

The Influence of Corporate Social Capital on Innovation Performance: A Case Study of Chinese Technological Small and Medium-sized Enterprises

Yan Chao¹, Dogeun Kim²

¹ Ph.D. Student, Department of Business Administration, Tongmyong University, South Korea,
yan729yong@gmail.com

² Professor, Department of Business Administration, Tongmyong University, South
Korea, dgkim@tu.ac.kr

Corresponding author: Dogeun Kim

Abstract: In the case of open competition and the proliferation of patents, Chinese technology-based small and medium-sized enterprises (SMEs) still face the bottleneck of insufficient innovation resources. It is urgent to use corporate social capital to complete the transition from traditional internal accumulation to the realization of resource sharing. The connection between social capital and the performance of SMEs that rely on technology in terms of innovation, however, has not been well studied. This paper constructs a logical structure based on social capital formation in China's economic transition course. A questionnaire survey of 523 Chinese technology-based SMEs, using regression analysis and PROCESS procedures, examines the relevance between corporate social capital and innovation efficiency and explores the impact of organizational learning on this process. According to the research, corporate social capital significantly affects the effectiveness of corporate innovation while organizational learning serves as an intermediary variable. This conclusion not only enriches and improves the research on how corporate social capital affects innovation performance but also provides important inspiration for technological SMEs in the transitional economy to strengthen innovation management.

Keywords: Corporate Social Capital, Organizational Learning, Innovation Performance, Technological SMEs

1. Introduction

With the transformation of China's economy and society, the environment faced by Chinese enterprises has become increasingly dynamic and complex. Innovation gradually replaces the resource advantage and becomes the primary source of the enterprise's competitive advantage. Under this background, it is difficult for enterprises, especially SMEs, to rely on their accumulation to obtain competitive advantages. After implementing the market economy, Chinese enterprises have to learn from scratch, and their innovation path has completed the transformation from imitation to original innovation. Therefore, to meet the needs of invention, enterprises can only use social capital to break through resource constraints and obtain resources required for technological innovation by establishing a broad and stable social network with stakeholders include the government, vendors, and universities conducting scientific research[1].

Received: November 13, 2022; 1st Review Result: December 28, 2022; 2nd Review Result: January 26, 2023
Accepted: February 28, 2023

However, the impact of corporate social capital (CSC) on innovation efficiency has received relatively little empirical research[2], and the research results have not been unified. The reasons for the inconsistent conclusions of this study may be: 1)The existing research on CSC on innovation capability is mostly concerned with the direct effect and devotes little attention to the specific mechanism of the role of CSC. Still, existing research has found organizational learning and CSC have been linked to improved innovation performance. 2)The existing research on social capital mainly concentrates on mature manufacturing enterprises, and there are few studies on SMEs, especially technology-based SMEs. Based on this, this study focuses on two specific questions: how does CSC affect the innovation effectiveness of technology-based SMEs? To what extent organizational learning mediates the association between CSC and innovation efficiency? To help Chinese technology-based SMEs go through the creative development stage, more practical suggestions and countermeasures are hoped to be offered[3].

2. Theoretical Background and Prior Research

2.1 Corporate Social Capital

French sociologist Bourdieu[4] established the concept of social capital and defined it as resources that individuals can currently or potentially access using group networks. As social capital continues to be studied by many scholars, the definition of CSC in the existing literature is inconsistent, which can be roughly divided into two categories: "resource view" and "structure view". The former inherits Coleman's definition of "functionalist" social capital, directing corporate social capital to the resources behind its social network members. The latter inherits the definition of "structuralism," the social capital of Burt, which equates corporate social capital with a specific structure of a social network. As far as this research is concerned, we comprehensively consider the research ideas of the above two orientations, draw on the definition of social capital by Nahapiet & Ghoshal[5], and define it as actual or potential resources rooted in an enterprise's social network[6].

2.2 Organizational Learning

To improve innovation performance, enterprises need diverse knowledge, resources and adequate knowledge-absorptive capacity to convert acquired knowledge and information into resources they can use. In 1958, March and Simon defined organizational learning as a system in which the businesses adjust their structure in an organized and planned way[7]. Argyris and Schon proposed that it is a process of finding mistakes and using theory to reconstruct and correct them. Huber[8] believes that organizational learning is the behavioral process that organizations use to remove obstacles by acquiring knowledge and creating knowledge to adapt to complex external surroundings. Bontis and Crossan[9] believed that organizational learning's objective is to enhance the behavior of the organization as a whole. Through the documentation of the carding, it can be found that organizational learning is the means of generating performance by continuously creating information in response to environmental changes. All forms of learning require a certain amount of knowledge, which can be acquired internally and from outside the organization. That is to say, the organization can learn not only through the members of the organization but also through interaction with customers, suppliers, sellers, scientific research institutions, and even competitors. The consequences of internal knowledge administration on business success were frequently the focus of earlier research. Still, not enough attention has been paid to acquiring knowledge and practical experience through external alliances and networks. Therefore, this paper emphasizes enterprises' research through contact and cooperation with external stakeholders to advance management practices, improving innovation performance[10].

2.3 Innovation Performance

Despite their lack of technical strength, SMEs with a focus on technology is a vital source of innovation. Therefore, there is a great deal of worry in academic circles about how to improve the innovation capacity of technology-based SMEs. Innovation performance is a specific form of organizational performance[11]. Hagedoorn & Cloud[12] think that the benefits brought by the whole process stage, from idea generation to new products entering the market, determine its innovation performance. Jantunen[13] defines innovation performance as the enterprise's improvement brought about by product or process innovation. Zhang Fanghua[14] believes that innovation performance is mainly composed of efficiency and effectiveness. In conclusion, improving the operational efficiency and profitability of the enterprise's scientific progress efforts is the most objective measure of innovation performance.

2.4 Prior Research on the Relationship between Variables

2.4.1 CSC and Innovation Performance

Most studies show that collaborating with other businesses promotes the inflow of technical knowledge from outside to enterprises[15], thereby improving enterprises' innovation level and performance. Yip and McKern showed that multinational corporations had established Research and Development (R&D) centers in China, such as the establishment of R&D centers in Beijing, Shanghai, and Wuxi by American General Motors, Meriton and Collins Medical, Continental Group, etc., which promotes new technology applications of Chinese enterprises and enables many SMEs in China to learn and grow in the process of applied research quickly and establish real innovation capabilities[16]. Cooke and Clifton[17] found that corporate social capital promoted the sales of new items and enhanced products quality, thus affecting the company's performance. Chinese scholar Zhang Fanghua [14], based on the direct or indirect connection between enterprises and various external entities, confirmed that the CSC could promote the effectiveness of technological innovation. For Chinese science and technology SMEs, the difficulty of innovation activities continues to increase. In the process of communication, they can expand the boundaries of information and resources and improve the accuracy of managers' market judgment and technological innovation decision-making.

2.4.2 CSC and Organizational Learning

Social capital can increase the understanding of complex, tacit knowledge by enterprises[17]. About the former, the larger the scale of the social capital network of the enterprise, the higher the abundance of heterogeneous and non-redundant information resources that the enterprise may obtain, and the more conducive to the development of new product development technologies exchange among enterprises. The other contribution of corporate social capital is that companies can acquire knowledge and information from cooperative relationships established by trust. Bolívarvar & Chrispeels[18] pointed out that "trust can keep us open to the knowledge of diversity, ensuring communication and learning between organizations," thus indicating that trust may provide people with a channel for intellectual capital exchange and increase the expectation of information value. Boisot[19] underscores the significance of trust in creating knowledge in an environment of high ambiguity and uncertainty: "When information is not encoded, trust hinged on the quality of business relationship rather than the inherent rationality of the information." This means that trust can increase an enterprise's ability to understand and accept complex knowledge. Apart from that, co-architecture knowledge helps companies better understand common goals among companies and the varying needs of each other's highly specialized work. It provides a cognitive mechanism for transferring and understanding large amounts of explicit, implicit, complex knowledge and difficult-to-conceptualized experiences.

2.4.3 Organizational Learning and Innovation Performance

The process of creating and disseminating knowledge in corporate contexts is known as organizational learning, that is, integrating knowledge into corporate strategy and management processes. From the perspective of organizational change, Tidd and Taurins[20] claim that organizational learning will continuously prompt organizations to re-examine and guide enterprises to carry out different types of change activities and then promote the realization of technological innovation. Lin and Sanders[21] point out that innovation occurs in organizational learning. Li believes that although the definitions and emphases of exploratory innovation and exploitative innovation are different, they both implicitly emphasize the inflow and identification of new information. It can be seen that the establishment of an organizational learning mechanism in enterprises can effectively promote the knowledge sharing of enterprises and stimulate the creative potential of enterprises.

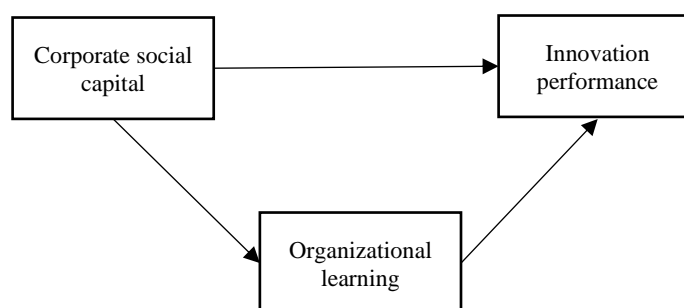
2.4.4 Mediator: Organizational Learning

Corporate social capital is an essential means for enterprises to acquire external knowledge and technology. Social capital is essential to companies in the cultivation of learning networks and the realization of learning effects. Organizational learning will conduct a market selection of learning results through trial and error and selection mechanism, make new technologies and new product development processes accepted by enterprises and then improve the innovation performance. New product development arises from companies taking full advantage of existing technologies and limited resources in the product market area. This resource comes from the entrepreneur's previous social capital. Organizational learning reduces problem-solving errors and the cost of new product development[22]. Atuahene examined 450 brand-new businesses in China and discovered that CSC influences organizational learning in a beneficial way. He also confirmed that organizational learning predicts enterprise performance in a positive way, but he did not investigate the mediated effect of organizational learning. Our study seeks to address this issue.

3. Research Methods

3.1 Research Model and Hypothesis

Through interviews with 3 CEOs and discussions with several professors and scholars, the pre-test and refinement of the survey questions was performed to confirm the content validity of the survey questions. Using data from Chinese high-tech SMEs enriches the mechanism of CSC on innovation. The conceptual framework and hypothesis are shown in [Fig. 1].



[Fig. 1] Research Model

- H1: CSC is positively correlated with innovation performance.
- H2: CSC is positively correlated with organizational learning.
- H3: Organizational learning relates positively to innovation performance.
- H4: Organizational learning acts as a conduit for the impact of CSC on innovation performance.

3.2 Operational Definitions and Measurement of Variables

In this study, Spss24.0 was used to verify the direct effect, and Hayes' Process3.0 was utilized to measure the mediating impact of organizational learning. All questionnaires were completed anonymously to ensure confidentiality. Most of the scales used in this paper were proven to have good validity by previous studies. They were modified based on interviews with entrepreneurs, discussions with scholars, and a literature review. The method of factor analysis is used to optimize the measurement indicators further. After excluding the measures with factor loadings less than 0.6, twenty measures were finally included in the final empirical analysis. Referring to the methods of Tsai and Ghoshal and Li Zuozhan[23], six items, including "Maintains positive inter-relationships with contacts who obtain external knowledge," are used to measure CSC. In terms of organizational learning, the scale of Atuahene-Gima was measured with eight items, including "We aimed to search for information to extract common methods and information in solving workflow problems." This scale, which complies with the objectives of this paper, takes Chinese high-tech enterprises as the survey object and studies the effects of organizational learning on creating novel products. According to a study by Zhang Mingde, six indicators are used to evaluate how well businesses innovate, such as "compared with their peers, the number of new product development of enterprises is more significant."

3.3 Sample Collection and Variable Measurement

[Table 1] Descriptive Statistical Analysis of Human Demography

Items		Count	Column N %	Items		Count	Column N %
Age	under 25	84	16.06%	Industry	Information Technology	109	20.84%
	26-35	180	34.42%		Biomedicine	88	16.83%
	36-45	201	38.43%		New energy and new materials	63	12.05%
	Over 46	58	11.09%		Software development	161	30.78%
Education	below community college	161	30.78%		Manufacturing	35	6.69%
	College (4 years)	294	56.21%		Other	67	12.81%
	Graduate	56	10.71%		Number of employees	Under 50	60
	PHD	12	2.29%	51-100		102	37.64%
Area	Guang dong	83	15.87%	101-200		51	18.82%
	Zhe jiang	111	21.22%	201-300		45	16.61%
	Bei jing	161	30.78%	301-500		13	4.80%
	Shan dong	168	32.12%				

The survey areas are mainly concentrated in Guangdong, Zhejiang, Beijing, and Shandong, as the number of technology companies in these provinces ranks among the top six in the country in the Chinese national map of technology companies released in 2021. The selection of science and technology SMEs as the research object is mainly based on three reasons: first, compared with state-owned enterprises or large-scale traditional enterprises, SMEs in China face more significant internal resource constraints and external business environment pressure, making the enterprise's dependence on its social relations a strategic need in the process of operation; second, previous efforts are heavily weighted in mature manufacturing enterprises[24], so focusing on SMEs technology enterprises can enrich the application field of social capital theory; third, as an essential bridge or even the only channel for external contacts of enterprises, entrepreneurs of SMEs can replace social capital at the level of enterprise organization to a certain extent. Therefore, using it as the research object can avoid the "multi-level problem". This study uses "snowball sampling," first surveying MBA and EMBA students, and then asking them to recommend other eligible respondents. The survey subjects are middle and senior managers of technology-based small and medium-sized businesses in four provinces. During the process of questionnaire collection, the middle or senior managers of each enterprise only fill out one questionnaire. The samples involve information technology, biomedicine, machinery manufacturing, and other fields are representative to a certain extent. Six hundred and seventy-eight questionnaires were sent out, and five hundred and twenty-three valid ones were recovered, with an effective recovery of 77.1%.

4. Results

4.1 Reliability and Validity Analysis

The Cronbach's alpha coefficients of all scales were greater than 0.8, an instrument with good reliability, as in [Table 2]. The confirmatory component analysis is used in AMOS24.0 to assess the construct's validity. All factor loadings were greater than 0.6, composite reliability was greater than 0.7, and the average extraction variance value (AVE) was greater than 0.5. All these prove that the scale has sufficient convergent validity.

[Table 2] Reliability and Validity Analysis Table

Variable	Title	factor loading	Cronbach's α	CR	AVE
Corporate social capital	ESC1	.848	0.82	0.93	0.71
	ESC2	.843			
	ESC3	.831			
	ESC4	.813			
	ESC5	.961			
	ESC6	.954			
Organizational learning	OL1	.830	0.92	0.94	0.64
	OL2	.821			
	OL3	.793			
	OL4	.760			
	OL5	.817			
	OL6	.815			
	OL7	.806			
	OL8	.784			
Innovation performance	CXJX1	.846	0.95	0.93	0.70
	CXJX2	.840			
	CXJX3	.839			
	CXJX4	.837			
	CXJX5	.826			
	CXJX6	.824			

4.2 Correlation Analysis

From the results in [Table 3], it can be found that CSC is positively correlated with organizational learning and innovation performance ($\beta=0.70$, $p<0.001$; $\beta=0.60$, $p<0.001$); organizational learning and innovation performance are positively correlated ($\beta=0.60$, $p<0.001$). Meanwhile, the square root of the AVE for the three variables in this study is greater than the absolute value of the correlation coefficient between its dimensions, indicating that the variables have good discriminant validity.

[Table 3] Correlation Analysis

	Innovation performance	Corporate social capital	Organizational learning
Innovation performance	0.83		
Corporate social capital	0.60**	0.84	
Organizational learning	0.60**	0.70**	0.80

Note: The diagonal number is the root value of the factor AVE. ** $p<0.01$.

4.3 Hypothesis Test

The hypothesis is evaluated using the hierarchical regression method in this paper; the analysis findings are displayed in [Table 4]. It can be found that CSC actively affects innovation performance (Model 1: $\beta=0.43$, $p<0.001$), so H1 has been verified. CSC improves organizational learning (Model 2: $\beta=0.64$, $p<0.001$), so H2 is validated. Organizational learning and innovation performance are significantly correlated (Model 3: $\beta=0.67$, $p<0.001$), hence H3 holds. To examine the mediating role, we use PROCESS Model 4, developed by Hayes (shown in [Table 5]). The findings demonstrate that the direct prediction effect of CSC is significant ($\beta=0.426$, $p<0.001$); after adding organizational learning as an intermediary variable, corporate social capital can still significantly predict corporate innovation performance ($\beta=0.264$, $p<0.001$). H4 is therefore confirmed. The bootstrap test showed that this mediating effect was significant.

[Table 4] Multiple Regression Analysis

Predictors	Model1(IP)		Model2(OL)		Model3(IP)		Model4(IP)	
	β	t	β	t	β	t	β	t
CSC	0.43	16.55***	0.64	15.98***			0.26	7.92***
OL					.67	15.976***	0.36	7.12***
R ²	0.37		0.35		0.50		0.42	
F	59.90***		56.05***		102.09***		186.62***	

Note: N = 523. CSC: corporate social capital; OL: organizational learning IP: innovation performance. *** $p<.001$.

[Table 5] The Mediation Effect Test of Bootstrap

Effect type	Effect value	Boot standard deviation	Boot 95%CI		Relative effect
			Lower limit	Upper limit	
total effect	0.4256	0.0258	0.3751	0.4761	
direct effect	0.2659	0.0354	0.2001	0.3361	62.48%
indirect effect	0.1597	0.0293	0.1044	0.2201	37.52%

5. Discussion

Technological SMEs can improve innovation performance through social capital. This research result is consistent with the research conclusion of Geng Xin[25]. However, they differ from this paper in the dimension division or research object of an entrepreneur's social capital. The study's conclusion also confirms what Witt[26] mentioned, "the embedded social relationship network cannot only enable enterprises to purchase resources at lower prices than market transactions, but also obtain intangible resources that enterprises cannot obtain in market transactions. These are important factors that lead to differences in innovation performance among firms".

CSC can actively promote the improvement of organizational learning. The study's conclusions concur with those of CHS Liu[27], but the research sample used is Taiwan's cultural and creative enterprises, and technology-based SMEs make up the research sample in this article .

The performance of technology-based SMEs in terms of innovation can be improved through organizational learning, which is similar to the research conclusions of Hung, Lien, et al.[28] and others. Nevertheless, they studied organizational learning by examining learning culture and strategy.

Organizational learning influences the connection between CSC and high-tech SMEs' innovation efficacy. This shows that CSC affects innovation performance through organizational learning. Previous research on innovation performance has mostly focused on the level of organizational learning, and few studies have used it as a mediating factor to determine how CSC affects the capacity of SMEs with a technology foundation to innovate.

6. Conclusion

As the principal part of innovation, technology-based SMEs have an increasingly prominent role in social and economic development. However, most SMEs are faced with resource scarcity and information asymmetry. Hence, this paper highlights the valuable function of CSC in finding and exploiting new information and the prominent part of effective organizational learning in the knowledge creation effect.

On the one hand, enterprises should actively examine the value created by entrepreneurs and focus on cultivating and developing corporate social capital. First, enterprises can expand their social network through e-commerce platforms, self-built extensive data systems, and other channels and improve the enterprise's access path and quantity of external resources. Second, technology-based SMEs should strengthen communication and coordination with the outside of the enterprise, establish good relationships, increase cooperation trust, develop relationships in business cooperation, strengthen cooperation in maintaining relationships, continuously reduce transaction costs, and boost the realization of innovative collaboration. On the other hand, enterprises should pay attention to the organizational learning's mediation function between CSC and the performance of technology-based SMEs' innovation. Research shows that technology-based SMEs cannot achieve practical innovation simply by relying on their social network resources. They must also strengthen learning from within the organization and integrate various knowledge acquired from the outside into innovative resources to achieve the purpose of technological innovation.

Lastly, the following are the research's shortcomings and future research directions: First, the subjects of the questionnaire in this paper mainly focus on Chinese technology-based SMEs. Given that the main objective of these businesses is scientific and technological innovation and that the research's scope is quite constrained, it should be further discussed if the findings are generally appropriate. Second, the continuity of research data is not strong, and panel data is not used to test theoretical assumptions. In the future, when data are available, panel data can be used to conduct in-depth discussions on social capital. Meanwhile, future research can explore its relationship with organizational learning and

innovation performance from different diverse types of social capital, such as corporate cognitive social capital.

References

- [1] C. Lyu, C. Peng, H. Yang, H. Li, X. Gu, Social capital and innovation performance of digital firms, Serial mediation effect of cross-border knowledge search and absorptive capacity, *Journal of Innovation & Knowledge*, (2022), Vol.7, No.2.
DOI: <https://doi.org/10.1016/j.jik.2022.100187>
- [2] I. Maurer, V. Bartsch, M. Ebers, The value of intra-organizational social capital: How it fosters knowledge transfer, innovation performance, and growth, *Organization Studies*, (2011), Vol.32, No.2, pp.157-185.
DOI: <https://doi.org/10.1177/0170840610394301>
- [3] Y. Zhu, X. Wittmann, M. W. Peng, Institution-based barriers to innovation in SMEs in China, *Asia Pacific Journal of Management*, (2012), Vol.29, pp.1131-1142.
DOI:10.1007/s10490-011-9263-7
- [4] M. Grenfell, Applying Bourdieu's field theory: The case of social capital and education, *Education, Knowledge & Economy*, (2009), Vol.3, No.1, pp.17-34.
DOI: <https://doi.org/10.1080/17496890902786812>
- [5] I. Maurer, M. Ebers, Dynamics of social capital and their performance implications: Lessons from biotechnology start-ups, *Administrative Science Quarterly*, (2006), Vol.51, No.2, pp.262-292.
DOI: <https://doi.org/10.2189/asqu.51.2.262>
- [6] N. Lin, *Building a network theory of social capital*, Routledge, pp.3-28, (2017)
Available from: <https://www.taylorfrancis.com/chapters/edit/10.4324/9781315129457-1/building-network-theory-social-capital-nan-lin>
- [7] N. Bontis, M. M. Crossan, J. Hulland, Managing an organizational learning system by aligning stocks and flows, *Journal of management studies*, (2002), Vol.39, No.4, pp.437-469.
DOI: <https://doi.org/10.1111/1467-6486.t01-1-00299>
- [8] J. Hong, Y. Liao, Y. Zhang, Y. Zhefu, The effect of supply chain quality management practices and capabilities on operational and innovation performance: Evidence from Chinese manufacturers, *International Journal of Production Economics*, (2019), Vol.212, pp.227-235.
DOI: <https://doi.org/10.1016/j.ijpe.2019.01.036>
- [9] C. Cruz-Cázares, C. Bayona-Sáez, T. García-Marco, You can't manage right what you can't measure well: Technological innovation efficiency, *Research policy*, (2013), Vol.42, No.6-7, pp.1239-1250.
DOI: <https://doi.org/10.1016/j.respol.2013.03.012>
- [10] J. Hagedoorn, M. Cloudt, Measuring innovative performance: is there an advantage in using multiple indicators?, *Research policy*, (2003), Vol.32, No.8, pp.1365-1379.
DOI: [https://doi.org/10.1016/S0048-7333\(02\)00137-3](https://doi.org/10.1016/S0048-7333(02)00137-3)
- [11] Z. Li, X. Gao, Makers' relationship network, knowledge acquisition and innovation performance: an empirical analysis from china, *Technology in Society*, (2021), Vol.66.
DOI: <https://doi.org/10.1016/j.techsoc.2021.101684>
- [12] F. Zhang, Corporate Social Capital and Technological Innovation Performance: Conceptual Model and Empirical Analysis, *Research and Development Management*, (2006), Vol.18, No.3 pp.47-53.
DOI: <https://doi.org/10.3969/j.issn.1004-8308.2006.03.008>
- [13] J. A. Wolff, T. L. Pett, Small-firm performance: modeling the role of product and process improvements, *Journal of Small Business Management*, (2006), Vol.44, No.2, pp.268-284.
DOI: <https://doi.org/10.1111/j.1540-627X.2006.00167.x>
- [14] M. Moilanen, S. Østbye, K. Woll, Non-R&D SMEs: External knowledge, absorptive capacity and product innovation,

- Small Business Economics, (2014), Vol.43, pp.447-462.
DOI: <https://doi.org/10.1007/s11187-014-9545-9>
- [15] G. S. Yip, B. McKern, China's next strategic advantage: From imitation to innovation, MIT Press, pp.447-462, (2016)
Available from: <https://www.amazon.com/Chinas-Next-Strategic-Advantage-Innovation/dp/0262034581>
- [16] R. Golmoradi, F. S. Ardabili, The effects of social capital and leadership styles on organizational learning, Procedia-Social and Behavioral Sciences, (2016), Vol.230, pp.372-378.
DOI: <https://doi.org/10.1016/j.sbspro.2016.09.047>
- [17] A. Pérez-Luño, C. C. Medina, A. C. Lavado, G. C. Rodríguez, How social capital and knowledge affect innovation, Journal of Business Research, (2011), Vol.64, No.12, pp.1369-1376.
DOI: <https://doi.org/10.1016/j.jbusres.2011.01.014>
- [18] J. M. Bolívar, J. H. Chrispeels, Enhancing parent leadership through building social and intellectual capital, American educational research journal, (2011), Vol.48, No.1, pp.4-38.
DOI: <https://doi.org/10.3102/0002831210366466>
- [19] C. H. Lin, K. Sanders, HRM and innovation: a multilevel organisational learning perspective, Human Resource Management Journal, (2017), Vol.27, No.2, pp.300-317.
DOI: <https://doi.org/10.1111/1748-8583.12127>
- [20] Y. Li, W. Vanhaverbeke, W. Schoenmakers, Exploration and exploitation in innovation: Reframing the interpretation, Creativity and innovation management, (2008), Vol.17, No.2, pp.107-126.
DOI: <https://doi.org/10.1111/j.1467-8691.2008.00477.x>
- [21] K. Atuahene-Gima, J. Y. Murray, Exploratory and exploitative learning in new product development: A social capital perspective on new technology ventures in China, Journal of International Marketing, (2007), Vol.15, No.2, pp.1-29.
DOI: <https://doi.org/10.1509/jimk.15.2.1>
- [22] Matthews R L, MacCarthy B L, Braziotis C, Organisational learning in SMEs: a process improvement perspective, International Journal of Operations & Production Management, (2017), Vol.37, No.7, pp.970-1006.
DOI: <https://doi.org/10.1108/IJOPM-09-2015-0580>
- [23] F. Cui, H. Lim, J. Song, The Influence of Leadership Style in China SMEs on Enterprise Innovation Performance: The Mediating Roles of Organizational Learning, Sustainability, (2022), Vol.14, No.6.
DOI: <https://doi.org/10.3390/su14063249>
- [24] K. Laursen, A. Salter, Open for innovation: the role of openness in explaining innovation performance among UK manufacturing firms, Strategic management journal, (2006), Vol.27, No.2, pp.131-150.
DOI: <https://doi.org/10.1002/smj.507>
- [25] X. Geng, L. P. Yu, L. Zhao, Research on the Relationship between Entrepreneurs' Social Capital, Dynamic Capabilities and Innovation Performance—A Case Study of Small Technology Enterprises, Economic and Management Review, (2013), Vol.29, No.2, pp.70-75.
DOI: <http://dx.doi.org/10.13962/j.cnki.37-1486/f.2013.02.010>
- [26] P. Witt, Entrepreneurs' networks and the success of start-ups, Entrepreneurship & Regional Development, (2004), Vol.16, No.5, pp.391-412.
DOI: <https://doi.org/10.1080/0898562042000188423>
- [27] C. H. S. Liu, Examining social capital, organizational learning and knowledge transfer in cultural and creative industries of practice, Tourism Management, (2018), Vol.64, pp.258-270.
DOI: <https://doi.org/10.1016/j.tourman.2017.09.001>
- [28] R. Y. Y. Hung, B. Y. H. Lien, B. Yang, C. M. Wu, Y. M. Kuo, Impact of TQM and organizational learning on innovation performance in the high-tech industry, International business review, (2011), Vol.20, No.2, pp.213-225.
DOI: <https://doi.org/10.1016/j.ibusrev.2010.07.001>