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## **Revista de Cercetare și Interventie Sociala**

ISSN: 1583-3410 (print), ISSN: 1584-5397 (electronic)

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### **EFFECTS OF CORE COMPETITIVENESS ON STRATEGIC ALLIANCE AND ALLIANCE PERFORMANCE IN MEDICAL DEVICE INDUSTRY**

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Revista de cercetare și intervenție socială, 2024, vol. 86, pp. 152-166

<https://doi.org/10.33788/rcis.86.12>

Published by:  
Expert Projects Publishing House



On behalf of:  
„Alexandru Ioan Cuza” University,  
Department of Sociology and Social Work  
and  
HoltIS Association

# Effects of Core Competitiveness on Strategic Alliance and Alliance Performance in Medical Device Industry

Xuwei ZHANG<sup>1</sup>, Dehua XI<sup>2</sup>

## Abstract

Along with the progress of economic development, the enhancement of national income, and the trend of population ageing in past years, people are annually increasing the medical expenses and enhancing the demands for medical devices. Being a part of healthcare, the requirements for the product safety and quality of medical devices are rather high. Manufacturers in the world therefore have to work hard to promote the competitiveness, attempting to achieve corporate goals and supply the best products to medical profession. Core competition combined resources are the sign of competitive advantage. Firms would build excellent competitive advantage through important resource combinations. A company tending to create competitiveness as well as build and lead new markets has to make investment earlier and continuously, apply the imagination to predict, develop, and investigate markets which have not been existed. The research focused on supervisors and employees in the medical device industry. The results reveal notable and positive effects of core competitiveness on strategic alliance and alliance performance, the understanding of how medical device firms apply strategic behavior in the competitive strategic means to reinforce the resource acquisition capability, and the reference for building the competitive advantage after strategic alliance and drafting appropriate competitive strategies for the business management of a domestic firm in medical device industry. It is expected to propose more specific suggestions for firms in medical device industry using core competitiveness in strategic alliance and dedicating to the promotion of competitive advantage.

*Keywords:* core competitiveness; strategic alliance; alliance performance; medical device industry.

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## Introduction

Along with the advance of economic development, the enhancement in national income, and the trend of population ageing in past years, Chinese people are annually increasing the medical expenses that the demands for medical devices are also increasing. Medical devices are a part of health care that the requirements for product safety and quality are high. Global manufacturers therefore have to promote the competitiveness, attempting to achieve corporate goals and supply the most excellent products to medical profession. Nevertheless, it requires the cooperation of good distributors on marketing channels that channel competitiveness among firms therefore becomes a key factor. It becomes the only method for a firm applying strategic alliance to promote and enhance channel competitive advantage.

Prahalad and Hamel (1990) emphasized that they argued that a firm could achieve outstanding competitive advantage by effectively combining these essential resources. A company, in order to create competitiveness as well as build and lead new markets, has to make investment in advance and continuously as well as apply imagination to predict, develop, and investigate markets which have not been existed. A firm in the medical device industry should strive to reduce costs incurred between manufacturers and dealers to enhance its competitive advantage in the industry. Besides, when products supplied by a manufacturer could not be promoted the quality, products marketed by a dealer could not effectively guarantee the quality and acquire customers' loyalty. A firm without proper cooperation would affect the delivery of an order; moreover, the technology innovation capability of a firm would influence the quality promotion capability in healthcare industry, and even influence the medical service quality. In this case, a company should combine and integrate various resources for quality, cost, flexibility, and innovation capability, and reinforce various competitive strategies to form competitive advantage so as to be more competitive than opponents.

The environment in medical device industry changes rapidly and the direction might change with regulations. To promote the business capability and competitiveness and pursue growing businesses, an enterprise simply competing with the resource ability could not cope with industrial changes. Spekman (1998) pointed out strategic alliance as the close, long-term, and reciprocal agreement relationship among more than two partners, where the resources, knowledge, and abilities were shared to reinforce each partner's competition position to achieve goals. Different types of strategic alliance would influence the cooperation between manufacturers and dealers that different types of strategic alliance become the key factor in the success of strategic alliance. A medical firm acquiring important resources with distinct types of strategic alliance could grasp business opportunities and channel information, result in contact with major customers, and ensure competitive advantage. Consequently, effects of core competitiveness on strategic alliance and alliance performance in medical device industry are discussed in this study, expecting to propose more specific suggestions for medical

device firms utilizing core competitiveness in strategic alliance and dedicating to competitive advantage.

## Literature review

Bronder and Pritzl (1992) indicated that a company, through strategic alliance, could realize or acquire systematic ability in certain markets (Nawrocki & Jonek-Kowalska, 2022).

Molina-Morales and Martinez-Fernandez (2010) suggested that research on relationship network embedded in enterprises allowed more meaningful comprehension of corporate performance and behavior. Geringer (1998) considered that improper partner selection and bad alliance management would result in decreasing satisfaction with alliance. Meanwhile, proper alliance partner and motivation could cause better alliance results. Therefore, the characteristics of partners can significantly influence alliance performance. Effective coordination among strategic partners is a crucial performance indicator; however, inadequate coordination may result in the loss of partners, as exemplified by the situation with Swissair. Apparently, strategic alliance performance directly depended on the selection of partners (Jamshed *et al.*, 2022). Qing, Weijing, and Wenhui (2012) empirically determined that the reputation, compatibility, and standardization capabilities of potential partners significantly influence innovation performance (Lin & Chen, 2022). Their findings revealed the mechanisms of knowledge sharing within the liner shipping alliance network, interpreted how information share among alliance partners enhanced company performance, and proved the positive relations between geographic closeness among partners and the previous relations, but with limited regulating effect (Mulla, 2022). The research results provided important practice opinions in the strategic competition process for senior managers of liner shipping companies; such strategy decision-making process involved in the information and relationship management in competitive alliance and the effect on company performance. Therefore, this study proposes the following hypotheses.

Bani-Hani (2021) examined the relationships among core competitiveness, competitive advantage, and organizational performance within the painting industry in the United Arab Emirates (Agha, Alrubaiee, & Jamhour, 2012). Seddighi and Mathew (2020) measured core competitiveness through shared vision, cooperation, and authorization; and, competitive advantage was measured through flexibility and responsiveness. These findings underscore the critical role of core competitiveness in enhancing both competitive advantage and organizational performance. Barney and Hesterly (2021) found out larger effects of flexibility, than reactivity, on organizational performance. In the research on airport shopping malls, Liang, Lin and Huang (2013) found out positive correlations between core competitiveness and organizational performance (Cooke *et al.*, 2021). Since

core competitiveness would positively affect organizational performance, the hypothesis is then proposed in this study.

From above research, the following hypotheses are therefore proposed in this study.

H1 Core competitiveness shows positive and significant effects on strategic alliance.

H2 Strategic alliance shows positive and remarkable effects on alliance performance.

H3 Core competitiveness reveals positive and remarkable effects on alliance performance.

## **Methodology**

### *Research sample and testing method*

Referring to the views of Tinsley and Tinsley (1987), the number of formally issued questionnaires should be added to the number of questions, and the ratio of the number of questions to the number of samples should be between 1:5 or 1:10. The study focuses on supervisors and employees in the medical device industry. The questionnaire includes a section on the background characteristics of these individuals. The questionnaire consists of 52 questions, and based on a reference ratio of 1:10, at least 520 valid responses were needed. 600 questionnaires were distributed, and 528 valid responses were collected, resulting in a response rate of 88%.

Regarding informed consent in research ethics, the researcher has to acquire the research objects' agreement to voluntarily participate and quit in the research process without being forced, pressured, and externally induced. The researcher provides information, and the participants totally understand and completely volunteer. The questionnaire survey is anonymous, and the acquired data are merely used for academic research, following the "informed consent" in research ethics.

### *Measuring tool*

The questionnaire in this study is divided into core competitiveness, strategic alliance, competitive strategy, and alliance performance. The questions are designed by referring to relevant literatures.

*Core competitiveness scale*

Referring to the research questionnaire of Hamel & Heene (1994), core competitiveness in this study is classified and defined as below.

1. Market capacity: marketing capability, logistics capability, technical support capability.
2. Integration ability: work process flexibility, product supply capability.
3. Unique ability: providing customers with unique products or service functions for special value.

*Table 1. Core competitiveness scale*

Dimension	Measurement Question
Market capacity	I feel that the company presents highly efficient product sales and distribution systems.
	I feel that the marketing department in the company presents strong and effective promotion capability.
	I feel that the company, with new products and service, becomes the pioneer in the market.
Integration ability	I feel that the company presents strong production process development and improvement capability.
	I feel that the company could integrate various internal techniques and resources.
	I feel that the company is capable of simultaneously producing different produces on the same production line.
Unique ability	I feel that the company's new products show unique characteristics.
	I feel that the company owns the ability which competitors could hardly imitate.
	I feel that the company's products or services reveal differentiation.

*Data source: organized in this study*

*Strategic alliance scale*

Regarding the selection of strategic alliance partners, the questionnaire in this study draws on the strategic alliance partner characteristics scale developed by Abuzaid (2014). This scale includes 14 questions covering three key dimensions: compatibility, complementarity, and commitment. Compatibility and complementarity pertain to the alignment of resources and organizational fit between partners and the company, while commitment addresses the dedication and loyalty between the partners and the company.

Table 2. Strategic alliance scale

Dimension	Measurement question
Compatibility	We choose partners with compatible organizational culture.
	We choose partners with compatible strategic goals.
	We choose partners with compatible management styles.
Complementarity	Our partners present unique abilities which we require.
	Our partners show high-standard technology which we require.
	Our partners demonstrate broader market coverage.
	Our partners have a diverse clientele.
	Our partners provide quality distribution systems.
	We choose partners with the possible synergy in the cooperation.
	We choose partners with complementary assets.
Commitment	Our partners are willing to do the best for the success of alliance.
	The partners we work with are willing to make long-term investments in the alliance.
	Our partners have shown great loyalty to the alliance.
	Our partners are willing to share professional knowledge.

Data source: organized in this study

*Alliance performance scale*

There are many measurement indicators for alliance performance. By referring to Geringer and Hebert (1998) and Mohr and Speakman (1994), there are 14 questions in this study, covering satisfaction with alliance operation, goal achievement, and satisfaction with profitability. The high scores stand for the high identity of the company to alliance performance.

Table 3. Alliance performance scale

Variable	Measurement Question
Alliance performance	Compared to competitors, the company presents better sales growth.
	I am very satisfied with the company's sales growth rate.
	Compared to competitors, the company could better acquire market benefits.
	In comparison with major competitors, the company shows better investment returns.
	I am very pleased with the return on business investment in the company.

Alliance performance	I am very satisfied with the sales reward of the company.
	Compared to major competitors, the company presents better advantage on net profit.
	In comparison with major competitors, the company appears better financial liquidity.
	I am very happy with how the league works.
	I am very satisfied with the cooperation and interaction with the alliance.
	I am very satisfied with the achievement of the expected goals of the alliance.
	I am very satisfied with the technology and knowledge promoted by Alliance.
	I am very pleased with the profitability that the alliance brings.
	I am very pleased with the increase in affiliate sales.

Data source: organized in this study

### Data analysis method

*Reliability analysis:* Each measurement scale in the study is preceded factor analysis and reliability analysis to verify the reliability and guarantee the higher consistency among questions in the questionnaire.

*Validity analysis:* AVE refers to latent variables being able to explain the ratio of the variance of pointer variable. The general judgment standard is  $AVE > 0.5$ .

*Correlation analysis:* To discuss the intensity among variables, Pearson's product-moment correlation is preceded before regression analysis to be the indicators for measuring the correlation among core competitiveness, strategic alliance, and alliance performance.

*Regression analysis:* After preliminarily test of correlation analysis among variables, the regression effect of the entire equation should be assured, based on the analysis of variance of three indicators. Analysis of variance, or F test, is used for testing the significance of mean difference in two or more samples.

### Reliability and validity test

#### Test of core competitiveness scale

The KMO measure for the core competitiveness scale in this study exceeds 0.7, indicating that this questionnaire is suitable for factor analysis. The Bartlett's test of sphericity yields a significance probability of 0.000, meeting the criterion for favorable validity. Factor analysis of the core competitiveness scale reveals three factors: "market capacity" (Eigen Value = 3.620,  $\alpha = 0.83$ ), "integration ability"



(Eigen Value = 1.442,  $\alpha = 0.82$ ), and “unique ability” (Eigen Value = 1.612,  $\alpha = 0.82$ ). The cumulative variance explained by these three factors is 74.160%.

#### *Test of strategic alliance scale*

The KMO measure for the strategic alliance scale in this study exceeds 0.7, indicating that this questionnaire is suitable for factor analysis. The Bartlett’s test of sphericity shows a significance probability of 0.000, meeting the standard for favorable validity. Factor analysis of the strategic alliance scale reveals three factors: “compatibility” (Eigen Value = 1.804,  $\alpha = 0.90$ ), “complementarity” (Eigen Value = 7.543,  $\alpha = 0.98$ ), and “commitment” (Eigen Value = 3.032,  $\alpha = 0.97$ ). The cumulative variance explained by these three factors is 88.424%.

#### *Test of alliance performance scale*

The KMO measure for the alliance performance scale in this study exceeds 0.7, indicating that this questionnaire is suitable for factor analysis. The Bartlett’s test of sphericity shows a significance probability of 0.000, demonstrating that the scale meets the standard for favorable validity. With factor analysis, the alliance performance scale in this study is extracted a factor of “alliance performance” (Eigen Value=9.834,  $\alpha=0.97$ ), and the cumulative covariance explained reaches 70.246%.

Summing up above analysis results, factor analysis of core competitiveness, strategic alliance, and alliance performance reveals the proper reliability of factors extracted from the scales. Furthermore, factors extracted from core competitiveness, strategic alliance, and alliance performance appear consistent content with the operational definitions that the scale should present proper construct validity.

#### *Correlation analysis*

Correlation analysis explores the relationship between variables, focusing on how changes in one variable cause changes in another variable, or how changes in one variable are related to changes in another variable. The statistical results reveal significant correlations among core competitiveness, strategic alliance, and alliance performance, with a significance level of 1%. The correlation coefficients indicate clear relationships among these variables, suggesting that regression analysis is appropriate. The results of Pearson correlation test are presented in Table 4.

Table 4. Correlation analysis

Dimension	Market capacity	Integration ability	Unique ability	Compatibility	Complementarity	Commitment	Alliance performance
Market capacity	1						
Integration ability	.340**	1					
Unique ability	.323**	.270**	1				
Compatibility	.420**	.418**	.342**	1			
Complementarity	.509**	.393**	.306**	.382**	1		
Commitment	.350**	.332**	.251**	.340**	.320**	1	
Alliance performance	.300**	.271**	.293**	.309**	.294**	.244**	1

Note: \*\*\* $p < .001$ .

Data source: organized in this study

### Regression analysis

According to the correlation analysis results in this study, it is considered that the data are suitable for further regression analysis, in which collinearity and DW test are further included. The specific analyses and results are show as followings.

#### *Effects of core competitiveness on strategic alliance*

The results of this study are shown in the table below. Regarding the regression analysis of core competitiveness to strategic alliance:

*Regression analysis of core competitiveness to compatibility.* Core competitiveness presents remarkable effects on compatibility. The regression analysis indicates significant results ( $F = 71.467$ ,  $p < 0.000$ ). The factors “market capacity,” “integration ability,” and “unique ability” within core competitiveness have notable and positive effects on compatibility in strategic alliances, with significance levels as follows:  $\beta = 0.257$  ( $p < 0.001$ ),  $\beta = 0.255$  ( $p < 0.001$ ), and  $\beta = 0.154$  ( $p < 0.001$ ).

*Regression analysis of core competitiveness to complementarity.* Core competitiveness demonstrates significant effects on complementarity. The regression analysis is significant ( $F = 84.318, p < 0.000$ ), with “market capacity,” “integration ability,” and “unique ability” within core competitiveness showing notable and positive effects on complementarity in strategic alliances. The significance levels are as follows:  $\beta = 0.381, \beta = 0.210,$  and  $\beta = 0.101$ .

*Regression analysis of core competitiveness to commitment.* Core competitiveness shows significant effects on commitment. The regression analysis is significant ( $F = 39.767, p < 0.000$ ), with “market capacity,” “integration ability,” and “unique ability” within core competitiveness demonstrating notable and positive effects on commitment in strategic alliances. The significance levels are as follows:  $\beta = 0.237, \beta = 0.208,$  and  $\beta = 0.100$ .

Meanwhile, VIF, in collinearity and DW test, is smaller than 3. It is considered that the collinearity is acceptable; DW is close to 2, showing that autocorrelation does not exist. It explains that market capacity, integration ability, and unique ability in core competitiveness would positively affect strategic alliance. According, H1 is supported.

Table 5. Regression analysis of core competitiveness to strategic alliance

Variable	Strategic alliance								
	Compatibility			Complementarity			Commitment		
	$\beta$	t	VIF	$\beta$	t	VIF	$\beta$	t	VIF
Core competitiveness									
Market capacity	0.257***	6.606	1.209	0.381***	9.973	1.209	0.237***	5.507	1.209
Integration ability	0.255***	6.994	1.168	0.210***	5.863	1.168	0.208***	5.164	1.168
Unique ability	0.154***	4.569	1.154	0.101**	3.056	1.154	0.100**	2.700	1.154
R <sup>2</sup>	0.290			0.326			0.185		
AdjR <sup>2</sup>	0.286			0.322			0.181		
F	71.467			84.318			39.767		

P	0.000	0.000	0.000
DW	1.398	1.568	1.765

Note: (1) \*\*\*  $p < .001$ ; (2)  $\beta$  is standardized regression coefficient (Data source: self-organized in this study)

*Effects of strategic alliance on alliance performance*

The research results are shown in the following table. Regarding the regression analysis result of strategic alliance to alliance performance:

Strategic alliance demonstrates significant effects on alliance performance. The regression analysis is significant ( $F = 29.291, p < 0.000$ ), with “compatibility,” “complementarity,” and “commitment” within strategic alliances showing notable and positive effects on alliance performance. The significance levels are as follows:  $\beta = 0.146, \beta = 0.131$ , and  $\beta = 0.083$ .

Meanwhile, VIF, in collinearity and DW test, is smaller than 3, where collinearity is in the acceptable range and DW is close to 2, revealing that autocorrelation does not exist. It explains that compatibility, complementarity, and commitment in strategic alliance positively affect alliance performance. H2 is therefore supported.

Table 6. Regression analysis of strategic alliance to alliance performance

Variable	Alliance Performance		
	$\beta$	t	VIF
Strategic alliance			
Compatibility	0.146***	4.425	1.249
Complementarity	0.131***	4.020	1.230
Commitment	0.083**	2.679	1.188
R <sup>2</sup>	0.144		
AdjR <sup>2</sup>	0.139		
F	29.291		
P	0.000		
DW	2.270		

Note: (1) \*\*\*  $p < .001$ ; (2)  $\beta$  is standardized regression coefficient (Data source: self-organized in this study)

*Effects of core competitiveness on alliance performance.*

The research results are shown in the following table. Regarding the regression analysis result of core competitiveness to alliance performance:

*Core competitiveness has significant effects on alliance performance.* The regression analysis is significant ( $F = 29.291$ ,  $p < 0.000$ ), with “market capacity,” “integration ability,” and “unique ability” within core competitiveness demonstrating notable and positive effects on alliance performance. The significance levels are as follows:  $\beta = 0.130$ ,  $\beta = 0.104$ , and  $\beta = 0.118$ .

Meanwhile, VIF, in collinearity and DW test, is smaller than 3. It is considered that collinearity is within the acceptable range and DW close 2 reveals the inexistence of autocorrelation. It explains that market capacity, integration ability, and unique ability in core competitiveness positively affect alliance performance. As a result, H3 is supported.

*Table 7. Regression analysis of core competitiveness to alliance performance*

Variable	Alliance Performance		
	$\beta$	t	VIF
Core competitiveness			
Market capacity	0.130***	4.195	1.209
Integration ability	0.104***	3.600	1.168
Unique ability	0.118***	4.410	1.154
R <sup>2</sup>	0.154		
AdjR <sup>2</sup>	0.149		
F	31.715		
P	0.000		
DW	2.270		

*Note: (1) \*\*\*  $p < .001$ ; (2)  $\beta$  is standardized regression coefficient (Data source: self-organized in this study).*

## Conclusion

The research results showed that capabilities of threshold, importance, and futurity in core competitiveness of medical device industry could effectively make the growth of corporate strategic alliance, competitive strategy, and alliance performance. Constantly developed and changed market environment, fiercely competitive stress, and investors' requirements for reward would make enterprises pay attention to the promotion of alliance performance in medical device industry. In the future competition, merely medical device industry paying attention to building core competitiveness, constantly improving and enhancing competitive strategy, and creating capacity for persistent strategic alliance could get a seat on the stage of market competition.

Medical device industry with the higher alliance performance presents higher commitment on continuous cooperation in the future. In this case, when the core competitiveness of an alliance partner is required by the company (to build reliable trust) and the partner treats each other with sincerity in the alliance process (to build kind trust), the promotion of alliance performance would be the best reliance to continuously maintain cooperation with the alliance partner and show the worthy cooperation.

Since strategic alliance in medical device industry is essentially the competitive and cooperative relationship, it is necessary to cautiously coordinate and draft strategic alliance when considering strategic alliance. What is more, it would enhance the strategic alliance performance and further achieve win-win by reinforcing trust and understanding based on the relationship to show full trust of the alliance object (including reliable trust and kind trust).

### *Suggestions*

According to the research results, essential suggestions aiming at medical device industry are proposed in this study.

1. Core competition refers to deep sub-competence being able to differentiate from competitors, because such competence can be hardly copied or owned by competitors. Core competitiveness realizes the collective learning of an organization, particularly about how to coordinate distinct production skills and integrate various techniques. Such core competitiveness creates sustainable competitive advantage for an enterprise and helps a company get into various relevant markets as well as contributes to the benefits for customers. For this reason, an enterprise should dig out the key technology to create market advantage, as each enterprise presents the unique core advantage and competitiveness. An enterprise tending to specify the advantage, separate the key capability, and make the advantage of the entire organization perfect might merely be the process, technique, knowledge, professional skill, or experience. It is the

- example to develop unique core competitiveness after comparing with other competitive enterprises with same skills.
2. When selecting cooperation enterprises for strategic alliance, the higher strategic alliance match could better enhance alliance performance. In this case, an enterprise cooperating with other highly matched enterprises could enhance competitive strategy and alliance performance. Consequently, an enterprise, when preceding strategic alliance, has to evaluate the match of core competitiveness, image, same culture or business, or complementary functions of both cooperation parties. The higher suitability of both parties would enhance the alliance performance of enterprises.
  3. An enterprise, when cooperating with alliance partners, could use few inputs to expand wider audience (customers). When merely one enterprise joins in the alliance, both brands could acquire credibility; along with the joining of more alliance enterprises and brands, corporate brand and reputation would be built to become the trustable choice for consumers. Alliance marketing is a marketing strategy based on performance, as it could reduce the waste of funds on advertisement distribution. Essentially, alliance marketing could be considered as expanding the marketing team by combining the service of cooperative firms; however, rewards could merely be acquired when service is transformed into successful sales.

### References

- Abuzaid, A. N. A. (2014). The impact of strategic alliance partner characteristics on firms' innovation: Evidence from Jordan. *International Journal of Business and Management*, 9(3), 77, DOI: 10.5539/ijbm.v9n3p77.
- Agha, S., Alrubaiee, L., & Jamhour, M. (2012). Effect of core competence on competitive advantage and organizational performance. *International Journal of Business and Management*, 7(1), 192-204, DOI: 10.5539/ijbm.v7n1p192.
- Bani-Hani, J. (2021). The moderating influence of managers strategic thinking on the effect of talent management on organization core competency. *Management Science Letters*, 11(1), 213-222 DOI: 10.5267/j.msl.2020.8.013.
- Barney, J., & Hesterly, W. (2021). *Strategic Management and Competitive Advantage* (6th ed.), Pearson.
- Bronder, C., & Pritzl, R. (1992). Developing strategic alliances: a conceptual framework for successful co-operation. *European Management Journal*, 10(4), 412-421. DOI: 10.1016/0263-2373(92)90005-O.
- Cooke, F.L., Wood, G., Wang, M., & Li, A.S. (2021). Riding the tides of mergers and acquisitions by building a resilient workforce: A framework for studying the role of human resource management. *Human Resource Management Review*, 31(3), 100747, DOI: 10.1016/j.hrmr.2020.100747.
- Geringer, J.M. (1998). Assessing replication and extension. A commentary on Glaister and Buckley: Measures of performance in UK international alliances. *Organization Studies*, 19(1), 119-138.

- Hamel, G., & Heene, C. (1994). *The Concept of Core Competence*. New York: Wiley, Chichester.
- Jamshed, M.A., Ali, K., Abbasi, Q. H., Imran, M. A., & Ur-Rehman, M. (2022). Challenges, applications and future of wireless sensors in internet of things: A review. *IEEE Sensors Journal*, 22(6), 5482-5494.
- Liang, C.J., Lin, Y.L., & Huang, H.F. (2013). Effect of core competence on organizational performance in an airport shopping center. *Journal of Air Transport Management*, 31, 23-26, DOI: 10.1016/j.jairtraman.2012.11.005.
- Lin, Y. C., & Chen, C. M. (2022). How do hotel characteristics moderate the impact of COVID-19 on hotel performance? Evidence from Taiwan. *Current Issues in Tourism*, 25(8), 1192-1197, DOI: 10.1080/13683500.2021.1910213.
- Mohr, J., & Spekman, R. (1994). Characteristics of Partnership Success: Partnership Attributes, Communication Behavior, and Conflict Resolution Techniques. *Strategic Management Journal*, 15, 135-152. DOI:10.1002/smj.4250150205.
- Molina-Morales, F.X., & Martinez-Fernandez, M.T. (2010). Social networks: effects of social capital on firm innovation. *Journal of Small Business Management*, 48(2), 258-279.
- Mulla, T. (2022). Assessing the factors influencing the adoption of over-the-top streaming platforms: A literature review from 2007 to 2021. *Telematics and Informatics*, 101797, DOI: 10.1016/j.tele.2022.101797.
- Nawrocki, T. L., & Jonek-Kowalska, I. (2022). Is Innovation a Risky Business? A Comparative Analysis in High-Tech and Traditional Industries in Poland. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(3), 155, DOI:10.3390/joitmc8030155.
- Prahalad, C.K., & Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review*, 68, 79-91, DOI: 10.1007/3-540-30763-X\_14.
- Qing, Z., Weijing, D., & Wenhui, H. (2012). Technological standard alliance in China: partner selection and innovation performance. *Journal of Science and Technology Policy in China*, 3(3), 196-209.
- Seddighi, H. R., & Mathew, S. (2020). Innovation and regional development via the firm's core competence: some recent evidence from North East England. *Journal of Innovation & Knowledge*, 5(4), 219-227, DOI: 10.1016/j.jik.2019.12.005.
- Spekman, R. (1988). Strategic supplier selection: toward an understanding of longterm buyer-seller relationships. *Business Horizons*, 31, 75-81, DOI: 10.1016/0007-6813(88)90072-9.