



The Role of Knowledge Management in Corporate Entrepreneurship Through Innovation and Research & Development

Fataneh Amiri¹, Ahmadreza Kasraei^{*2}, Mohamadreza Kabaranzad Ghadim³

1. Department of Entrepreneurship Management, Central Tehran Branch, Islamic Azad University, Tehran, Iran.

2. Department of Industrial Management, Central Tehran Branch, Islamic Azad University, Tehran, Iran (Corresponding author).

3. Department of Industrial Management, Central Tehran Branch, Islamic Azad University, Tehran, Iran.

* Corresponding author email address: Kasrai49@yahoo.com

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Abstract

Corporate entrepreneurship is an entrepreneurial process that organizations undergo to enable all employees to function as entrepreneurs, allowing them to continuously, swiftly, and efficiently carry out individual or group activities within the central organization. In this context, knowledge management, innovation, and research and development (R&D) processes can be influential. This study aims to examine the role of knowledge management in corporate entrepreneurship through innovation and R&D. To achieve this, a review of the theoretical literature was first conducted to establish the research framework. Based on this framework, a conceptual model was formulated, and research hypotheses were developed. To test the research hypotheses, the statistical population consisted of managers and experts from a knowledge-based company operating in the oil and gas sector, with a total of 56 individuals. Since no sampling was conducted, the questionnaire was distributed among all personnel. The questions in the questionnaire were adapted from reliable sources, and their validity and reliability were confirmed. Given the non-normal distribution of the data, the partial least squares (PLS) method and Smart PLS 2 software were employed for statistical analysis. Based on the significance values related to the hypotheses, all five hypotheses were confirmed. The effect of knowledge management on R&D was found to be 0.816, the effect of knowledge management on corporate entrepreneurship was 0.842, the effect of knowledge management on innovation was 0.881, the effect of R&D on corporate entrepreneurship was 0.874, and the effect of innovation on corporate entrepreneurship was 0.825. The findings of this study indicate that knowledge management can influence not only corporate entrepreneurship but also innovation and R&D. Furthermore, innovation and R&D can contribute to enhancing corporate entrepreneurship. Considering the components and indicators of each of these variables can help improve three dimensions: innovation, the development of new products and services, or risky processes, ultimately impacting performance.

Keywords: Knowledge management, corporate entrepreneurship, research and development, innovation.

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1. Introduction

Corporate entrepreneurship is an entrepreneurial process that organizations undergo to enable all employees to function as entrepreneurs, allowing them to continuously, swiftly, and efficiently carry out individual or group activities within the central organization [1, 2]. Corporate entrepreneurship consists of three dimensions: innovation, the development of new products and services or risk-taking processes. It is a process that drives organizational activities towards creativity, innovation, risk-taking, and proactiveness. When entrepreneurship is carried out by an individual or a group within an organization, it is referred to as corporate entrepreneurship. In essence, corporate entrepreneurship is the process an organization undertakes to enable all employees to act as entrepreneurs. In organizations that lack the necessary conditions for entrepreneurship, certain variables are required to foster corporate entrepreneurship [3-5].

The operational environment of organizations, both public and private, has undergone significant changes over the past decade. This environment has transformed from a static and unresponsive setting into a highly dynamic and ever-changing one. Consequently, organizations need to be flexible in nearly all aspects of their existence to ensure survival. Additionally, the need to retain and continue utilizing intellectual capital has further necessitated the adoption and application of knowledge management [6]. Today, the generation and development of knowledge are recognized as key driving forces for all nations. Undoubtedly, the industrial, economic, and social development of any country depends on continuous research in all fields.

Research and development (R&D) is a concept that has been seriously considered and discussed since the 20th century. It encompasses a set of constructive activities aimed at increasing human knowledge, advancing social culture, and applying this knowledge in new contexts [7, 8]. In the realm of commerce, R&D signifies movement towards a brighter future through long-term activities in knowledge and technology based on scientific research. The primary objectives of R&D include increasing knowledge, discovering potential applications for new findings, enhancing well-being and convenience, and boosting both domestic and international competitiveness. The strategic orientation of nations toward extensive and competitive market entry has underscored the necessity of R&D in industry and commerce [9].

In the global marketplace, organizations that can meet contemporary customer demands for high-quality, diverse, and cost-effective products and services in the shortest time frame will secure the largest market share. This requires the continuous implementation of R&D processes. Research and development involve discovering new knowledge about products, processes, and services and applying that knowledge to create new and improved products, processes, and services that cater to market demands [10]. The significance of R&D is evident among the factors that directly contribute to strong economic performance in nations and emerging companies in the 21st century. In every well-established and experienced company, R&D initiatives support business goals. By producing better and more innovative products, improving operational processes, and offering specialized consulting to other companies and customers, a firm can achieve remarkable economic growth [11].

Every industry and business, whether traditional or emerging, must continually design and expand its product range. This is necessary due to the continuous advancement of technology, the progress of competitors, and the shifting preferences of customers. Such evolution is not possible without a well-structured R&D program. In summary, the R&D process includes activities that companies undertake to innovate and introduce new products and services, which are essential for business growth and market positioning [12].

Knowledge management offers numerous advantages, including rapid responses to key business challenges, better identification of activities, cost reduction, fostering an organizational culture of growth and success, capacity building, employee stimulation and motivation, and improved recruitment and retention. The goal of knowledge management is to generate, preserve, and disseminate existing knowledge within organizations to ensure the proper and systematic training of employees. When employees receive structured and precise training, organizations experience enhanced efficiency and performance across all aspects [13, 14].

Knowledge management encourages knowledge sharing by engaging those who are eager to learn while also motivating those who are less engaged in learning to actively participate in knowledge creation and dissemination. For example, a department within an organization may have conducted an experiment or research study years ago, adding data to the organization's knowledge repository. However, with time, this information becomes outdated, necessitating an update. In an organization lacking a knowledge

management system, the process of identifying information sources and relevant resources must be repeated from scratch. In contrast, an organization that implements knowledge management ensures that past research methods and findings remain accessible to all employees, facilitating their [15-17].

Past research evidence indicates that knowledge management is a variable that influences business process management and that its dimensions can enhance business process management [18]. Many researchers have examined the relationship between business process management and organizational performance, leading to positive findings demonstrating its impact. Knowledge management can improve organizational performance and, at the same time, strengthen the components of business process management. Focusing on business process management components also enables better resource utilization and contributes to improved organizational performance [6].

Innovation is a creative process through which resources and ideas lead to new solutions. In other words, innovation is the transformation of an idea or invention into a business or other practical applications. Innovation strategies in a systemic approach involve creating initiatives related to science, education, research, technological development, and industrial renewal. Thus, innovation encompasses a broad range of concepts, from research activities to the formulation of technological strategies, and is significantly influenced by strategic planning [19, 20].

A review of innovation generations reveals that market pull and technology push are two key driving forces behind innovation. Additionally, in recent generations, stakeholder participation in the innovation process has increased. Consequently, innovation enhances the competitiveness of an economy in selected sectors, contributing to overall social wealth. Entering the new millennium, with the rapid changes in technology industries worldwide, an organization's ultimate competitiveness and survival depend on its ability to develop and produce new and innovative products and services [21, 22].

Nations worldwide are leveraging innovation to boost productivity and improve economic conditions, driven primarily by intensifying global competition [23, 24]. Innovation is a fundamental driver of entrepreneurship and growth, and entrepreneurial firms are distinguished by their

commitment to innovation. Research has shown that innovation in organizations serves as a key driver of industrial competitiveness and national development. Modern organizations that engage in greater innovation are more successful in responding to dynamic environments and developing new capabilities that enhance their performance. Therefore, understanding the challenges of innovation and proposing appropriate solutions to address them is critical. Each organization, depending on its specific activities, must define innovation within the different dimensions of its structure and strive to improve innovation across all these dimensions [25].

Improving the level of corporate entrepreneurship is the most fundamental issue in entrepreneurial organizations. This can be achieved by focusing on and emphasizing various variables, ultimately leading to enhanced organizational performance and productivity. The objective of this study is to examine the role of knowledge management, innovation, and R&D in corporate entrepreneurship and assess their impact. Based on the aforementioned discussion, the primary research question of this study is: To what extent does knowledge management influence corporate entrepreneurship through innovation and research and development?

2. Methodology

This study is applied in terms of its objective and employs a descriptive-survey approach for data collection. It is also classified as a correlational study. The statistical population consists of managers and experts from a knowledge-based company operating in the oil and gas sector, totaling 56 individuals. Since no sampling was conducted, a census approach was used, and the questionnaire was distributed among all personnel.

Given the data collection technique, the research instrument was derived from existing studies and adapted from the primary research. A five-point Likert scale was used for the questionnaire items, where "5" represented "strongly agree" and "1" represented "strongly disagree." The questionnaire items were extracted from relevant research articles, and modifications were made based on expert opinions. The number of items, their sequence, and their sources are presented in Table 1.

Table 1. Structure of the Research Questionnaire

Variable	Number of Questions	Question Sequence
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Knowledge Management	6	1-6
Research & Development	5	7-11
Innovation	5	12-16
Corporate Entrepreneurship	6	17-22

Furthermore, construct validity was assessed using convergent validity based on the average variance extracted (AVE) index and discriminant validity. Composite

reliability (CR) was also used to measure reliability. A summary of these values is presented in [Table 2](#).

Table 2. Factor Loadings and Significance of Questionnaire Items (Construct Validity)

Question	Factor Loading	t-statistic	Question	Factor Loading	t-statistic
Q1	0.744	6.594	Q12	0.523	3.824
Q2	0.818	4.152	Q13	0.628	3.223
Q3	0.751	3.661	Q14	0.892	35.591
Q4	0.438	4.870	Q15	0.872	33.569
Q5	0.679	3.661	Q16	0.884	22.470
Q6	0.645	4.754	Q17	0.804	19.224
Q7	0.628	12.696	Q18	0.901	46.592
Q8	0.414	9.417	Q19	0.891	34.183
Q9	0.882	16.207	Q20	0.803	13.333
Q10	0.739	12.357	Q21	0.855	25.268
Q11	0.931	10.060	Q22	0.825	13.991

3. Findings and Results

To analyze the data and test the hypotheses, it was first necessary to determine whether the data distribution was normal. For this purpose, the Kolmogorov-Smirnov test was used. Given that the significance levels for all variables were

less than 0.05, the data distribution was not normal. Consequently, the partial least squares (PLS) method was employed for hypothesis testing within the structural equation modeling framework using Smart PLS version 2 ([Table 3](#)).

Table 3. Normality Test of Data Distribution

Variable	Significance Level	Type of Distribution
Knowledge Management	0.000	Non-Normal
Research & Development	0.000	Non-Normal
Innovation	0.000	Non-Normal
Corporate Entrepreneurship	0.000	Non-Normal

The significance model (Figure 1) and standardized path coefficient model (Figure 2) are presented below. The appropriate threshold for significance values is above 1.96,

while for standardized estimates, it should be greater than 0.4.

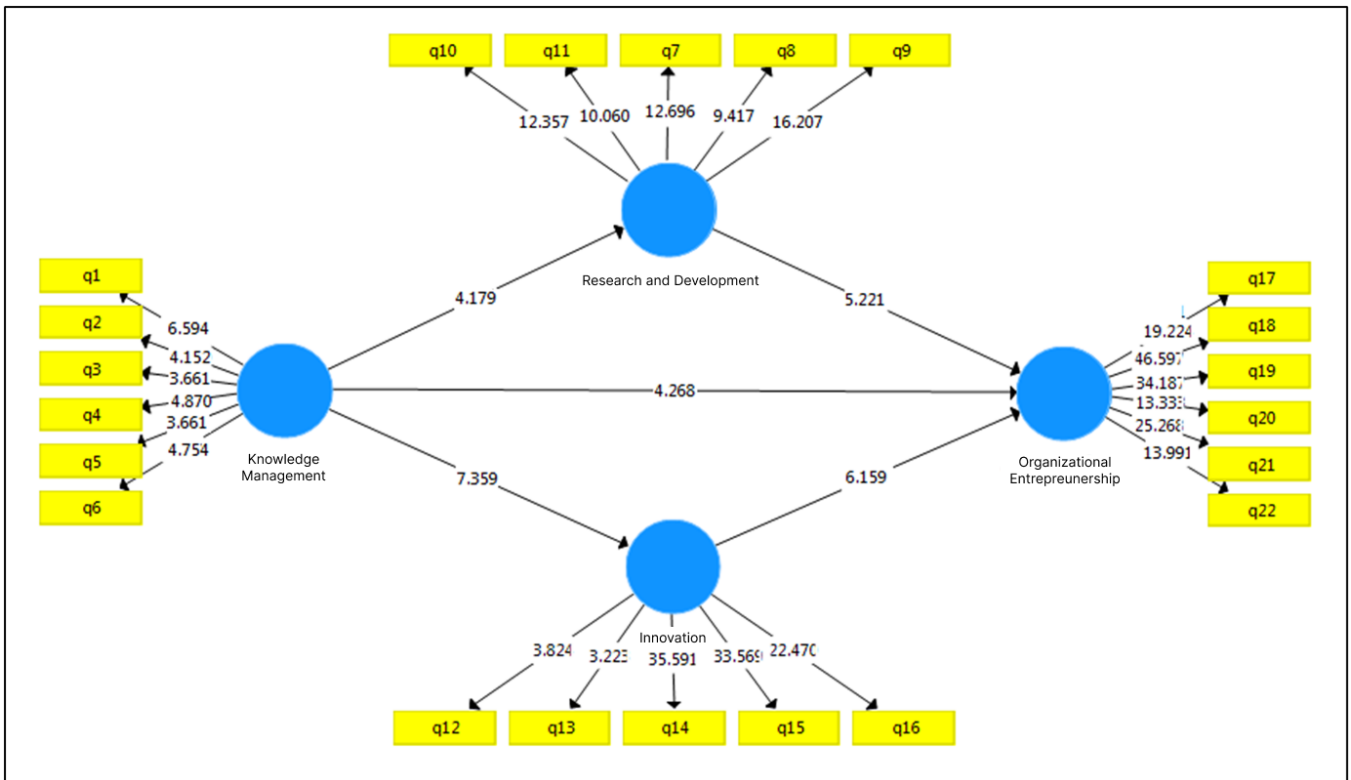


Figure 1. Significance Model

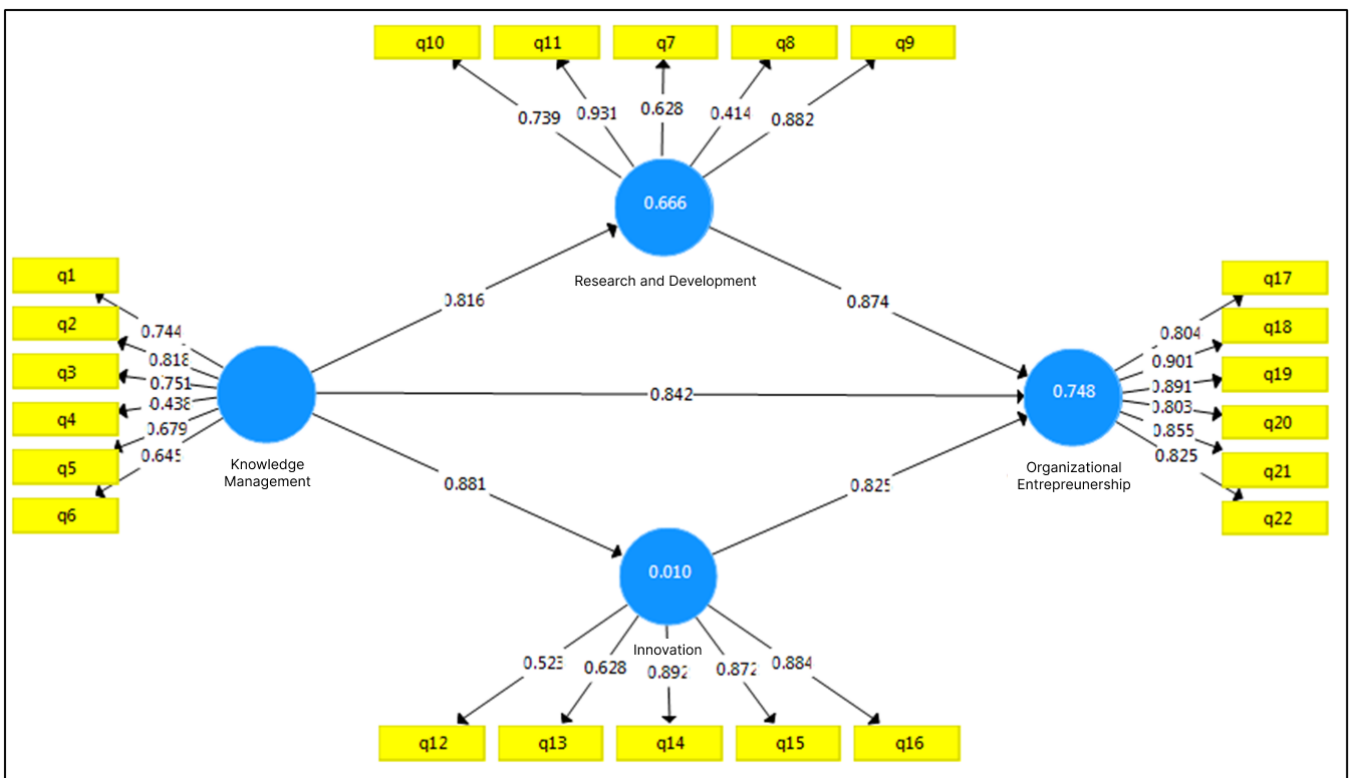


Figure 2. Standardized Path Coefficient Model

The values for discriminant validity of the variables are presented in Table 4. Since the diagonal values are greater

than the values in the rows and columns to the right and below, discriminant validity is confirmed.

Table 4. Discriminant Validity

Variables	Knowledge Management	Research & Development	Innovation	Corporate Entrepreneurship
Knowledge Management	0.807			
Research & Development	0.631	0.734		
Innovation	0.519	0.347	0.782	
Corporate Entrepreneurship	0.362	0.449	0.121	0.668

Model fit indices, including the average variance extracted (AVE > 0.5) and composite reliability (CR > 0.7), are presented in Table 5. The results indicate that AVE values are above 0.5 and CR values exceed 0.7, which are

considered acceptable. Additionally, Table 5 demonstrates that the model fit is highly satisfactory, as all indices are close to 1 and the RMSEA falls within the recommended range.

Table 5. Model Fit Indices, AVE, and Composite Reliability

Variable	NFI	RFI	IFI	TLI	CFI	RMSEA	AVE	CR
Knowledge Management	0.942	0.962	0.954	0.911	0.957	0.000	0.662	0.871
Research & Development	0.891	0.972	0.931	0.955	0.954	0.000	0.641	0.865
Innovation	0.947	0.933	0.862	0.875	0.866	0.000	0.612	0.871
Corporate Entrepreneurship	0.865	0.901	0.758	0.996	0.920	0.000	0.686	0.886

Recommended values: NFI, RFI, IFI, TLI, and CFI should be close to 1, and $0 \leq RMSEA \leq 0.1$.

A summary of the hypothesis testing results is presented in Table 6.

Table 6. Summary of Hypothesis Testing Results

No.	Hypothesis	Significance Value	Result	Path Coefficient
1	Knowledge management influences research & development.	4.179	Confirmed	0.816
2	Knowledge management influences corporate entrepreneurship.	4.268	Confirmed	0.842
3	Knowledge management influences innovation.	7.359	Confirmed	0.881
4	Research & development influences corporate entrepreneurship.	5.221	Confirmed	0.874
5	Innovation influences corporate entrepreneurship.	6.159	Confirmed	0.825

4. Discussion and Conclusion

Corporate entrepreneurship is a process in which organizational management seeks to implement creative ideas to seize environmental opportunities. Simply defined, corporate entrepreneurship refers to entrepreneurial activities conducted within a large organization. Through entrepreneurship, an organization strives to enhance its dynamic capabilities and competitiveness within the industry. Corporate entrepreneurship is an entrepreneurial process undertaken by an organization to enable all employees to function as entrepreneurs, allowing them to efficiently and continuously carry out individual or group

activities within the central organization. Entrepreneurship is defined as an activity that, through creativity, introduces something new with added value by utilizing time, resources, risk, and collaboration. Entrepreneurship is not limited to individuals; it can also be organizational. Even large companies, whether public or private, can engage in entrepreneurship.

Knowledge management can be applied in complex organizational settings to generate reliable solutions. Similarly, research and development (R&D) can be utilized in intricate organizational contexts to provide effective solutions. Additionally, R&D enhances employee productivity and creates added value for goods and services. Investment in R&D is a commonly recognized indicator of

technological innovation [26]. By implementing R&D activities and adopting innovations related to new technologies, organizations can foster creativity and innovation, thereby facilitating the emergence of opportunities and corporate entrepreneurship. One of the key elements in an organization is idea generation, which leads to corporate entrepreneurship and the development of new concepts within the organization [6]. In fact, knowledge management can be effectively applied in complex organizational environments to generate reliable solutions. Corporate entrepreneurship plays a significant role in fostering creativity and innovation, ultimately leading to the generation of new ideas within an organization [27].

Accordingly, this study aimed to examine the role of knowledge management in corporate entrepreneurship through innovation and R&D. By reviewing theoretical foundations and previous studies, the research framework was developed, leading to the formulation of a conceptual model and five research hypotheses. To test the hypotheses, a questionnaire was utilized, whose validity and reliability were confirmed. The questionnaire was distributed among the statistical sample, which consisted of 56 individuals. Given the non-normal distribution of data and the nature of the model, the partial least squares (PLS) method, a subset of structural equation modeling (SEM), was used, and all five research hypotheses were confirmed.

The results for the first hypothesis demonstrated that knowledge management significantly influences R&D. Based on hypothesis testing, the impact of knowledge management on organizational performance was found to be 0.816. This finding aligns with prior studies [21, 28, 29]. The influence of knowledge management on corporate entrepreneurship was measured at 0.842, consistent with the findings of Kantur et al. (2016). Furthermore, knowledge management was found to impact innovation by 0.881 [30]. Therefore, leveraging employees' knowledge and experience is essential for improving and increasing R&D, corporate entrepreneurship, and innovation. Knowledge is the most valuable asset of any organization. Organizations that possess this resource can better address existing challenges and perform more successfully in competitive environments.

The present era is characterized by rapid and profound technological transformations, emphasizing the integration of information and the active participation of creative and knowledge-oriented human resources rather than solely operational employees. Consequently, strategic management aims to maximize the effective use of knowledge to address uncertainties, maintain competitive

positioning, and foster creativity and innovation to expand market presence. This requires organizations to recognize knowledge management as a strategic necessity in enhancing competitiveness.

Based on these findings, the following recommendations are proposed: Organizations should visit and benchmark successful companies to enhance their knowledge and experience. Knowledge sharing and experience exchange should be prioritized, with incentives provided where necessary. Suitable platforms, such as computer-based systems, should be developed for knowledge and experience transfer.

The results of the fourth hypothesis indicated that R&D significantly influences corporate entrepreneurship, with an impact of 0.874. Hypothesis testing also revealed that the effect of knowledge management on business process management was 0.742. This finding is in line with prior studies [23, 24, 31]. Engaging in R&D activities facilitates the generation of new ideas, leading to creativity, innovation, and entrepreneurship.

Based on the analysis of the fifth hypothesis, innovation was found to significantly influence corporate entrepreneurship, with an effect size of 0.825. This result aligns with previous studies [6, 32, 33]. Consequently, it is recommended that organizations implement information systems and software to develop structured processes and conduct continuous monitoring to ensure adherence. Additionally, successful organizations should be visited for knowledge-sharing and benchmarking. Knowledge exchange should be actively encouraged, and incentives should be provided where necessary. Computer-based systems should serve as effective platforms for knowledge and experience transfer.

Formal structures should be established to monitor and oversee knowledge-related activities. Methods and procedures for acquiring and transferring knowledge should be effectively communicated to all employees. Organizational training units should expand their knowledge acquisition efforts by utilizing both internal and external instructors. Organizations should swiftly respond to competitors' actions to maintain their market position.

Future researchers are encouraged to conduct similar studies in other organizations and compare their findings with those of the present research. Additionally, given the conditions of the studied organizations, future studies should develop models to enhance organizational performance and efficiency and conduct precise evaluations and comparisons of their outcomes.

Authors' Contributions

Authors equally contributed to this article.

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Declaration of Interest

The authors report no conflict of interest.

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Ethical Considerations

All procedures performed in this study were under the ethical standards.

References

- [1] J. Schönwälder and A. Weber, "Maturity levels of sustainable corporate entrepreneurship: The role of collaboration between a firm's corporate venture and corporate sustainability departments," *Business Strategy and the Environment*, vol. 32, no. 2, pp. 976-990, 2023, doi: 10.1002/bse.3085.
- [2] L. M. Marques, J. Ferreira, S. Kraus, and R. V. Mahto, "Organizational Antecedents of Corporate Entrepreneurship: A Quantitative Investigation From Portugal," *The Journal of Entrepreneurship*, vol. 31, no. 3, pp. 483-513, 2022, doi: 10.1177/09713557221136130.
- [3] C. J. García and B. Herrero, "Corporate Entrepreneurship and Governance: Mergers and Acquisitions in Europe," *Technological Forecasting and Social Change*, vol. 182, p. 121845, 2022, doi: 10.1016/j.techfore.2022.121845.
- [4] A. Rodríguez-Peña, "Assessing the Impact of Corporate Entrepreneurship in the Financial Performance of Subsidiaries of Colombian Business Groups: Under Environmental Dynamism Moderation," *Journal of Innovation and Entrepreneurship*, 2021, doi: 10.1186/s13731-021-00152-w.
- [5] P. M. Kreiser, D. F. Kuratko, J. G. Covin, R. D. Ireland, and J. S. Hornsby, "Corporate entrepreneurship strategy: extending our knowledge boundaries through configuration theory," *Small Business Economics*, vol. 56, pp. 739-758, 2021, doi: 10.1007/s11187-019-00198-x.
- [6] H. Bayat, A. Rouhi, and S. Arabi, "Examining the impact of business process management implementation on the performance improvement of insurance companies," in *In 9th International Conference on Management, Accounting, and Economic Development*, 2022.
- [7] T. G. Valderrama, J. Sánchez-Ortiz, and E. Mulero-Mendigorry, "Knowledge Production And commercialization From R&D: The Pharmaceutical Sector," *Management Decision*, vol. 61, no. 13, pp. 222-247, 2023, doi: 10.1108/md-05-2022-0567.
- [8] J. H. Choi, J. Yoon, and J. M. Song, "Adaptive R&D Contract for Urgently Needed Drugs: Lessons from COVID-19 Vaccine Development," *Omega: The International Journal of Management Science*, vol. 114, p. 102727, 2023, doi: 10.1016/j.omega.2022.102727.
- [9] M. Elyasi, M. R. Attarpour, and M. Khusirat, "A review of successful technological policies in developing countries," *Journal of Industrial Technology Development*, vol. 4, no. 27, 2016.
- [10] S. T. Kim, M. C. Lo, and Y. C. Wang, "Relationship between knowledge management and organizational performance: A Test on SMEs in Malaysia," *Procedia - Social and Behavioral Sciences*, vol. 228, 2016.
- [11] J. Ding, J. Chen, H. Song, and G. Wang, "Are non-R&D innovation activities actually effective for innovation sustainability? Empirical study from Chinese high-tech industry," *Sustainability*, vol. 11, no. 1, p. 174, 2019. [Online]. Available: <https://doi.org/10.3390/su11010174>.
- [12] S. Brion and C. Mothe, "Organizational context and innovation ambidexterity: Is creativity the missing link?," in *In XXVe conférence de l'AIMS*, 2016.
- [13] I. Shemshadi, "The impact of the knowledge-oriented leadership and culture on innovation and performance of organizational with emphasis on the role of mediator of Practices and process of knowledge management," *Transactions on Data Analysis in Social Science*, vol. 6, no. 2, pp. 45-59, 2024. [Online]. Available: https://www.transoscience.ir/article_210139.html.
- [14] D. Rošulj, "Knowledge Management in Serbian SMEs: Key Factors of Influence on Internal and External Business Performances," *Sustainability*, vol. 16, no. 2, p. 797, 2024, doi: 10.3390/su16020797.
- [15] M. Nguyen, P. Sharma, and A. Malik, "Leadership styles and employee creativity: the interactive impact of online knowledge sharing and organizational innovation," *Journal of Knowledge Management*, vol. 28, no. 3, pp. 631-650, 2024, doi: 10.1108/JKM-01-2023-0014.
- [16] L. T. Nguyen, "How Knowledge-Based HRM Practices Affects Aspects of Innovation Capability Through Knowledge Management: The Moderating Role of Innovative Culture," *Global Knowledge Memory and Communication*, 2024, doi: 10.1108/gkmc-03-2024-0162.
- [17] K. S. P. Ng, "How Customer Knowledge Management Helps Retain Fitness Club Members: A Mediating Effect of Relationship Quality," *International Journal of Sports Marketing and Sponsorship*, vol. 25, no. 2, pp. 360-381, 2024, doi: 10.1108/ijmsms-07-2023-0136.
- [18] L. Wei and Y. Ling, "CEO Characteristics, Knowledge Management and Performance in Transition Economies: Evidence from China," *Journal of Business Research*, vol. 68, no. 6, 2015.
- [19] A. Mehrani, H. Alizadeh, and A. Rasouli, "Evaluation of the Role of Artificial Intelligence Tools in the Development of Financial Services and Marketing," *Journal of Technology in Entrepreneurship and Strategic Management*, vol. 1, no. 1, pp. 71-82, 2022.
- [20] A. Morovati Sharif Abadi and M. Jahromi, "Examining the impact of green innovation dimensions on organizational performance," *Journal of Industrial Management Studies*, vol. 12, no. 33, 2014.
- [21] H. Alizadeh, K. Alba, and A. Rahdari, "Assessing the development and sustainability of SMEs based on industry acceptance 4.0," in *1st National Conference on Modern Applied Research in Business and Industrial Development (ARBI2024)*, 2024, pp. 1-16. [Online]. Available: <https://civilica.com/doc/2037846>.
- [22] H. Alizadeh and M. Foroughi, "A Strategic SWOT Analysis of Leading Electronics Companies based on Artificial

- Intelligence," *International Journal of Business Management and Entrepreneurship (IJBME)*, vol. 2, no. 2, pp. 1-16, 2023.
- [23] H. Safarzadeh, M. Mohammadi, and A. Tadin, "Examining the impact of knowledge management strategies on innovation and organizational performance (Case study: Health and treatment centers in northern Fars)," *Health Dawn Journal*, vol. 11, no. 1, 2016.
- [24] H. Safarzadeh and A. Tadin, "Examining the impact of strategic alliances on organizational performance (Case study: Health and treatment centers in northern Fars)," *Journal of Health Faculty, Yazd*, vol. 11, no. 1, 2012.
- [25] M. Ahmadvand and F. Khorasanchi, "Innovation in organizations: An examination of types, implementation stages, and influencing factors," in *In Pioneers of Progress Congress*, 2013, p. 4.
- [26] A. Nobari and S. Nabizadeh, "Business process management and financial performance," *Employee Relations*, vol. 14, no. 5, pp. 435-442, Jan2021 2021.
- [27] S. Zeinali, "The role of knowledge management in business process management," in *In First International Conference on New Paradigms of Intelligent Business and Organizational Management*, 2016.
- [28] B. Choi, S. Poon, and J. Davis, "Effects of knowledge management strategy on organizational performance: A complementarity theory-based approach," *Omega*, vol. 36, 2018. [Online]. Available: <https://doi.org/10.1016/j.omega.2006.06.007>.
- [29] H. Lee and B. Choi, "Knowledge Management enablers, Processes, and Organizational Performance: An integrative view and empirical examination," *Journal of Management Information Systems*, vol. 20, no. 1, pp. 179-228, 2013. [Online]. Available: <https://doi.org/10.1080/07421222.2003.11045756>.
- [30] D. Kantur, "Strategic Entrepreneurship: Mediating the Entrepreneurial Orientation Performance Link," *Management Decision*, vol. 54, no. 1, pp. 24-43, 2016. [Online]. Available: <https://doi.org/10.1108/MD-11-2014-0660>.
- [31] S. Rouhani, A. Zarei, and H. Dilami, "Key success factors in implementing business process management systems," *Journal of Information Technology Management Studies*, vol. 3, no. 12, 2015.
- [32] M. J. Rodrigues, P. Moreno, and P. Tejada, "Innovation and Performance of SMEs in the Service Industry," *Journal of Organizational Change Management*, vol. 28, no. 2, pp. 194-212, 2016. [Online]. Available: <https://doi.org/10.1108/JOCM-01-2015-0020>.
- [33] R. Pabarish, V. Amiri, and M. Jafari, "Investigating the impact of organizational processes and entrepreneurial orientation on organizational performance with the mediating role of strategic entrepreneurship in industrial companies of Zanjan Province," *Journal of Public Management*, vol. 6, 2020.