

Global and External Factors which Determine the Choice of the Global Sourcing Concept

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The paper presents the role and the meaning of the Global Sourcing concept that is a method of world-wide, global purchases. The paper identifies the most important factors which lead to the presented concept of purchasing. The factors were suggested by the companies from the Lodz voivodeship during the research conducted by means of surveys.

Keywords: logistics, international purchasing, worldwide sourcing, determinants of choice the global sourcing

1. INTRODUCTION

Altogether 49 enterprises of different sizes participated in the research (11 big enterprises, 15 middle-sized and 23 small). Public limited companies are the most common legal form of the companies under research (fraction 0.64) and dominate in all three aforementioned sizes. The companies run different kinds of activities but production is dominating (fraction 0.68). What is more they belong to different branch sectors. The biggest number of the questioned companies represent an automotive industry and a manufacturing industry followed by electromechanical, textile and plastics industries. They all have from just a few to a few dozens of foreign suppliers which in the majority of cases come from Europe.

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The research took place in the region of Lodz. Lodz Special Economic Zone is located in this region and it gathers the companies of the different industries, often with foreign capital, which widely use the concept of global purchasing. The central position and a complex network of roads are other logistic advantages of the region favorable for the creation of supply centers. What is more in comparison to other important Polish cities, the costs of labor in this region are lower. On the area where the research was conducted there are many educational and scientific institutions (including the technical ones) which educate a lot of specialists and which support the companies' possibilities by applying knowledge. The presented conditions result in the fact that innovative companies are often placed in the Lodz voivodeship using the advantages of Global Sourcing.

The concept of the so-called Global Sourcing has a history of many centuries. Already in the ancient times tradesmen were travelling long distances by ships or on animals to remote countries to buy there products more cheaply and to make these regions new markets for them. Such a policy was

conducted in 3rd century B.C. by the Sumerians, the Egyptians and the Syrians with the inhabitants of Smaller Asia³. Since then until now the meaning and the role of global purchases have undergone many changes. In the seventies many actions which had the biggest influence on the current position of this kind of purchasing were undertaken. Already at that moment international concerns have been trying to buy single parts in the different regions of the world. While doing it they try to combine relatively cheap manpower, cheap resources, few requirements concerning environment protection, liberal labor code, good and easy entrance on the capital market and low tax burdens. This concept was defined as “*Global Sourcing*”.⁴

In one of the approaches the Global Sourcing means an effective usage of global natural resources⁵. This definition shows that the cheap resources should be bought, a production should be run in the countries with a low level of remuneration and the resources should be sold on attractive markets. However, for the majority of researchers the Global Sourcing means international or worldwide purchases. They should not be understood in an operational meaning⁶ but as a factor which plays a strategic role and which always exerts a bigger impact on the competition capacities and on a company's importance⁷.

Achievement of the higher quality of purchased goods, risk diversification, bigger security of purchasing and opening of new markets⁸ are the main advantages of the described method.

³ G. Kerkhoff, *Zukunftschance Global Sourcing*, Wiley-Vch, Weinheim 2005, p. 35.

⁴ J. Li, *Die Rolle der VR China im Rahmen des Global Sourcing deutscher Industrie- und Handelsunternehmen*, Verbund Stiftung deutsches Übersee-Institut, Hamburg 1998, p. 17.

⁵ M. Gant, *Total Quality Management und Global Sourcing: Ein kontinuierlicher Prozess*, in “Beschaffung aktuell“, 1991, nr 9, p.34.

⁶ U. Arnold, *Global Sourcing: Ein Konzept zur Neuorientierung des Supply Management von Unternehmen*, in M. K. Welge, *Globales Management : Erfolgreiche Strategien für den Weltmarkt*, Schäffer-Poeschel, Stuttgart 1990, p. 59.

⁷ J. Li, *Die Rolle der VR China im Rahmen des Global Sourcing...op.cit*, p. 19.

⁸ G. Kerkhoff, *Zukunftschance Global Sourcing*, op.cit, p. 38.

The global factors and the internal factors defined by the authors and presented in details in the further part of this paper are among the factors which encourage the choice of the Global Sourcing.

2. GLOBAL FACTORS

The authors included all the elements which exert the influence on the choice of the global purchasing concept and the search of a commercial affiliate abroad in the global factors.

In particular the following factors were distinguished:

- Influencing the choice of the global purchasing concept,
- Leading to the choice of a given supply region,
- Connected with a beginning of international cooperation.

The research results showed that achieving a higher quality of products which are offered by external, foreign companies is the most important factor which conditions the choice of the Global Sourcing. It is worth noticing that the improvement of quality is one of the main advantages of the global purchasing concept. The remaining factors-distinguished by the authors and evaluated by the respondents are presented in table 1.

Table 1. Factors which contribute to the choice of the Global Sourcing⁹

Factors	Prevalence	Median
Achievement of the higher quality of offered products	88%	4
Willingness to increase the	82%	4

⁹ In order to define the prevalence and the importance of the different variants of answers, the proper measurements were used. The prevalence rate was defined as the frequency of indications on the analyzed variant- the frequency was independent on the kind of indication. A common factor was the one which got the biggest number of indications. In order to evaluate the importance of every factor the median was calculated as the average measurement (for the featured measures on an ordinal scale). The median (also called the average, the second quartile) in statistics is the value of the feature below and above which there is an equal number of observations.

company's effectiveness		
Increase of flexibility	75%	4
Willingness to increase the company's portfolio	73%	4
Increase of effectiveness	71%	4
Lower labor costs	65%	4
Qualified employees	61%	3
Restructuring of the company	41%	2,5
Others	10%	5

Source: own preparation on the basis of own research

The choice of the supply region is in the majority of cases and in the strongest way influenced by an economic factor (it was pointed by 90% of the researched companies out of which a half considered it as important and very important). The next factors (such as territorial factors, accessibility of customs, roads and couriers and effectiveness of local governments) although often mentioned by the respondents did not appear to be important for a parent company. The cultural factor- a similar culture, mentality and language of a foreign supplier was the weakest and the least often enumerated factor. The language and culture barriers have recently decreased mainly because of the increasing number of managers who speak foreign languages and the presence of negotiation specialists in the different cultural circles. This barrier is more often and more effectively eliminated and it does not influence the choice of the countries for global purchases (table 2).

Table 2. Factors which influence the choice of a given supply region

Factors	Prevalence	Median
Economic factors	90%	4
Technological level	84%	4
Economic level	75%	3
Customs service	69%	3
Speed of handling issues in offices	67%	3
Territorial factors	67%	3
Availability of	65%	3

couriers		
Availability of roads	65%	3
Legal assistance	49%	1
Existence of economic zones	47%	3
Entrepreneurship of authorities	45%	2
Cultural factors	33%	1
Others	2%	5

Source: own preparation on the basis of own research

Talking about the Global Sourcing and all other factors which influence the choice of this supply method it is impossible not to mention the risk connected with the beginning of an international cooperation. The risks which are the most often enumerated by the Polish entrepreneurs are as follows:

- Logistics infrastructure,
- Administration and bureaucratic regulations,
- Legal regulations (table 3).

Table 3. Risks connected with starting an international cooperation

Factors	Prevalence	Median
Transport, logistics, infrastructure	80%	3
Administration and bureaucratic regulations	75%	3
Legal regulations	73%	3
Qualifications of employees	67%	2
Interest rates and tax deductions	57%	2
Labor costs	55%	3
Political environment	47%	3
Culture, language, religion	43%	2
Lack of state aid	26%	2

Source: own preparation on the basis of own research

As far as the region from which foreign suppliers come from is concerned, the entrepreneurs stated that if they had a choice to choose the partners

again, they would come from the Member States of the European Union (table 4).

Table 4. Regions of the origins of new possible suppliers

Region of suppliers' origin	L	S	M	Sum total	Fraction
European Union	5	16	8	29	0.57
Central and Eastern Europe	3	2	1	6	0.11
Asia	1	2	3	6	0.11
Other		2		2	0.04
I do not know	1	4	4	9	0.17
Sum total				52	1

Source: own preparation on the basis of own research

3. INTERNAL FACTORS

The internal factors which encourage the choice of the Global Sourcing are the factors connected with:

- Choice of a foreign supplier,
- Cooperation with a given supplier,
- Specificity of purchased goods, kind of transport which is used and the usage of different kinds of packaging.

These factors are described in details in the further part of this paper.

Factors connected with a choice of foreign suppliers

A choice of a proper supplier is the stage of implementing the Global Sourcing. The choice of the foreign supplier is the result of a careful process of choosing a partner. It takes into consideration the analysis of single features important from the point of view of a parent company (table 5).

Table 5. The number of companies using a defined way of choosing a foreign partner

Ways of choosing a foreign supplier	L	S	M	Sum total	Fraction
Detailed process of choice	6	4	12	22	0.41
Choice done at random	1	3		4	0.07
Choice based on recommendation	4	12	4	20	0.36
Others	3	5	1	9	0.16
Sum total				55	1

Source: own preparation on the basis of own research

Carrying out a detailed process of the choice of a supplier is the method which is applied the most often. Such a choice is always based on certain criteria, important from the point of view of a parent company. High quality and low price of the offered goods (table 6) are the most important and most often mentioned criteria which decide about the

choice of a partner. It is worth underlining that both of these elements belong to the main advantages of the Global Sourcing concept. The next criteria of choice equally important and equally frequently chosen are as follows:

- Favorable conditions of supply,

- Possibility to negotiate prices and dates of supply,
- Market reputation, brand on a market,
- Easy way of ordering

Table 6. Criteria which decide about the choice of a supplier

Criteria	Prevalence	Median
High quality	96%	5
Lowest price of the offered goods	94%	5
Company's reputation, brand on a local or broader market	90%	4
Possibility to negotiate processes and deadlines	90%	4
Easy way of ordering	90%	3
Supply conditions	90%	4
Payment conditions	88%	4
Short time of delivery	88%	4
Size of a company	84%	2
Warranty conditions	84%	4
Modern machinery stock	84%	3
Length of a company's existence on the market	80%	3
Reductions	80%	4
Qualified personnel	80%	3
Commercial catchment area	73%	3
ISO 9001	73%	4
Financial situation of a supplier	71%	3
Possibility of returns	71%	3
Beneficial localization- close distance from a supplier	65%	3
Others	2%	5

Source: own preparation on the basis of own research

Factors connected with a cooperation with foreign suppliers

During the cooperation with foreign partners, the companies control the deadlines and conditions of supplies and examine the delivered parts of goods (table 7). The examination of the delivered parts of goods is particularly important when the delivered product is a raw material used in a production or a semi-finished product; in such cases a poor quality of the supplied goods can have a very unfavorable influence on a final product quality. The audits of suppliers are the least popular, which

is connected mainly with a high cost of such solutions.

Table 7. Number of companies undertaking certain actions while cooperating with a foreign supplier

Kind of activities	L	M	S	Sum total	Fraction
Coordination of supply time	10	19	14	43	0.27
Control of supply conditions	7	18	11	36	0.22
Regular meetings with a supplier	8	9	5	22	0.13
Suppliers' audits	6	3	3	12	0.07
Examination of a part of goods delivered by a supplier	8	14	12	34	0.21
Control of contract conditions	4	6	6	16	0.10
Others		1		1	0
Sum total				164	1

Source: own preparation on the basis of own research

The majority of the Polish companies under research have an alternative supplier for goods purchased abroad but only for the strategic elements which are the basic parts of a final product and

which decide about its quality. Every third company has an alternative supplier for all the elements purchased abroad and only some of them do not possess such a supplier (table 8).

Table 8. Number of companies which have an alternative supplier

Alternative supplier	L	M	S	Sum total	Fraction
Yes, for all elements	4	10	4	18	0.37
Yes, for strategic elements	6	11	9	26	0.53
No	1	2	2	5	0.10
Sum total	11	23	15	49	1

Source: own preparation on the basis of own research

Factors connected with the specificity of the purchased goods, the kind of transport used and the usage of the different kinds of packaging

The researched companies buy in the majority of cases from their foreign suppliers raw materials and semi-finished products (table 9). Services are purchased the least often although their outsour-

ing has significantly developed during the last years leading to the development of many supply regions (e.g. India which specializes e.g. in IT services). A lot of Polish concerns start slowly to benefit from such solutions without being afraid of (for example) a distance from a supplier and they concentrate on the full professionalism of the specialists from such companies.

Table 9. Kinds of purchases from foreign suppliers

Kind of purchases	L	S	M	Sum total	Fraction
Purchase of services	3	2	1	6	0.06
Purchase of semi-finished products	8	11	7	26	0.24

Purchase of raw materials	7	12	11	30	0.29
Purchase of packages	3	4	3	10	0.09
Investment purchases (machines, devices)	6	8	9	23	0.21
Others		9	3	12	0.11
Sum total				107	1

Source: own preparation on the basis of own research

Cheap and standard goods are among the most often bought. The goods with a low supply risk for which the company has an alternative supplier are placed on the second place. 67% of the purchased goods are characterized by a low complexity and these are simple, not complicated goods. The mass and unprocessed goods are purchased less often

although 65% of the purchased goods are characterized by such features (table 10).

Table 10. Features of goods purchased from foreign suppliers

Features	Prevalence	Median
Standard goods	71%	3
Cheap goods	71%	3
Goods with a low supply risk- where there are alternative suppliers	69%	3
Goods with a low complexity	67%	3
Mass goods	65%	3
Unprocessed goods	65%	4

Source: own preparation on the basis of own research

It is worth underlining that all the features enumerated in table 10 characterize the goods which are particularly suitable for being on an international market within the Global Sourcing. On the basis of the aforementioned chart it can be stated that Polish entrepreneurs possess the knowledge on it and they apply the tested solutions.

The relation of a medium size of the ordered goods and the average unit value of goods is the most common relation within international supply. A correlation of a big number of ordered products and their low unit price was placed on the second place. The least common situation is the purchase

of cheap goods in small and middle quantities (table 11). Relatively small, medium and big quantities of purchased goods and relatively low, medium and high values of unit prices were defined by the respondents. The presented results confirm the theory that in the framework of the Global Sourcing it is the best to buy cheap goods in big quantities. However, if their unit value increases, the number of the purchased products can be decreased.

Table 11. Relation between the number of ordered goods and their unit value

		Unit value of goods		
		small	medium	high
Ordered number	small	4	10	12
	medium	2	27	7
	big	16	11	10

Source: own preparation on the basis of own research

The choice of the proper means of transport both in terms of a distance from a supplier and of the specificity of the transported goods is one of the basic problems in the Global Sourcing. As results from the analysis of the conducted research, Polish entrepreneurs use road transport the most extensively (table 12). It is connected generally with the location of the suppliers of the companies under research which in the majority of cases come from Europe. What is more taking into consideration the kind and the character of the purchased

products (raw-materials, semi-finished products; cheap goods) there are no contraindications for this kind of transport. The inland transport and the rail-road transport are the least popular mainly because of the poor infrastructure and their low flexibility. Such a situation can often lead to lengthening of the time of carriage and to unplanned increase of costs.

Table 12. Number of companies using a defined kind of transport

Kind of transport	L	M	S	Sum total	Fraction
Road transport	10	21	15	46	0.48
Sea transport	4	5	9	18	0.19
Inland transport	2	1		3	0.03
Aerial transport	5	4	5	14	0.14
Road transport	3	2		5	0.05
Intermodal transport	4	4	3	11	0.11
Sum total				97	1

Source: own preparation on the basis of own research

Packaging is next to transport another problem area in the Global Sourcing. The goods purchased from foreign suppliers are in the majority of cases carried on pallets (table 13). It is connected mainly

with road transport which is the most popular kind of transport.

Table 13. Number of companies using a certain kind of transport packages

Kind of package	L	M	S	Sum total	Fraction
Pallets	11	18	15	44	0.46

Containers	3	7	6	16	0.17
Big bags	1	3	2	6	0.06
Barrels	3		7	10	0.10
Tanks		4	2	6	0.06
Others	2	10	2	14	0.15
Sum total				96	1

Source: own preparation on the basis of own research

The identified global and internal factors lead to the choice of the Global Sourcing and international purchases. The entrepreneurs should pay particular attention to these aspects as they determine the success of the described supply method. What is more, the presented factors (particularly the ones mentioned the most often by the companies under research) can be the source of information for other companies interested in the global purchase.

4. SUMMARY AND CONCLUSIONS

The analysis of the empiric research results helped to identify the most important factors which encourage the choice of the Global Sourcing concept. What is more the gained theoretic and practical knowledge enabled their evaluation. These factors are characterized below in points.

1. Achieving higher quality of products and a will to increase the effectiveness of the parent company are the factors which have influenced the most the choice of the Global sourcing. It was taken for granted that the respondents were right to refer to these two points. Thanks to a global system of purchases, a company can buy a raw-material/ a product of a higher quality in comparison with similar ones offered by a national supplier and can buy goods rarely accessible on Polish markets. Both situations lead to the increase of the company's attractiveness.
2. Economical factors and a technological level influence the most often and in the strongest way the choice of a given supply region. Companies when deciding on an international supply must choose first the supply region which is the best for them. This choice is influenced by many economical

factors (e.g. the price of the purchased goods, costs connected with a purchase) and a technological level of the region with the conviction that there are more and more specialized markets (e.g. Turkey- clothes). It is worth using the available bookish knowledge predisposing certain supply regions taking the purchase costs into consideration.

3. Transport, logistics and infrastructure were the most common risk factors mentioned by the companies while starting the cooperation with abroad. It was stated that the defined risk is much easier to eliminate than e.g. the risk connected with administrative and bureaucratic regulations mentioned on the second place. Contrary to the organization of the logistic infrastructure, a company does not have any influence on official regulations.
4. The companies under research stated that if they were to choose a supplier again, they would opt for the one from the European Union. It was stated to be the best solution. Polish suppliers want to limit costs and have at the same time a similar trade culture. Therefore, they should look for partners in the closest supply regions in the European countries. While wanting to take the most of intra-community purchases, they should look for the partners in the Member States of the European Union.
5. The choice of a foreign supplier was the consequence of the detailed process of the choice taking into consideration the analysis of partners' features, important from the point of view of activities of the parent company. The recommendation was the second way. The choice made on the basis of recommendation is considered to be wrong. The choice of suppliers is the key element of

the Global Sourcing success and should be based only on a detailed process of choice in which a detailed verification of a supplier features takes place.

6. The research results showed that high quality of a purchased good and its low price are the factors which decided the most often about the choice of suppliers. It must be taken for granted that the symbiosis of these two factors together with the third one: a proper service from the part of a supplier leads to a proper choice of a partner. It should always happen taking into consideration all three presented criteria.
7. During the cooperation with a foreign supplier, the companies under research in the majority of cases coordinate the time of supplies, the conditions of supply and examine the delivered parts of goods. All these three activities are very important and they must be obligatorily done. The goods not delivered in the due time can lead to a production stoppage in the parent company. The conditions of supply different than the ones which were agreed may lead to the increase of costs. The delivery of a faulty part of goods or raw materials or of e.g. semi-finished products can deteriorate the quality of a company's final product. The entrepreneurs while taking care of their own businesses, should pay particular attention to these activities and delegate them to the proper employees.
8. The companies under research in the majority of cases possess an alternative supplier for the strategic elements. One third of the researched companies possess alternative suppliers for all the elements purchased abroad. In case of the strategic elements (main components, goods on which the quality of the final product is dependent) the companies should have alternative suppliers (if it is possible and the current supplier is not a monopolist). It is so because the total dependence on one partner is dangerous as the partner can start to dictate their conditions of cooperation. It is worth creating a data base of alternative suppliers for all the goods just in case of unexpected problems with the current partners or in the situations which are not dependent on the current suppliers e.g. natural disasters. However, these suppliers should remain passive in the process of purchase.
9. The companies under research buy in the majority of cases raw materials and semi-finished products. It was taken for granted that the purchase of raw materials is caused mainly by the shortage of their Polish equivalents (of the same quality). E.g. in the construction industry China is the monopolist on dyes market. Although there are a few companies (including the national ones) which produce the cheaper replacements, they differ considerably from their originals as far as the quality of the applied materials is concerned-. The purchase of semi-finished products can in turn be dictated by a lower price of goods than the one offered by a national producer.
10. The goods purchased from foreign suppliers are in the majority of cases cheap and standard products. They are characterized by a low supply risk (alternative suppliers) and by a low complexity (simple, not complicated goods). The purchased goods possess therefore the properties suitable for the Global Sourcing.
11. The most common two relations between the size of the purchased products and the unit value of a product is the link between a low unit value of products and a big number of order parts and the average unit value of goods and the average number of the ordered units. In the framework of the global supplies it is the best to purchase cheap goods in large quantities, which was confirmed by the empiric research. If a company is experienced in international purchases it is possible to get good conditions for a smaller number of units. In this paper it was assumed that these two relations are the most economically beneficial.
12. The respondents stated that they use road transport for the collection of goods purchased abroad in the majority of cases. It was assumed that this mode of transport is very attractive mainly because of its speed and relatively low risk of transport. In the road transport, the goods are delivered to the very place without a transshipment or an inter-storage. Thanks to an extensive network of roads this mode of transport offers high flexibility of supplies and a possibility to get

to almost any place. It is also considered that with the current poor infrastructure of railways and of water routes and still relatively high costs of air transport, road transport can still be dominating. What is more in case of supplies on the territory of Europe it is definitely the cheapest and the best solution. As far as inter-continental supplies are concerned, intermodal transport is recommended: sea and road transport mainly because of the lower costs of such a solution.

13. The research results showed that a pallet is the most common kind of packaging. It is connected mainly with the road transport, used the most often in international supply. This kind of packaging is very practical. It is possible to place a lot of goods on it and to protect everything with stretch film. As a result, a compact totality is obtained which is easy for loading and unloading: a forklift is sufficient.

All the aforementioned identified and evaluated factors make the entrepreneurs directly or indirectly choose the concept of the Global Sourcing. They define the conditions favorable for this kind of supply using them at the same time as the kind of information compendium for other companies which are also eager to buy abroad.

5. BOOK REFERENCES:

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