An often-overlooked part of the procurement process is the initial phase of working with a new supplier and how we can help them get up to speed as quickly as possible to perform effectively for our organisation (CIPS Australia: New Supplier Engagement)
Introduction

Supplier selection, along with supplier evaluation and continuous measurement/assessments, is an important organisational process: purchased products represent between 40% and 60% of end product sales and have a direct impact on the cost and quality of products. In addition, even a small cost gained by selecting a good supplier can have great impact on benefits (Aiter et al., 2011).

Supplier selection relies on multiple assessment techniques which include both quantitative and qualitative methods (Choi and Hartley, 1996). At the same time, many organisations continue to select suppliers based on experience and intuition - selective and unreliable approaches (Kontio, 1996). The most common evaluation criteria used to select suppliers are: financial health, expertise, operational performance metrics, business processes and practices, enabling behaviours or cultural factors and risk factors (Aiter et al., 2011).

Multiple criteria decision-making (or multiple attributes decision-making (MCDM/MADM) is one of the approaches that helps to rank and select one or more suppliers from a pool of providers based on the ratings and weights of the precisely known criteria (Delgado et al., 1992; Hwang and Yoon, 1981). The MCDM provides an effective framework for supplier comparison based on the evaluation of multiple conflict criteria. The Analytic Hierarchy Process (AHP) is widely used by researchers and practitioners for complex decisions and to manage the difficulty of determining the performance of a supplier on one criterion - or the importance of some criterion with a high degree of precision (Ghodsypour and O’Brien, 1998). AHP benefits include the ability to perform precise assessments of values through hierarchical structuring and pair-wise comparison, it is programmable on computers, it allows for value assessment, forecasting, alternative selection and resource allocation and it is widely applied by many business organisations and government institutions. Other analytic supplier selection methods include Pre-Emptive Goal Programming (takes into account qualitative and quantitative factors), Multi Objective Programming (helps to negotiate with suppliers not initially selected), Linear Programming (considers tangible and intangible factors) and Fuzzy Set Theory (evaluates small suppliers) (Aiter et al., 2011).

Definition

Supplier selection is the process of selecting a supplier to acquire the necessary materials to support the outputs of organisations. Selection of the best and/or the most suitable suppliers is based on assessing supplier capabilities (Shih et al., 2004).

Successful application

Very often supplier performance measures for supplier selection (such as financial performance evidence, questionnaires, survey or site visits) is difficult to obtain. In addition, several decision-makers must be involved in the decision-making process (De Boer et al., 1998). Finally, decision-making is often influenced by uncertainty: situations are changing rapidly or are uncertain and decision variables are difficult or impossible to quantify (Ghodsypour and O’Brien, 1998).

Steps to successful application

1. Think strategically about your business needs and objectives.
2. Consider what you should look for in suppliers: some of the most common attributes are quality and reliability, speed and flexibility, value for money, strong service, clear communication, financial security.

3. Limit and examine the potential pool of suppliers. This can be based on recommendations or information provided by directories, trade associations, business advisers, business support organisations, enterprise agencies, or exhibitions.

4. Produce a short-list of suppliers.

5. Choose a supplier: this can be done by interviewing potential suppliers.

6. The final step is managing supplier relationships. Once settled on the suppliers, negotiate terms and conditions and draw up contracts, open communication between the company and your suppliers facilitates dealing with any problems.

Hints and tips

- It is beneficial to obtain a financial report from the supplier company before choosing a supplier (Okes and Westcott, 2001).
- Personal communication and negotiations are important factors in finalising supplier selection (Okes and Westcott, 2001).
- It is important to assess supplier quality levels through on-site assessment or survey, or request the potential supplier to provide a certificate of quality (Okes and Westcott, 2001).
- Recommendations from the customers of a potential supplier are important (Okes and Westcott, 2001).

Potential advantages

- An appropriate supplier selection process enables purchasing professionals to formulate viable sourcing strategies and is capable of handling multiple conflicting attributes (Tahiri et al., 2008).
- Supplier selection is one of the key issues of SCM as good suppliers have a direct impact on the cost of the final product (Aiter et al., 2011).
- An appropriate supplier selection process provides a unique means of ensuring consistency among suppliers (Chan, 2003).

Potential disadvantages

- Supplier selection processes demand specialised software and require qualified personnel who are expert on the subject (Tahiri et al., 2008).
- Supplier selection methods are usually used for international supplier selection where the environment is more complicated and risky (Yusuff et al., 2001).
- Some supplier selection methods do not consider risks and uncertainties regarding the supplier’s performance, thus leading to hazardous results (Yusuff et al., 2001).

Performance monitoring

- Financial health: sales, profitability, liquidity, return on investment (ROI), debt ratio, transparency of finances (Aiter et al., 2011).
- Expertise: network capabilities, quality and production capabilities, technical level compared to sector average, spread of technical creation, investment in R&D (Aiter et al., 2011).
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- Operational performance: on-time delivery, lead time, responsiveness, inventory management and control, order acceptance, processing and fulfilment, customer service, preventive maintenance, hours of operations training (Aiter et al., 2011).
- Business processes and practices: how a supplier provides a product or a service at the best value, on time and as required (Aiter et al., 2011).
- Behaviours and cultural factors: the improvement culture, information capabilities, intention of coordination (Aiter et al., 2011).

Case studies

MacLaren set up a department to specifically select suppliers that would be able to contribute '80% of vehicle value'. The overarching aim is to support supplier development and growth and thereby mitigate potential problems. The new department also focuses on creating appropriate key performance indicators to measure suppliers selected (Ngobi, 2011).

IKEA selects suppliers based on the IWAY code of practice which identifies its minimum requirements. The code of practice expects suppliers to follow national and international law, not to use child labour, not to use woods and glues from non-sustainable forests, waste and emissions, contribute to recycling, follow health and safety requirements, care for the environment, and take care of their employees (The Times, b).

In the early 2000s British Telecom's (BT) supplier selection programme focused on ethnic minority businesses (EMBs), with participating firms in the construction, software design, cleaning and training sectors. Since 1998, 1/3 of the 19 companies mentored are reported to have secured work from BT, directly or indirectly, as a result of the supplier diversity programme. The stated rationale for the Programme emphasises the business benefits to BT of a diverse supply base, as well as the social case (Ram et al., 2002).

Further Resources/Reading

Web
Supplier Selection Strategies and Criteria
Blogspot on supplier selection
Supplier selection process
8 Supplier Selection Criteria
Global strategic purchasing: Identifying and selecting suppliers

Books

Supplier Selection and Business Process Improvement: An Exploratory Multiple Case Study ISBN 978-3838311258


Supplier Selection ISBN 978-0945456322

Strategic Purchasing and Supply Management: A Strategy-Based Selection of Suppliers (Einkauf, Logistik und Supply Chain Management) ISBN 978-3835006584
References


