CUSTOMER PREFERENCES IN SELECTING A SUPPLIER IN THE CONTEXT OF THE STRENGTHENING OF SUPPLIER-CUSTOMER RELATIONS

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Abstract

The basic prerequisite for building long-term relationships between suppliers and customers is the convenience of cooperation for all participating subjects. The benefits arising in relation to the sacrifices incurred, however, can always be assessed only by the recipient, based on the subjective perception of the value obtained. From the supplier's perspective, this means that the solution it offers needs to be most consistent with the preferences of the customer. However, the perceived value in markets with highly commoditized products is often affected by factors that the supplier have no chance to reveal, and thereby accommodate the range of its services and products, without establishing closer relationships with its customers. It is therefore very important for suppliers to identify the parameters of products and services supplied and other factors that the customers find important when selecting a supplier and how and why their preferences change over time. It is the initial step for the effective operation of the company in relation to the customers, strengthening relationships and improving the performance of the supplier as well as that of the entire value network.

The aim of the quantitative research in body shops was therefore to identify the parameters of products and services supplied and other factors that the customers find important and whether their preferences differ. Based on the factor and cluster analyses, factors were first identified that influence the customers when selecting a supplier on the monitored market, and consequently the customers were segmented according to their preferences.

Keywords: Supplier selection, strengthening relations, customer preferences, body shops

1. INTRODUCTION

The basic prerequisite for ensuring long-term business performance in today's highly competitive environment is the specification and the subsequent creation and delivery of such solutions to target customers that they perceive as more valuable than those offered by the competition. The ability to effectively solve customer problems is, under the current conditions, one of the most fundamental capabilities for any supplier [1] - the supplier needs to be able to deliver the best customer value at the lowest possible cost [2]. At the same time, it is no longer enough if they pay their attention to the direct customers only, but it is essential to establish effective cooperation among all the value network entities [3].

The problem is, however, that it is always the beneficiary that is the only to assess the benefits obtained in relation to the sacrifices made, based on a subjective assessment of the size of the obtained values. But the value in markets with highly commoditized products is often determined by factors that the supplier cannot reveal without establishing closer relationships with them, to be able to accommodate its offer to the customers. Under the current market conditions it is therefore widely acknowledged that the performance of businesses can be significantly and undeniably improved by close buyer-supplier relationships [4]. For suppliers in highly competitive markets with an excess of supply over demand it is therefore vital relationships with customers to build and strengthen. This requires a good understanding of the needs, requirements and preferences of target customers.

2. SELECTING A SUPPLIER IN THE CONTEXT OF THE STRENGTHENING OF SUPPLIER-CUSTOMER RELATIONS

2.1. Aim and methodology

This article aims to identify areas and factors that affect the choice of supplier and summarize the results of a primary quantitative research focused on evaluating the importance of each parameter of the supply and other characteristics of the supplier for its customers.

To achieve the objectives, the authors used a literature search (in particular an analysis and subsequent synthesis of the information gathered), as well as the results of the primary research conducted in the spring of 2015 in body shops. The aim of the research was to determine which attributes customers prefer when choosing a supplier and which are therefore essential for increasing the value as perceived by them. The quantitative research was conducted through written inquiries on the basis of a prepared questionnaire. Methods of descriptive statistics, factor analysis and cluster analysis were used for the data analysis, using the IBM SPSS Statistics software.

2.2. Theoretical background

The issue of evaluation of suppliers is of interest to both customers and suppliers themselves. The customers deal with the issue from the perspective of the criteria, methods and procedures that enable them to measure the performance of individual suppliers and choose the best of them [e.g. 5, 6]. According to the supply chain operations reference model, for measuring the performance of suppliers, scales are used falling into five categories - reliability, responsiveness, flexibility, costs and asset management efficiency) [7]. These relate both to the product (reliability, responsiveness, flexibility), and the supplier (cost and financial, assets and infrastructure) [8]. Reliability includes appropriate criteria for evaluating the accuracy of deliveries in terms of their content, quantity, place, time and other required conditions. The responsiveness category refers to the criteria for the evaluation of the speed of deliveries. Flexibility includes criteria relating to the agility of a supplier in responding to demand changes. Cost and financial criteria cover the cost and financial aspects of deliveries, assets and infrastructure criteria are used for evaluating the effectiveness of supplier in managing assets to support demand [8].

Suppliers are interested in the issue in order to find ways and procedures to effectively identify the needs, requirements and preferences of customers and how to serve them so that the enterprise succeeds as a supplier with the customers. It is necessary to consider customers themselves the most important source of information. It is advisable to use customer experience, i.e. to derive information from their real experience [9]. Information from customers is usually obtained through a number of channels. In accordance with the requirements of ISO 9001, they survey satisfaction of selected customers, and in accordance with the requirements of the same regulation customers evaluate selected suppliers. Evaluation is focused mainly on the so-called logistics performance and objectively measurable criteria are mainly used [10]. However, in addition to the characteristics of products/services (functionality, quality, price, terms) customer value is also formed by intangible, often subjectively assessed factors stemming from the level of customer relations and overall company image [11]. Factors to be considered, including their hierarchical interconnection, are part of the so called complex product [12]. The basis is the core product, i.e. its utility. The tangible product includes moreover packaging, labelling, equipment, quality, style and design. Compared to the previous, the enhanced product also incorporates presales, sales and after-sales service, warranties, communication, distribution, payment and delivery terms, price (perceived as the sum of all sacrifices), discounts and samples. The complex product also contains intangible factors, i.e. trust, goodwill of the manufacturer, brand and relationships. [12]. To what extent these factors are important in the choice of supplier can be determined only by direct customer interviewing. It is the initial step for choosing the appropriate service strategy and effective functioning of the enterprise in relation to customers, a prerequisite for strengthening relationships and improving the performance of the supplier and the entire value network.

2.3. Practical research

Research description

The primary quantitative research was aimed at the importance of each parameter of the supply and other characteristics of the supplier (selling material for body shops) as evaluated by its customers. The research was conducted among workers of body shops based in the Czech Republic that are existing or potential customers of the supplier evaluated. Respondents suitable for the research were chosen in an intentional judgement-based selection by the employees of the company evaluated. 70 body shops from the Czech Republic were approached. The questionnaire was filled out by the total of 49 of them, i.e. 70percent rate of return [13].

The research examined how customers perceive the importance of individual components of the supply, characteristics of the supplier, and selected marketing tools. The respondents rated each attribute on a seven-point scale from 1 - absolutely unimportant to 7 - absolutely important. Evaluated were not only the attributes of a selected line of products (quality, price and changes thereto according to various factors, range of products, comprehensiveness and quality of service, delivery date, supplier speed of response to customers' requirements, different variants of product packing), but also the supplier (customer service professionalism, image and reputation of the enterprise) and selected communication tools (preferred method of communication, loyalty programs, various forms of sales promotion).

Research results and their analysis

The perceived importance median for all the analyzed attributes was detected in the upper half of the evaluation scale and thus they can all be regarded as important in choosing a supplier. The frequency analysis also revealed that four important attributes can be identified that particularly affect body shops when choosing a supplier. In these cases, more than a half of the respondents used the upper limit of the scale (absolutely important) for evaluating the importance of the attribute. It is the quality of the products (73 percent of respondents), price of the products (67 percent), supplier speed of response to customer requirements (61 percent) and the complexity and quality of services provided by the supplier (55 percent). The distribution of importance for other attributes showed greater variability and therefore the question arises whether we can identify among body shops segments that vary in their preferences (see **Table 1**).

Table 1 Perception of the importance of selected attributes from the perspective of all respondents

Attribute	Frequencies							Mean	Median
	1	2	3	4	5	6	7		
Wide range of products	4%	0%	6%	6%	18%	24%	41%	5,7	6
Various types of product packaging	8%	6%	14%	20%	14%	18%	18%	4,6	5
Quality of products	0%	0%	0%	0%	10%	16%	73%	6,6	7
Price of products	0%	2%	0%	2%	12%	16%	67%	6,4	7
Price adjustment by the volume etc.	4%	2%	0%	8%	16%	20%	49%	5,9	6
Complexity and quality of services	0%	2%	2%	4%	14%	22%	55%	6,2	7
Responsiveness to customers' requirements	0%	0%	4%	6%	6%	22%	61%	6,3	7
Delivery time	2%	0%	0%	6%	20%	22%	49%	6,1	6
Professionalism in serving the customer	0%	0%	0%	2%	14%	35%	49%	6,3	6
Reputation in the industry	0%	2%	2%	10%	33%	20%	33%	5,7	6
Different forms of sales promotion	8%	4%	6%	16%	16%	24%	24%	5,0	5
Loyalty programmes	10%	8%	8%	8%	20%	22%	22%	4,8	5
Method of communication	2%	0%	0%	0%	16%	35%	47%	6,2	6

Given the high correlation between certain pairs of attributes, first of all a factor analysis of perceived importance was conducted in order to identify factors that influence body shops when choosing a supplier. The results of the factor analysis are included in **Table 2**.

Table 2 Factor Analysis Results

Attribute	Components			
	Factor 1	Factor 2	Factor 3	Factor 4
Responsiveness to customers' requirements	.936			
Delivery time	.894			
Complexity and quality of services	.704			
Professionalism in serving the customer	.514			
Loyalty programmes		.775		
Different forms of sales promotion		.761		
Price adjustment by the volume etc.		.688		
Wide range of products			.859	
Price of products			.851	
Various types of product packaging			.587	
Reputation in the industry				.813
Quality of products				.597
Method of communication				.543

Total Explained Variance % 66.179

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.^a

a. Rotation converged in 6 iterations.

The factor analysis revealed the existence of four factors. These factors are Customer service (factor 1), Promotion (factor 2), Price and product range (factor 3) and Quality (factor 4), while the Quality factor can be applied both to the quality of the products purchased and to the perceived quality of the business partner (reputation of the supplier, etc.). The identified factors, whose importance can be perceived quite differently by the customers, together affect the decision on the choice of a supplier.

To segment body shops, the Two Step Cluster Analysis method was chosen, implemented in the IBM SPSS Statistics software. Factor scores (method: regression) were used as segmentation variables, the optimal number of clusters was determined based on minimization of Schwarz's Bayesian Criterion (BIC). The achieved quality of the segmentation model was validated using the silhouette measure of cohesion and separation (=0.4). Among the body shops 4 distinct segments were revealed by the following frequency division: segment A (16 percent of respondents), segment B (39 percent of respondents), segment C (31 percent of respondents) a segment D (14 percent of respondents). The position of the centroids of the clusters created show a significantly different level of impact of the factors in the individual segments (see **Table 3**).

Table 3 Position of centroids in identified segments

Cluster	Factors			
	Customer service	Promotion	Price and product range	Quality
Segment A	0.15	-0.60	-0.38	-1.64
Segment B	0.56	0.55	0.45	0.12
Segment C	-1.02	0.38	-0.31	0.36
Segment D	0.47	-1.65	-0.12	0.78

In the segment A, of all the factors, it is the Customer service factor that gets ahead at the expense of the Quality factor. These are customers for whom the price of products and flexibility of the supplier are the most important selection criteria. Segment B consists of highly demanding customers, who are heavily influenced by all the factors of choice. Almost all tracked attributes are absolutely important to them, and therefore it is likely to be difficult to absolutely satisfy all of their requirements. Segment C is characterized by high demands on product quality at the expense of price and customer services. When choosing a supplier, they may consider all the supply parameters, but they are willing to pay for quality products. Apparently they will accept less flexibility of the supplier and longer delivery times. Customers from the last Segment D are characterized by their indifference to the chosen tools of the marketing mix (modification of packaging and pricing, sales promotion and loyalty programs). It is crucial for them to be provided with a quality product at a fixed price along with a wide range of accompanying services. The position of the importance median in the individual segments and results of the tests performed are included **Table 4**.

Table 4 Comparing the perceived importance of the supplier selection attributes among the identified segments

Attribute	Median					Median Test (df=3)	
	A	B	C	D	Total	Chi-Square	Asymp. Sig.
Wide range of products	4.5	7	6	6	6	7.837	.050
Various types of product packaging	3.5	6	4	3	5	9.892	.020
Quality of products [a.]	6	7	7	7	7	-	-
Price of products [a.]	6.5	7	6	7	7	-	-
Price adjustment by the volume etc.	5	7	6	5	6	17.553	.001
Complexity and quality of services [a.]	5.5	7	6	7	7	-	-
Responsiveness to customers' requirements [a.]	6.5	7	5	7	7	-	-
Delivery time	6	7	5	7	6	15.064	.002
Professionalism in serving the customer	6	7	6	7	6	13.301	.004
Reputation in the industry	4.5	6	6	7	6	7.474	.058
Different forms of sales promotion	4.5	6	5	2	5	11.814	.008
Loyalty programmes	3	6	6	1	5	10.317	.016
Method of communication	5	7	6	6	6	13.482	.004

Note: A scale was used from 1 - absolutely unimportant to 7 - absolutely important

a. Unable to test differences due to the low variability of responses (the overall median value is equal to 7).

In 8 of the 13 attributes under consideration, the median test at 95 percent confidence level revealed differences in the perceived importance among customers from different segments. The biggest differences among the segments are in the perception of the importance of the marketing mix.

3.   CONCLUSION

In an environment of permanent changes, effective supplier-customer relations are an important stabilizing factor for both customers and suppliers. For suppliers, it is important to understand the customers to be able to offer a solution that meets their needs, requirements and preferences. This also applies to body shops. The results of the research conducted show that customers can be segmented into four groups according to the perception of the importance of individual supply parameters, characteristics of the supplier and selected communication tools - a segment preferring logistics services, segment of highly demanding customers, customers primarily focused on quality and price, and a segment characterized by indifference to the evaluated tools of the marketing mix. The results of the research are a base for the supplier for achieving a higher perceived customer value and therefore a prerequisite for building and strengthening customer relationships.

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