

Research Supply Chain Performance Evaluation Based on Creating Shared Value Strategy

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Abstract: Creating shared value strategic thinking that can be applied in many fields. How to promote the supply chain management? Companies need to recognize the limited development in logistics, suppliers, distribution channels, training, etc. Aiming at the strategic choice, performance evaluation and performance improvement issues of creating shared value, based on the improved BSC and the fuzzy comprehensive evaluation model integrating DEMATEL and ANP, the paper carried out the evaluation research on supply chain strategic performance. Firstly, this research analyzes the feasibility of the supply chain and created a shared value development strategy; secondly, based on the traditional BSC framework combined with the connotation of the shared value creation strategy, a six-dimensional performance evaluation framework is proposed to evaluate the performance of the strategy implementation, and then a performance evaluation system for the implementation of the strategy is established. And integrate DEMATEL and ANP methods to establish a performance evaluation model, perform fuzzy comprehensive evaluation to obtain comprehensive weights to achieve an accurate evaluation of the strategic implementation performance system. Practical results show that the comprehensive performance evaluation model is novel and effective. It can evaluate the performance creating shared value strategies, thereby improving the effectiveness and scientificity of decision-making, and meets the needs of performance improvement for companies creating shared value.

1 INTRODUCTION

The creation of shared value is proposed by Porter and Kramer and defined as policies and operational practices that improve the competitiveness of the company, while promoting the economic and social conditions of the community where it is located. Creating shared value is an organization's strategic goal or a new method of value creation, which is to expand value. The new method of total volume guarantees the competitiveness of network organizations (Porter & Kramer 2011). In practice, Google, IBM, Intel, Johnson & Johnson, Nestl, Unilever, and Wal-Mart have begun to implement shared value plans to bring greater innovation and growth to enterprises and bring greater benefits to society. At the Create Shared Value Summit in 2011, "measurement" was also identified as the key driving force for the adoption of shared value. Porter M, Hills G, Pfitzer M, et al (Porter, Hills, Pfitzer, et al. 2012) pointed out that if companies do not measure their progress in social goals, what's more important is the extent to which social performance improves the

economic value of enterprises, and enterprises cannot know the extent to which they create shared value. The new framework that focuses on the interaction between business and social results is one of the most important tools for driving shared value in practice. There is no universal system that can evaluate the existence of this role, but even those who are most in the pursuit of shared value. Advanced companies also lack the data needed to optimize their results (Spitzeck, Chapman 2013). Although people are beginning to accept the concept of shared value, the tools to put this concept into practice are still in its infancy (Moretti 2017). Therefore, how to construct a measurement system to create shared value and use scientific methods to measure has important theoretical and practical significance for the promotion and application of the strategy of creating shared value.

The strategy implementation performance evaluation framework plays a core role in strategic management. Currently, there are two main methods applied to strategy implementation performance: key performance indicator method and balanced

scorecard method. Among them, the balanced scorecard has a significant impact on performance evaluation. Harvard Business Review is rated as the most influential and comprehensive strategic management tool in modern times. Praveen Gupta (Gupta 2007) organically combined the Sigma principle and BSC to create a Six Sigma scorecard based on continuous process improvement. The ANP method developed by Saaty can solve problems involving quantitative and qualitative standards and considering the interdependence and feedback between standards. Therefore, ANP is a useful method to solve the problems mentioned in this article. However, when applying the ANP method, on the one hand, you need to clarify the relationship between the factors. At this time, if there are many influencing factors, you also need to consider the simplification of the relationship to avoid the exponential disaster of pairwise judgment in ANP; on the other hand, use The method of obtaining the ANP super matrix by average weighting is unreasonable, which results in different element groups being given the same weight (Erol, Sencer, Sari 2011). Therefore, a new evaluation method is proposed by integrating DEMATEL and ANP methods, and it has been widely used.

Therefore, this article takes the creation of shared value as the supply chain strategy, based on the BSC theoretical framework, summarizes the shortcomings of BSC in the research on the creation of shared value strategy, improves the BSC performance evaluation framework, systematically establishes a supply chain strategy implementation performance evaluation system, and Use the integrated DEMATEL and ANP model for evaluation to make it more accurate to evaluate the strategic implementation performance of the supply chain and improve the strategic implementation performance.

2 DESIGN OF PERFORMANCE EVALUATION MODEL FOR CREATING SHARED VALUE STRATEGY

Porter and Kramer proposed the concept of creating shared value (Porter & Kramer 2011), which is to increase the total economic value through the creation of social value and environmental value, similar to the triple bottom line model (Elkington 1997). Juscius and Jonikas (Juscius, Jonikas 2013) believe that shared value creation includes the economic benefits of the enterprise, better product quality, the establishment of organizational culture and the development of globalization. Spitzeck and Chapman (Spitzeck, Chapman 2013) used socio-ecological efficiency analysis to evaluate the triple bottom line indicators of a particular product life cycle to determine whether the company's strategy can be regarded as a case of shared value creation. In summary, the strategy of creating shared value is a strategy to increase the total economic value through the interaction between social value and environmental value constituent elements. Therefore, creating shared value is not only a social responsibility, but also a new strategic goal or a new way of value creation. The creation of shared value can be used as an enterprise's development strategy, as shown in Fig 1.

Supply chain from creating shared value strategy to performance creation is mainly reflected in the economic, social and environmental performance obtained by stakeholders. Economic value performance includes cost reduction, profit increase, etc.; social value performance includes improving corporate reputation and corporate reputation,

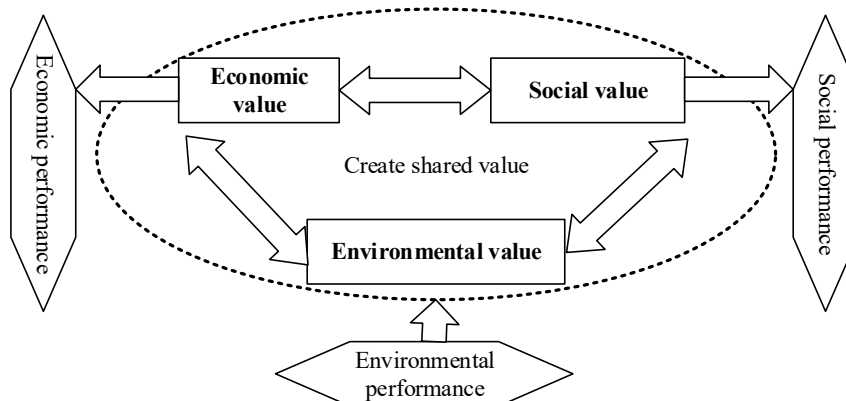


Figure 1: The performance evaluation model of creating shared value strategy.

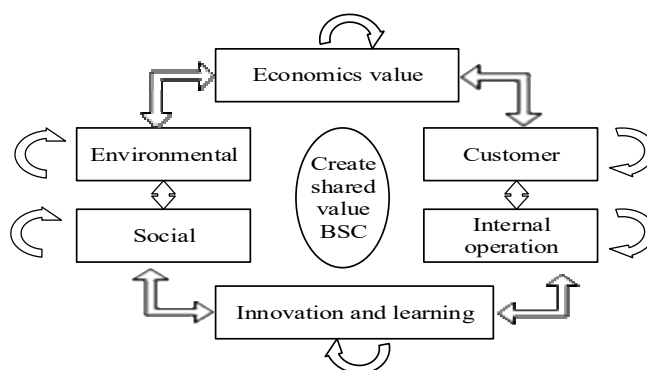


Figure 2: Relationship between six dimensions.

etc.; environmental value performance includes reducing environmental pollution from corporate activities, improving ecological environment quality, and achieving the sustainability of the company and society Sexual development.

The strategy of creating shared value is a complex network composed of many related dimensions. Therefore, the establishment of a performance evaluation index system is a systematic work. The evaluation index needs to be comprehensive, objective and effective to reflect the logical relationship of creating economic value and the performance of creating shared value. Impact. Reefke H, Trocchi M (Reefke, Trocchi 2016) believes that the creation of shared value is sustainability, corporate social responsibility and strategic philanthropy are all supplements to common values, not something different. In this context, the overall goal of the strategy of creating shared value is to increase the total amount of economic value, which reflects the market attributes of the enterprise. Therefore, the traditional BSC performance evaluation framework is an appropriate method to transform strategic goals and policies into evaluable ones. Indicators, to realize the performance measurement of the strategy of creating shared value; on the other hand, creating shared value is to consider finding new economic value growth points from social and environmental factors, in order to reveal the important role of social and environmental dimensions in the strategy of creating shared value. In-depth exploration of the mechanism of society and the environment in promoting the increase of the total economic value, so it is necessary to improve the traditional BSC structure. On the basis of retaining the original four dimensions of BSC, add "social dimension" and "environmental dimension", and The "financial dimension" is revised to the "economic value dimension" to be more suitable for the

connotation of the enterprise to create shared value, and the improved BSC is named the six-dimensional balanced scorecard to more comprehensively evaluate the implementation performance of the enterprise's strategy of creating shared value, such as in Figure 2.

The six dimensions are generally driven and driven to form a value creation management system. The six dimensions interact and support each other. At the same time, the goals of the six dimensions are centered on the overall strategy of creating economic value. The indicators of each dimension directly or indirectly serve the supply chain strategy. From the perspective of influence trends, the environmental and social dimensions are generally external influencing factors, which tend to affect customers and internal operation dimensions. The five dimensions generally affect the economic value dimension, which is also in line with the balanced scorecard's strategy as the core and focus on The "balance" between the various dimensions and performance drivers are mainly for maximizing the benefits of the corporate strategy. At the same time, there is a certain causal relationship between the six dimensions, which will be mainly reflected in the selection of the evaluation model later, and the performance of the strategy of creating shared value will be created by scientific evaluation.

3 CONSTRUCTION OF PERFORMANCE EVALUATION INDEX SYSTEM FOR STRATEGY IMPLEMENTATION

The strategic map is an extension of the BSC theory, which can help the supply chain clarify the strategy

of creating shared value and strengthen the internal communication of the enterprise. At the same time, the strategy map adds two levels on the basis of the BSC dimension: granular level: that is, each dimension is composed of multiple elements; dynamic level: that is, the strategy map is dynamically changing. The strategy map is a measure and countermeasure that decomposes the company's strategy into corresponding levels, and lays the foundation for the design of the balanced scorecard indicator system. In practice, a preliminary strategic map can be given based on research analysis and expert decision-making.

Creating shared value as the overall strategic goal (mainly economic value), using the six-dimensional BSC performance evaluation framework, decomposing multiple lower-level indicators under their respective dimensions, and taking the most representative evaluation indicators as examples. According to the quantitative and qualitative indicators of the above pre-selected performance evaluation, then the supply chain strategic management experts are investigated. The interviewed experts are required to fill in the corresponding indicators on the supply chain. The degree of importance of the performance evaluation for creating shared value (1 represents extremely unimportant, 7 represents extremely important). According to the experts' statistics on the response to the questionnaire, six dimensions of key performance indicators (the average score can be set to 5 or more) are obtained. The results of the selected indicators are shown in Figure 3.

While following the logic and framework of BSC, it also refers to several typical indicators of Erol et al (Erol, Sencer, Sari 2011) to match specific indicators with the connotation of the strategy of creating shared value. BSC supports the connection between metrics, goals, and strategies to integrate and reflect the realization of corporate strategy. The key performance indicators are arranged according to the six-dimensional BSC framework. Some indicators may only be observed at the specific company level, but they still reflect the impact on the strategy of creating shared value. For example, the annual water consumption, annual energy consumption and waste minimization in the "environmental dimension" are applicable to individual companies' strategies for creating shared value. There are similar conclusions for various social or economic value indicators.

4 FUZZY COMPREHENSIVE EVALUATION MODEL INTEGRATING DEMATEL AND ANP

The integration of DEMATEL and ANP methods streamlined the indicators in ANP, and obtained a lot of valuable information by calculating the reason set and result set. At the same time, considering the weighting problem of the ANP supermatrix, the comprehensive influence matrix of DEMATEL can be used as the weight matrix of the ANP unweighted supermatrix to correct the deficiency of the average weight when calculating the weighted supermatrix by ANP. At the same time, the fuzzy comprehensive evaluation is used. Method for the integration of information.

Firstly, it is to identify whether the supply chain implements the strategy of creating shared value, and then conduct a questionnaire survey on the factors that may affect the performance of the supply chain. The survey scope includes leaders, technical experts and employees at all levels of the company. After statistical analysis of the results of the questionnaire, combined with the actual situation of the supply chain, based on the six-dimensional BSC framework proposed above as the indicator dimension, 24 representative key performance indicators were selected, and the selected supply chain was comprehensively evaluated in multiple dimensions. As shown in Fig. 3.

5 CONCLUSIONS AND PROSPECTS

The purpose of this research is to create, implement and evaluate performance for the design and development of strategies for creating shared value. It will promote the development of shared value creation to performance evaluation methods. In order to achieve these goals, this article reviews the concepts, models, frameworks and methods related to the fields of creating shared value strategy, BSC, and performance evaluation. Finally, in the process of summarizing the research challenges, a performance evaluation system development process aimed at creating shared value strategies for the supply chain was proposed and explained. At the same time, a supply chain performance evaluation model with interrelated factors, considering the creation of shared value and a performance management framework is

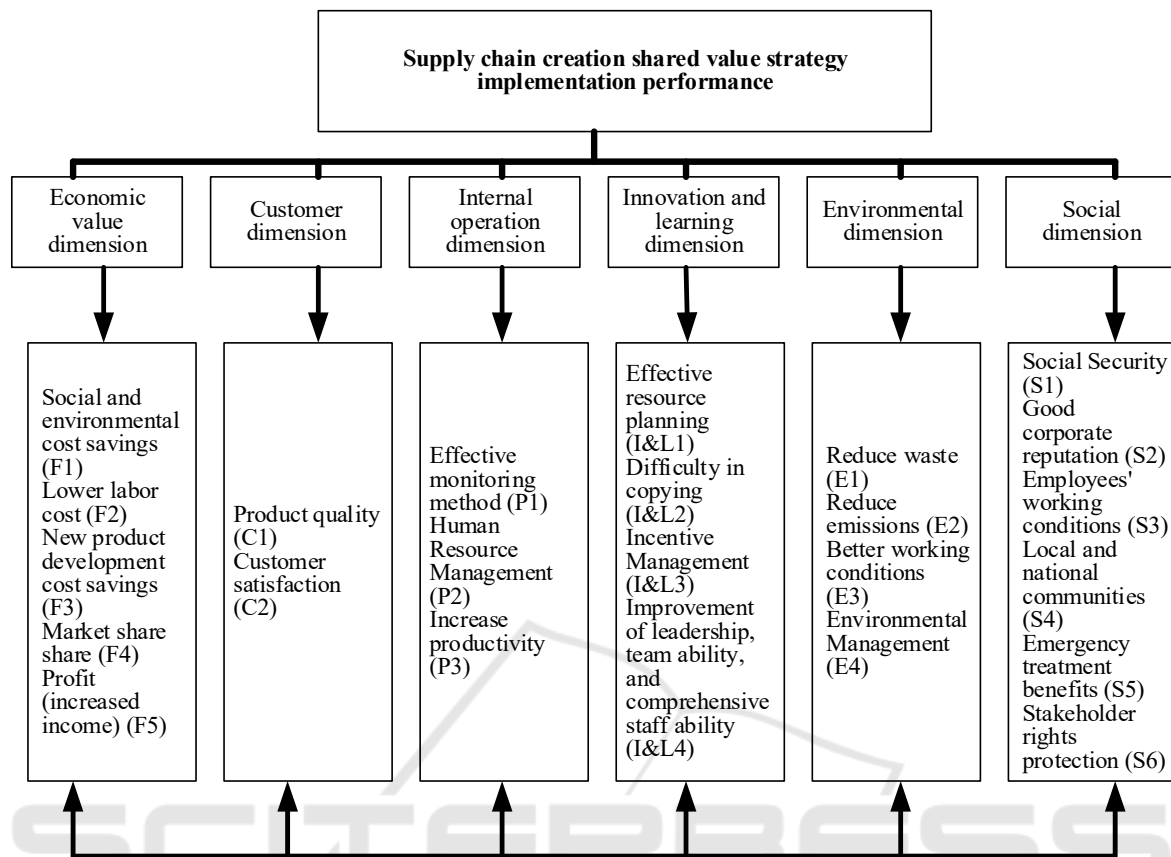


Figure 3: The ANP model of the performance evaluation of the strategy of creating shared value.

proposed, and implemented by the integration of DEMATEL and ANP methods. The novelty of this method is that the performance evaluation attribute is the use of The widely recognized elements and model methods of the balanced scorecard have also been theoretically proven and tested in practice. Therefore, the performance evaluation of the supply chain to create shared value is scientific, and the interdependence and feedback relationship between them are considered at the same time.

(1) Improve the structure of the traditional balanced scorecard and build a performance evaluation system for the implementation of the supply chain creation and shared value strategy. On the basis of the traditional balanced scorecard, combined with the characteristics of the strategy of creating shared value, by improving the structure of the traditional balanced scorecard, a performance evaluation system in line with the implementation of the strategy of creating shared value is established.

(2) The scientific and systematic evaluation of corporate strategy implementation performance takes into account the interaction between evaluation dimensions and evaluation indicators and between

the two. In the existing applications, there is a lack of consideration of the above interaction relationship, and the selected quantitative method cannot match it.

(3) Help the supply chain improve the performance of strategy implementation. The purpose of strategic implementation and performance management is not only to determine and evaluate the strategy, but to better implement the management of the strategy to improve performance. Through the evaluation method of this article, we can identify the key driving factors of strategy implementation performance, so as to better carry out strategic management and improve strategy implementation performance.

The method and research framework proposed are applicable to all types of supply chains that create shared value as a strategy. At the same time, performance factors need to be selected according to the specific supply chain conditions and specific industries analyzed, and the standards for creating shared value need to be further adjusted. At the same time, there are also issues that need further research. For example, this article does not fully analyze the supply chain performance of companies creating

shared value based on financial reports. Therefore, in future research, a third type of indicators can be established to supplement and improve the evaluation system. Integrate the strategy of creating shared value with performance appraisal management, and use objective key indicators of performance appraisal to measure and realize the traceability between the creation of shared value and the performance framework. The lack of data support in the research, future research can use a combination of qualitative and quantitative methods to improve the objectivity of the evaluation.

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