939	
Pioneering performance	Creativity	.906	864
	The initiative	.818	
	Take risks	.841	

### Secondly: Description and diagnosis of research variables:

#### 1- Description and diagnosis of the independent variable strategic acuity

from the table(2)Below it is clear that the independent variable of strategic dexterity achieved an arithmetic mean (3.942) and a standard deviation of (0.373) with a coefficient of difference of (140) and with a relative importance of (78.84), and this indicates that the variable has a high degree of importance according to the answers of the sample, which confirms that the role of strategic ingenuity will reflect positively on the reality of the researched company and will enhance its performance at the required level in various aspects of exploiting current opportunities and resources and exploring new business for the company and entering into As for the dimension level, the exploration dimension came first at the dimension level, and it achieved an arithmetic mean of (3.989) and a standard deviation of (0.384), as well as a coefficient of variation of (148) It also achieved a very important percentage (79.78). As for the other dimension represented by exploitation, it ranked second in the order of dimensions, as it achieved an arithmetic mean of (3.989), a standard deviation of (0.384), and a coefficient of difference of (148), with a relative importance level of (.79.78).

Schedule (2)Description and diagnosis of the independent variable

the independent variable	N	Arithmetic mean	standard deviation	coefficient of difference	Dimensional arrangement	Relative importance
exploration	67	3,989	0.384	.148	1	79.78
exploitation	67	3,895	0.445	.198	2	77.91
Strategic dexterity	67	3,942	0.373	.140		78.84

#### 2- Description and diagnosis of the dependent variable Pioneering performance

table shows (3) The results achieved for the dependent variable, Pioneering performance achieved an arithmetic mean (3.818) and a standard deviation of (0.373) with a coefficient of difference of (139) and with a relative importance of (.76.36), and this indicates that the variable has a high degree of importance according to the answers of the sample, which confirms that interest in Pioneering performance will give the organization the advantage of initiative and the ability to take risks and deal with them in a way that transforms them into opportunities to be invested through the creative advantage that makes them able to keep pace with changes And to stay in the competitive race in the market environment. As for the dimension level, the initiative dimension came first at the dimension level, and it achieved an arithmetic mean of (3.684) and a standard deviation of (0.458), as well as a coefficient of difference of (211) It also achieved a very important percentage.(73.68). As for the risk tolerance dimension, it ranked second in the order of dimensions, as it achieved an arithmetic mean of (3.914), a standard deviation of (0.508), and a coefficient of difference of (259), with a relative importance level of (78.28) Likewise, the creativity dimension was ranked second in the order of dimensions, as it achieved an arithmetic mean of



(3.856), a standard deviation of (0.418), and a coefficient of difference of (.176), with a relative importance level of (.77.13).

table (3) Description and diagnosis of the variant affiliate

dependent variable	N	Arithmetic mean	standard deviation	coefficient of difference	Dimensional arrangement	Relative importance
creativity	67	3,684	0.458	.211	3	73.68
The initiative	67	3,914	0.508	.259	1	78.28
Take risks	67	3,856	0.418	.176	2	77.13
Pioneering performance	67	3,818	0.373	.139		76.36

### Third: Testing research hypotheses

**1- The first main hypothesis :**"Tis four association relationship Moral significance between

Variable strategic dexterity And The leading performance of the research sample company From the table below, it is possible to know the correlation between the independent variable strategic prowess and the dependent variable Pioneering performance, through the total index of the correlation, which amounted to (.814\*\*)At a significant level (0.05), this indicates the existence of a significant correlation between the research variables, strategic dexterity as an independent variable and Pioneering performance is a dependent variable, and this indicates that increasing interest in strategic ingenuity by exploring opportunities and exploiting current resources by the research sample company will lead to stimulating the role of Pioneering performance as well, then This proves the validity of the first main hypothesis, which states that there is a significant correlation between the two variables.

Table (4) results of correlation analysis

the independent variable	Strategic dexterity
dependent variable	
Pioneering performance	.814**

\*:P≤0.05

N=67

**2- The second main hypothesis** There is a significant effect of the variable strategic ingenuity in the Pioneering performance of the research sample company.

The regression analysis table shows that there is a significant effect of the independent variable strategic prowess on the dependent variable Pioneering performance Since the reliance on the calculated value of F, which amounted to (2,156) which is the largest tabular value of which is (1.671\*) at a significant level (0.05) and degree of freedom (1065) Since the value of T has reached (27,815) which is also the largest tabular value of it, this indicates the significance of the effect. It is

the coefficient of determination R whose value is (.663) which indicates that the independent variable is able to explain (66%) of the different factors in the variable, and that the residual and the adult (33%) due to a group of reasons not included in the current research.

Table (5) Results of the effect relationship analysis

the independent variable / dependent variable	Strategic dexterity		F	T	R2
	$\beta_0$	$\beta_1$	calculated	Calculated	
Pioneering performance	.614	.813	2,156	127,815	.663

\*:P≤0.05

df:(1.65)

N=67

### Conclusions

- 3- Petrochina operates with the concept of strategic ingenuity and at a certain level through the expertise and managerial skills present in the research sample company, and this enables it to keep up with the competition with peers.
- 4- The Petrochina Company, the research sample, has the potential to explore new opportunities, as well as exploit current resources and potential capabilities at a limited level.
- 5- The concept of strategic ingenuity enhances the role of leadership performance in the research sample company at a limited level due to the lack of interest in this aspect by the administrative leaders working in the researched company.
- 6- The research sample company has a limited level of initiative in seizing opportunities, as well as the creative capabilities available to it and its ability to bear the risks that afflict the corporate environment.

### Recommendations

- 7- The necessity of paying high attention to the concept of strategic ingenuity in the researched company by intensifying training and qualification programs for its administrative leaders and enabling them to use the available technology more.
- 8- The research sample company should enhance the capabilities of exploring the opportunities and strengths of the company through more advanced assessment programs, as well as highlighting and revealing more about the capabilities available to it and investing it better, as well as its current capabilities.
- 9- The need to improve and raise the level of the company's leading performance by paying attention to the concept of strategic ingenuity as a competitive advantage that enables it to lead in its field of business.
- 10- Enhancing the dimensions of Pioneering performance by improving decisions related to proactive moves and taking the initiative in investing in available opportunities, as well as investing in the best creative capabilities that raise the level of performance of the company, as well as increasing its ability and flexibility in facing environmental changes to achieve the goal of survival, growth and continuity.



### References

1. Akande, Olusola , "Strategic Pioneering skills' influence on small businesses' performance in Oyo and Osun Western States-Nigeria", Research Journal in Organizational Psychology and Educational Studies (RJOPEs) .Vol . 1 , No . 6. (2012): 345-352
2. Alharafsheh, M., Zraqat, O. M., Houssien, A. H. M. A., & Shajrawi, A. (2021). Crisis Management Strategies During the COVID-19 Pandemic and its Impact on Performance Developing of Jordanian Universities: The Mediating Role of Strategic Ambidexterity. PalArch's Journal of Archaeology of Egypt/Egyptology, 18(4), 3985-4007.
3. Aliyu, Mukhtar Shehu, Halilu Bello Rogo, and Rosli Mahmood , "Knowledge management, Pioneering orientation and firm performance: The role of organizational culture", Asian Social Science. Vol. 11, No. 23. (2015): 140-152.
4. Arsić, Siniša , "Specific aspects of strategic entrepreneurship in family companies and non-family companies", Journal of Process Management. New Technologies. Vol. 5, No, 1, (2017) 37-42.
5. Balan, P. & Lindsay, N. (2010) " Innovation capability, Pioneering orientation and performance in Australian hotels", Cooperative Research Centre for Sustainable Tourism in Australia.
6. Blocker, C. P., Flint, D. J., Myers, M. B., & Slater, S. F. (2011). Proactive customer orientation and its role for creating customer value in global markets. Journal of the Academy of Marketing Science, 39(2), 216-233.
7. Boholm, M. (2019). How do Swedish Government agencies define risk?. Journal of Risk Research, 22(6), 717-734.
8. Boohene, R. & Yiadom, E. & Yeboah, M. (2012) "An Empirical Analysis of the Effect of Pioneering Orientation on Firm Performance of Auto Artisans in the Cape Coast Metropolis", Developing Country Studies, ISSN 2225-0565, Vol 2, No.9, pp.77-86.
9. Brixiová, Zuzana, Thierry Kangoye, and Mona Said , "Training, human capital, and gender gaps in Pioneering performance", Economic Modelling. Vol. 85. (2020).1-31
10. Bustinza, O. F., Vendrell-Herrero, F., & Gomes, E. (2020). Unpacking the effect of strategic ambidexterity on performance: A cross-country comparison of MMNEs developing product-service innovation. International Business Review, 29(6), 101569.
11. Callaghan, C and Venter, R , "An investigation of the Pioneering orientation, context and Pioneering performance of inner", Southern African Business Review, Vol. 15, No1. (2011).28-48.
12. Callaghan, C. & Venter, R. (2011) "An Investigation of the Pioneering Orientation, Context and Pioneering Performance of inner-city Johannesburg Street Traders", Southern African Business Review Vol. 15 No. 1, pp.28-48.
13. Cardoso de Sousa, F., Pellissier, R., & Monteiro, I. P. (2012). Creativity ,innovation and collaborative organizations. The International Journal of Organizational Innovation, 5(1), 26-64.
14. Chen Yan, (2017), Dynamic ambidexterity: How innovators manage exploration and exploitation, School of Business, Stevens Institute of Technology, Castle Point on Hudson, Hoboken, NJ 07030, U.S.A.



15. Cho, Y. H., & Lee, J.-H. (2018), "Pioneering orientation, Pioneering education and performance", *Asia Pacific Journal of Innovation and Entrepreneurship*, 12(2), 124–134.
16. Ciasullo, M. V., Montera, R., Cucari, N., & Polese, F. (2020). How an international ambidexterity strategy can address the paradox perspective on corporate sustainability: Evidence from Chinese emerging market multinationals. *Business Strategy and the Environment*, 29(5), 2110-2129
17. Curcuruto, M., Mearns, K. J., & Mariani, M. G. (2016). Proactive role-orientation toward workplace safety: Psychological dimensions, nomological network and external validity. *Safety science*, 87, 144-155.
18. Dafel, F.P (2012) " An Essesment of Pioneering Orientation in an agriBusiness", Master Thesis, North- West University.
19. De Geest, David S., Scott Seibert, and Ernest O'Boyle. "The relationship of general mental ability to Pioneering firm performance: A metaanalysis", *Journal of occupational and organizational psychology*. Vol.91.No..2 .(2018).1-34.
20. de Jongi, J.P.J., Parkerii, S.K, Wennekers, S. , Wu, C." *Corporate Entrepreneurship at the Individual Level :Measurement and Determinants*", 2011.
21. Escrig-Tena, A. B., Segarra-Ciprés, M., García-Juan, B., & Badoiu, G. A. (2022). Examining the relationship between work conditions and Pioneering behavior of employees: does employee well-being matter?. *Journal of Management & Organization*, 1-23.
22. Fox, Julie M." *Organizational entrepreneurship and the organizational performance linkage in university extension*". Diss. The Ohio State University, 2005.
23. Fu, N., Flood, P. C. & Morris, T., (2016). Organizational ambidexterity and professional firm performance: The moderating role of organizational capital. *Journal of Professions and Organization*, 3(1), 1-16.
24. Gao, Y., Ge, B., Lang, X., & Xu, X. (2017), "Impacts of proactive orientation and Pioneering strategy on Pioneering performance: An empirical research", *Technological Forecasting and Social Change*.
25. García-Granero, A., Llopis, Ó., Fernández-Mesa, A., & Alegre, J. (2015). Unraveling the link between managerial risk-taking and innovation: The mediating role of a risktaking climate. *Journal of Business Research*, 68(5), 1094-1104
26. Gastaldi, L., Lessanibahri, S., Tedaldi, G., & Miragliotta, G. (2022). Companies' adoption of Smart Technologies to achieve structural ambidexterity: an analysis with SEM. *Technological Forecasting and Social Change*, 174, 121187.
27. Gifford, E. A. (2017), *Exploring knowledge intensity in entrepreneurship: a quantitative study of knowledge, innovation and performance in Pioneering firms*.
28. Halevi, M. Y., Carmeli, A., & Brueller, N. N. (2015). Ambidexterity in SBUs: TMT behavioral integration and environmental dynamism. *Human Resource Management*, 54(S1), 223-238.
29. Hasan, Fatima and Almubarak, Muneer, "Factors influencing women entrepreneurs' performance in SMEs, *World Journal of Entrepreneurship*", *Management and Sustainable Development* , Vol. 12, No.2.(2016). 82 – 101.
30. Hosseini, Mojtaba, Hossein Dadfar, and Staffan Brege. "Firm-level entrepreneurship and international performance: A simultaneous examination of orientation and action". *Journal of International Entrepreneurship* .Vol. 16.No.3. (2018): 338-368.



31. Jalod, K.M., Hasan, A. J., & Hussain, A.N. (2021). Strategic Vigilance and its Role in Pioneering Performance: An Analytical Study of the Views of a Sample of Managers in the Ur Company in Nasiriyah, Iraq, *Multicultural Education*, 7(1).
32. Javad Y., Alireza Kh, Yaghoob M. (2015). Organizational Entrepreneurship and Its Impact on the Performance of Governmental Organizations, *Procedia - Social and Behavioral Sciences Journal*, 169. pp. 75-87
33. Jelilov, Gylych and Onder, Evren. "Entrepreneurship in Nigeria Realities on Ground", *Pyrex Journal of Business and Finance Management Research*, Vol.2, No.3, (2016).6-9.
34. Kamunge, Mbugua Stephen, & Njeru, Agnes, & Tirimba, Ondabu Ibrahim (2014), Factors Affecting the performance of small and micro enterprises in limuru town market of kiambu county, Kenya, *International Journal of Scientific and Research Publications*, Vol. 4, Issue 12. p.p.1-20.
35. Karimi, Abbas, Javad Sofiyabadi. and Mohammad Hasan Mobaraki, "Corporate Entrepreneurship in Training Institutions". *International Research Journal of Applied and Basic Sciences*. Vol. 3, No.11. (2012): 2273-2280.
36. Khan, Z., Amankwah-Amoah, J., Lew, Y. K., Puthusserry, P., & Czinkota, M. (2020). Strategic ambidexterity and its performance implications for emerging economies multinationals. *International Business Review*, 101762
37. Kraus, S. & Rigtering, C. & Hosman, V. (2012) "Pioneering Orientation and the business performance of SMEs: a quantitative study from the Netherlands", *Review Management Science* 6, pp.161-182.
38. Kusmawardhani, A. (2013) "The Role of Pioneering Orientation on Firm Performance:", Doctor of Philosophy Thesis, Sydney Business School, University of Wollongong.
39. Laguador, Jake, M, "Correlation study of personal Pioneering competency and the Academic performance in operations Management of Business Administration Student", *International Journal of Research in Business and Social Sciences* May, Vol. 3, No. 5, (2013): 61-70.
40. Lee, L. & Tan, E. (2012) "The Influences of antecedents on Employee Creativity & Employee Performance : A Meta-Analytic Review", *Interdisciplinary Journal of Contemporary Research in Business*, Vol.4, No.2, pp.984-996.
41. Loong Lee, Wee, and Aik Lee Chong. "The effects of Pioneering orientation on the performance of the Malaysian manufacturing sector". *Asia-Pacific Journal of Business Administration*. Vol. 11.No.1. (2018): 30-45.
42. Mashahadi, F., Ahmad, N. H., & Mohamad, O. (2016). Strategic innovation ambidexterity and the internationalization performance of small and medium enterprises: An insight into herbal-based small and medium enterprises (HbSMEs). *World Journal of Entrepreneurship, Management and Sustainable Development*.
43. McMullan, Retired W. Edward, and Thomas P. Kenworthy. "Creativity and Pioneering performance". Springer International Pu, (2016).
44. Musigire, S., Ntayi, J., & Ahiauzu, A. (2017). Does strategic ambidexterity moderate organizational support-sales performance relationship for financial services in Uganda?. *African Journal of Business Management*, 11(4), p.



45. Nordqvist, M., & Zellweger, T. (Eds.). (2010). *Transgenerational entrepreneurship: Exploring growth and performance in family firms across generations*. Edward Elgar Publishing.
46. Oehmichen, et al., (2017), Boards of directors and organizational ambidexterity in knowledge-intensive firms, *The International Journal of Human Resource Management*, 28:2, 283-306
47. Oriarewo, G. O., S. A. Ofobruku, and Z. A. Tor. "The Implications of Emotional Intelligence on Pioneering Performance: A Discussion". *South Asian Journal of Social Studies and Economics* (2019): 1-13. *South Asian Journal of Social Studies and Economics*. Vol.3.No.1. (2019). 1-13.
48. Peters, K., & Buijs, P. (2022). Strategic ambidexterity in green product innovation: Obstacles and implications. *Business Strategy and the Environment*, 31(1), 173-193.
49. Qaiyum, S., & Wang, C. L. (2016, September). Examining strategic ambidexterity as an antecedent of functional and cross-functional ambidexterity. In *British Academy of Management 2016 Annual Conference*, Newcastle University (pp. 6-8)
50. Sebikari, Kagame Vincent. (2014) "PIONEERING PERFORMANCE AND SMALL BUSINESS ENTERPRISES IN UGANDA" *International Journal of Small Business and Entrepreneurship Research*, Vol. (2), No. (4), pp 1-12
51. Setiawan, Jenny Lukito. "Examining Pioneering self-efficacy among students". *Procedia-social and behavioral sciences*. The 5th Indonesia International Conference on Innovation, Entrepreneurship, Vol.115,No.1. (2014): 235-242.
52. Sinha, S. (2015). The exploration-exploitation dilemma: a review in the context of managing growth of new ventures. *Vikalpa*, 40(3), 313-323.
53. Sutanto, Eddy Madiono, Peter J. Sigiols, and Ivando Putih. "University students' Pioneering performance. Diss. Petra Christian University", *Journal of Economics, Business, and Accountancy Ventura* Vol. 21, No. 2, August – November, (2018) 251 – 258.
54. Tajvidi, Mina. "Strategic directions, innovation capacity and Pioneering firm performance in high-tech SMEs", UK. Bangor University (United Kingdom), 2015.
55. Van, Rensburg, Deryck J. "IS Strategic Entrepreneurship a Pleonasm?" . *Journal of management and strategy*, Vol. 4, No. 1, (2013), pp: 1 – 25.
56. van Vuuren, Jurie, and Melodi Botha. "The practical application of an Pioneering performance Business and Enterprise Development". Vol. 17, No. 4, (2010).
57. Zuber, C. D., & Moody, L. (2018). Creativity and innovation in health care. *Nursing Administration Quarterly*, 42(1), 62-75.