

Research on Organizational Learning and Development of High-Tech Enterprises Under the Background of “One Belt One Road”—Taking Zhejiang Company D as an Example

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ABSTRACT

In order to enable high-tech enterprises to achieve development with the aid of China's "One Belt One Road" strategy, this paper uses Chinese company D as an example, through literature analysis, questionnaire survey, linear regression analysis and other methods, points out the defects in the company D's organizational learning system, then proposes improvements. Taking China's "One Belt One Road" strategy as the background, analyzing the defects of company D's organizational learning system is the innovation of this paper.

Keywords: *One Belt One Road, high-tech enterprises, organizational learning, development*

1. INTRODUCTION

At present, the "One Belt One Road" is a strategy that companies can rely on to achieves development. How high-tech enterprises use the "One Belt One Road" strategy to achieve development is a key issue. A sound organizational learning system has become a core factor for an enterprise to gain a competitive advantage in the market. It can create a steady stream of innovative capabilities. This paper takes the "One Belt One Road" strategy as the background, based on scientific research and analysis. Then draws constructive conclusions and suggestions to enable the target company to have more complete organizational learning.

Harrison Owens[1] once said: "For a long time in the past, the most important goal of a company was to produce products or provide services to make a profit. However, companies have a higher priority and more important task at present. That is to become an effective learning organization. The reason for this is not that products and profits are no longer important, but because in the future, if there is no sustained learning, the company will not be able to make any profits. A very important conclusion is

drawn: the important job of an enterprise is learning, other jobs are in the back row." In the background of the "One Belt One Road" strategy, we will discuss organizational learning and development; put forward suggestions for improvement and development. We believe it can enhance the economic efficiency of enterprises and enhance international competitiveness. At the same time, it can also enhance China's international competitiveness and achieve sustainable development under more optimized internal and external environments and conditions.

2. QUESTIONNAIRE DESCRIBING

2.1. Employee Basic Information analysis

In order to understand Company D's organizational learning system and the influence of the "One Belt One Road" strategy on the learning system. This questionnaire was designed for the various departments and employees of company D, aiming to find out the mismatches between company D's organizational learning system and the "One Belt One Road" strategy.

Table 1. Employee Basic Information Form

	Item	Frequency	Percentage (%)
Gender	Male	88	84.62
	Female	16	15.38
Education	High school and below	4	3.85
	Technical secondary school / college	32	30.77
	Undergraduate	60	57.69
	Master degree and above	8	7.69
Years of employment	Less than or equal to 3years	10	9.6
	4-5 years	38	36.5
	6-10years	32	30.8
	11-20years	24	23.1
	21 years and above	0	0
Your job title	Business owner	0	0
	Senior management	4	3.85
	Middle managers	8	7.69
	Grassroots managers	40	38.46
	General staff	52	50

From the analysis of the gender structure of the sample, it can be seen that male accounted for 84.62% of the sample, female accounted for 15.38%, and the ratio of male to female was close to 8:2, which was in line with the ratio of male to female in all employees of company D. Field research found that the employees of Company D are mainly programmers and innovative researchers, so male account for a larger proportion of female.

From the analysis of the sample academic structure, it can be seen that the undergraduate degree accounted for the largest proportion. The second is the technical secondary school, accounting for 30.77%, and the graduate student accounting for 7.69%. The smallest is high school and below, accounting for only 3.85%. The results of the questionnaire are in line with the overall situation of company D. High school and junior college graduates are some of the early entrants. The minimum requirement for recruited employees is junior college, and the minimum requirement for some positions involving R&D is undergraduate.

From the analysis of the sample's length of employment structure, it can be seen that the number of people who have been employed for 4-5 years is the largest, accounting for 36.5%, followed by 6-10 years, accounting for 30.8%. The proportion of employees who have been employed for 11-20 years is 23.1%. The proportion of employees who have been employed for 3 years or less is 9.6%. This result is consistent with the situation of high-tech enterprises. Nationwide, the turnover rate of high-tech enterprises is lower than the average level, and the employment situation is relatively stable. Company D is a leader in its industry. Relatively speaking, the employee turnover rate is low.

From the analysis of the sample job structure, it can be seen that ordinary employees account for the most, accounting for 50%, followed by grassroots managers, accounting for 38.46%. Middle managers accounting for 7.69%. The least senior managers accounting for 3.85%. This is also in full compliance with the pyramidal structure of a normal enterprise reliability analysis.

Table 2. Reliability analysis

Item	Number of items	Cronbach's Alpha
Enterprise situation	13	0.969
Enterprise Culture	13	0.970
Enterprise achievements	10	0.895

From the perspective of Cronbach's Alpha coefficient, the internal consistency coefficients of the three dimensions of enterprise conditions, organizational culture and company performance have reached 0.8 or even 0.9. The overall reliability of the questionnaire has reached 0.962. As far as behavioral science is concerned, Cronbach's coefficient is above 0.7, indicating that the internal consistency test of each dimension is relatively ideal. Therefore, the internal consistency of this questionnaire has been recognized.

2.2. Linear regression analysis

It can be seen from Table 3 that when the F test is performed on the model, it is found that the model passes the F test ($F=16.651, p=0.000<0.05$), which means that the model construction is meaningful.

Table 3. Linear regression analysis

Linear regression analysis results (n=104)									
	Non-standardized coefficient		Standardized coefficient	t	p	VIF	R ²	Adjust R ²	F
	B	Standard error	Beta						
Constant	6.674	0.520	-	12.832	0.000**	-			
(1)The company uses a unique salary system to motivate employees to achieve their goals	-0.518	0.109	-0.679	-4.735	0.000**	4.377	0.939	0.883	F (12,13)=16.651, p=0.000
(2)Managers often uses new leadership methods to guide employees to achieve organizational goals	-0.123	0.155	-0.171	-0.793	0.442	9.877			
(4)In response to changes in demand, the company will rebalance the division of labor among various departments	1.031	0.251	1.351	4.109	0.001**	23.003			
(5)According to customer needs, the company will change the content and methods of service	-0.402	0.131	-0.517	-3.068	0.009**	6.044			
(6)In order to accelerate the completion of company goals, the company will try different procedures	-0.236	0.143	-0.263	-1.651	0.123	5.409			
(7)In order to accelerate the completion of the company's goals, the company will make timely and appropriate adjustments to the work of employees	-1.356	0.225	-1.208	-6.030	0.000**	8.540			
(8)Part of the company's high profits comes from newly researched products and services	0.755	0.144	0.872	5.258	0.000**	5.848			
(9)Companies often develop new products and services that can be accepted by the market	-1.754	0.396	-1.870	-4.434	0.001**	37.835			
(10)Colleagues often use new parts or service items to accelerate company performance	-0.308	0.164	-0.426	-1.882	0.082	10.922			
(11) Compared with competitors, the company has more patent rights	0.639	0.130	0.798	4.925	0.000**	5.580			
(12)The company often introduces some new technologies to improve the production process and process	-0.229	0.247	-0.226	-0.926	0.371	12.711			
(13)The company purchases new equipment to improve the organization's production and work efficiency	1.367	0.267	1.727	5.123	0.000**	24.184			
Dependent variable: What is your expected export business in the next two years									
D-W value:2.091									
* p<0.05 ** p<0.01									

A test for the multicollinearity of the model found that the VIF value in the model is greater than 10, which means that there is a collinearity problem. It is recommended to check the closely related independent variables and re-analyze after removing the closely related independent variables. The final specific analysis shows that (only the factors that have a positive impact on the development of the company are analyzed):

In order to cope with changes in demand, company D will re-weigh the regression coefficient value of 1.031 (t=4.109, p=0.001<0.01) of the division of labor in each department, which means that in response to changes in demand, company D will re-balance the division of labor in each department. Your expectation for your export

business in the next two years is to have a significant positive impact.

Part of company D's profit comes from newly researched products and services. The regression coefficient value is 0.755 (t=5.258, p=0.000<0.01), which means that part of company D's profit comes from newly researched products and services. It will have a significant positive impact on your export business expectations within the next two years.

Compared with competitors, company D has more patent rights and the regression coefficient value is 0.639 (t=4.925, p=0.000<0.01), which means that company D has more patent rights in docking compared with

competitors. The export business within the next two years is expected to have a significant positive impact.

Company D purchased brand new equipment to improve the organization's production and work efficiency. The regression coefficient value is 1.367 ($t=5.123$, $p=0.000<0.01$), which means that company D buys brand new equipment to improve the organization's production and work. The efficiency will have a significant positive impact on your export business expectations in the next two years.

3. COMPANY D'S ORGANIZATIONAL LEARNING SYSTEM IMPROVEMENT IN RESPONSE TO THE "ONE BELT ONE ROAD" STRATEGY

3.1. To run the Internet

The Internet is indispensable for high-tech enterprises[2], and the "One Belt One Road" strategy has accelerated the development of globalization in a true sense. How to use the Internet to achieve growth and occupy a competitive position is a difficult problem that every enterprise will face. Company D opens the Internet within the enterprise, uses the Internet to understand the development of the world in related fields through the guidance of each department, so as to quickly respond to development and enhance its competitive position.

3.2. To create a renewable industry chain

With the further development of globalization, greening and the "One Belt One Road" initiative, Company D has emphasized the concept of green, low-carbon and energy-saving in the course of organizational learning. In response to the "One Belt One Road" strategy, Company D strives to meet the needs of more people in the world with less pollution and less resource consumption. Company D has created a regenerative industry chain to occupy an advantageous position in overseas competition with lower costs and more popular and recognized products.[3]

3.3. To set up the overseas business department

The "One Belt and One Road" strategy has brought unprecedented opportunities to high-tech enterprises[4]. After predicting the opportunities that "One Belt One Road" strategy may bring, Company D has paid more attention to overseas business units. Company D has expanded its business scope and tilted its talents to countries along the "One Belt One Road". The Overseas Business Department is a department created to implement the strategy of going global. Therefore, the Overseas Business Department pays special attention to the needs of the countries along the "One Belt One Road".

3.4. To transform into a learning organization

Company D's previous operation was mainly determined by the company's founders and senior personnel. Now, the operation of Company D is gradually aligning with learning organizations, striving to create an organization with the ability to continuously learn and correcting behavior through new knowledge and new ideas[5]. It encourages all employees to learn and continuously reform themselves, encourages employees to innovate and create, and gives employees more autonomy.

4. IMPROVEMENT MEASURES BASED ON SURVEY RESULTS

4.1. To promote a positive image and accelerate international integration

In order to establish a sense of social responsibility and enhance the company's international image, company D needs to understand and abide by the local political, legal, and financial systems in the process of achieving development with the help of the "One Belt One Road" strategy, pay attention to the protection of intellectual property rights. A sense of social responsibility, strictly protect the ecological environment, actively help the local economy develop, improve people's livelihood and establish a good image of it. Different methods of using the Internet will bring different effects. Company D should guide its employees to use the Internet correctly, keep abreast of the current international development in related fields and learn from each other.

4.2. To form a focused and interrelated organizational learning system

The learning systems of different departments and levels should be analyzed in detail. For example, the organizational learning for the overseas business department and the scientific research department cannot be the same. The overseas business department should guide it to pay attention to the status quo and needs of the countries along the "One Belt One Road", while the scientific research and development department should pay more attention to the global technological development in related fields[6]. In addition, the training for fresh graduates or newly hired employees should also be different from the training for senior employees. However, the organizational learning of various departments should not be independent of each other, but related to each other.

4.3. To accelerate the construction of a learning organization

The overseas development of Chinese high-tech enterprises not only exports products and technologies but also ideas. Chinese companies have shifted from exporting technology and equipment to exporting mature experience and practice[7]. Chinese high-tech enterprises should export their mature concepts and technologies to countries and regions along the "One Belt One Road", integrate them into the development of local society and combine local characteristics and needs to customize special solutions for different countries and different customers.

4.4. To upgrade equipment and talents

In today's era, production is extremely dependent on machines, and the level of machines has greatly improved the efficiency of production[8]. Efficient machines incorporate the wisdom of other talents. After company D puts forward the requirements for talents, it must also upgrade the functions of the machine in a timely manner or replace the existing old ones with new ones. In this way, the production level and market competitive position can be efficiently improved. The combination of talents and efficient machines can achieve the effect of one plus one greater than two[9].

5. CONCLUSION

This paper proposes how high-tech companies can improve their organizational learning system to adapt to the overall environment under the "One Belt One Road" strategy. Through questionnaire analysis and linear regression analysis, this paper discovers the shortcomings of company D's organizational learning system. For example, company D lacks the company's positive image publicity in the internal training process, company D's organizational learning system is not clear and so on. Based on this, the article puts forward specific suggestions for improvement, such as promoting the company's positive image during employee training, accelerating the construction of a learning organization[10], and upgrading talents and equipment.

REFERENCES

- [1] Hong, Jacky. Structuring for organizational learning[J]. *Learning Organization*, 1999, 6(4):173-186. DOI:10.1108/09696479910280631
- [2] AJGJ, BGM. On the learning patterns and adaptive behavior of terrorist organizations[J]. *European Journal of Operational Research*, 2020, 282(1):221-234. DOI:10.1016/j.ejor.2019.09.011
- [3] Malik P, Garg P. Learning organization and work engagement: the mediating role of employee resilience[J]. *The International Journal of Human Resource Management*, 2017:1-24. DOI:10.1080/09585192.2017.1396549
- [4] Leithwood K, Leonard L, Sharratt L. Conditions Fostering Organizational Learning in Schools[J]. *Educational Administration Quarterly*, 1998, 34(2):243-276. DOI:10.1177/0013161X98034002005
- [5] Leithwood K A, Louis K S. Organizational learning in schools[J]. *Canadian Journal of Education*, 1998, 282(4). DOI:10.2307/1585900
- [6] Rusch, E. A . Institutional Barriers to Organizational Learning in School Systems: The Power of Silence[J]. *Educational Administration Quarterly*, 2005, 41(1):83-120. DOI:10.1177/0013161X04269546
- [7] James, G, March. Exploration and Exploitation in Organizational Learning[J]. *Organization Science*, 1991. DOI:10.1287/orsc.2.1.71
- [8] Brown J S, Duguid P. Organizational Learning and Communities-of-Practice: Toward a Unified View of Working, Learning, and Innovation[J]. *Organization Ence*, 1991, 2. DOI:10.1287/orsc.2.1.40
- [9] Bhatt G D, Zaveri J. The enabling role of decision support systems in organizational learning[J]. *Decision Support Systems*, 2002, 32(3):297-309. DOI:10.1016/S0167-9236(01)00120-8
- [10] James M. Sinkula, William E. Baker Thomas Noordewier. A framework for market-based organizational learning: Linking values, knowledge, and behavior[J]. *Journal of the Academy of Marketing Science*, 1997. DOI:10.1177/0092070397254003