

# The application and optimization strategy of supplier evaluation in purchasing management

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**Abstract:** Supplier evaluation involves comprehensive evaluation of its ability, service, reputation and other content, which plays an important role in procurement management. Improving the effectiveness of its evaluation is beneficial to help enterprises choose high-quality suppliers, through optimizing its structure, while reducing costs, improve the efficiency of procurement, thus enhancing its competitiveness. This paper first expounds the concept and content of supplier evaluation, then discusses how to construct supplier evaluation mechanism, and finally studies its application and optimization strategy, hoping to provide useful reference for related workers.

**Key words:** Supplier evaluation; Procurement management; Application and optimization

Procurement management is a systematic project, and supplier evaluation is an indispensable part of it. It involves the evaluation and monitoring of the performance of suppliers, which can provide guarantee for the smooth implementation of procurement and meet the needs of the organization. In the process of globalization and the increasing complexity of supply chain, how to carry out supplier evaluation has become a focus of attention. Improving the effectiveness of supplier evaluation can provide enterprises with better and more diverse choices, and achieve the expected procurement objectives by managing suppliers. This paper focuses on its application and optimization strategy in procurement management, in order to achieve the goal of improving the effect of procurement management through the optimization process.

## I. Overview of supplier evaluation

### 1. Supplier evaluation definition

The so-called supplier evaluation refers to the systematic evaluation of enterprise suppliers on a regular basis to measure whether they meet the needs and expectations of the enterprise, in addition to the evaluation of their overall performance. This process is a very critical part of the enterprise's procurement management, which is conducive to helping the enterprise select high-quality suppliers, discover and correct the problems in time, so as to ensure the efficiency of procurement activities and improve the quality of activities.

### 2. Content of supplier evaluation

Supplier evaluation involves many aspects, such as product and service quality, competence and reputation, etc.

Product and service quality refers to the evaluation of related products and services provided by suppliers, including product performance, price, quality and so on. Ability and reputation refer to the evaluation of the supplier's own management ability, technical level, compliance, reputation, etc. Delivery and response ability refers to the evaluation of the supplier's own delivery ability, including whether it can deliver on time, whether it can provide relevant documents as required, the speed and effect of the supplier's handling of the problem, and so on. The supplier's own risk refers to the assessment of the supplier's own risks in terms of production safety, financial condition and environmental responsibility. Sustainability refers to the assessment of the supplier's own responsibility and environmental awareness, as well as its ability to help and support the long-term and sustainable development of the enterprise.

In short, with the help of supplier evaluation, enterprises can objectively and truly understand their situation, so as to select quality suppliers and provide more efficient and stable supply chain services for the development of enterprises.

## II. Establish supplier evaluation mechanism

### 1. evaluation units and their respective divisions

Generally speaking, it is the procurement department of the enterprise to formulate and optimize the evaluation index system, build the corresponding model, and unify and coordinate the evaluation activities. The main work of this department is to guide and supervise the actual work of the evaluation unit, pay attention to the evaluation process, improve the evaluation quality, and ensure the reliability of the results. Since this department is responsible for determining the strategy of supplier evaluation and coordinating its evaluation process, it should ensure that the evaluation objectives and the procurement strategy of the enterprise do not conflict. In order to achieve this goal, professional evaluation knowledge should be possessed; The quality management department evaluates the supplier's quality management, certification, and product and service quality indicators, etc. The evaluation can be carried out by the relevant quality documents issued by the supplier or on-site inspection to evaluate its quality capability; The relevant management department of the supply chain evaluates the supplier's own logistics management and delivery ability, and evaluates its delivery ability with the help of its delivery record, logistics management process and production capacity. The financial department evaluates the supplier's own economic capacity, specifically its financial statements, income statements, etc., to understand its financial status and solvency.

### 2. The specific evaluation process and scoring method

In the formulation of evaluation standards should not be blindly followed, but should be combined with enterprise procurement needs,

strategies. The more common criteria include the supplier's quality management ability, economic strength, risk management, delivery ability and so on. After defining the evaluation criteria, the next thing to do is to select the more high-quality candidates from a large number of suppliers to facilitate the follow-up evaluation. In this work, various factors should be taken into account, such as the type of purchase, the scale of purchase and so on. In addition, the relevant information of the supplier, such as registration information, delivery records, products, etc. should be collected, which can be collected by questionnaires, suppliers' voluntary submission, etc. Next, the supplier shall be evaluated and scored according to the evaluation criteria. Evaluation can be carried out in the form of expert scoring, evaluation table and evaluation matrix.

### 3. Evaluation result management

The management of supplier evaluation results generally adopts a grading system. Combined with the comprehensive score, the supplier is divided into corresponding levels, such as A generally refers to excellent suppliers, B+ refers to excellent suppliers, B refers to qualified suppliers, C refers to unqualified suppliers. The corresponding scores of the above suppliers are: 90 points and above, 80-90 points, 60-80 points and below 60 points.

## III. The application and optimization strategy of supplier evaluation in procurement management

Supplier evaluation refers to that the procurement department of the enterprise regularly carries out quantitative and qualitative evaluation of the products and services of the suppliers, so as to reasonably evaluate their overall performance. On this basis, combined with the evaluation results, the supplier conducts negotiations and consultations on related procurement matters, so as to enable the enterprise to obtain high-quality products and services. This kind of product or service has higher quality, lower cost and strong reliability to improve the competitiveness of enterprises. In order to achieve this goal and improve the efficiency of procurement management, the evaluation of suppliers should be actively carried out and continuously optimized. Specifically, the following points can be started:

### 1. Scientific classification

The classification of suppliers can be started from multiple angles, such as combining the procurement of goods, including raw materials, office supplies and other procurement. According to the purpose of procurement, it can be classified into inventory, project procurement and so on. After the classification, enterprises will have a general understanding of their suppliers. This should include the purchasing department to know the relevant history of suppliers, actual needs and so on.

### 2. Clear evaluation indicators

The evaluation indicators are generally the first thing to be defined. The indicators include two categories, such as quantifiable and non-quantifiable indicators.

Among them, the former refers to the relevant indicators combined with statistical data to calculate the score, mainly including: on-time delivery rate, product quality and after-sales service quality. The latter cannot be calculated by direct data, but should be combined with actual performance to carry out comprehensive evaluation. These include:

**Qualitative indicator:** This indicator refers to the evaluation of the overall performance of the supplier by describing some of its attitudes and behaviors, such as the evaluation and judgment of the seriousness and responsibility of the work, communication and cooperation, and self-management.

**Price and cost:** Compare the purchase price with the market situation, or evaluate the actual profit rate and cost structure of the supplier;

**Quotation behavior:** the main consideration is the timeliness of the quotation, whether the list of data is specific, objective and transparent, the quotation includes a lot of content, such as raw material costs, processing costs, logistics costs, taxes and so on;

**Cost reduction attitude and action:** whether the cost reduction action will take the initiative to carry out, or actively cooperate with, and develop the cost reduction plan that can be landed;

**Payment:** whether it can actively cooperate with the payment requirements, conditions and payment methods put forward by Party A, whether it can timely and correctly issue invoices, whether the invoices meet the financial and tax requirements, whether the financial status is good, etc.

**Evaluation index:** refers to the evaluation of the supplier's performance, including its mental outlook and work style, by asking other partners and relevant staff.

It is of positive significance to make the evaluation indicators clear, for example, it is conducive to improving the cooperation efficiency of both parties. Based on this, the core needs of enterprises can be analyzed and the key points of their needs can be listed, so as to lay a foundation for the subsequent formulation of evaluation standards. At the same time, it should be updated in time to make it more in line with their actual needs and market situation.

### 3. Pay attention to the scientific evaluation method

Whether the evaluation method is scientific is of Paramount importance and relates to the effectiveness of the evaluation. There are three kinds of evaluation methods, such as information-based evaluation, qualitative evaluation and quantitative evaluation. After clarifying the evaluation method, we should also understand the supplier's evaluation approach, such as site visit, certification by a third party, field visit and questionnaire survey. On this basis, choose the evaluation method scientifically. In fact, the choice of evaluation method is closely related to factors such as enterprise budget, resources and time. In general, companies have the flexibility to use a variety of assessment methods to achieve the best results.

Take the catering supplier of X Technology company as an example to build the evaluation framework: The qualitative evaluation believes that the supplier should comply with the corresponding service specifications, such as the Daily Management Specifications of Catering Suppliers and the Entry Manual of Catering Suppliers. This kind of evaluation has the characteristics of generalization and foundation. Quantitative evaluation refers to the use of quantitative methods, in the evaluation should not only pay attention to performance indicators, such as consumption, dining rate, etc., but also can not ignore the evaluation of key risk points, such as video surveillance, food safety audit conducted by the third party, on-site inspection. Finally, the supplier evaluation cycle is determined according to the needs of the enterprise, which commonly includes monthly, quarterly and annual evaluation.

#### 4. Grading the suppliers

A good weight should be assigned when evaluating suppliers. That is, the scoring system should be set according to the procurement requirements and demands, including the selection of parameters.

After the evaluation department has made clear the evaluation indicators and methods, the next thing to do is to carry out dynamic rating based on the supplier's indicator information, and on this basis, adjust its level and formulate procurement strategies based on the supplier's score. Generally speaking, suppliers are generally divided into four levels, which are A, B, C and D. Level A: refers to the more excellent suppliers, and can establish a good cooperative relationship with them, that is, directly renew the contract or reward incentives; Level B: for the current cooperative relationship can be stably promoted, by maintaining the current management measures to improve their capabilities; Level C: This kind of supplier should be guided, combined with existing problems to interview its senior management, through in-depth communication, to explore solutions, improve their capabilities; Adjust orders and other ways to give them pressure to solve the problem; Grade D: refers to suppliers with major hidden dangers, for which orders should be reduced. If the assistance is found to be ineffective, the cooperation should be stopped.

In view of the evaluation results, the following measures should be taken: continue to feed back the results, make suggestions for improvement, and carry out auxiliary management at appropriate times; To provide feedback to internal departments to ensure they are kept informed of the supplier situation; Due to the elimination of substandard suppliers, resulting in a small number of suppliers, should accelerate the recruitment of new suppliers; For those suppliers that have been eliminated, the enterprise should put forward rectification requirements, and can be re-included in the selected team after rectification.

## Conclusion

For the management of supply chain, the relationship between enterprises and suppliers is no longer just a cooperative relationship, but a deep partnership. This relationship places new requirements on both parties, namely, to establish a mutually beneficial and trusting relationship, and to work together to optimize the supply chain. Supplier selection is extremely critical for enterprises, because high-quality suppliers can provide enterprises with better raw materials, products and services, etc., which can help enterprises improve efficiency, reduce costs and improve competitiveness. At the same time, through optimizing the supply chain, it can improve its response speed. Based on this, the effectiveness of supplier evaluation should be continuously improved to help enterprises select high-quality suppliers and give full play to its efficacy in maintaining the stability of the chain.

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