# **Evaluation Index System Construction for Diversified Business Operation**

- Case Study of P Company

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**Abstract.** Many companies get more competitiveness and economic benefits through diversified operations, but some companies do not succeed through diversification. The business development diversification is subject to many factors. This paper takes P Company that adopts diversified strategic development as the research object, uses analytic hierarchy process, deeply analyzes the key factors affecting the diversified operation effect and the relationship between all factors, and makes reasonable suggestions for practical work.

#### Introduction

Diversification is the business model adopted by some large enterprise groups. However, with the advance of division of labor based on specialization, diversified business model has attracted the heated discussion from the academic and practical levels. Diversification theory has obtained considerable development after going through multiple times of alternate specialization and diversification trend. "Diversification" was first proposed by American scholar H. I. Ansoff in 1950, when studying the corporate strategies, he put forward the expansion of business product categories and the behavior that enterprises entered new product category, which was called "diversification". Diversification theoretical research is progressively developed. In addition to further development in depth and breadth, the researchers also began to shift the focus. From the earliest stages of concept study to later research on diversified operation category, motivation research and assessment research, each stage promotes the improvement of theories.

The governments, enterprises and scholars pay increasingly more attention to reconstruction of the business competitiveness, and diversification strategy is an important way for enterprises to reconstruct the competitiveness as well as an important means to enhance the business competitiveness. With the influx of international capital and gradual maturity of the market, the enterprises face increasingly fiercer competition, which put forward higher requirements for enterprises to implement the diversification strategy. How to find and assess various factors in the diversification process has become a difficult problem in the strategic implementation process, which urgently needs relevant theoretical models to guide the development path.

There are many factors affecting the business diversification effects, the external factors include the macroeconomic environment and market environment, whereas internal factors include the ability of business operators, internal management level, organizational structure, execution and strategic choice. Through allocation and coordination between the various factors, the enterprises may achieve the optimal effect of diversification. Diversification is affected by various factors. Only by having full understanding of original business sustained profitability and comprehensively analyzing various factors affecting diversification can the operator make reasonable decisions.

## **Current Situation of P Company**

P Company is a large state-owned enterprise. In 2014, the operating income amounted to 300 billion Yuan. Relying on resource advantages of integration of information flow, capital flow and logistics flow, main businesses of P Company are divided into three major business segments, namely: the traditional business segments, express logistics business segment and financial services sectors.

Although P Company has made great achievements under the guidance of diversification strategy, a number of businesses develop in a sustained, healthy, rapid and sound manner. It can be said that the present income scale of P Company benefits from the diversification contribution. However, with the external business technological innovation, changes in market conditions and customer demands as well as limited internal resources, many businesses compete for limited business resources, different business operation becomes homogeneous, and thus new challenges have been proposed over enterprises. The addressed extent and intensity of these problems have determined future competitiveness and market position of P Company.

Through in-depth analysis, P Company is facing major problems of "neglecting the cultivation of core competitiveness and no outstanding competitive advantage", "not based on core competitiveness and excessively enters the industries without strategic association", "lack of corporate scrutiny and assessment and blind diversification" and "ignoring the internal integration".

The operation problems of P Company are not only caused by its management level, but also caused by no scientific strategy formulation and management methods in the implementation process of diversification strategy. Based on actual operating conditions of P Company, P Company builds the evaluation index system, and establishes the pairwise comparison matrix according to the actual findings of P Company, in order to clarify the relationship between the individual factors, further adjust the operation strategies of P Company, and enable it to get on track of healthy development.

# **Diversified Operation Evaluation System**

**Establishment of Evaluation Index System.** Based on key diversification performance factors and combined with the actual operating status of P Company, this paper determines the business diversification evaluation index system, as shown in the below table:

Table 1 Evaluation Index System Factors Primary index Operators Ability  $\alpha_1$ Structure  $\alpha_2$ Internal Management capabilities a Internal resources as Execution α<sub>4</sub> Internal Development β<sub>1</sub> Implementation of the External Merger β<sub>2</sub> strategic choice β Establish Strategic Alliances β<sub>3</sub> Macro Environment γ<sub>1</sub> External Environment Market Environment γ<sub>2</sub> Selection of Correlated Diversification  $\varepsilon_1$ Diversified Type Uncorrelated Diversification ε<sub>2</sub>

**Determination of Pairwise Comparison Matrix.** According to the pairwise comparison between factors, AHP may determine the relative importance of each factor in all levels, and further use mathematical methods to judge, which is only applicable to the situation with uncertainty and subjective information, but also allows using the experience, insight and intuition in a logical way. Through scientific questionnaire design and statistical analysis, this paper makes the findings objectively reflect the real situation. Specific steps include:

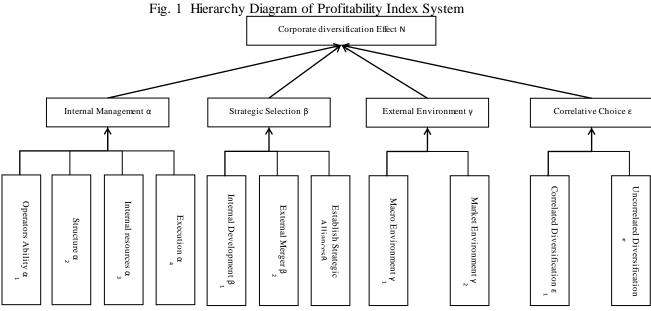
**Questionnaire Design.** According to competitiveness evaluation index system in Table 1, this paper conducts the questionnaire design. The questionnaire uses five grades of scoring mechanism.

**Sample Selection and Sampling Survey.** In order to ensure scientific and professional findings, this study mainly selects 219 grassroots staff and senior management staffs in P Company as the survey samples, 189 questionnaires were returned and 147 questionnaires were valid.

**Analysis of Result**. This paper uses the comprehensive judgment method, calculate and process the survey results and obtain the final result. Among them, the weight of senior management is 0.5, the weight of middle management is 0.3, and the weight of grass-roots staff is 0.2.

# Research on Corporate Diversification Evaluation Model

## Hierarchy Diagram of factor Index System.



**Establish Pairwise Comparison Matrix A and Consistency Test**. Before determining the weights, this paper first builds the judgment matrix to judge the relative effect side of each index on target layer (evaluation results), aij is denoted as the importance level between i factor and j factor, uses the obtained survey analysis results, and builds the pairwise comparison matrix.

By using the questionnaire and comprehensive judgment methods, this paper obtains the pairwise comparison matrix between factors and between the primary indexes of each factor.

Table 2 Pairwise Comparison Matrix between Primary Indexes of Corporate diversification Effect

	Internal	Strategi	External	Correlati	
	Management	c Selection	Environment	ve Choice	
Corporate	1	3	2	3	Internal Management
Diversification	1/3	1	1/2	2	Strategic Selection
Effect N	1/2	2	1	2	External Environment
	1/3	1/2	1/2	1	Correlative Choice

Table 3 Pairwise Comparison Matrix between Primary Indexes of Internal Management Factor

	Structu	Internal	Executi	Operators	
	re	Resources	on	Ability	
Trata una a 1	1	3	1/2	2	Structure
Internal	1/3	1	1/2	1/2	<b>Internal Resources</b>
Management	2	2	1	2	Execution
α	1/2	2	1/2	1	Operators Ability

Table 4 Pairwise Comparison Matrix between Primary Indexes of Strategic Selection Factor

	Internal	External	Establish	
	Development	Merger	Strategic Alliances	
	1	2	3	Internal
Stratagia				Development
Strategic Selectionß	1/2	1	2	External Merger
Selectionp	1/3	1/2	1	Establish Strategic
				Alliances

Table 5 Pairwise Comparison Matrix between Primary Indexes of External Environment Factor

	Macro	Market	
	Environment	Environment	
External	1	1/2	Macro Environment
Environment γ	2	1	Market Environment

Table 6 Pairwise Comparison Matrix between Primary Indexes of Correlated Choice Factor

	Correlated	Uncorrelated	
	Diversification	Diversification	
	1	3	Correlated
Correlated			Diversification
Choice ε	1/3	1	Uncorrelated
			Diversification

By using yaahp software, this paper conducts the consistency test over the pairwise comparison matrix, and its consistency index parameters are respectively 0.0265, 0.0534, 0.0088, 0 and 0, which are less than 0.1. Therefore, the above pairwise comparison matrices meet the consistency requirement.

**Index Assignment.** By using yaahp software to analyze and calculate the pairwise comparison matrix, this paper obtains the specific weight of all factors as below:

Table 7 Weights of Profitability Index System Factors

Factors	Weight of Overall Goal	Primary Index	Weight	Weight of Overall Goal
	0.4531	Operators Ability α <sub>1</sub>	0.1922	0.0871
Intomal Management Ability		Structure $\alpha_2$	0.3007	0.1363
Internal Management Ability		Internal resources α <sub>3</sub>	0.1228	0.0556
		Execution α <sub>4</sub>	0.3843	0.1741
	0.1671	Internal Development β <sub>1</sub>	0.5396	0.0902
Implementation of Strategic Selection		External Merger $\beta_2$	0.2970	0.0496
Selection		Establish Strategic Alliances β <sub>3</sub>	0.1634	0.0273
Corporate External Environment	t 0.2616	Macro Environment γ <sub>1</sub>	0.3333	0.0872
Corporate External Environment		Market Environment γ <sub>2</sub>	0.6667	0.1744
Diversification Choice	0.1182	Correlated Diversification $\epsilon_1$	0.7500	0.0886
Diversification Choice		Uncorrelated Diversification $\varepsilon_2$	0.2500	0.0295

#### **Conclusions**

There are many factors affecting the corporate diversification effects, and these factors are penetrated into the entire process from the formulation of diversification strategy to the implementation of diversification strategy. By sorting and comparing many factors, this paper summarizes the improved operating status of the P Company, and successfully implements the most important factors of diversification strategy:

For P Company, it is a relatively reasonable development path to implement diversification by using the internal development method. Given the financial, technological and management situations of P Company, the diversified development of P Company is more suitable for the implementation of "refocusing" development, that is, the enterprises focus on shrinking the business activities to the core field under the competitive pressure, and give up the non-core filed not obvious corporate management utility. By strengthening the resource base and capabilities of P Company, it can better implement the development strategy of "refocusing", in order to meet the strategic needs of corporate diversified development.

### References

- [1] [US] Alfred D.Chandler. Strategy and Structure. Yunnan People's Publishing House, 2002
- [2] [US] Kevin Lane Keller. Strategic Brand Management. Translated by Lu Taihong and Wu Shuilong, China Renmin University Press, 2009
- [3] [US] Michael E.Porter. Competitive Advantage. Beijing Huachen Press, 1997
- [4] [US]Joseph Schumpeter. The Theory of Economic Development. The Commercial Press, 1990
- [5] Yan Jianyuan, Yan Chengjie and Qin Fan. A Review of the Strategic Alliance Motivation, Shape and Performance. Journal of Nankai (Philosophy and Social Sciences), Vol. 6, 2003
- [6] Yu Yu. Decision, Selection, Implementation and Control of Corporate Diversification Strategy. Modern Logistics News, Vol. 7, 2011
- [7] Yuan Ping. Research on Relationship between Corporate Interactive Guidance, Market Environment, Strategic Type and Business Performance. Jilin University Doctoral Dissertation, P. 42, 2010.
- [8] Zhang Mingyu and Zhangwen Song. Theory and Practice of Corporate Strategy. Science Press, 2005.
- [9] Liu Fucheng and Tian Qing. Research on Execution Factors and Promotion Measures. Journal of Chongqing Institute of Technology (Social Sciences), Vol. 8, 2010
- [10] Luo Si. Hongta Innovative Dual-core Application Refocusing Strategy, Hong Kong Wenhui Newspaper, April 10, 2006
- [11] Song Liqiu and Wang Jinghua. Discussion on Private Enterprise Management under the Diversification Strategy. China Business & Trade, Vol. 3,2011