Study on Evaluation of the Core Competitiveness of Enterprises Application Efficiency Based on Customer Value Creation

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Abstract

Based on analysis of index system and evaluation model of core competence and the creation of customer value evaluation index system, this paper put forward relative appraising of two times about evaluation model based on the evaluation of the efficiency, application of core competence by means of Data Envelopment Analysis (DEA). It gives an actual example to review the efficiency of the core competitiveness of these enterprises by use of investigation data of 11 enterprises, prove relative appraising of the application efficiency of enterprise core competitiveness, further evaluation the application efficiency of enterprise core competitiveness of customers can provide information and application value in the analysis of creation of customer value.

Keywords: Customer value, Core competence, Data envelopment analysis, Evaluation

Introduction

The primary task of company according to Peter Dulac is to create customers. The company's core competency lies in that its core technology, R & D team, marketing network, corporate culture and other aspects of doing well than competitors, but also to provide customers with greater value, the core value of the company's core competitiveness reflects. How to maximize the effective conversion of resources to customer value will be the path for enterprises to acquire core competence and the direction of rational allocation of core resources. Since Hamel and Prahalad began to analyze the relationship between core competence and customer value, many foreign scholars have also evaluated their core competence in a predetermined environment [1,2] Urban Ljungquist gives the company's core competencies to provide customers with more than the expected value of the standard [3-5]. With the introduction of customer value, some scholars began to study the relationship between core competence and customers, the famous American scholars James Quinn, Jordan Barocci and Karen Zeen in their"Innovative Explosion II Strategy for growth through intellectual software. A book states: To develop a strategy for core competencies, an organization simply chooses a few (2 or 3) of the most important businesses for its customers and has acquired or acquired in these businesses Optimal ability to bring unique value to customers. This is the core competence. Fleury, Afonso Fleury and Maria Tereza, after analyzing the main features of the new economy, we think that the change from individual to collective efficiency. It is also the overall problem of industrial competitiveness. It is considered that the construction and evaluation of the core competitiveness must consider the problems of the new economy, including the issue of customer value [6]. Geert Duysters, John Hagedoorn. In the analysis and research of the core competencies and performance among different enterprises and in-depth study on the transformation of core competencies between enterprises, especially through mergers and acquisitions and through strategic alliances, the effective integration can be The core resources for enterprises to bring significant economic benefits, in evaluating core competitiveness and core resources, should pay attention to the application effects of core competitiveness [7].

Gilgeous, Parveen [8]. In the study of manufacturing-center management, the paper analyzes the issues of core competence and knowledge and argues that managers need to strengthen understanding and understanding of the interaction between knowledge and core competencies depth, put forward the core competitiveness in the market competition and consider the customer value to maintain the competitive advantage of the methods and strategies. With the development of the enterprise and the expansion of the market, in order to maintain and enhance competitiveness, enterprises must obtain a more developed strategic framework on the road of outward-oriented operation, so as to enable the enterprises to obtain the core competencies needed in the market competition Effective growth. Leemann James E [9] found that professionals in an organization must have solid technical skills and the ability to adequately reflect the value of a company when researching customer needs. Business professionals can use these skills to demonstrate the value-added contribution they make to their customers so they can significantly improve their business performance and achieve superior personal performance and business performance.

Hu Enhua and other scholars believe that: The core competitiveness of enterprises is that customers must value the core values [10]. Shi Junwei [11] argues that the company's core competitiveness should not only focus on important core resources, such as: core technology, R & D team, marketing network, corporate culture and other resources than competitors, the use of these core resources to create products for customers about how much effective value is provided. The number of these effective values also reflects the size of the core value of the enterprise also reflects the core competitiveness of the application efficiency. Huang Dingxuan ext. [12]argue that a large number of studies show that the core capabilities of enterprises provide important support for the products and services of enterprises, which are mainly manifested in the functions of enterprise products such as quality, performance, brand, appearance and user service, In the competition to win the advantage, which requires companies to use their own core resources for the enterprise products or services to customers create more distinctive, greater value, so that customers focus on corporate product quality and characteristics of the reasons for the value of Price insensitive, therefore, customers are willing to pay high prices to buy business products.

Judging from the current research literature, scholars at home and abroad have many achievements in research and evaluation methods of the core competence of enterprises. However, the evaluation methods of the core competitiveness of enterprises in creating customer value needs to be further studied. This article attempts to study the efficiency of the core competitiveness of enterprises in creating customer value, and gives a solution to the problem.

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The core competitiveness of the application efficiency and its frontier

The application efficiency of the core competence is the application efficiency of the core competence in the competition. The core idea is that the effective use of the core competence can enhance the strength of the enterprise and the effect in the competition and can reflect the change of the strength in the core competitiveness of the application efficiency.

The validity of production behavior in economic theory has attracted enough attention and has achieved relatively mature and stable results in the measurement method. This is the study on the production effectiveness and production front, and the research on the method of production effectiveness. There are many scholars (Feng Yingjun) to establish the theory of management effectiveness and measurement methods, the paper through the reference and research of these methods, to establish the core competitiveness of the application efficiency evaluation theory and measurement methods.

The frontier of application efficiency of core competence is theoretically the only one that exists as the effective boundary of the combination of management behavior and effect of optimal utilization of core competence. Since the relationship between the core competitiveness of competitive behavior and the competition effect is very complicated and it is difficult to determine the quantitative relationship between them, we think that the non-parametric method can be used to represent the frontier of the core competitiveness of application efficiency. In order to deeply study the application efficiency of core competitiveness, we can get ideas from the analysis of production effectiveness.

The production effectiveness analysis is a non-parametric method called Date Envelopment Analysis (DEA) proposed by Charnes, Cooper and Rhodes in 1978, the method is a method of assessing the relative validity developed by economist Farrell on the basis of the evaluation of private enterprises. The most important feature of DEA method is that it does not need to assume any form of production function between the input and output of the production system. Linear relying on the actual observation data of each unit, the effective units are linearly combined to construct a "floating "Fragment hyperplanes on the entire sample point of view produce the frontier and thus evaluate the relative efficiency of each cell [13].

The DEA constructed frontier of production covers all data observation points, which reflects the optimal relationship between input and output of production system. On the other hand, DEA also proposed a simple and effective way to calculate the distance between observation point and production frontier, which is to calculate the maximum possible input reduction or maximum output increase of the evaluation unit relative to the effective production frontier From this analysis to determine its production effectiveness. DEA has opened up a new way of validity analysis and made great progress both in theoretical research and practical application.

DEA's specific practices are as follows

There are n units of the same type of evaluation, the j-th unit of evaluation in an economy production in the input vector $x_j = (x_{j1}, \cdots, x_{jm})^T$, the output vector is $y_j = (y_{j1}, \cdots, y_{jk})^T$, so you can use (x_j, y_j) to indicate the entire production of the unit being evaluated activity. The possible set of production consists of two parts, one is the interior of the collection and the other is the boundary of the collection. The boundary of the production is the envelope generated by the data $(x_j, y_j) j = 0,1, \cdots n$ which is called the production frontier. The production activities corresponding to the points falling on the set boundary achieve the maximum output under the same input, which is called effective production live. The points inside the collection are called inefficient production activities.

The effectiveness of production can better explain the relative effectiveness of the production activities of the units being evaluated as input-output, but the evaluation of production effectiveness contains the influence of the advantages and disadvantages of objective basis conditions. Strictly speaking, the evaluation of production effectiveness is only evaluated Units of strength, that is, under certain conditions (including objective and basic conditions and people's subjective efforts), input and output optimization level. The core competitiveness of the application of cutting-edge efficiency is to draw on the idea of productive effectiveness.

Based on Customer value of the Core Competitiveness of Application Efficiency Evaluation Model

Customer Value Evaluation and Evaluation of the Core Competitiveness of Enterprises

Customer value evaluation

Creating customer value will be a very important issue. Taking advantage of Philip Kotler's research on customer value, we point out that "customer value refers to the difference between the total customer value and the total customer cost, which is the amount of customer's desire to obtain from a particular product or service The total customer cost is the estimated cost of the customer when estimating, obtaining and using the product or service. The total customer value includes four aspects of product value, service value, personnel value and image value; Customer costs specifically include currency costs, time costs, mental costs and physical costs in four areas. Due to factors that are not easily quantifiable in terms of customer value, total customer value and total customer cost, when we evaluate customer value, we introduce fuzzy comprehensive evaluation method to determine customer value. The fuzzy comprehensive evaluation method makes a general comparison and evaluation on the data from different sides of the same kind of objective things. By constructing the fuzzy subset of each level to quantify the fuzzy indicators, the fuzzy exchange principle is used to synthesize the indicators so as to obtain the Evaluation of the overall evaluation of the results [14-16].

Evaluation of the core competitiveness of enterprises

Evaluation of the core competence of enterprises many scholars in our country have carried out a great deal of research on the evaluation of core competitiveness and have achieved some research results. Representatives such as: Wei Jiang, Wang Yi and Guo Bin and other scholars in the core competitiveness evaluation, done a very in-depth study, this article uses Wang Yi designed core competitiveness of enterprises index system, evaluation of core competencies. We use Analytic Hierarchy Process (AHP) to determine the weight of indicators at all levels of the company's core competitiveness (Figure 1).

Through repeatedly seeking opinions from relevant experts, the first-level indicators and the second-level indicators judgment matrix under each first-level indicator are determined according to the 1-9 ratio scale method, and the levels of each of the core competitiveness of enterprise. The weight of the level indicator. Using multi-level fuzzy comprehensive evaluation method to evaluate the core competitiveness of enterprises, we can get the evaluation value of the core competitiveness of enterprises [17-23]. The use of customer value and core competitiveness of the evaluation value to establish a reference index, the current index and the may state index.

Assuming there is n core competence of the evaluated enterprise, after establishing the index system of evaluating the core competitiveness evaluation system, the core competitiveness of the jth evaluated enterprise will be evaluated by systematic evaluation and other methods. As a result, the x_j is the reference index of the enterprise being evaluated; the customer value index system is used to evaluate the
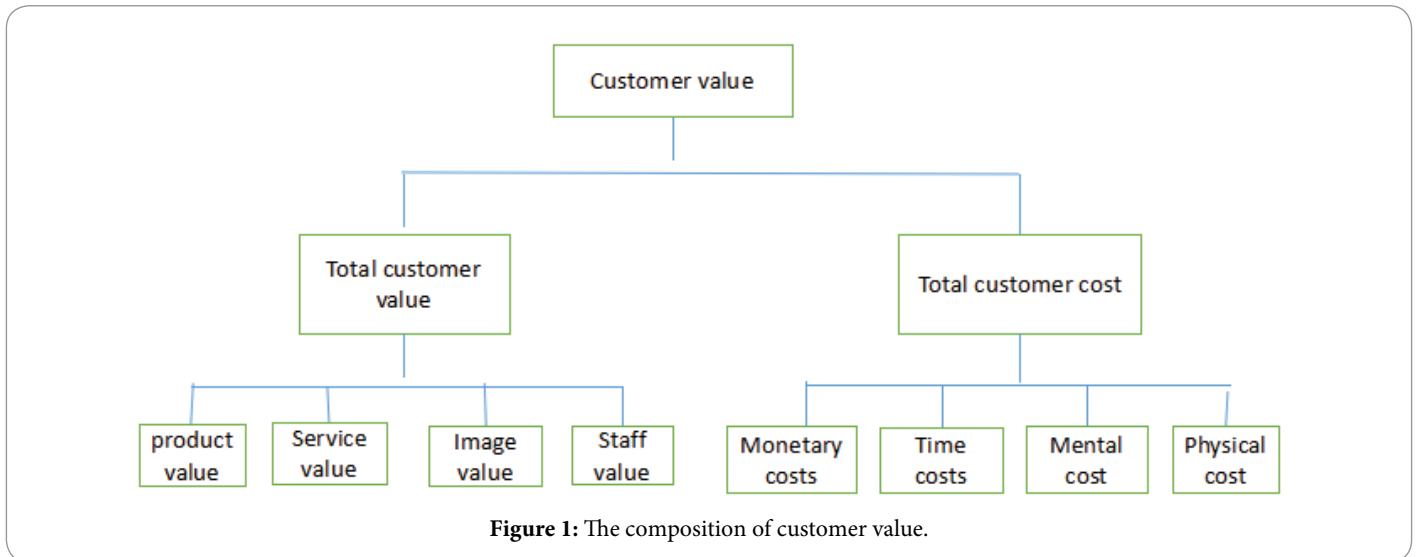
Figure 1: The composition of customer value.

customer value of the product of the jth enterprise under evaluation by the method of systematic evaluation. Assuming the result is y_j the current index called the jth evaluated enterprise:$(x_j, y_j)$is called the index status of the jth company to be evaluated. Then the index state (x_j, y_j) $j = 0,1, \cdots, n$ of n companies to be evaluated can establish a set:

$$T = \{(x,y) \Big| \sum_{j=0}^{n} \lambda_j x_j \le x, \sum_{j=0}^{n} \lambda_j y_j \ge y, \lambda_j \ge 0, \sum_{j=0}^{n} \lambda_j = 1, j = 0,1,\cdots,n\} \quad (1)$$

Among them,$(x_0, y_0) = (0,0)$ The set T determined by (1) is the set of exponential states. The nature of the index state may set

Convexity

Arbitrary $(x, y) \in T$ and $(\hat{x}, \hat{y}) \in T$ and any $\lambda \in [0,1]$ there is,

$$\lambda(x,y) + (1-\lambda)(\hat{x}, \hat{y}) = (\lambda x + (1-\lambda)\hat{x}, \ \lambda y + (1-\lambda)\hat{y}) \in T$$

From the theoretical analysis, the stronger the core competence, the greater the customer value that may be generated, the stronger the core competence and the larger core rigidity. Especially after the core competitiveness enters the maturity stage, the stronger the core rigidity. It will affect the core competitiveness to create customer value and due to the existence of other competitors, the core competitiveness may be stronger in composition than in the past, but the ability to create customer value is relatively weakened. From this point of view, the frontier formed by the evaluation value of customer value and core competence is convex. If we are in the selection of evaluation samples, Make $(x, y) \in T$ and $(\hat{x}, \hat{y})$ get closer. It is possible to achieve or approximate the inputs of the sum of λ and $(1-\lambda)$ ratios of x and $\hat{x}$, producing the output in the same proportion of y and $\hat{y}$, respectively.

Invalid

(i) Arbitrary $(x, y) \in T$ and $\hat{x} \ge x$, there is $(\hat{x}, y) \in T$ (ii) Arbitrary $(x, y) \in T$ and $\hat{y} \le y$, there is$(x, \hat{y}) \in T$. This means that there may be stronger core competencies, but the customer value created is not large.

Minimality

The exponential state possible set T is the intersection of all the sets that satisfy the above conditions 1-2.

Establishing a relative evaluation model of core competence application efficiency

Introduce the concepts of index states and index states that may be set. Suppose that x_j and y_j are the reference index and the current index $(x_j, y_j \in E_1)$ of the jth enterprise, respectively, and E_1 is the set of composite indices of the enterprises estimated by the method of systematic evaluation. Then the array (x, y) $(x_0, y_0) = (0,0)$ is the index state of the jth enterprise Data, The convex set is said to be a set of exponential states composed of index states $\{(x_j, y_j)\}_0^n$, The output-oriented BCC model is as follows:

$$\max Z$$

$$\text{s.t.} \ \sum_{j=0}^{n} \lambda_j x_j \le x_{j_0}$$

$$\sum_{j=0}^{n} \lambda_j y_j \ge Z y_{j_0} \quad (2)$$

$$\sum_{j=0}^{n} \lambda_j = 1 \ , \lambda_j \ge 0, j = 1,2,3\ldots,n$$

If the optimal value of linear programming (2) is $Z^* = 1$. Then said the company is in the index state may set the frontier of T, If $Z^* > 1$. Then the business is not in front of T's face let $\bar{x}_{j_0} = x_{j_0}, \bar{y}_{j_0} = Z^* y_{j_0}$, obviously $(\bar{x}_{j_0}, \bar{y}_{j_0})$ is on the frontier of T, $(\bar{x}_{j_0}, \bar{y}_{j_0})$ is the projection of the exponential state (x_{j_0}, y_{j_0}) of enterprise j_0 on the frontier of possible set T of exponential state.

As shown in Figure 2, the shaded area indicates that the exponential state may set T, (x_1, y_1) and (x_2, y_2) on behalf of the index of enterprises 1,2 state, respectively, The index state(x_1, y_1) of firm 1 is in the exponential state of the frontier of T($Z^* = 1$). The index state (x_2, y_2) of firm 2 is not on the frontier of T($Z^* > 1$),$(\bar{x}_2, \bar{y}_2)$ is the projection of the exponential state on the front side in the exponential state (x_2, y_2).

Based on the above two cases, if Z^* is the optimal value of (2), then we say:

$$\eta = 1/Z^* \times 100\% \quad (3)$$

For the j_0 core competitiveness of enterprises appraisal value. As seen from $1/Z^* = y/\bar{y}$, The rating is the percentage of the current customer index of each firm's core competencies that is likely to reach the same value under the same conditions.

The analysis and judgment of the application efficiency of core competence based on the exponential state

Efficiency analysis of using customer's core competitiveness to create customer value. Core competence based on customer value the application efficiency may be composed of two parts: one is the boundary of the set, and the other is the set internal. We call the upper

bound of the collection the forefront of application efficiency for core competencies. Through the core competitiveness of the application efficiency frontier can be relatively valid definition of evaluation unit; we call the core competitiveness of the efficiency of the frontier of the effective unit, the collection of internal points as invalid units. Or evaluate the effectiveness of the appraisal unit with the frontier of the application efficiency of the core competency. The appraisal unit with a strictly positive distance is a non-effective unit, and the zero-distance appraisal unit is an effective unit. Core competencies the forefront of application efficiency represents the maximum efficiency that companies use to create their core competencies, which is to maximize their efficiency when creating customer value using this core competency.

After setting up the concept that the application efficiency of customer value core competencies and the core competency of application efficiency frontier, we can judge the application efficiency of core competency of evaluation unit and how to determine the application efficiency of core competence of evaluation unit. Given a (x, y) evaluation unit, the unit $(x, \overline{y})$ corresponding to it can be determined on the front of the application efficiency of core competence. $(x, \overline{y})$ is the projection of evaluation unit (x, y) on the forefront of the application efficiency of core competence. It represents the best core competencies that should be achieved in the case of the same reference index. It is not difficult to see that the efficiency of core competence has played an important role in eliminating the objective conditions (core competitiveness or core resource size), reflecting the customer value generated by the evaluation unit's ability to apply core competencies. Therefore, the core competitiveness of application efficiency can be used as a core competitiveness to create a measure of customer efficiency. Assuming that the two evaluation units (x_1, y_1) and (x_2, y_2), and their core competitiveness application efficiency correspond to η_1 and η_2, if $\eta_1 > \eta_2$)Then the application efficiency of core competence of evaluation unit (x_1, y_1) is better than that of evaluation unit (x_2, y_2), vice versa.

Analysis of the development direction of core competitiveness

If the evaluation unit (x_1, y_1) is on the frontier, it indicates that the application efficiency of the core competitiveness has reached the maximum, and the development direction of the core competitiveness of the evaluation unit can only improve the core competitiveness. If the evaluation unit (x_1, y_1) is under the frontier and has a certain distance from the frontal plane, the evaluation unit will develop its core competitiveness in the following aspects: firstly, to enhance the application efficiency of core competitiveness and secondly, to enhance the core competitiveness.

Analysis of changes in customer value

In previous literatures, we can find out the relationship between core competence and customer value, and always enhance customer value by enhancing core competitiveness. Due to the improvement of core competitiveness, we usually need to invest resources and factors relatively large, the risk of increasing customer value is relatively large, making the effect of enhancing customer value and investment of the core resources and elements do not match.

In order to deeply analyze the interaction between customer value and core competence, if the evaluation unit (x_1, y_1) is on the frontier, it shows that the core competitiveness of the application efficiency to maximize, if you want to enhance customer value, you must enhance the core competitiveness, and must be consistent with the direction of customer value. If the evaluation unit (x_1, y_1) is under the frontier, it shows the core competitiveness of the application efficiency does not reach the maximum, if you want to enhance customer value, we must first check the direction of core competitiveness and customer value is the same direction, followed by the analysis of the core competitiveness of the application of the efficiency of the final study to enhance core competition The value of customers (Including enhancing core competencies and changing core competencies) can increase customer value.

The Calculation and Analysis of Results

Example calculation

This article collected 11 Harbin electrical and mechanical industry enterprises from January 2015 to December 2016 basic data (Customer value part of the data from the customer survey, the core competitiveness
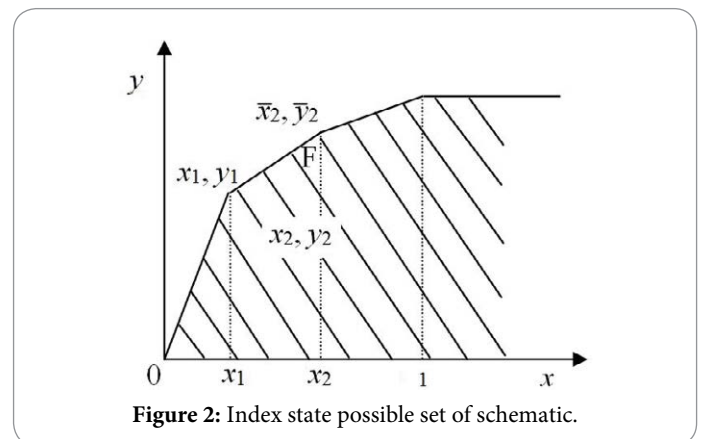

Figure 2: Index state possible set of schematic.

Company name	Company code	Current index (Customer value comprehensive evaluation)	Reference index (Comprehensive evaluation of core competencies)
Harbin Jieman Mechanical and Electrical Equipment Co., Ltd.	A	0.686	0.5100
A City North Central Machinery Co., Ltd.	B	0.482	0.4203
Heilongjiang Province Shunda Power Equipment Co., Ltd.	C	0.424	0.4590
ZhadaiDikang Elevator Manufacturing Co., Ltd.	D	0.641	0.4822
Harbin Dongyu Agricultural Engineering Machinery Co., Ltd.	E	0.401	0.3804
Harbin Day Ye Bearing Co., Ltd.	F	0.646	0.6045
Harbin Hongda Bearing Co., Ltd.	G	0.701	0.5685
Harbin Ha Naili Automobile Shock Absorber Manufacturing Co., Ltd.	H	0.3545	0.3210
ACheng North Central Machinery Co., Ltd.	I	0.404	0.3609
Harbin Beiguang Metallurgical Machinery Co., Ltd.	J	0.718	0.6270
Harbin ZhongzhaoDikang Elevator Manufacturing Co., Ltd.	K	0.566	0.5230

Table 1: 11 companies measured results-each year composite index.

of enterprises from the company's annual report), according to the evaluation process, first of all Carry out the core competitiveness of enterprises and their corresponding customer value evaluation, that is, calculate the comprehensive index of each enterprise in each year (Table 1). Then, on this basis, the relative evaluation, the results in Table 2.

Evaluation results analysis

The relative evaluation value provides us with the overall status of each enterprise's customer value relative to the evaluation of the core competitiveness of enterprises, but does not reflect the reason why the company's ranking relatively forward and backward, so in the completion of the enterprise customer value After the relative evaluation, but also must analyze these results, its main purpose is to analyze the rationality of the calculation results, and identify the specific reasons affecting the relative ranking of enterprises.

Evaluation of the Results of the Analysis

The analysis of evaluation results can be divided into two aspects

(1) Analysis of the rationality of the calculation results: Although the data-based analysis we use has a certain degree of sophistication and as far as possible reflects the quantitative relationship between customer value and core competence, only a few mathematical models are used to describe the entire complex customer value and core competence. There are obviously some limitations. In order to avoid the influence of these limitations on the evaluation results, we need to have a correct understanding of the measurement results.

According to the relative evaluation results to find out the relative reasons for the relative value of customer value. The relative evaluation value is based on the composite index of customer value and core competitiveness, and the composite index is weighted by each indicator. Therefore, we can start from the index system based on the relative evaluation value, Analysis of ways to find the relative impact of customer value of the specific reasons.

(2) Evaluation of the rationality of the results: Taking the basic data of 2015 as an example, we make a reasonable analysis of the relative evaluation values in 2016. First of all, we use the SPSS software to draw the core competitiveness of the composite index as input to the customer value of the composite index as the output of the scatter plot, the outermost data points in this figure constitute the envelope of the exponential frontier, as shown in Figure 3. After a practical analysis, we think the above 11 data points are basically in line with the actual conditions of various enterprises.

Analysis of the results of the reasons

If we simply consider the comprehensive evaluation of customer value, then we can easily analyze the customer value of these 11

Ranking	2015	
	Company code	Relative rating
1	A	100%
1	G	100%
1	H	100%
1	J	100%
1	D	100%
6	I	95.20%
7	B	91.30%
8	B	91.10%
9	E	87.40%
10	K	82.10%
11	C	71.10%

Table 2: The results of the calculation of the customer value of 11 enterprises the relative evaluation value.
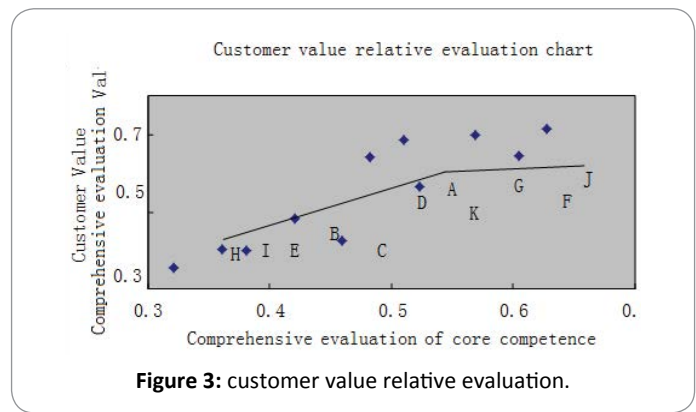

Figure 3: customer value relative evaluation.

enterprise products, according to the size of the order, you can. However, due to the considerable differences in the core competitiveness of each enterprise, the core competitiveness of enterprises is the most important factor affecting customer value. In the analysis of corporate customer value, we must consider the issue of core competitiveness. Therefore, it is necessary to evaluate the relative value of customers based on their core competitiveness. Judging from the relative evaluation value of customer value, some enterprises must enhance the customer value, for example, K and C enterprises. We note from this example that we can find that it is more scientific to use the relative evaluation values of core competence and customer value to make a comprehensive judgment than the comprehensive evaluation value which only uses the customer value. Can reveal the core competitiveness and customer value In the enterprise's core competitiveness of the relative comparison, which core competitiveness is more competitive advantage, which enterprise's customer value needs to be improved. In practical application, this method has more application value.

Analysis of the relative evaluation value of customer value at the frontier of application efficiency of core competence. When, the relative value of the customer value of the firm is at the forefront of the application efficiency of the core competencies such as A, D, G, H and J. The implication of these points is that the relative value of their customer value is very high compared to other companies. With the existing core competencies, the customer value created has reached its maximum. If you need to enhance its customer value, you must first increase its core competencies. The relative evaluation value of customer value at the frontier can also be divided into two cases: endpoint H and point J; point D, point A, and point G; For the analysis of the end points H and J at the frontier, it is necessary to combine the relative evaluation values of the core competitiveness.

First, analyze the situation of the endpoints: if the comprehensive evaluation value of core competitiveness is relatively low, such as enterprise H, the core competitiveness is also the lowest. Its customer value is the lowest among all evaluation units. Although the relative value of customer value of 100%, due to the enterprise's customer value of the lowest comprehensive evaluation value. But cannot think its customer value is relatively large. If the overall evaluation of core competence is high, such as firm J, in this case, the relative evaluation is invalid and he is certainly the best. Can be judged based on the absolute rating.

Second, analyze the middle point D, A, G: For D, A, G companies, the core competence of the comprehensive evaluation value is not large, but the relative value of customer value evaluation is relatively large (100%). This shows that in the current case of the core competitiveness, customer value reached a relative maximum. If you want to improve the customer value of your product, you must first provide core competencies. Second is the other factors that affect customer value. Analysis of relative evaluation value of customer value under the frontier.

When the relative value of corporate customer value evaluation, when the frontier, such as: C, F, E, K, I and B point of the enterprise.

Here we analyze the situation in two ways

(1) The relative value of customer value ranking, greater than or equal to the customer value of the comprehensive evaluation rankings. Such enterprises such as: F, I and B point of business. The relative value of customer value from such enterprises is relatively high, although not reached the frontier, but if you need to enhance customer value, you need to enhance the core competitiveness. For example, I-point enterprises, although the comprehensive evaluation of customer value is not large, if only the use of comprehensive evaluation to judge, it is likely to more consider how to enhance customer value issues, rather than through the promotion of core competitiveness to drive customer value.

(2) The ranking of relative value of customer value is less than the ranking of comprehensive value of customer value. Such enterprises such as: C, K and E point of business. The comprehensive evaluation value of core competitiveness of these enterprises is relatively large, but the relative value of customers is relatively low, indicating that they are not making good use of their core competitiveness to enhance customer value. Therefore, for such enterprises, how to maximize the efficiency of the existing core competitiveness to enhance customer value.

The Research Conclusion

Through theoretical analysis and actual measurement of the relative evaluation value of customer evaluation value and core competence of 11 electromechanical enterprises, we can find that it is not enough to determine the contribution of core competence to customer value only by evaluating the integrated value based on customer value of. The use of core competitiveness of application efficiency model to evaluate customer value, mainly has the following advantages:

(1) The relative evaluation value based on the core competence of customer value can make a very effective comparison of the customer value contribution of different core competitiveness. The comparison results can be used as the basis for analyzing and evaluating the efficiency of the enterprise's core competitiveness in contributing to customer value.

(2) By using the relative evaluation model of customer value, we can calculate the customer relative evaluation value and analyze the function efficiency of core competitiveness. It can judge the customer value more than simply using the comprehensive evaluation value of customer value, Force utilization efficiency issues.

(3) Using the evaluation results of the application efficiency of core competence based on customer value, we can provide effective adjustment methods in studying the changes of the core competitiveness and customer value of enterprises.

Appraisal of core competence application efficiency based on customer value needs to collect data on core competence and customer value of multiple enterprises, especially considering the comparability among enterprises. This may have some difficulties in practice. Therefore, the selection of evaluation samples must be in line with the evaluation of the competition and living environment of enterprises, otherwise the scientific findings of the study will be affected to some extent.

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