#### The International Journal of Interdisciplinary Organizational Studies

ISSN: 2324-7649 (Print), ISSN: 2324-7657 (Online)

Volume 19, Issue 1, July-December, 2024



# THE IMPACT OF MANAGERIAL COMPETENCY, ORGANIZATIONAL RESILIENCE, AND ENVIRONMENTAL DYNAMISM ON THE INNOVATION PERFORMANCE OF NEW STARTUPS

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### **Abstract**

This paper takes the new startups as the research object. By reviewing the research results of relevant variables, summarizing the previous viewpoints and combining with the actual situation in China, this paper finds out the new characteristics of managerial competency, organizational resilience, environmental dynamism and innovation performance. Through empirical research, this paper analyzes the relationship between various variables, focuses on the main impact model of managerial competency on innovation performance of new startups, and tests the mediating role of organizational resilience. This paper introduces the dynamic nature of regulatory variable environment and discusses the relationship between managerial competency and innovation performance, with environmental dynamism as a mediator.

The research results indicate that managerial competency has a positive impact on innovation performance. By enhancing the abilities of managers, enhancing organizational resilience, and adjusting the environmental dynamism of the enterprise, the innovation performance of the enterprise can be improved. Organizational resilience and environmental dynamism have a positive impact on the innovation performance of new startups companies, and the mediating effect of the two on managerial competency and innovation performance is also significant.

**Keywords**: Managerial competency / Organizational resilience / Environmental dynamism / Innovation performance / New startups

### INTRODUCTION

## **Background of the Study**

When discussing the innovation performance of new startups, the interrelationship between managerial competency, organizational resilience and environmental dynamism has become a topic of great concern. Managerial competency is the core quality of leaders and managers and is considered to have a direct and important impact on innovation. However, our understanding of how managerial competency indirectly affects innovation performance by affecting organizational resilience remains relatively limited.

The introduction of organizational resilience as an intermediary variable aims to explain the mechanism of the influence of managerial competency on innovation performance. In the face of changing market and competitive pressures, organizational resilience can become a key factor that



enables enterprises to better adapt to change, adjust strategies, and effectively deal with uncertainty. Therefore, we hope to fully understand this influence path through in-depth research on the shaping of organizational resilience by managerial competency.

In addition, considering the constant changes and uncertainties of the external environment, we introduced environmental dynamism as an intermediary variable to ensure that the study results are more accurate. Environmental dynamism may influence innovation performance to some extent, and we hope that by controlling it, we can more accurately assess the impact of managerial competency on innovation performance of new startups.

This study aims to provide in-depth theoretical understanding and practical guidance for leaders, managers and researchers of new startups enterprises. By uncovering the relationship between managerial competency, organizational resilience, environmental dynamism and innovation performance, we hope to provide strategic advice on how to improve the innovation performance of new startups and promote their sustainable development in a competitive market. This research background builds a comprehensive understanding of the mechanism affecting the innovation performance of new startups, and is expected to provide useful enlightenment for the academic and industry.

### **Statement of the Problem**

In the current increasingly fierce market competition environment, the innovation performance of new startups has become a key factor for their survival and development. However, in this process, the complex relationship between key factors such as managerial competency, organizational resilience and external environmental dynamism has not been deeply resolved. This study aims to answer the following core questions:

First, how does managerial competency directly affect the innovation performance of new startups? By digging into the mechanism of direct influence of core qualities of leaders and managers on innovation activities, we will provide substantial theoretical support for new startups to improve innovation performance.

Secondly, what is the mediating role of organizational resilience between managerial competency and innovation performance? By exploring in detail, the mechanism of organizational resilience as a mediating variable, we will reveal how managerial competency affects innovation performance by shaping organizational resilience and provide more specific strategic direction for firms.

Finally, when external environmental dynamism is considered, is there a difference in the impact of managerial competency and organizational resilience on the innovation performance of new startups? By introducing environmental dynamism as a intermediary variable we will study the difference in the impact of managerial competency and organizational resilience on innovation performance under different environmental conditions, so as to provide more accurate development strategies for enterprises.

By answering these questions, this study will comprehensively understand the key factors in the innovation activities of new startups and their interrelationships, and provide academic depth and practical guidance for improving innovation performance, strengthening organizational resilience and adapting to changes in the external environmental dynamism. The implementation of this research is not only expected to promote the theoretical expansion of the academic circle in this field, but also to provide operational strategic suggestions for new startups in actual operation and promote their sustainable development.

# **Research Objectives**

- 1. To reveal the direct impact mechanism of managerial competency on innovation performance of new startups.
- 2. To explore the mediating role of organizational resilience between managerial competency and innovation performance.
- 3. To analyze the mediating role of environmental dynamism on managerial competency and organizational resilience.

#### Research Framework

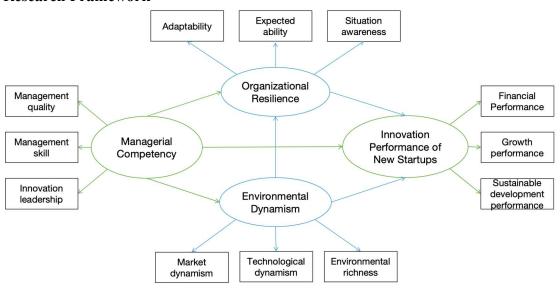


Figure 1 Theoretical Model

# ARGUMENT PROCESS AND RESULTS

### **Basic Information of Sample**

### 1. The Situation of Questionnaire

In order to ensure the randomness and richness of the samples, this study randomly distributed and collected samples through wechat groups of alumni, relatives and friends, and other

public websites in various provinces, and explained the importance of the questionnaire, hoping that everyone could fill it out carefully. For the recovered questionnaires, the unqualified questionnaires such as missing items and too short filling time were excluded, and the remaining valid questionnaires were counted. 280 electronic questionnaires were sent out online, and 257 were recovered, with a recovery rate of 91.79%. There were 240 valid questionnaires, with an effective rate of 93.39%, which met the data requirements of the research.

Through the review and statistics of the questionnaire survey, the demographic variables analyzed are as follows:

•Gender: According to statistics, among all valid questionnaire participants, 204 were male and 36 were female. The statistical table of relevant data is shown in 1.

Gender Group	Frequency	Percentage
Male	204	0.85
Female	36	0.15
Subtotal	240	1

Table 1 The Table of Sample Statistical Analysis on Gender

•Age: According to statistics, among all valid questionnaire participants, 17 were Under 25 years old, 163 were between 25 and 35 years old, 32 were between 35 and 45 years old, and 28 were over 45 years old. Please see 2 for the relevant data statistics table.

Table 2 The Table of San	iple Statistical.	Analysis on A	Age
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Age Group	Frequency	Percentage
25 years old and below	17	0.007083333
25-35 years old (inclusive)	163	0.679166667
35-45 years old (inclusive)	32	0.133333333
45 years old and above	28	0.116666667
Subtotal	240	1

•Educational Attainment: According to statistics, among all valid questionnaire participants, 71 people have High school or below, 52 people have College degree, 103 people have Undergraduate degree, and 14 people have Master's degree or above. Please see 3 for the relevant data statistics table.

**Table 3** The Table of Sample Statistical Analysis on Educational Attainment

<b>Educational Attainment</b>	Frequency	Percentage
High school or below	71	0.295833333

College degree	52	0.216666667
Undergraduate degree	103	0.429166667
Master's degree or above	14	0.058333333
Subtotal	240	1

•Position: According to statistics, among all valid questionnaire participants, 107 people are Senior Manager, 96 people are Middle Manager, 23 people are Grassroots Manager, and 14 people are Ordinary Employee. Please see 4 for the relevant data statistics table.

**Table 4** The Table of Sample Statistical Analysis on Position

Position	Frequency	Percentage	
Senior Manager	107	0.445833333	
Middle Manager	96	0.4	
Grassroots Manager	23	0.095833333	
Ordinary Employee	14	0.058333333	
Subtotal	240	1	

•Industry to which the enterprise belongs: According to statistics, among all valid questionnaire participants, 39 people work in the Internet IT industry, 36 people work in the Finance industry, 1 people work in the Real estate or construction industry, 58 people work in the Trade/retail/logistics industry, 94 people work in the Education/media/advertising industry, and 12 people work in the other industry. Please see 5 for the relevant data statistics table.

Table 5 The Table of Sample Statistical Analysis on Industry to which the enterprise belongs

Industry	Frequency	Percentage
Internet IT	39	0.1625
Finance	36	0.15
Real estate/construction	1	0.004166666
Trade/retail/logistics	58	0.241666666
Education/media/advertising	94	0.391666666
Other	12	0.05
Subtotal	240	1

Year of establishment: According to statistics, among all valid questionnaire participants, 74 people in the enterprise established less than 3 years, 61 people in the enterprise established 3-5 years (inclusive), 82 people in the enterprise established 5-8 years (inclusive), and 74 people in the enterprise established more than 8 years. Please see 6 for the relevant data statistics table.

**Table 6** The Table of Sample Statistical Analysis on Year of establishment

Year of establishment	Frequency	Percentage	
3 years and below	74	0.308333333	
3-5 years (inclusive)	61	0.254166666	
5-8 years (inclusive)	82	0.341666666	
8 years and above	23	0.095833333	
Subtotal	240	1	

•Total number of employees in the enterprise: According to statistics, among all valid questionnaire participants, 73 people work in a company with 20 employees and below, 105 people work in a company with 20-499 employees, 42 people work in a company with 500-999 employees, and 20 people work in a company with 1000 employees and above. Please see 7 for the relevant data statistics table.

Table 7 The Table of Sample Statistical Analysis on Total number of employees in the enterprise

<b>Educational Attainment</b>	Frequency	Percentage
20 and below	73	0.304166666
20-499	105	0.4375
500-999	42	0.175
1000 and above	20	0.08333333
Subtotal	240	1

•The average annual sales revenue: According to statistics, among all valid questionnaire participants, the average annual sales revenue of 94 enterprises is less than 1 million yuan, the average annual sales revenue of 94 enterprises is 1.01-4.99 million, the average annual sales revenue of 94 enterprises is 5-9.9 million, and the average annual sales revenue of 94 enterprises is more than 10 million yuan. Please see 8 for the relevant data statistics table.

**Table 8** The Table of Sample Statistical Analysis on the average annual sales revenue

The average annual	sales Frequency	Percentage
revenue		
1 million and below	94	0.391666666
1.01-4.99 million	63	0.2625
5-9.9 million	58	0.214666666
10 million and above	25	0.104166666
Subtotal	240	1

## 2. Analysis Process of Basic Statistics of Variables in the Research

### (1). SEM Based on Multiple Regression Analysis

Structural equation modeling is a statistical analysis method used to examine the relationship between observed data and latent variables, as well as the relationship between

individual variables (Gana, K., & Broc, G. 2019). It helps researchers understand complex cause-and-effect relationships and evaluate the impact of multiple variables on a phenomenon.

Multiple regression analysis is a part of SEM that can be used to determine the impact of different independent variables on the dependent variable. In SEM, researcher can embed multiple regression analysis into a broader model to account for direct and indirect relationships between individual variables. Such models can include both observed and latent variables and allow researchers to explore the impact of latent variables on Observation dimensions, as well as the causal relationships between different variables.

# (2). Results of Quantitative Research

**Managerial competency index** =  $(0.372 \times \text{Management skills}) + (0.4814 \times \text{Management quality}) + <math>(0.1467 \times \text{Innovative leadership})$ 

**Organizational Resilience Index** =  $(0.6399 \times \text{Adaptability}) + (0.0173 \times \text{Situational awareness}) + <math>(0.2051 \times \text{Anticipatory capacity})$ 

**Environmental dynamism Index** =  $(0.1837 \times \text{Market dynamics}) + (0.6355 \times \text{Technical dynamics}) + (0.2019 \times \text{Environmental richness})$ 

innovation performance Index =  $(0.3949 \times \text{Financial performance}) + (0.4314 \times \text{Growth performance}) + (0.2175 \times \text{Sustainability performance})$ 

### 3. Findings from Qualitative Research in Research

# (1) Deficiencies in the specific practice of innovation performance management in new startups enterprises

Based on the semi-structured interview and the actual situation observed during the visit, the researchers found deficiencies in various specific methods adopted by Chinese new startups in terms of the time to construct the impact of managerial competency, organizational resilience and environmental dynamism on innovation performance, which are as follows:

- (1) Lack of clear goal setting and performance indicators
- (2) Talent recruitment and retention challenges
- 3 Insufficient training and development opportunities
- (4) Miscommunication
- (5) Lack of effective performance evaluation system
- (6) Lack of incentives
- (7) Ignoring employees' work-life balance
- (8) Organizational change is difficult

- (9) Insufficient level of technology and informatization
- (10) Lack of employee engagement

# (2) Policy Recommendations in Specific Practices

Through the semi-structured interview, combined with the actual situation observed during the visit, and through in-depth research, the researchers put forward a variety of specific improvement suggestions for Chinese new startups based on the relationship between "managerial competency, organizational resilience, environmental dynamism and innovation performance", which are as follows:

- (1) Integrated innovation-oriented managerial competencytraining
- 2 Establish an adaptive performance evaluation system
- (3)Promote organizational resilience
- 4)Strengthen staff training and development
- 5 Innovative incentive mechanism design
- (6) Establish a culture of open communication
- 7) Focus on employee work-life balance
- 8 Introduce technology and information support
- 9Strengthen employee participation
- 10 Building an adaptable organizational culture

#### Conclusion

This paper constructs the relationship model between managerial competency, organizational resilience, environmental dynamism and innovation performance and carries out empirical analysis. After verifying the relevant hypotheses proposed, the following conclusions are drawn:

# Hypothesis 1: Managerial competency directly affects the innovation performance of new startups.

The mechanism of managerial competency on innovation performance is verified. Hypothesis 1 in this paper is about the relationship between managerial competency and innovation performance. Managerial competency has a positive impact on enterprise innovation performance. Considering the impact of managerial competency on three dimensions, management quality, management skill and innovative leadership, the relevant analysis is made for each dimension. Finally, it is proved that there is a positive correlation between various dimensions of managerial competency and innovation performance, which is verified by the empirical research hypothesis

1. This also shows that by improving the competence of middle and senior managers, they can have higher workplace ability, improve work efficiency, and thus improve innovation performance.

# Hypothesis 2: Organizational resilience plays an intermediary role between managerial competency and innovation performance.

Organizational resilience plays an intermediary role between managerial competency and innovation performance. Hypothesis 2 in this paper is about the relationship between Organizational Resilience, managerial competency and innovation performance. That is, Organizational resilience plays a mediating role between managerial competency and innovation performance. Hypothesis 2 is verified by empirical research. Meanwhile, it also explores the organizational resilience of three dimensions: adaptability, expected ability and situation awareness, impact on innovation performance, The empirical study proves that each dimension of organizational resilience has a positive correlation with managerial competency and innovation performance. It shows that organizational resilience can act as the "adhesive" between managers and enterprises, and improve work efficiency by improving the adaptability, expected ability and situation awareness of new startups. Reduce the cost of work, thereby improving the ability of enterprises to cope with risks and the ability of enterprises to recover after a crisis.

# Hypothesis 3: Environmental dynamism plays an intermediary role between managerial competency and organizational resilience.

H3 is verified: Environmental dynamism plays an intermediary role between managerial competency and organizational resilience. Hypothesis 3 in this paper is about the relationship between the control effects of environmental dynamism on managerial competency and organizational resilience. Environmental dynamism positively influences corporate performance, which is verified by the empirical research hypothesis H3. Meanwhile, Environmental dynamism three dimensions of Market dynamics, technical dynamics and Environmental richness on managerial competency and organizational resilience. The impact of organizational resilience, the empirical study proves that all dimensions of Environmental dynamism are positively correlated with managerial competency and organizational resilience. Because new startups are in the early stage of establishment, there are shortcomings in Market dynamics, technical dynamics and Environmental richness. Only by constantly enhancing their resilience, cultivating risk awareness and improving the enterprise's risk response ability. Only when combined with the managerial competency and organizational resilience of the enterprise itself can it play a role in the performance of the enterprise.

# Hypothesis 4: External environmental dynamism has a moderating effect on the mediating effect between managerial competency and organizational resilience.

It is verified that External Environmental dynamism has a moderating effect on the mediating effect between managerial competency and competence organizational resilience, i.e., External environmental dynamism. The dynamic change of the environment is not affected by people's

subjective behavior, which also increases the uncertainty factor in the survival and growth process of new startups. According to the dynamic changes of the entrepreneurial environment, the managers of new startups generally make predictions and judgments, and the more accurate the measures taken, the more effectively they can reduce the business risks brought by the environment. Strong management employee competence and organizational resilience will have a positive correlation effect on enterprise performance. Only when managers maintain the sensitivity to changes in the surrounding environment and the agility to take actions can new startups grasp industry information, competitors' coping strategies and changes in their own strength in a timely manner. In other words, the stronger the managerial competency of a new startups, the more quickly it can adapt to changes in the environment and choose a development strategy suitable for the enterprise. Enhance organizational resilience of enterprises, and then improve innovation performance.

# Hypothesis 5: Organizational resilience mediates the relationship between managerial competency and innovation performance.

Organizational resilience mediates the relationship between managerial competency and innovation performance., That is, Organizational resilience can enhance enterprise performance by enhancing enterprise managerial competency. The hypothesis 4 is verified by the empirical research. Meanwhile, Organizational resilience is also explored in three dimensions of managerial competency: adaptability, expected ability and situation awareness. The relationship between managerial competency and innovation performance, the empirical study proves that organizational resilience has a partial mediating effect between various dimensions of managerial competency and innovation performance. Organizational resilience requires that the management of an enterprise can clearly understand the development status of the enterprise, and correctly guide the daily operation and future development direction of the enterprise. At the same time, organizational resilience also requires that enterprise managers can clearly understand the inadequacies and potential risks of enterprise development, and propose innovative solutions to solve the difficulties faced by the enterprise when risks arise.

# Hypothesis 6: External Environmental dynamism moderates the mediating effect of managerial competency on innovation performance through organizational resilience.

Verify the external environmental dynamism moderates the mediating effect of managerial competency on innovation performance through organizational resilience. Although the dynamic change of the environment is not affected by people's subjective behaviors, according to the dynamic change of the entrepreneurial environment, the stronger organizational resilience will promote the managers of startups to make predictions and judgments. The more accurate the measures taken, the more effectively they can reduce the business risks brought by the environment. Strong Organizational Resilience and strong management employee competency will have a positive correlation effect on enterprise performance. Only when an organization has sufficient flexibility can it be sensitive to changes in the surrounding environment and agile in

taking actions. That is to say, the stronger organizational flexibility a startup has, the more quickly it can adapt to changes in the environment and choose a development strategy suitable for the company, thus improving innovation performance.

#### Discussion

This section explores the interpretation of the findings in depth, highlighting the importance of our findings and their implications in the context of innovation performance management for Chinese new startups. The interpretation of the results follows a structured analysis of each major component and its associated findings:

# 1. Overall performance management methods

The study highlights the profound significance of adopting a holistic approach to enhancing performance management, focusing on the impact of managerial competency, organizational resilience and environmental dynamism on innovation performance of new startups. The findings underscore the interrelated nature of these variables, suggesting that treating one aspect in isolation is not enough to achieve scientific management. This holistic approach can guide policymakers and practitioners in developing comprehensive and effective strategies.

### 2. Interconnection of variables

Structural equation model (SEM) reveals the effects of managerial competency, organizational resilience and environmental dynamism on innovation performance of new startups. These models show that these variables are not isolated entities, but function as interdependent components of business management. The interpretation of these results highlights the importance of coordinated development mechanisms to explain these interactions.

# 3. Contextualized poverty reduction practices

The study provides a rich illustration of specific innovation performance management practices implemented by Chinese new startups. These practices are not only quantified, but also carried out in their historical and regional contexts. This contexturalization allows for a nuanced understanding of the strategies employed, highlighting their applicability to the unique challenges facing the region.

### 4. Policy Recommendations

The results of the study culminated in a set of practical policy recommendations aimed at strengthening the performance management efforts of Chinese new startups. These recommendations are based on the findings and are designed to address the shortcomings identified in the current strategy. By explaining these recommendations, we highlight the potential impact and importance of these recommendations to improve performance management efforts.

In summary, the interpretation of the findings reinforces the central themes of a holistic approach, interconnectedness and context-aware business management strategy. This paper

provides a clear idea of the practical significance of the research results, and paves the way for an in-depth understanding of the performance management and enterprise development of Chinese new startups.

#### Recommendations

Starting from managerial competency, this study makes an in-depth analysis of the relationship between the dynamic nature of the environmental dynamism, organizational resilience and innovation performance. The results show that managerial competency, organizational resilience and environmental dynamism are correlated with the performance of new startups. These conclusions can provide a theoretical basis for new startups to face the changing environment and determine the future development direction in the early stage of establishment, and can also provide a broader line of thought for future research, and provide a reference for new startups with resource constraints.

Managerial competency is very important for new startups. If a new startup wants to overcome difficulties and survive, it must constantly improve its competitiveness, constantly learn new knowledge and master new skills. Managerial competency can make certain resources of uncertain value to the new startup's enterprise. Managers have to constantly learn new knowledge, expand the field of knowledge, keep up with the times, grasp the development trend and make the best judgment for the development of the enterprise. Improving management quality can promote work efficiency, and then positively affect innovation performance; management skills can improve job completion, and then positively affect innovation performance. Innovation leadership is the core of promoting team innovation. It actively guides and stimulates team creativity and has a profound impact on innovation performance. Effective innovation leadership can create an atmosphere that is open and encourages thinking, and encourages teams to take risks and try new ideas, thereby improving innovation performance and promoting continuous progress of the organization. This study finds that Managerial competency can be improved by improving management quality and management skills, which positively affects innovation performance.

New startups should continuously enhance organizational resilience and enhance their ability to resist risks. Due to the characteristics of "new", the daily production and operation of a new startup's enterprise is relatively active, and it is in the stage of actively striving for the market. However, due to the limited experience, the development state is very unstable, and the Organizational Resilience level is low at this time, which makes it difficult to cope with the challenges brought by internal and external shocks. Therefore, we should reasonably understand and improve our organizational resilience, overcome the dilemma of resource constraints by reorganizing and utilizing existing resources, solve resource constraints, face opportunities and challenges, and positively affect innovation performance.

New startups enterprises should pay attention to the impact of environmental dynamism on innovation performance. The regulating effects of environmental dynamism are confirmed in this study, environmental dynamism plays a intermediary role in managerial competency and

innovation performance. Therefore, new startups should cultivate risk awareness when growing and developing, respond promptly to changes in their own industry environment, adjust the future development direction of the enterprise, and improve the ability to prevent and deal with risks.

#### REFERENCES

- Aftab, J., Veneziani, M., Sarwar, H., & Ishaq, M. I. (2022). Entrepreneurial orientation, entrepreneurial competencies, innovation, and performances in SMEs of Pakistan: Moderating role of social ties. Business Ethics, the Environment & Responsibility, 31(2), 419-437.
- AlMulhim, A. F. (2023). Knowledge management capability and organizational performance: a moderated mediation model of environmental dynamism and opportunity recognition. Business Process Management Journal, 29(6), 1655-1679.
- Boadu, F., Du, Y., Xie, Y., & Dwomo-Fokuo, E. (2023). Knowledge transfer received, entrepreneurial opportunity type, environmental dynamism, and innovative performance by overseas subsidiaries in China. Technology Analysis & Strategic Management, 35(3), 237-254.
- Carvalho, C. E., Rossetto, C. R., & Piekas, A. A. S. (2021). Innovativeness in Brazilian startups: the effect of the absorptive capacity and environmental dynamism. International Journal of Innovation and Learning, 29(1), 1-17.
- Choi, S. B., Lee, W. R., & Kang, S. W. (2020). Entrepreneurial orientation, resource orchestration capability, environmental dynamics and firm performance: A test of three-way interaction. Sustainability, 12(13), 5415.
- Ferreira, J., Coelho, A., & Moutinho, L. (2020). Dynamic capabilities, creativity and innovation capability and their impact on competitive advantage and firm performance: The moderating role of entrepreneurial orientation. Technovation, 92, 102061.
- Ibidunni, A. S., Ogundana, O. M., & Okonkwo, A. (2021). Entrepreneurial competencies and the performance of informal SMEs: The contingent role of business environment. Journal of African Business, 22(4), 468-490.
- Jermsittiparsert, Kittisak & Namdej, Puttisat & Somjai, Sudawan. (2019). Green Supply Chain Practices and Sustainable Performance: Moderating Role of Total Quality Management Practices in Electronic Industry of Thailand. 8. 33-46.
- Kumar, S., & Bhatia, M. S. (2021). Environmental dynamism, industry 4.0 and performance: Mediating role of organizational and technological factors. Industrial Marketing Management, 95, 54-64.

- Prayag, G., & Dassanayake, D. C. (2023). Tourism employee resilience, organizational resilience and financial performance: the role of creative self-efficacy. Journal of Sustainable Tourism, 31(10), 2312-2336.
- Saeed, M. A., Tabassum, H., Zahid, M. M., Jiao, Y., & Nauman, S. (2022). Organizational flexibility and project portfolio performance: The roles of environmental uncertainty and innovation capability. Engineering Management Journal, 34(2), 249-264.
- Santoro, G., Messeni-Petruzzelli, A., & Del Giudice, M. (2021). Searching for resilience: the impact of employee-level and entrepreneur-level resilience on firm performance in small family firms. Small Business Economics, 57, 455-471.
- Sijia, Z., Lingfeng, Y., & Yanling, L. (2021). Entrepreneurial Leadership, Organizational Resilience and New Venture Performance.
- Somjai, Sudawan & Girdwichai, Luedech. (2019). EXPLORING THE NEXUS AMONG THE SUPPLY CHAIN INTEGRATION, SUPPLY CHAIN LEARNING AND THE INNOVATION PERFORMANCE OF AGRIBASED FIRMS IN INDONESIA. Polish Journal of Management Studies. 20. 491-501. 10.17512/pjms.2019.20.2.41.
- Suryaningtyas, D., Sudiro, A., Eka, T. A., & Dodi, I. W. (2019). Organizational resilience and organizational performance: examining the mediating roles of resilient leadership and organizational culture. Academy of Strategic Management Journal, 18(2), 1-7.
- Tarigan, Z. J. H., Mochtar, J., Basana, S. R., & Siagian, H. (2021). The effect of competency management on organizational performance through supply chain integration and quality. Uncertain Supply Chain Management (2).
- Tariq, T. A., & Zehir, C. (2023). Examining the relationship among innovation competencies, management innovation, and organizational performance. International Journal of Business Ecosystem & Strategy (2687-2293), 5(4), 55-66.
- Vargas-Hernández, J.G. (2021). Management, Performance, and Measurement of Organizational Resilience. International Journal of Sustainable Economies Management.
- Werner, M. J. E., Yamada, A. P. L., Domingos, E. G. N., Leite, L. R., & Pereira, C. R. (2021). Exploring organizational resilience through key performance indicators. Journal of Industrial and Production Engineering, 38(1), 51-65.
- Zabłocka-Kluczka, A., & Sałamacha, A. K. (2023). Organizational resilience as the mediator of relation between brand performance and organizational performance–reflections from the perspective of crisis times. Journal of Organizational Change Management, 36(6), 932-949.
- Zhao Sijia, Yi Lingfeng, & Lian Yanling. (2021). Entrepreneurial leadership, organizational resilience and performance of new startups enterprises. Foreign Economy and Management, 43(3), 42-56.