

SUPPLIER EVALUATION FRAMEWORK BASED ON CSR PERSPECTIVE

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Abstract With the increasing awareness of CSR many companies especially large international corporations have been paying more attention in selecting suppliers that are capable of adhering to the practice of social and environmental sustainability. This paper aims to find out what criteria are adopted by companies to assess their suppliers, and how much importance CSR contributes to the final decision of the selected supplier.

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1. INTRODUCTION

Supplier selection and evaluation is one of the most critical activities in purchasing or procurement process (Bayazit, Karpak & Yagci, 2006). The earliest research on supplier selection was proposed by Diskson in 1966. He identified 23 different criteria for supplier selection based on a questionnaire sent to managers of companies in North America. These criteria include quality, delivery, performance, warranty and claim policy, production facilities and capacity, net price, and technical capabilities. Most succeeding studies are based on the Diskson's concepts, largely discussing on whether a certain supplier was qualified for being a supplier or not. However, criteria suggested by these previous studies have been used for decades and need further adjustment.

In recent years, both industries and academies are devoting intensive attention to corporate social responsibility (CSR). CSR goes beyond regulatory compliance to focus on how companies manage their economic, social, and environmental impacts, as well as their relationships with stakeholders (e.g. employees, suppliers, government). Hietbrink et al. (2011) indicate that CSR perspective should be added to the manufacturer's purchase decision-making for suppliers. Lim and Phillips (2008) find that cooperation between firms and CSR suppliers enhances mutual relationship and stabilizes supply sources. Mishra and Suar (2010) also consider that strong commitment of a business to CSR leads to better performance and social image of the business.

Hence, this paper aims to find out what criteria are adopted by companies to assess their suppliers, and how much importance CSR contributes to the final decision of the selected supplier.

2. LITERATURE REVIEW

2.1. Corporate Social Responsibility (CSR)

Whereas many definitions exist in the current realm of social literature, one of the most well-defined and frequently cited definition of CSR is provided by EU Commission "...CSR is a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis". Corporate Social Responsibility is a business strategy that protects society, environment and all other participants impacted by the business. Corporate Social Responsibility is the continuing commitment to be-have responsibly by integrating all these issues into business operations.. The concepts of CSR have continually evolved and are still actively debated. The issues of CSR the most

often discussed in the literature include: human rights, fair business practices, natural environment, consumer issues, human resources management.

As a result, many studies apply the concept of CSR to different sectors, for instance, to food industries, automobile sectors, apparel and textile industries, pharmaceutical and so on (Hartmann, 2011; Loureiro, Sardinha & Reijnders, 2012; Cheah, Chan & Chieng, 2007; Saniuk & Saniuk, 2013; Szczanowicz & Saniuk, 2014). A considerable body of related research has demonstrated that CSR can influence consumer attitude toward businesses. Hietbrink et al. (2011) indicate that CSR perspective should be added to the manufacturer's purchase decision-making for suppliers. A growing body of research seems to suggest that businesses take supplier's CSR into consideration when selecting suppliers so that delivery and quality of products can be assured and suppliers will make more serious commitment to CSR activities. With the increasing awareness of CSR large international corporations have been paying more attention in selecting suppliers that are capable of adhering to the practice of sustainability.

2.2. Supplier selection and evaluation

Supplier selection and evaluation is one of the most critical activities in purchasing or procurement process. This evaluation process consists of 4 stages i.e., defining objective, formulating the selection criteria, qualifying the suitable alternatives, and final selection. The literature on supplier evaluation includes some surveys that 1) focused on problem criteria, and 2) proposed methods for the selection process (Fig. 1).

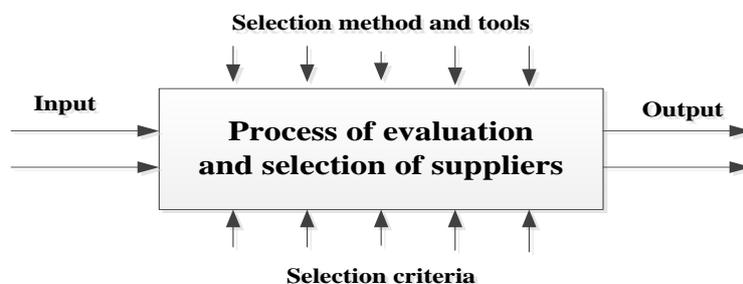


Fig. 1 Process of evaluation and selection of suppliers

To qualify the prospective suppliers, the effective defining of selection criteria is necessary (Ting & Cho, 2008). According to many authors (e.g. Dickson, 1966; Weber et al., 1991; de Boer, Labro & Morlacchi, 2001; Ho et al., 2010; Jasiulewicz-Kaczmarek & Misztal, 2015), cost/price is one of the most crucial, if not the most crucial, factors to take into account when selecting a supplier. Purchasing prices can be considered as a major determinant of a company's ability to achieve

competitiveness, and its ability to achieve high profit margins. Quality is a second criterion which has deserved an abundant amount of attention in the supplier selection literature (e.g. Dickson, 1966; Weber et al., 1991; Shu & Wu 2009, Ho et al., 2010). First of all, in the context of this research quality refers to a supplier's "product quality". Important indicators of product quality are product's "conformance to specifications and requirements" and the "average defect rate" Furthermore, "product sophistication /innovativeness" is an important factor to consider Delivery is yet another one of the most frequent used criteria in supplier selection (Ho et al., 2010). This criterion reflects on supplier reliability issues such as "compliance with predetermined due date" and "compliance with predetermined order quantity". As the concept of the agile supply chain received an increasing amount of attention among both academics and company supply chain managers to cope with complex and dynamic environments, increasingly supplier selection criteria related to flexibility and responsiveness are adopted (Chang et al., 2006). The next criterion considered in the literature is "Financial stability" (Berger, Gerstenfeld & Zeng, 2004). Both suppliers and buyers seek supply chain partners, which have the ability to positively contribute to their relationship, especially in the case of longer term relationships. A supply chain partner who is financially unstable will be less able to do so. Therefore, it is important to consider the financial position when selecting a suppliers. The other criterion is to "Supplier's reputation". A supplier's reputation reflects on both a supplier's "performance history" (Dickson, 1966), which is based on own experiences with a known supplier, and a supplier's "reputation in the industry" (Chan et al., 2007).

Table 1 Supplier selection methods

Category	Methods	Authors
Intelligent approaches	neural network based methods, expert systems, fuzzy decision-making and hybrid approaches	Kumar & Roy (2010), Tang et al. (2013)
Multi-criteria decision-making (MCDM)	Analytic Hierarchy Process (AHP), Analytical Network Process (ANP), Technique for Order Preference by Similarity to Ideal Solution (TOPSIS)	Tam & Tummala (2001), Gencer & Gurpinar (2007), Ho, Xu & Dey (2010), Xiaolin & Ying (2011), Agarwal, et al. (2014), Rajabani & Fathi (2014),
Mathematical models	Data Envelopment Analysis (DEA), linear programming models (LP), mixed integer programming, multi-objective programming (MOP), goal programming (GP), grey relational analysis (GRA)	Hafezalkotob et al. (2014), Feng, Wang, & Wang (2001), Vagal et al. (2015), Saen (2007), Bai & Sarkis (2010), Haq, & Kannan (2006), Kontis & Vrysagotis (2011), Balakannan, Nallusamy & Majumdar (2015), Haq & Kannan (2006)
Combined models	AHP+GP, AHP + FSP, AHP + LP, ...	Chamodrakas, Batis & Martakos, (2010), Ghodsypour & O'Brien (1998), Lee (2012)

Once the criteria are selected and set, it becomes necessary to select suitable approaches. Most of the approaches as used in supplier selection are quantitative in nature. Some of these methods used a single model, such as linear programming, AHP, fuzzy set theory, etc., and others used a combined model, such as integrated AHP and DEA, fuzzy and multi-objective programming, etc. (Table 1).

Prior research on supplier selection mainly focused on suppliers' capabilities from the perspective of manufacturers; however, with the increasing attention paid to corporate social responsibility, in addition to capabilities, supplier's corporate social responsibility should be taken into consideration for selection.

3. SUPPLIERS EVALUATION BASED ON CSR ISSUES

In conventional supply chain management companies usually assess their suppliers by price, quality, lead time and level of their services. However, because of the growing pressure from employees, consumers and society concerning ethical aspects of running a business and degradation of natural environment as a result of processes performer, CSR was identified by companies as an important criterion of suppliers selection.

Large companies, especially international ones, develop Code of Conduct that refers to ethical principles and respect for natural environment. The Code of Conduct is voluntary accepted set of guidelines concerning the way a company runs its business in terms of social, ethical and environmental aspects. Code of Conduct is usually built on international agreements such as UN Global Compact and standardization documents such as ISO, which ensures companies that their products are being produced during good working conditions. Codes of Conduct can also be created specifically for suppliers (Supplier Code of Conduct) or other business partners of the company to make sure that they work in the same way as the company. Many international companies signing contracts with suppliers require them to sign a declaration in which obligates the introduction of the concept of corporate social responsibility through application of the principles of good practice contained in Statements on Business Practices and in Supplier Social & Environmental Responsibility Agreements. These statements and agreements are associated with doing business with strict compliance with all applicable laws and ethical standards, not practices to combat corruption and bribery not discriminate against employees, the protection of international human rights and environmental responsibility. In most cases acceptance of Supplier Code of Conduct is a preliminary requirement of every supply agreement, and confirmation of an order is equal to supplier's commitment on running business according to the Code guidelines.

Based on an analysis of more than 80 Supplier Codes of Conduct and practices used by companies, the classic set of criteria for selecting suppliers was extended

with new aspects. From suppliers and their subcontractors companies expect, among other things:

- compliance with international standards, in particular the Universal Declaration of Human Rights and OECD guidelines,
- compliance with labor laws in force in the country,
- compliance with the conventions of the International Labour Organisation
- respect for human dignity by creating appropriate working conditions,
- the principles of safety, health and hygiene,
- implementation of an environmental management system,
- reduction of waste and packaging throughout the life cycle of products,
- protection of natural resources and ecosystems,
- the development of products / services with reduced environmental impact.
- implementation of anti-corruption policy.

The exemplary criteria of suppliers assessment and interdependencies between them are introduced in the Figure 2. For social dimension of suppliers criteria selection, two criteria are involved, “employment practice” and “safe & health”. “Employment practice” will lead to “safety and health”. Suppliers who implement an effective safety management could prevent workplace injuries and reduced associated cost. “Employment practice” also has a relationships with other criteria, such as: quality, supplier’s reputation and environmental performance.

For environmental dimension, also two criteria were involved, “environmental responsibility” and “environmental performance”. “Environmental responsibility” is responsibility and commitment of managers to comply law regulations, define environmental policy, its goals and tasks. The way of completing commitments defined in policy is assessed with „environmental performance”, influenced, among others, by „technology capability”, „employment practice” and „safety & health”.

Importance of social and environmental aspect of sustainability in selection of international suppliers is evident in the relevant literature (Hietbrink, Berens & van Rekom, 2011; Govindan, Khodaverdi & Jafarian, 2013). However, less attention in literature on the subject is given to best practices implemented by companies to assess the level of meeting predefined criteria and consequences resulting from the assessment for suppliers.

Such an assessment can take the form of a questionnaire, visit or a formal audit. One of the forms of the assessment used by companies is the so-called self – assessment questionnaire. Questionnaires are developed by the company based on their own Code of Conduct and made available to potential suppliers, and the suppliers, with whom the organization is already working via the website. Many companies also use questionnaires developed by specialized organizations, which they are members of, f.ex. SEDEX (Droźnyer, Saniuk & Jasiulewicz-Kaczmarek, 2014). In this case, the result of self-assessment is also available to other members of the organization. The form of questionnaire is used most frequently during the initial evaluation of the new supplier, both as part of the assessment as well as part of building

awareness of CSR provider. In particular regard to the suppliers who have previously completed a questionnaire it is part of an ongoing monitoring to maintain standards and measure progress.

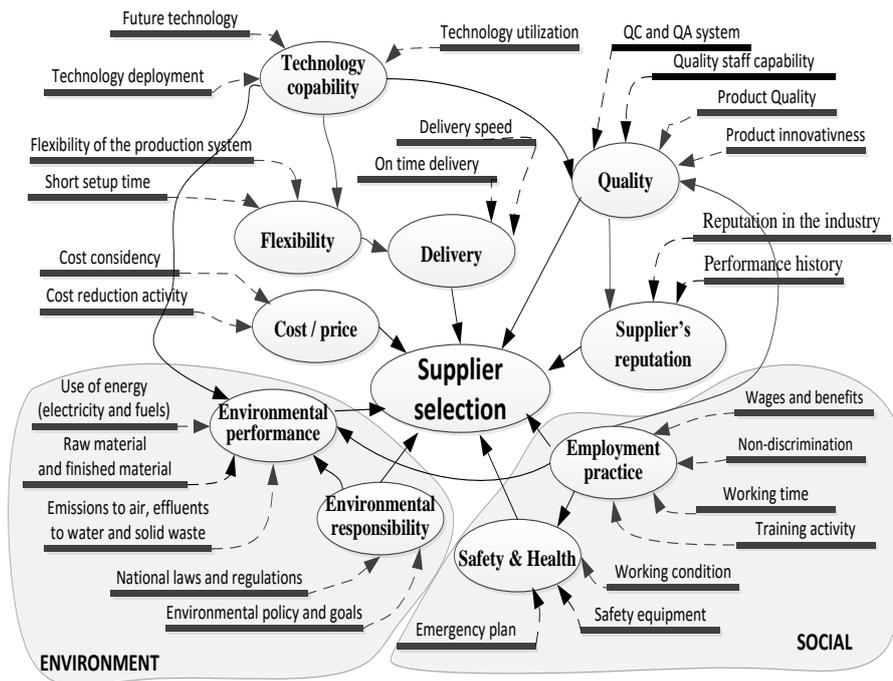


Fig. 2 Interdependency between supplier selection criteria

Another form of evaluation of the level of compliance is a social audit. Supplier who is given the "Supplier Code of Conduct" from the customer, agrees to carry out at any time announced or unannounced audits in order to confirm compliance with the provisions of the Code (eg. Nestle). Lack of permission to carry out the audit results in the most cases with refusal to continue further cooperation with the supplier. These audits are performed by company auditors or by external organizations, for example. Intertek, SEDEX, etc. After conducting audit both sides get a report that presents both good practices applied by the supplier as well as areas requiring changes / non-compliance areas. When areas of non-compliance are identified at a supplier, corrective action has to be implemented and the time frame for reaching compliance agreed upon. The expectations of compliance can also be reinforced in contracts. Follow-up audits and visits may be carried out to continually evaluate and improve supplier performance.

3. CONCLUSION

One of the important activities in supply chain management is supplier selections, which aim to select the best supplier. Traditionally, the selection of the supplier is based on the ability of the supplier to meet economic aspect such as quality, delivery and cost. Due to the globalization in business, competitive market situations and changing of customers' demands, organizations should add environmental and social aspects to the supplier selection criteria. The criteria are communicated to suppliers the most often by introducing the so called Suppliers Code of Conduct. That Code is a popular tool by which buyers manage and monitor their suppliers' ethical and socially responsible practices. Development and providing the code to suppliers is an important step to change the way customers build relationships with their suppliers. Good product, its price and delivery terms are no longer sufficient criteria for suppliers evaluation. The importance of gaining the conditions in which the product is developed. With the purpose of keeping the positive reputation, many corporations have requested suppliers to adopt the social accounting, auditing, and reporting indicators (e.g. Accountability's AA1000, GRI Sustainability Reporting Guidelines, SAI's SA8000 ISO 14000 Environmental Management Standard) to disclose suppliers' social and environmental effects of their economic actions to society. In this way, corporate social responsibility criteria have been incorporated into the evaluation and selection of suppliers.

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BIOGRAPHICAL NOTES

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