ISSN 2706-6827 Vol. 3, Issue 10: 1-8, DOI: 10.25236/IJFS.2021.031001

Low Cost Strategies and Enterprise Performance: The Mediating Role of Incremental Innovation

Shumin Zhang*

School of Economics and Management, Lanzhou University of Technology, Lanzhou, China
zhangshumin97@126.com
**Corresponding Author*

Abstract: *The technological progress of "learning by doing" has helped numerous China's enterprises to survive in the market competition by imitating innovation and low-cost operation, and to accumulate certain strength and capital. However, whether incremental innovation can be regarded as a long pursued innovation mode in firms is a scientific question worth thinking. Based on a sample data of 136 firms with more than 100 employees, the structural equation model is adopted to test the theoretical hypothesis. The results show that indirect low-cost strategy is helpful for improving of enterprises' performance and the success of incremental innovation. Direct low-cost strategy is not conducive to incremental innovation and has no significant effect on enterprises' performance. Incremental innovation should not be a long-term innovation mode pursued by the firm when it is positioning and implementing low-cost strategy.*

Keywords: *Low-cost strategy, incremental innovation, enterprise performance, mediating role*

1. Introduction

The "learning by doing" mechanism in the technological progress is the main driving force in China's rapid economic growth since 1990s, China's enterprises with strong "learn" ability, according to the principle of comparative advantage, the economic structure has been adjust, and rural labour force has been transferred, so the economic development has been accelerated eventually[1]. The technological progress of "learning by doing" provides a technical guarantee for enterprises pursuing imitation innovation and "now" arbitrage. However, with the continuous follow-up of late-developing enterprises, those who can take the lead in achieving low cost will be able to obtain the sustained competitive advantage.

Porter[2] pointed out that the implementation of low-cost strategy requires enterprises to meet the requirements in resources, skills, organizational arrangements, control procedures and innovation systems, such as easy manufacture of products, continuous resource input, strict management of workers, structured organizational responsibilities, piecework incentives, strict cost control, and regular detailed control reports. Obviously, no matter it is perfect competition market or imperfect competition market, the enterprise can control the cost from two aspects when pursuing the low-cost strategy, that is, the control of direct cost or the control of indirect cost[3]. Direct costs include production, raw materials, compensation, etc., while indirect costs include scale production, process optimization, and function structure compactness, etc.[4]. Many state-owned enterprises (such as Northeast China old industrial base) have had to go bankrupt for restructuring due to excessive "burden", while many private enterprises (such as Spring Airlines) have successfully operated due to strict cost control.

It is believed that any "prudent" cost-conscious enterprise is more likely to survive a "crisis" than a "wasteful" cost-conscious enterprise. When enterprises pay attention to the implementation of low-cost strategy, incremental innovation, as a kind of low-input, gradual change, may be more favored by enterprises [5]. Judging from the innovation process of China's enterprises, most of them survived in the fierce market competition by means of imitation and incremental innovation. As Li (2015)[6] deemed that with the learning from Japan's experience in the history of innovation, if China's enterprises can start from the characteristics of manufacturing industry, develop the tradition of incremental innovation and realize the coordinated development of industry, they will be able to achieve the orderly transformation, upgrade and sustainable development of China's manufacturing industry, and ultimately intelligent manufacturing strategy also can truly implement.

ISSN 2706-6827 Vol. 3, Issue 10: 1-8, DOI: 10.25236/IJFS.2021.031001

Therefore, this paper takes low-cost strategy as the entry point of research, on the one hand, to test whether low-cost strategy and its two dimensions can bring about enterprise performance improvement; on the other hand, to test whether incremental innovation is the process mechanism of low-cost strategy affecting enterprise performance. The specific research steps of this paper are as follows: first, theoretically summarize the relationship between low-cost strategy, incremental innovation and enterprise performance, and propose hypotheses; Second, describe the source of sample data, variable measurement and data reliability test in detail, and conduct reliability test. Thirdly, test theoretical hypotheses descriptive by statistical analysis and structural equation model. Finally, put forward the research conclusions and countermeasures.

2. Theories and hypotheses

2.1. Study on the Two-Dimensional Nature of Low-Cost Strategy and Its Impact on Enterprise Performance

Low-cost strategy means that enterprises try to obtain sustainable competitive advantages by reducing costs. As one of the business tier strategies, the relative strategy of low-cost strategy is differentiation strategy or innovation strategy[7]. The implementation of low-cost strategy has two dimensions: one is to invest low-cost production materials; Second is to optimize the production process to save costs.

Wang (2003)[8] divided cost management into internal minimum cost management caused by short-term profit maximization goal and external supply chain lean cost management caused by breadth and depth strategy. Zhang (2016)[9] divided cost management into explicit cost and invisible cost. In the short term, the enterprise can be put into low price dominant way to obtain excess profit, but as more and more enterprises enter the market segmentation profit, constantly consumed raw materials prices will certainly present increasing trend, enterprises have to think about being out of the product market segments or optimizing the internal process management mode of the recessive to maintain a low cost advantage. However, when enterprises cannot optimize the process management to reduce the cost pressure, the common practice is to "squeeze" the "manpower" (low salary or layoff) to obtain the low cost advantage. For example, Li and Hu (2012)[10] once pointed out that “it is not advisable to deliberately create a bad working environment in order to reduce costs, arbitrarily increase workers' working time in order to maximize surplus value, impose high penalties in order to reduce employees' income, and arbitrarily reduce employees' work force in order to relieve operating pressure”.

It can be seen that there are two ways for an enterprise to adopt a low-cost strategy, namely, it can either directly reduce the cost of raw materials, labor and technology, or indirectly reduce the cost of defective products, communication conflicts and poor information transmission by optimizing the internal process management. Obviously, these two low-cost paths will have an impact on the improvement of enterprise financial performance. In the aspect of empirical research, Zheng and Li (2011)[11] confirmed the significant direct effect of low-cost strategy on enterprise performance by using the questionnaire survey data of 316 enterprises. Lei et al. (2014)[12], Zhang and Wang (2017)[13] all confirmed that the lag period of the impact of low-cost strategy on enterprise performance is shorter than that of differentiation strategy. Yang (2017)[14] confirmed with the sample of listed companies of China's retail enterprises that low-cost strategy will improve enterprise performance, while differentiation strategy will reduce enterprise performance. Ma et al. (2016)[15] based on 187 samples of international enterprises confirmed that the low cost strategy of inborn international enterprises had no significant impact on enterprise performance.

To sum up, most scholars believe that enterprises' emphasis on the implementation of low-cost strategy can help improve enterprise performance. However, empirical studies on the relationship between low-cost strategy and enterprise performance by dividing it into two dimensions, direct and indirect, are still rare. Therefore, this paper proposes the following hypothesis 1.

Hypothesis 1a: direct low-cost strategy has a direct positive effect on enterprise performance;

Hypothesis 1b: indirect low-cost strategy has a direct positive effect on enterprise performance.

2.2. Study on the Mediating Effect of Incremental Innovation between Two-Dimensional Low-Cost Strategy and Enterprise Performance

Incremental innovation and radical innovation are two innovation modes often adopted by

ISSN 2706-6827 Vol. 3, Issue 10: 1-8, DOI: 10.25236/IJFS.2021.031001

enterprises. Compared with radical innovation, which focuses on technology and professional skills, incremental innovation pays more attention to market and diversified management. The organizational structure based on progressive innovation is more complex, centralized and formalized than radical innovation [16]. Dewar and Dutton (1986) [17] pointed out that the degree of innovation depends on the novelty of technology and knowledge compared with the current technology. If an enterprise adopts a completely different technology for production, it will be shown as radical innovation, while if it only makes minor adjustments or simple updates on the basis of the current technology, it will be shown as incremental innovation. Looking back at the "innovation miracle" of China's enterprises since the reform and opening up, whether it is the era of technology spilt that encourages FDI to introduce or the era of voice behavior that strengthens the participation of management reform, imitation and incremental innovation are almost the "difficult years" every China's inland enterprise has experienced.

When capital resources, technical resources and intellectual resources are short or insufficient, it is wise to adopt incremental innovation to preserve and accumulate strength, which may be the reason why many domestic enterprises choose incremental innovation instead of radical innovation. As pointed out by Pi and Zhao (2017)[18], in the global value chain (GVC), China's enterprises can climb to the high end through innovation when climbing the incremental path, while in the radical path, they must construct a global value chain dominated by domestic chains. Obviously, when enterprises choose incremental innovation, the purpose is to adjust and control the input of resources at any time, and they hope to control the risk and loss of failure, so the positioning of low-cost strategy may be more suitable. In terms of empirical research, Zheng and Li (2011)[11] prove that incremental innovation plays a partial mediation between low-cost strategy and enterprise performance. Zhang et al. (2014)[19] confirmed that the impact of low-cost strategy on incremental innovation is not significant, but the impact of incremental innovation on the performance of new products is significant.

In conclusion, the strategy of "low-cost strategy incremental innovation enterprise performance" reflects the China's companies based on imitation and incremental innovation path to realize the process of competition in the market survival and profit creation mechanism, but whether incremental innovation in direct low-cost strategy and indirect low-cost strategy play a partial mediating role in affecting the enterprise performance remains to be further empirical test, therefore, put forward the following hypothesis 2.

Hypothesis 2a: incremental innovation plays a mediating role between direct low-cost strategy and enterprise performance;

Hypothesis 2b: incremental innovation plays a mediating role between indirect low-cost strategy and enterprise performance.

3. Research design

3.1. Sample data

From August to December 2018, this paper conducted a questionnaire survey of 221 enterprises through field visits to more than 20 industrial parks. Including Beichen industrial park, Binhai new area development zone, Zhongbei industrial park, Xiqing economic and technological development zone, Taida economic development zone, Wuqing district industrial park and other industrial parks in Tianjin. A total of 221 questionnaires were issued and 196 were returned, among which 136 enterprises answered all the "low-cost strategy" options. Therefore, 136 valid questionnaires were finally obtained in this paper, with an effective rate of 69.39%.The selection criteria of the sample enterprises are: at least 100 permanent employees. Of the 136 enterprises, 82 are in the service sector and 71 have more than 500 employees.

The questionnaire was mainly completed by the general manager or strategy manager of the enterprise. Self-evaluation questionnaire may have common method deviation. In order to avoid the problem of common method deviation, we pay attention to the following matters when issuing the questionnaire: first, each enterprise only issues one questionnaire; Secondly, every time the questionnaire is issued, the research intention of the project is introduced to the investigated in detail, and the information obtained from the survey is only used for academic research and will not be disclosed to the outside world. Finally, the variables of the items made block Settings, and strive to distinguish significantly. The results of the Harman single-factor test on 136 questionnaires show that there is no common factor in the factor structure that can explain most of the variation (the first factor only explains 21.741% of the variance), and the variables are loaded on different factors. Therefore,

ISSN 2706-6827 Vol. 3, Issue 10: 1-8, DOI: 10.25236/IJFS.2021.031001

there is no common method deviation in the recovered questionnaire.

3.2. Variable setting

3.2.1. Low-cost strategy

The low-cost strategy scale was designed according to low cost competitive strategy scale with reference to Narver and Slater (1990)[20]. This paper measures low-cost strategy from two aspects: first, it is a strategic measure to reduce enterprise operating costs in a direct way, such as "compared with product innovation, enterprises pay more attention to compensation cost control". Second, it is a strategic measure to reduce the enterprise's operating cost in an indirect way, such as "the enterprise pays attention to optimize the technological process and management process to reduce the cost". There are two questions in total. The five items were all 5-level Likert scale.

3.2.2. Incremental Innovation

According to the scale of gradual innovation designed by Zheng et al. (2011)[11] and Sun et al. (2007)[21], the subjective evaluation of enterprise's incremental innovation was carried out. The scale of incremental innovation includes: "enterprises pay attention to the improvement of existing technologies or methods to meet the needs of current development; Enterprises focus on the improvement of existing technologies or methods to achieve the development of new business areas; Enterprises focus on the use of existing technology or methods to develop new products or markets; Companies focus on exploiting existing products or services to develop new markets." All 4 items were 5-level Likert scale.

3.2.3. Enterprise Performance

The enterprise performance index designed in this paper includes four subjective evaluation indexes: "market share, sales growth rate, sales profit rate and market development performance." All 4 items were 5-level Likert scale.

3.3. Exploratory Factor Analysis and Reliability and Validity Tests

3.3.1. Exploratory Factor Analysis and Structural Validity Test

The KMO value of the scale was 0.758, and the significance level of Bartlett test was close to 0.000, indicating that the scale data were suitable for factor analysis. After using the maximum variance method to solve the factors, it is found that the characteristic roots of the four factors are greater than 1, and the contribution rate of the cumulative variance is 71.606%. The factor structure was consistent with the conceptual dimension of the theoretical model, and the extraction value of the factor item was above 0.5. It can be seen that the questionnaire scale designed in this paper has better structural validity. Exploratory factor analysis results are shown in table 1.

Table 1: Exploratory factor analysis.

Variable	Item	Factor 1	Factor 2	Factor 3	Factor 4	Extraction value
Direct low cost strategy	S11	136.	- 104.	880.	153.	827.
	S12	225.	- 107.	841.	246.	829.
	S13	- 129.	144.	775.	- 237.	693.
Indirect low cost strategy	S14	258.	- 028.	231.	775.	722.
	S15	112.	383.	- 093.	737.	712.
Incremental innovation	C11	107.	732.	- 014.	335.	660.
	C12	084.	868.	033.	115.	774.
	C13	145.	853.	- 055.	- 004.	751.
	C14	087.	719.	- 021.	- 032.	527.
Enterprise performance	R11	760.	101.	081.	198.	633.
	R12	861.	116.	031.	145.	777.
	R13	811.	147.	063.	020.	684.
	R14	839.	071.	047.	092.	720.

3.3.2. Reliability Test

The Cronbach's α reliability coefficient of all items in the scale was 0.775. The Cronbach's α reliability coefficients of direct low-cost strategy, indirect low-cost strategy, incremental innovation

ISSN 2706-6827 Vol. 3, Issue 10: 1-8, DOI: 10.25236/IJFS.2021.031001

and enterprise performance scale respectively are 0.791, 0.548, 0.825 and 0.844, In addition to the slightly lower Cronbach's α reliability coefficient of indirect low-cost strategy scale, the overall Cronbach's α reliability coefficient of the scale and other latent variables scale are above 0.75, indicating a good internal consistency of the scale.

3.4. Descriptive Statistical Analysis

Using SPSS26.0 software to calculate the mean value and standard deviation of latent variables, and calculate the correlation coefficient of each latent variable. According to the correlation coefficient in table 2, some latent variables are significant and some are not. Therefore, there is a relatively complex relationship between latent variables, which should be further explored and tested by using structural equation model.

Table 2: Descriptive statistical analysis.

Latent variables	Mean	Standard deviation	1	2	3
1. Direct low-cost strategy	3.554	0.857			
2. Indirect low-cost strategy	3.897	0.782	0.178*		
3. Incremental innovation	4.184	0.663	0.028	0.312***	
4. Enterprise performance	3.612	0.757	0.944***	0.451***	0.018

Note: *p < 0.05; **p < 0.01; ***p < 0.001. N = 136.

3.5. Structural Equation Model Test

3.5.1. The Relationship between Low-Cost Strategy and Enterprise Performance

Taking enterprise performance as the dependent variable and enterprise's two-dimensional low-cost strategy as the independent variable, the structural equation model 1 was constructed. The test results are shown in figure 1, and the fitting of various indicators is shown in table 3. As can be seen from figure 1, the effect of indirect low-cost strategy to enterprise performance is 0.39*, which is significant. The effect of direct low-cost strategy to enterprise performance is 0.11, which is not significant. So hypothesis 1a has not been proved, hypothesis 1b has been proved.

3.5.2. The Mediating Role of Incremental Innovation between Two-Dimensional Low-Cost Strategy and Enterprise Performance

Taking enterprise performance as the dependent variable, taking direct low-cost strategy and indirect low-cost strategy as independent variables at the same time, and taking incremental innovation as the mediating variable, the structural equation model 2 was constructed. The test results are shown in figure 2, and the fitting of various indicators is shown in table 3. As can be seen in figure 2, the direct effect coefficient of direct low-cost strategy to incremental innovation is -0.19 (insignificant), and the direct effect coefficient of direct low-cost strategy to enterprise performance is 0.10 (insignificant). It can be seen that incremental innovation does not play a mediating role between direct low-cost strategy and enterprise performance, and the hypothesis 2a has not been proved. In addition, the direct effect coefficient of indirect low-cost strategy to incremental innovation is 0.48** (significant), and direct effect coefficient to enterprise performance is 0.48* (significant), but the coefficient of incremental innovation to enterprise performance is 0.08 (insignificant), incremental innovation between indirect low-cost strategy and enterprise performance also does not play a mediating role, hypothesis 2b has not been proved.

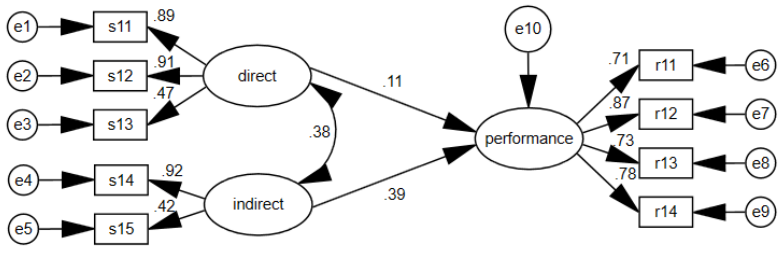

Figure 1: The relationship between two-dimensional low-cost strategy and enterprise performance.

ISSN 2706-6827 Vol. 3, Issue 10: 1-8, DOI: 10.25236/IJFS.2021.031001

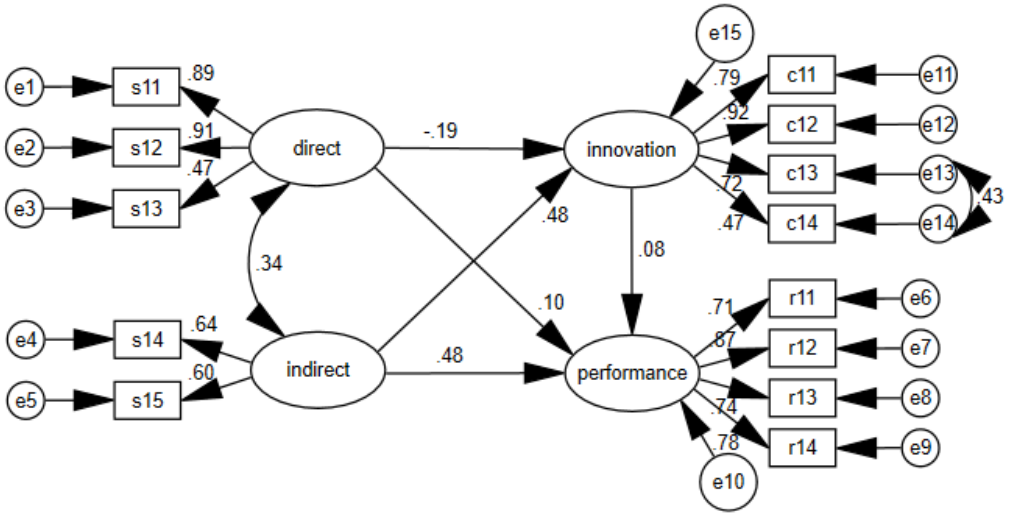

Figure 2: The relationship between two-dimensional low-cost strategy, incremental innovation and enterprise performance.

Table 3: Fitting indicators of AMOS model.

SEM	χ^2	df	χ^2/df	GFI	RMR	RMSEA	AGFI	NFI	CFI
Model 1	36.757	24	1.532	0.944	0.064	0.063	0.895	0.928	0.973
Model 2	87.814	58	1.514	0.914	0.062	0.062	0.865	0.892	0.959

4. Research Conclusions

Based on the statistical analysis results of the structural equation model, three research conclusions are drawn.

4.1. Compared with Direct Low-Cost Strategy, Indirect Low-Cost Strategy May Be More Conducive To the Improve Enterprise Performance

According to structural equation model 1 and model 2, the direct effect of direct low-cost strategy on enterprise performance is not significant, but the positive effect coefficient of indirect low-cost strategy on enterprise performance is significant, it can be seen that enterprises implementing indirect low-cost strategies are more likely to improve corporate performance than implementing direct low-cost strategies. The results of this study show that low-cost strategies that aim at low-price raw material inputs, low-paying manpower inputs, and production cost control may not significantly improve enterprise performance, while low-cost strategies that aim at process optimization and large-scale production can significantly improve enterprise performance.

4.2. Compared with Direct Low-Cost Strategy, Indirect Low-Cost Strategy is More Conducive to Incremental Innovation

According to structural equation model 1 and model 2, direct low-cost strategy has a negative effect on incremental innovation and is not significant, and indirect low-cost strategy has a positive effect on incremental innovation and is significant. It can be seen that enterprises implementing indirect low-cost strategies are more beneficial enterprise incremental innovation than direct low-cost strategies. The results of this study show that direct low-cost strategies can not only help companies to carry out incremental innovation, and may even destroy the company's incremental innovation, while indirect low-cost strategies can help enterprises' incremental innovation.

4.3. Incremental Innovation Cannot Play a Mediating Role between Low-Cost Strategy and Enterprise Performance

The test results of structural equation model 2 show that the positive effect of incremental innovation on enterprise performance is not significant, indicating that incremental innovation cannot

ISSN 2706-6827 Vol. 3, Issue 10: 1-8, DOI: 10.25236/IJFS.2021.031001

play a mediating role between low-cost strategy and enterprise performance. Combined with conclusions (1) and (2), it can be seen that direct low-cost strategy, indirect low-cost strategy and incremental innovation have positive effects on enterprise performance at the same time, but only indirect low-cost strategy has a significant impact on enterprise performance. It can be seen that when enterprises implement indirect low-cost strategy, they will show the innovation orientation, and then stimulate the incremental innovation of enterprises, but the incremental innovation at this time cannot further promote the improvement of enterprise performance. It indicates that there may be other mediating variables between indirect low-cost strategy and enterprise performance, such as dual innovation [15] and transactional leadership behavior.

5. Research countermeasures and suggestions

5.1. China's Enterprises Should Focus on Indirect Cost Control when Positioning Low-Cost Strategy

According to the results of empirical studies, when Chinese enterprises are positioning their low-cost strategy, direct low-cost strategies have a positive but insignificant effect on enterprise performance, while indirect low-cost strategies have a negative and insignificant effect on incremental innovation, while indirect low-cost strategies have a significant positive effect on both incremental innovation and enterprise performance. It can be seen that China's enterprises pay more attention to indirect low cost control than to direct low cost control, which is more conducive to enterprise innovation and performance improvement. The reason may be that process management optimization and large-scale production reduce the enterprise's deadweight loss and improve the enterprise's production efficiency, thus contributing to innovation and performance improvement. Therefore, in the process of daily production or operation, China's enterprises should locate and implement the low-cost strategy of indirect cost control such as process optimization and large-scale production, while avoiding the low-cost strategy of direct cost control such as the positioning and implementation of raw material cost, labor cost and production cost.

5.2. When China's Enterprises Are Positioning Indirect Low-Cost Strategies, Incremental Innovation Cannot Improve Enterprise Performance

According to the results of empirical research, when China's enterprises position indirect cost strategy, although indirect cost strategy has a significant positive direct effect on both incremental innovation and enterprise performance, the positive direct effect of incremental innovation on enterprise performance is not significant. It can be seen that incremental innovation has a stronger direct effect on enterprise performance than indirect low-cost strategy. From the secondary side, it also indicates when the enterprises are position and implementing indirect low-cost strategy, if incremental innovation is carried out, success may not be translated into enterprise performance. Reason could be that incremental innovation is a temporary innovation model for the enterprise to save and accumulate the strength, instead of being a long-term model. In the fierce market competition, enterprises blindly pursue incremental innovation cannot survive with shrinking, such as MOTOROLA and Nokia mobile phone maker, ignoring profit the smartphones change, Kodak digital camera neglecting digital camera change.

5.3. China's Enterprises Should Take Radical Innovation as the Main Direction of Technological Change, Transformation and Upgrading

Nowadays, more and more domestic enterprises are moving from imitation innovation to leading innovation, and their independent research and development capabilities are becoming stronger and stronger, so they have the strength and capital to pursue radical innovation. Domestic enterprises with core technologies, such as Huawei mobile phones, China railway, Petrochina and Haier electronics, are going abroad with their own technologies to seize the international market. So no matter how safe and tempting the incremental innovation model is “temptation”, China's enterprises should see it as a kind of transitional innovation model, continuously strengthening its radical innovation ability is the best choice, only in this way, China's enterprises can develop differentiation technique, so as to obtain excess profit in the market competition.

ISSN 2706-6827 Vol. 3, Issue 10: 1-8, DOI: 10.25236/IJFS.2021.031001

References

[1] The Research Group of Economic Institute of CASS. Learning by doing, low cost competition and conversion of economic growth pattern[J]. Economic Research, 2006(4): 4-14.
[2] Michael P. Competitive strategy[M]. Translated by Chen L F. Beijing: Citic press, 2014.
[3] Barney J B. Strategic factor markets: Expectations, luck, and business strategy[J]. Management Science, 1986, 32(10) : 1231-1241.
[4] Cooper R, Kaplan R S. Measure costs right: make the right decisions[J]. Harvard Business Review, 1988, 66(5): 96-103.
[5] Li Y. How to create an international competitive advantage through the "made in china" plan——the important historical experience in the Japanese industrial innovation[J]. Frontiers, 2015 (11): 49-61.
[6] Fu W Y, Li H. Investigation of agile production advantage in pearl river delta[J]. South China Journal of Economics, 2010 (1): 71-82.
[7] Schuler R S, Jackson S E. Linking competitive strategies with human resource management practices [J]. Academy of Management Perspectives, 1987, 1(3): 207-219.
[8] Wang J C. Lean cost management [J]. Economic Management, 2003(3): 44-47.
[9] Li B M, Hu C. Enterprise development in the new era calls for management improvement[J]. Management World, 2012(12): 1-6.
[10] Zhang H Y. Research on the problems and countermeasures of "cost reduction" in the real economy [J]. Price: Theory & Practice, 2016(9): 25-28.
[11] Zheng B Y, Li S. The relationship of competitive strategy, innovation selection, and firm performance [J]. Science Research Management, 2011, V32(4): 59-68.
[12] Lei H, Ouyang L P, Nie S S, et al. A study on the time-lag effect of competitive strategy on the enterprise performance the impulse response analysis based on VAR model[J]. Chinese Journal of Management Science, 2014, 22(11): 140-148.
[13] Zhang W Z, Wang D. Analysis of technological innovation, performance of enterprise and long-term competitive advantage in the context of competitive strategy[J]. Taxation and Economy, 2017(6): 38-43.
[14] Yang X X. Scale expansion, competitive strategy and performance of listed retail enterprises[J]. Jianghan Tribune, 2017(8): 25-29.
[15] Ma H J, Song C H, Guo H. An empirical study about the relationship among strategic choice, ambidextrous innovation and born-global firms' performance[J]. Studies in Science of Science, 2016, 34(10): 1550-1560.
[16] Ettlie J E, Bridges W P, O 'Keefe R D. Organization strategy and structural differences for radical versus incremental innovation[J]. Management Science, 1984, 30(6): 682-695.
[17] Dewar R D, Dutton J E. The adoption of radical and incremental innovations: An empirical analysis [J]. Management Science, 1986, 32(11): 1422-1433.
[18] Pi J C, Zhao R Z. The Comparative Analysis of Chinese Firms' Upgrading Paths in Global Value Chains [J]. International Economics and Trade Research, 2017, 33(12): 37-51.
[19] Zhang J, He Y, Duan Y L. Incremental innovation and radical innovation: antecedents, performance consequence and interaction effect [J]. Forum on Science and Technology in China, 2014(5): 5-9.
[20] Narver J C, Slater S F. The effect of a market orientation on business profitability [J]. The Journal of Marketing, 1990: 20-35.
[21] Sun Y F, Li Y, Liao X W. A study of corporate innovation and internal controls under heterogeneous strategic orientations [J]. Journal of Industrial Engineering and Engineering Management, 2007, 21(4): 24-30.