
ASPECTS REGARDING THE SUPPLIERS' EVALUATION OF A COMPANY THAT MAKES BEARINGS

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Abstract:

In the supply of materials and technical equipment, a special importance is given to the decision of selecting supply sources and suppliers. Choosing the supplier has become a real "art"; the action is based on the prior study of main data and information which can characterise each supplier. Based on the collected data and information, a comparative evaluation is provided, which classifies each supplier according to a percentage (or a grading scale) assigned based on the importance of the established classification criteria. The suppliers' evaluation and selection time is essential because the market where the material activities will run is practically now being established. This selection activity thus involves the existence of certain specific analysis criteria on which to obtain a correct evaluation of each supplier. The purchasing strategy is followed by the tactical selection of the selling companies. The suppliers' selection involves a preliminary process of identification of potential candidates..

The paper analyses how certain suppliers' evaluation of a company that makes bearings is being practiced (the space did not allow for an analysis of all suppliers, but the procedure is identical for each supplier separately), and in the end, the resulting conclusions are mentioned.

Keywords: evaluation, suppliers, bearings

1. Theoretical notions

Sell-purchase processes, as an essential element of the economic agents' commercial activity, is carried out continuously, in the context of the dynamic relationship between demand and offer from the national and international market. These processes are in fact the moment when participants (the seller and the buyer or the producer and the consumer) meet and complete the commercial act. In other words, special and particular relationships arise between such partners, supplier relationships, which bare the mark on its industrial, but also commercial character,

according to the product's type and destination and on the established collaborative relationships.

In the supply of materials and technical equipment, a special importance is given to the decision of selecting supply sources and suppliers. Choosing the supplier has become a real art.

Objective criteria for evaluating the real suppliers (current, existing) are considered:

- The way previous deliveries were conducted, when it is analysed whether there were deviations from the terms of delivery specified in the contract or commonly agreed with the supplier;
- The compliance with the conditions on the ordered quantity, established assortment, required quality. Depending on these elements, the supplier's delivery potential will be established;
- The evolution in time of sales prices; this might mean that it had inconsistent achievements in other ways, too.

The evaluation of subjective criteria is basically provided by the information from questionnaires sent periodically by purchasing agents to the decision factors or other people from the supplying company. The information aims the level and quality of the technical assistance, and also of the services provided by the supplier.

The time of evaluation and selection of suppliers is essential, virtually representing the definition of the market where the future supply activity of material resources necessary to the consumer enterprise will be carried out. Based on the evaluation, an effective, but not final selection is done, as this latter one will take shape only after testing their credibility.

Usually, the criteria are grouped on levels of importance, such as:

- Very important: quality and price;
- Of great importance: the time of fulfilling the orders, the delivery potential, financial position;
- Average importance: flexibility, adaptability, reputation, managerial competence, the importance of past business;
- Low importance: the possibility of reciprocal agreements.

The practical use of the criteria is done in the context of the different methods of evaluation and selection of suppliers, among which we can mention:

- The method of granting points according to the importance and degree of manifestation of the criterion;
- The method of granting points on the criteria's degrees of importance, with details on specific sub criteria. The grading margin is generally chosen between 1 and 100.

For a real and comprehensive evaluation the largest number of criteria should be taken into account that would allow characterising the suppliers on various sides. Based on a study conducted in the U.S.A., it was found that approximately 62,3% of the interviewed companies use around 23 criteria, on an evaluation scale of 1 to 4.

The issue of suppliers' selection criteria is based on a pertinent analysis of the material supply market, which would allow the issue of efficient strategies in accordance with the needs and interests of the company.

Lewis and England define the term of purchase as the commercial act that includes (Cârstea, Gh., 2000):

- the identification of needs;
- choosing the suppliers;
- negotiating the price and other negotiation transactions;
- tracking orders until their delivery.

Likewise Heinritz (Tăutu, M., „Dental Dialogue” Magazine, no.11/2009) describes the term of buying as the activity to purchase quality materials, in the desired quantity, at an appropriate moment, for a good price and from a good source.

The notion of “Evaluation of suppliers” appears as synonymous with that of “Characterisation of suppliers” in some specialised materials.

The evaluation of suppliers is done through the supply with materials and technical equipment and it will be considered the following:

- to provide the purchase and bringing to destination of material resources at the lowest supply prices;
- to prevent over-storage, but also the lack of stock.

The aim is to choose those suppliers whose offer is most economically advantageous and who provide certainty for future short and long term deliveries. The most important criteria are the quality of material resources, supply conditions, transport destination, type of transport, level of price.

The need of grouping (Băşanu, Gh., 2001) the resources necessary to be supplied for is a result of the following causes: the different impact resources have on the activity; it was noticed that these can be grouped into few resources and with high impact, respectively into various resources and low impact on the efficiency of the activity and taking into account all these resource, which in most of the cases are various, is very expensive for most of the managers.

Grouping the resources implies the existence of certain criteria (Băşanu, Gh., Pricop, M.,1999) respectively of some grouping methods. Single or multiple criteria of characterisation can be used in grouping, according to the analysis necessities. Among the existing criteria in the specialised literature we can mention: the economic importance, the quantitative importance, the importance of the market it is provided from, the strategic importance.

The grouping after the economic and quantitative importance is based on the principle emphasised by Pareto, according to which approximately 20% of the resources have a share of almost 80% in the total cost of the activity. This classification is also known under the name of “20/80” classification (Fundătură; D., 1999).

Under certain resource entities, when a pronounced “number-value” concentration is carried out, an intermediary class may be introduced, with a relatively

low numerical share and average impact on the activity. In this case, this grouping method is also called the “ABC” method. (Bășanu, Gh., 2001)

According to this method, there are three important classes: A, B and C which are characterised by the following percentages:

Table 1. ABC Method

Class	Percentage [%]	
	Number	Value
A	5	80
B	15	15
C	80	5

According to this method it is advisable to retain the resources from class A and sometimes B.

The classification according to the criteria – the importance of market suppliers is done based on the “market risk” (Cârstea, Gh., 2000). According to this criterion, resources can be grouped into:

Class A – Risky resources – resources that are ensured from a monopoly or oligopoly market;

Class B – Standard resources – resources that are ensured from a competitive market. The classification according to the criterion of strategic importance is based on “the impact on the performances of the finished product”. According to this criterion, resources are divided into:

Class A – Strategic resources;

Class **B** – Specific resources;

Class **C** – Interchangeable resources.

In order to obtain some “strategic groups” in the field of material resources, it is recommended to simultaneously use two or more classification criteria.

Among these possibilities, the following stand out: the classification on the criterion of economic and quantitative importance.

In this case, a classification according to each criterion is made, the grouping on both criteria being done with a table such as the following (table 2):

Table 2. Classification according to the economic and quantitative importance

	A	B	C
Economic importance Quantitative importance			
A	I	II	III
B	II	III	IV
C	III	IV	V

It can be noticed that this classification allows a more detailed grouping of resources, namely:

- Class I (A-A) – Very important resources;
- Class II (A-B) – III (A-C) – Important resources;
- Class IV (B-C) – Resources of minor importance;
- Class V (C-C) – Unimportant resources.

The grouping according to the complex criterion of economic importance and the risk on the suppliers' market shall be made by grouping resources into three groups, according to each criterion. Therefore we have: great importance; medium importance;

Three classes (groups) of importance will result:

- Class A – Strategic resources (very important);
- Class B – Risky resources;
- Class C – Uncritical resources.

2. Elements of evaluation of suppliers and the documentation used in a Romanian company that produces bearings

In order to achieve the evaluation of suppliers the following stages are had in view:

The person responsible from the purchasing department registers all the offers in a table, after that he passes to the preliminary evaluation which will be based on eliminating the suppliers who cannot meet our purchase requirements. After establishing the selection criteria, a research is carried out aiming to eliminate from the selection process the candidates that cannot meet the requirements imposed by the purchasing company. The following aspects are taken into account: the seller's ability, the technological level and the performances achieved. This stage allows avoiding the loss of resources, specific to the situation in which all suppliers that have been identified as candidates are thoroughly examined. At the end of this stage, the list qualified suppliers is framed. For example, for wheels and rollers, Rotrade SRL

supplier cannot issue a certificate of guarantee and a declaration of compliance under the applicable law. Once this stage is accomplished, we can proceed to the thorough analysis and a list of suppliers who have qualified will be drawn up.

For this analysis, each criterion was given a factor of importance, from 0 (no importance) to 5 (extremely important). Thus, for the fasteners, the company Fastener Limited SRL was chosen, because it has the lowest price, the shortest delivery time, provides transportation for orders exceeding 500 lei and on each Monday of the week, the method of payment is by PN (promissory note), with a maturity of 30 days, and the quality of the bridles is very good.

Table 3 Evaluation of suppliers of fasteners

Selection criterion	IC	F 1	F 2	F 3	F 4
Quality of products	30	5	3	5	2
Level of prices	25	3	5	1	3
Term of delivery	20	3	5	2	4
Term of payment	15	3	5	4	2
Certificate of guarantee	5	0	5	5	0
Transport	3	0	3	5	0
Discount	2	4	4	0	0
Total	100	2,57	4,29	3,14	1,57

IC=Importance of the criterion

F1.....4=Suppliers

SRL

C=Criterion

F4=Şurub Trade SRL

F1=Power Belt SRL

F2=Fastener Limited

F3=Fabory SRL

For the purchase of the belts, the evaluation of the two suppliers who are currently used was performed and, according to each belt's availability and quality, Power Belt SRL was chosen in this case, because the quality of the belts may be medium or high, the low price, the great availability as compared to Romotion Belting SRL which does not have these belts in stock, being available only in 3 weeks.

Table 4. Evaluation of belts' suppliers

Selection criterion	IC	F 1	F 2
Quality of products	30	3	5
Level of prices	25	5	5
Term of delivery	20	4	1
Term of payment	15	4	5
Certificate of guarantee	5	5	5
Transport	3	3	0
Discount	2	5	5
Total	100	4,14	3,71

IC=Importance of the criterion

F1.....2=Suppliers

SRL

C=Criterion

F1=Power Belt SRL

F2=Romotion Belting

In the case of polyamide bars and Teflon plates, Perfect Seal SRL was chosen which, although has a higher price than that of Adeko SRL, has a much less delivery time of delivery, the same method of payment, i.e. OP (order of payment), within 30 days from the issuance of the invoice and transport is ensured by this supplier, as compared to Adeko, for which transportation would have cost much more because the products are very heavy.

Table 5. Evaluation of suppliers of plastics

Selection criterion	IC	F 1	F 2	F 3
Quality of products	30	5	5	4
Level of prices	25	3	5	3
Term of delivery	20	5	2	1
Term of payment	15	5	5	5
Certificate of guarantee	5	5	2	0
Transport	3	3	0	0
Discount	2	0	0	0
Total	100	3,71	2,71	1,86

IC=Importance of the criterion

F1.....3=Suppliers

C=Criterion

SRL

F1=Perfect Seal SRL

F2=Adeko SRL

F3=Comindustrial

For oil-sealing rings and O-rings, Power Belt SRL was chosen because the prices are good, it is a reliable supplier with which the company has worked from the very beginning, the method of payment is extremely easy, web-shopping type, the method of payment is indeed less favourable since the term of payment is 25 as compared to 30 days as it would have been with Perfect Seal SRL, but it has the advantage that three types of products can be paired in the same order, respectively a part of the belts.

Table 6. Evaluation of suppliers of sealing systems

Selection criterion	IC	F 1	F 2	F 3	F 4
Quality of products	30	3	2	5	4
Level of prices	25	5	5	1	3
Term of delivery	20	5	2	2	1
Term of payment	15	4	5	3	5
Certificate of guarantee	5	3	0	5	4
Transport	3	3	0	0	0
Discount	2	5	0	0	0
Total	100	4,00	2,00	2,29	2,43

IC=Importance of the criterion

F1.....4=Suppliers
SRL

C=Criterion

F4=Perfect Seal SRL

F1=Power Belt SRL

F2=Fastener Limited

F3=Fabory SRL

Adix Technik SRL was chosen as supplier for rollers and industrial wheels because the prices are the lowest, they provide the best availability and transportation is ensured.

The list of accepted suppliers was prepared, presented in table 1.

Table 7. LIST OF ACCEPTED SUPPLIERS

Crt. No.	Name of supplier	Field	Supplied product/service	Observations
1.	Fastener Limited SRL	Products-commodities	Fasteners	Favoured for prices
2.	Fabory SRL	Products-commodities	Fasteners	Favoured for the quality of the products
3.	Şurub Trade SRL	Products-commodities	Fasteners	Favoured for unique products
4.	Power Belt SRL	Products-commodities	Fasteners	Alternative
5.	Romotion Belting SRL	Products-commodities	Belts	Favoured for the quality of the products
6.	Power Belt SRL	Products-commodities	Belts	Favoured for the prices and delivery terms
7.	Perfect Seal SRL	Products	Industrial plastics	Favoured for the quality of the products and delivery terms
8.	Adeko SRL	Products		Favoured for prices
9.	Comindustrial SRL	Products		Less favoured

PREPARED BY,

Responsible for goods purchased

The company used the following questionnaire for the evaluation of suppliers

EVALUATION QUESTIONNAIRE OF SUPPLIERS

1. GENERAL INFORMATION:

- 1.1. Name of supplier.....
- 1.2. Address:
- 1.3. Telephone/fax, e-mail:.....
- 1.4. Range of products / services
- 1.5. Contact:

Name and surname	Position:	Signature:

- 1.6. Total number of employees:
of which in the quality field:.....

1.7. Do you have a certified quality system?

- YES** State the name of the certification body:
.....
and send a copy of the Certificate of Compliance
- NO** Specify the state of the quality system:
- under documentation Reference standard
- under implementation

2. State the payment method you approve of:

on delivery; within 30 days; compensation; CEC, promissory note.

3. What quality documents do you issue at the delivery of the product/service?

Quality / guarantee certificate;

Certificate of compliance;

4. State the time of complaint:

24 hours;

48 hours;

more, according to the case;

5. State the way complaints are solved, for the products supplied and claimed:

Product replacement; repair, if necessary; return of the value;

6. Do you inform your customers about new products/services provided by the organisation?

The tag in table 8 is used for tracking the suppliers.

Table 8. TAG FOR TRACKING THE SUPPLIERS

NAME OF SUPPLIER:

Current no.	SUPPLIED PRODUCT/SERVICE	DATE	OBSERVATIONS ON THE SUPPLIER	Solution

3. Conclusions

Since the company uses as a form of supply both the direct supply and the intermediary one, the evaluation and selection of suppliers can be done by giving up to the suppliers that did not comply with the contractual requirements, identifying new sources of supply and new suppliers who have demonstrated flexibility in providing urgent orders.

It should be noted that the company uses advanced scientific methods to evaluate existing and potential suppliers.

As a proposal, it is suggested to identify more suppliers who are direct and not intermediary producers, so that the purchase prices are lower and the profit higher.

In evaluating suppliers, it is not enough to calculate a score for each supplier and to make a hierarchy of them, but a thorough identification, evaluation and selection should be made. Often in this company, due to the lack of personnel, and therefore of the lack of time, this thoroughness stage is skipped, the traditional suppliers being taken into consideration. This is not a negative thing, considering the trust acquired over time by both parties, however, there is room for better, since the market is diverse and it offers many possibilities.

As in many other areas, decisions are taken by the managers, but most of the times the decision is greatly influenced by that person's reluctance. It is thus recommended a closer research on the chosen supplier, but more especially better communication between the department of supply and the general manager, for detailed information and discussions on problems related to the supplier, method of payment or any other decisive element in the ordering of that given product.

At the same time, it can be stated that the personnel is insufficient and the desire to satisfy customers with an ever wider range of products resulted in large stocks for less required products and therefore the decrease of easy marketable stocks.

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