Analysis on Innovation Factors of OEM Foreign Trade Enterprises: Taking Zhejiang Textile Industry Experience

Asia Pacific Journal of Multidisciplinary Research
Vol. 7 No.4, 10-17
November 2019 Part IV
P-ISSN 2350-7756
E-ISSN 2350-8442
www.apjmr.com
CHED Recognized Journal
ASEAN Citation Index

Xu Li, Sun Yide
Zheajiang Yuexiu University of Foreign Language, China
2357016233@qq.com, 475121972@qq.com

Date Received: October 17, 2018; Date Revised: November 21, 2019

Abstract– *This study investigated the innovation factors of OEM foreign trade enterprises. Research methods such as descriptive statistics, evaluation, and factor analysis were utilized. Respondents were 110 textile enterprises in Zhejiang Province, China. These enterprises were OEM foreign trade enterprises, mainly processing and producing for some foreign superior brands. Data resource were collected through questionnaire survey and documentary analysis. The content of the survey was about these textile enterprises innovation. The study analyzed the factors OEM foreign trade enterprise innovation, pointing out the factors which affect the innovation of learning by doing foreign trade enterprises from the OEM product, organization, marketing, open innovation point of view there. The research result shows that originality was very important in product innovation. Information systems was helpful to re-engineer processes and simplify employee work processes in process innovation. To organizational innovation, innovative organizational performance policies was the most effective. External knowledge was valuable to open innovation,*

Keywords – *Textile industry; OEM Enterprise Innovation; Innovation factors*

INTRODUCTION

Since China's reform and opening up in 1978, China's economy has achieved amazing rapid development, becoming one of the world's most important economies, and its GDP has leapt to the second place in the world. From 1978 to 2017, China's total imports and exports expanded to 4. 1 trillion US dollars, accounting for 11. 5%[1]. However, the huge volume of imports and exports does not mean that Chinese products are completely competitive. Although Chinese-made goods have occupied the world market by participating in international division of labor, most of the products are mainly processed trade, which is at the low end of the value chain, high consumption, low product level, low technological content, and low added value Indisputable facts, coupled with the fact that the original labor cost advantage was gradually being lost, the processing profit enterprises facing difficulties and profitability are facing a great dilemma[2].

Take Zhejiang Province as an example. From the perspective of the main commodities exported in recent years, textiles have accounted for about one-third of the export share of Zhejiang Province, and these garments, fabrics, yarns, etc. in the export are still based on processing trade, mainly OEM[3]. This article takes Zhejiang Province's textile enterprises as an example to make an empirical analysis on the innovation aspects of OEM enterprises, and to explore the innovation factors of OEM enterprises in depth, which has very important theoretical and practical significance.

The theory of "innovation" was first proposed by the Austrian-American economist Joseph Aros Schumpeter[4]. Schumpeter believes that innovation is the establishment of a new production function (new combination of factors of production), the purpose of which is to obtain potential excess profits. In "The Business Cycle" published in 1939, he put forward a more systematic theory of innovation, and attributed economic development to five types of innovation: (1) the introduction of new products or new characteristics of a product; (2) the use of new technologies That is, new production methods; (3) opening up new markets; (4) conquering or controlling new sources of supply of raw materials or semi-finished products; (5) realizing new organizations for enterprises.

American scholars R. Nelson and S. Winter[5], inspired by the theory of biological evolution, through in-depth research on the mechanism of the innovation process, created a unique branch of the theory of innovative evolution, which promoted technological and institutional innovation Integration, and consider

innovation as a system, including production, management, management, organization and other aspects. Then the innovation theory has further developed.

In the 1990s, China introduced the term "innovation" into the scientific and technological circles, and formed various expressions such as "technical innovation", "knowledge innovation", and "technological innovation". Chinese domestic scholar Fu Jiayi[6]defines technological innovation in innovation as entrepreneurs seizing the potential profit opportunities in the market and re-organizing production conditions and factors for the purpose of obtaining commercial benefits, establishing more convenient, efficient and efficient transportation. Lower cost production and operation system, and then launch new products, new process methods, markets, obtain new sources of supply of raw materials or semi-finished products, or establish a new organization of the enterprise. It includes technology, organization, business, and finance. Integrated process of a series of activities.

Scholars from Taiwan made a related arrangement in the article "Research on the Construction of Enterprise Innovation Ability Index".Related excerpts are provided in Table 1.

Table 1. Innovation classification

Scholar (year)	classification
Schumpeter (1943)	New products, new methods of production, new sources of supply, the exploitation of new markets, new ways to organize business.
Schmookler (1966)	Product technology (how to create or improve a product) Manufacturing Technology (how to Make)
Dafe(1978）	Technical innovation，administrative innovation
Damanpour (1991）	New product or service,new manufacturing process technology,new structure or management system,new plans for organization members
Higgins(1995)	Product innovation,process innovation,marketing innovation, management innovation: new management approach
Neely（1998）	Product Innovation,process innovation,organizational innovation

In particular, there is a need to add open innovation. Zhu Zhaohui, Chen Jin[7] proposed the concept of open innovation, and pointed out that the importance of technological innovation. Open innovation is not only to expand the source of innovation from inside the organization to outside the organization, but also to adopt a business model that matches the innovation to transform innovation into products, and ultimately obtain economic benefits.

Therefore, the research objects of innovation are summarized. This article analyzes innovation from four aspects. (1) Product innovation. It refers to the number of new products or services launched by companies in the market to meet the needs of external users or the market. In addition, the degree of product innovation is also one of the measurement items. Sun Ningna [8] expounded product innovation from the perspective of product materials, structure, form, function, and creativity, combined with culture, and pointed out that the combination of product and culture can bring innovation and uniqueness.(2)Process innovation. It refers to the innovation of operating procedures, methods and rules in technical activities or production activities. Qiu Sining[9]pointed out that it is necessary to make full use of the information management system, simplify the employee's work process, and re-engineer the process. (3) Organizational innovation. It refers to the innovation of organizational management elements, including aspects of organizational structure, management actions, and incentives. Xu Chong and Jiang Wei [10] believe that enterprises should seek development in an era of intense competition, and the development and utilization of organizational innovation has become an important means of possessing and holding competitiveness. (4) Open innovation. In a changing market environment, companies have gradually realized the importance of collaborative creation to technological innovation. Yang Yiyi and Chen Rongqiu [11] pointed out the role of customers as resources, co-creators and users in new product development. Emphasize the role of customers in product development, attach importance to interaction with customers and feedback from customers.

OBJECTIVE OF THE STUDY

This study evaluates the innovation factors of OEM foreign trade textile companies. It aims to determine the 4 innovation aspects including product innovation, process innovation, management innovation, open innovation with 10 questions per dimension. Different from industrial upgrading, this article mainly studies OEM textile enterprises at the low end of the industrial chain and how they to innovates independently. These innovations are mainly based on the OEM model of

Zhejiang textile industry from the perspectives of products, processes, organization, and open dimensions. The relevant literature has obtained the influence factors of different innovation factors, which provides a theoretical basis for the design of the questionnaire and facilitates further empirical analysis. Finally, this article plans to find the influencing factors of innovation from each angle and provide suggestions for corporate innovation.

METHODS

Descriptive statistics method intends to define the basic situation of enterprises, and then use statistical software for data analysis. Factor analysis is an analysis method that simplifies data by summarizing a relatively small amount of concise information (that is, factors) from a large amount of measurable data. This study screens out the main factors that affect innovation through factor analysis, in order to point out the impact of different factors on innovation.Through data analysis and factor analysis, the principal component factors that constitute the innovation factors of the surveyed enterprises (OEM-based Zhejiang Textile Industry) were extracted in order to make feasible suggestions for innovation paths.

RESPONDENTS

More than 110 respondents are considered as the target sample of the search. All these respondents are related to textiles, which importantly engaged in OEM production. As to the location of the company, all these respondents mainly comes from Hangzhou, Ningbo, Wenzhou, Jiaxing. The ownership structure of these companies is based on shareholding, family, and contract systems. The company size includes small companies with less than 50 and large companies with more than 1,000 employees. The company's business involves fiber manufacturing, fabric production, printing and dyeing finishing, clothing production, apparel production, etc.

DATA GATHERING

The principal data is collected from questionnaire surveys of companies visited in person.The questionnaire of this study is mainly divided into two parts, basic information and several aspects of Zhejiang textile industry innovation. About 10 questions were designed from four perspectives, including product innovation, process innovation, organizational innovation, and open innovation. The Kerter (seventh) scale method uses a score of 0-7 (1 is the least consistent, 7 is the most consistent) for the survey.

RESULTS AND DISCUSSION

Table 2. The basic information of enterprise characteristics

Profile	Category	f	%
Years of establishment	Less than 1 year	1	0.91
	2-5 years	32	29.09
	6-10 years	47	42.73
	11-20 years	25	22.73
	More than 20 years	5	4.55
Company Address	Hangzhou	27	24.55
	Ningbo	11	10.00
	Wenzhou	7	6.36
	Jiaxing	8	7.27
	Others	40	36.36
	Missing values	17	15.45
Company property structure	Stock system	49	44.55
	Family system	55	50.00
	Contract system	6	5.45
Company Size	Below 50 people	23	20.91
	51-100 person	36	32.73
	101-300 person	21	19.09
	301-500 person	18	16.36
	501-1000 person	8	7.27
	Over 1000 person	4	3.64
Position of the company's industrial chain	Fiber making	11	10.00
	Fabric production	15	13.64
	Finishing after printing and dyeing	10	9.09
	Costume making	38	34.55
	Clothing production	15	13.64
	Domestic sales	5	4.55
	Processing export	16	14.55
Education background of company leader	Junior high school and below	3	2.73
	High school (technical secondary school)	28	25.45
	University (junior college)	65	59.09
	Graduate studen	14	12.73

Table 1 shows that enterprises established after 2000 accounted for 72.73%, and enterprises established since the 1990s accounted for 22.73%, which is in line with the rapid development of textile enterprises' foreign trade export situation in Zhejiang. Judging from the number of employees, the size of an enterprise generally ranges from tens to three hundred to three hundred. The number of enterprises that exceed or fall below this category is not large, accounting for about

10%. Among the surveyed companies' property rights structures, 95% are joint-stock and family-based. Only a small number of companies use contractual property rights. Among the companies surveyed, 34.55% are in the apparel manufacturing chain, and only about 4.55% are in the sales chain. The rest are mainly located at the lower end of the industrial chain such as raw material processing and manufacturing. Among the interviewed enterprises, 84.5% of the interviewed business leaders have their education background mainly in high school (secondary school) and university (undergraduate). In addition, 12.73% of the leaders hold a graduate degree, and the proportion of company leaders with only junior high school education or below is 2.73%.

Before conducting exploratory factor analysis on the questionnaire data, first use the KMO measure and Bartlett's spheric test. To check whether the data is suitable for factor analysis. The larger the KMO value, the more common factors there are between variables, and the more suitable the questionnaire is for factor analysis. If you can do a factor analysis, further extract the factors and rotate them to get a factor that is easier to interpret.

Table 2. Product innovation of KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.869
Bartlett's Test of Sphericity	Approx. Chi-Square	615.401
	df	45
	Sig.	.000

*KMO sample measure: Is the data suitable for factor analysis? KMO above 0.9, very suitable; 0.8-0.9, very suitable; 0.7-0.8, suitable; 0.6-0.7, not very suitable; 0.5-0.6, very barely; below 0.5, not suitable.

Table 3. Product innovation ofTotal Variance Explained

	Initial Eigenvalues		
Component	Total	% of Variance	Cumulative %
1	5.431	54.306	54.306
2	1.085	10.846	65.151

*Few factors describe the commonality and similarity of more observed variables and the correlation between them.Factors with eigenvalues greater than 1 are obtained from 2 factors.

Table 2 shows that the KMO measurement value is 0.864, ranging from 0.8 to 0.9, indicating that the questionnaire data is very suitable for factor analysis; the significance probability of the statistical value of the Bartlett spheric test is 0.000, which is less than 1%, indicating that the data has Correlation, there are common factors among the correlation matrices representing the mother population. Therefore, the data of this questionnaire is suitable for factor analysis, to find the few factors that can reflect the basic structure of the original data, to describe the commonality and similarity of more observed variables and the correlation between them. Factors with eigenvalues greater than 1 are obtained from 2 factors, as shown in Table 3, and the factor load matrix after rotation is obtained as shown in Table 4.

Table 4. Product innovation of Rotated Component Matrix(a)

Factor	Rotated Component Matrix(a)	Component 1	Component 2
1	The company's products have won important R & D design awards	0.86	0.03
	The company's product sales rank among the best in the industry	0.78	0.19
	The raw materials used in our products are novel, diverse and unique.	0.7	0.53
	The company's new product quality management is better than its peers	0.64	0.46
	The company's new products have the characteristics of leading the trend	0.62	0.54
2	The company's products are partly innovative and partly follow the market trend	0.49	0.62
	The company's products with innovative, trait variability and diversity	0.45	0.68
	The Company in product planning, will take into account its cultural connotation	0.43	0.43
	The company provides a rich and diversified products	0.13	0.83
	The company's products are more distinctive features	0.11	0.82

*According to the 0.5 principle, a factor greater than 0.5 indicates that the factor has a larger load on the variable.

Theoretically speaking, the relative importance of the same-level elements evaluated with a certain higher-level element as the criterion can be obtained by calculating the eigenvalues of the comparison matrix. The eigenvalues of the extracted factors can be weighted using a formula. The eigenvalues are regarded as λ . W is the corresponding weight, and the formula is $W=\lambda / \sum_{i=1}^{i=n} \lambda$, At the same time, according to the formula, the weights are calculated using the eigenvalues. In product innovation, the weight of factor

1 is W1 = 0.833, and the weight of factor 2 is W2 = 0.167.

The weighted factor 1 is mainly manifested in the product's innovation, including design and R & D, and innovation in raw materials. Zhou Liqun, Zhang Longpeng, Zhang Shuangzhi[12]pointed out that R & D cooperation can promote enterprise product innovation input, increase product innovation output, and have an important positive impact on product innovation. Liu Tingli, Li Qiaochu[13]found that R & D internal expenditure is the most important driving factor for technological innovation in high-end manufacturing.

Table 5. Process innovation of KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.866
Bartlett's Test of Sphericity	Approx. Chi-Square	668.555
	df	45
	Sig.	.000

Table 6. Process innovation of Total Variance Explained

	Initial Eigenvalues		
Component	Total	% of Variance	Cumulative %
1	5.674	56.743	56.743
2	1.137	11.366	68.109

Table 7. Process innovation of Rotated Component Matrix(a)

		Component	
Factor	Rotated Component Matrix(a)	1	2
1	The company uses information systems to streamline employee workflow	0.84	0.13
	The company has the ability to re-engineer processes using information systems	0.78	0.24
	The company has the ability to respond to the recent needs of the textile market	0.77	0.3
	The company will conduct relevant market research before launching new products	0.76	0.35
	The company attaches importance to the training of R & D designers	0.74	0.37
	If the company finds a similar plan exists in the market, it will suspend the original plan	0.65	0.19
	The company has accurate and fast grasp of new product pre-sale and formal sales.	0.6	0.59
2	When the company launches a new product, it will conduct special marketing based on product characteristics	0.36	0.70
	The company's marketing activities are innovation-oriented in the same industry	0.37	0.80
	The company's product sales increase year by year	0.08	0.90

Table 5 shows that the KMO value is 0.866, which is the same as the analysis of product innovation. It is suitable for further factor analysis. Two factors are extracted, as shown in table 6. After factor rotation, the factor load matrix is obtained, as shown in table 7. Similarly, the data is substituted into the corresponding formula, and the weights are calculated using the eigenvalues. In the process innovation, the weight of factor 1 is W1 = 0.833 and W2 = 0.167.The heavier factor 1 mainly relates to the impact of information systems. Wang Lina and Zhang Guoping [14] show through empirical research that information technology has significantly promoted the R & D investment and process innovation of entrepreneurial enterprises, and information technology has increased the impact on innovation due to management training. In addition, the human capital of entrepreneurs and the educational level of employees have improved the role of information technology.

Table 8. Organizational Innovation of KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.878
Bartlett's Test of Sphericity	Approx. Chi-Square	752.463
	df	55
	Sig.	.000

Table 9. Organizational Innovation of Total Variance Explained

	Initial Eigenvalues		
Component	Total	% of Variance	Cumulative %
1	6.210	56.455	56.455
2	1.118	10.159	66.614

Table 8 shows that the KMO value is 0.878, which can be further factored. Similarly, it is the same as the analysis of product innovation. It is suitable for further factor analysis. Two factors are extracted, as shown in table9. After factor rotation, the factor load matrix is obtained, as shown in table10. The relevant data is substituted into the corresponding formulas.

In organizational innovation, the weight of factor 1 is W1 = 0.847 and W2 = 0.153. Qu Rujie, Zhu Houqiang, Liu Ye, Shi Kan [15] discussed the positive impact of employees' perception of the organization's emphasis on innovation on employee innovation behavior, that is, the organization's innovation awareness positively affects employee innovation behavior. Shao Bina and Xie Zhiming [16] believe that organizational culture is a key factor for company innovation. It can cultivate, centralized decision-

making and a high degree of formal culture, which is negatively related to innovation. Applying too much pressure to employees may reduce the positive impact on innovation

Table 10. Rotated Component Matrix(a)

Factor	Rotated Component Matrix(a)	Component 1	2
1	The company actively adopts feasible innovative policies to improve organizational performance	0.86	0.22
	The company supports new ideas from employees wherever possible	0.85	0.11
	The company's operating style is more flexible	0.8	0.16
	Our environment allows our employees to be creative	0.79	0.28
	The company strives to build a corporate culture that encourages innovation	0.7	0.36
	The company will adjust the focus of the work in time to promote overall performance	0.64	0.42
	The company has an open communication environment and good communication channels	0.6	0.52
	The company encourages employees to look at problems with "new perspectives"	0.59	0.45
	Respect for the ideas and professionalism of our employees	0.56	0.41
2	The company's organizational structure can change rapidly based on the external environment	0.29	0.83
	The company can change service items and service methods according to customer requirements	0.11	0.88

Table 11. Open Innovation of KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.895
Bartlett's Test of Sphericity	Approx. Chi-Square	800.519
	df	78
	Sig.	.000

Table 11 shows that the KMO value is 0.895, which is suitable for further factor analysis. Two factors are extracted, as shown in table12. After factor rotation, the factor load matrix is obtained, as shown in table13.

Table 12. Open Innovation of Total Variance Explained

	Initial Eigenvalues		
Component	Total	% of Variance	Cumulative %
1	6.716	51.663	51.663
2	1.201	9.241	60.904

Table 13. Open Innovation of Rotated Component Matrix(a)

factor	Rotated Component Matrix(a)	Component 1	2
1	The company is able to identify what external knowledge is valuable	0.85	0.07
	The company knows the future direction of the valuable knowledge mentioned in the previous paragraph	0.76	0.32
	The company has enough channels to search for new knowledge	0.75	0.39
	The company can absorb information from customers, the government and other external sources	0.73	0.2
	The company can use information technology to create value for customers through partners	0.72	0.39
	The company can keep abreast of competitors' developments	0.65	0.27
	The company regularly evaluates customer satisfaction	0.6	0.27
	The company earnestly expands new channels of knowledge acquisition	0.53	0.55
	The company has closer ties with upstream and downstream companies than its peers	0.51	0.42
	The company has more contacts with scientific research institutions and design institutes than its peers	0.44	0.56
	The company values customer relationship management (C RM)	0.39	0.71
2	The company can implement different alliance strategies according to the external environment	0.3	0.79
	The company has a creative corporate identity	0.05	0.87

Factor rotation results in a factor rotation load table. Similarly, the data is substituted into the relevant formula. In open innovation, the weight of factor 1 is W1 = 0.848, and the weight of factor 2 is W2 = 0.152. Xu Huilin, Yang Wang, and Wang Zhenshan[17] believe that when cross-border mergers and acquisitions take place, host country innovation resources are gathered as external resources, and corporate absorptive capacity and cross-cultural integration capacity are used as internal capabilities, which significantly promotes corporate innovation. Cross-border mergers and acquisitions not only have a positive impact on the absolute amount and change of corporate innovation input and output, but also have a significant positive effect on the quality of corporate

innovation. In addition, it was also found that when the M & A enterprise belongs to the manufacturing industry or M & A in a developed host country, the higher the level of innovation resources and intellectual property protection in the province where the M & A enterprise is located, the more significant the improvement of enterprise innovation.

CONCLUSION

In product innovation, the factors dominated by factor 1 in the figure are mainly R & D design, sales of new products, novel and diverse raw materials of the product, unique style, quality management, and product-leading trends. Therefore, factor 1 is named *originality factor*. Factor 2 mainly controls the diversity and sharpness of the product, so factor 2 is named as the *distinct diversity factor*. Factor 1 has a greater weight than factor 2, so factor 1 has a greater impact on product innovation. The results show that factor 1 has the highest load on product R & D and design, and the load on product uniqueness is low.

In process innovation, the variable dominated by factor 1 is mainly the ability to use information systems to reengineer the process and simplify the employee's workflow; before the new product is launched, the ability to understand and respond to the market, according to the main characteristics, factor 1 can be named as *workflow factor*. The variables dominated by factor 2 are mainly characteristic marketing and sales volume when launching a new product, and factor 2 is named as the *characteristic marketing factor*. Factor 1 has a greater weight than factor 2, so factor 1 has a greater impact on process innovation. The results show that the use of information systems to simplify employees' work processes has the highest load, and the accuracy and speed of grasping new product pre-sale and formal sales is the lowest.

In organizational innovation, the variable governed by factor 1 is mainly the innovative organizational performance policy; supporting employees' new ideas and ideas, etc., so factor 1 is named *performance plus creative factor*. The variables governed by factor 2 have an organizational structure that can respond to the external environment and customer requirements, so factor 2 is named the *external environmental response factor*. The results show that factor 1 has the highest load on organizational performance, while the load on employee thought and professionalism is lower.

In open innovation, the variable dominated by factor 1 is to be able to identify which external knowledge is valuable. Using information technology, creating value for customers through partners, sufficient channels to search for new knowledge, etc., factor 1 is considered an *external factor*. The variables dominated by factor 2 include contact with scientific research institutes and design institutes, etc. Factor 2 is named as a *cooperative R & D fact*or. Factor 1 weighs more than factor 2, so factor 1 has a greater impact on open innovation. The results show that the factor has the highest load in identifying valuable external knowledge, while the load is lower in conscientiously standing new knowledge.

RECOMMENDATION

The above conclusion is based on the analysis of Zhejiang textile industry innovation. According to the conclusion, the following recommendations are proposed: (1) In the process of product innovation, enterprises are mainly affected by two aspects, originality and distinctive diversity of products. The originality is more obvious, especially in the R & D and design. Therefore, to make breakthroughs in product innovation, companies must attach importance to R & D and design. At the same time, implement a product diversification strategy. (2) Enterprises are mainly affected by two aspects in the process innovation process, workflow and featured marketing. Among them, the design of the work process is particularly important, especially the effective performance management using information systems, which is extremely critical in process innovation. At the same time, strengthen product unique marketing. (3) In the process of organizational innovation, enterprises are mainly affected by several aspects, performance, creativity and response to the external environment. Among them, the use of informatization and digital applications can realize intelligent manufacturing, brand communication, industry internal data fusion and sharing, and deep integration of external resources of the industry[12]. At the same time, it strengthens the responsiveness to the external environment and customers.(4) In open innovation, companies seek the value of the external environment, such as R & D innovation with research and design institutions. Therefore, in open innovation, it is extremely practical to continuously seek for something valuable in the external environment.

REFERENCES

[1] Zhao Wei. (2019).40 years of China's foreign trade: policy review and outlook [J]. World Economic Research, (02): 29-36 .

[2] Zhang Jie. (2010).Research on the path, mechanism and countermeasures of Zhejiang Province's textile industry transformation and upgrading based on the perspective of global value chain [D]. Zhejiang Sci-Tech University.

[3] Qiu Hong, Lin Hanchuan.(2014).Global Value Chain, Enterprise Capabilities and Transformation and Upgrade——A Study Based on Textile Enterprises in the Pearl River Delta Region of China [J] .Economic Management, 36 (08): 66-77.

[4] Schumpeter(2008). Theory of Economic Development. [F]. Beijing: Beijing Press.

[5] Richard R.Nelson,Sidney G.Winter.(1997).Evolutionary theory of economic change.Beijing: Business Press

[6] Fu Jiazheng, Xu Qingrui.(2003). Technological Innovation in Small and Medium Enterprises [M] .Hunan University Press.

[7] Zhu Zhaohui,Chen Jin.(2008).Open innovative technology learning mode [F] Beijing: Science Press.

[8] Sun Ningna.(2009).Application of Design Beauty in Market Development Product Innovation of Small and Medium-sized Enterprises [J] .Contemporary Economy, (22):69-71.

[9] Qiu Sining.(2006) .Process innovation and create a competitive advantage [J]. Contemporary economy, (12):28-29.

[10] Xu Chong, Jiang Wei.(2009).Limitations and Breakthroughs of Organizational Innovation in Private Enterprises [J] .Business Research,(01): 69-73.

[11] Yang Yiyi, Chen Rongqiu.(2008). From Closed Innovation to Open Innovation: Customer Role, Value and Management Countermeasures [J]. Science of Science and Technology Management, (3):115-119.

[12] Zhou Liqun, Zhang Longpeng, Zhang Shuangzhi.(2016).R & D Cooperation and Enterprise Innovation: An Empirical Study Based on Chinese Manufacturing Industry [J] .Jiangsu Social Science, (02): 47-55.

[13] Liu Tingli, Li Qiaochu.(2019).Research on the Driving Forces of Innovation Efficiency in High-end Manufacturing——Based on the Perspective of Technology Product Value Discovery [J] .Price Theory and Practice, (02): 137-140.

[14] Wang Lina, Zhang Guoping.(2018).Information Technology, Human Capital and Technological Innovation of Entrepreneurial Enterprises——Empirical Research Based on Chinese Micro-enterprises [J] .Science and Technology Management, 39 (04): 111-122.

[15] Qu Rujie, Zhu Houqiang, Liu Ye, Shi Kan.(2019).The importance of organizational innovation and employee inussion on the relationship between corporate organizational culture, innovation and performance [J] .Modern Commercial Industry,40 (01): 44-46.

[16] Shao Bulinna, Xie Zhiming.(2019).Discussion on the relationship between corporate organizational culture, innovation and performance [J] .Modern Commercial Industry,40 (01): 44-46.

[17] Xu Huilin, Yang Wang, Wang Zhenshan.(2019).Open Innovation and Enterprise Innovation: An Empirical Study Based on Cross-border Mergers and Acquisitions of Chinese Shanghai and Shenzhen A Share Listed Companies [J] .International Finance Research, (11): 86-96.

[18] Wang Shubai, Zhang Yong(2019). Mechanism, Path and Policy Suggestions of Digital Transformation of Foreign Trade Enterprises [J] International Trade, (09): 40-47.