

RESEARCH INDUSTRIAL BUYER BEHAVIOR - KEY FACTOR OF STRATEGIC POSITIONING

UDC 658.89.012.1:316.6

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Abstract. *Efficient and effective target customer value creation implies continually generating information about relevant market participants and their expanding in enterprise. Dynamics of customer needs and influential factors, as well as complexity of intra and interpersonal communications, require application of various mathematics, statistic and psychological techniques in the research. The aim of the paper is to explore importance of some instruments for identification and explanation of customer behavior.*

1. INTRODUCTION

A key factor of strategic enterprise positioning is the management of buyer and customer behaviors. The successful management requires good knowledge of the enterprise's clients and their value perceptions, which is achieved by organizing continual and systematic research of customer behaviors. Focus is on understanding what the value is for clients and how to make interfunctional coordination in order to create superior value. This is especially important since once made client relations should be maintained, improved and developed continually. It is also important and necessary to continually invest in building confidence, learning and mutual adjustment. Enterprises which create advantage by using mutual resources in improving quality and processes are in a better position.

Dynamic environment requires from the enterprise an intensive competition for customer demand, entry of new competitors with new rules and risks, as well as generating new needs. Minimizing business misses and losses are conditioned by business goals defined on the basis of relevant market actor research. Development of information technology and various software programs has reinforced mathematical-statistical techniques and methods applying in marketing researches. The psychological techniques are specially important for exploring phenomena such as: attitudes, perceptions, preferences, and motivations. Exploring psychological aspect of individual customer behavior is specially sig-

nificant and complex if the number of participants in the buying process is larger, like in organizational buying. The set of instruments from multivariate statistical tools has been recently used in analyzing analytical structure of the group buying decision-making process and determining its key actors.

2. DETERMINANTS OF THE STRUCTURE OF GROUP BUYING DECISION-MAKING PROCESS

Any buying decision is a complex process. Such questions as why buying occurs, when it occurs, how suppliers are chosen, who does the buying and why one product or a service is chosen over another, are in the focus of explorers. Formal and informal inclusion of many people in situations when buying is not in personal interest makes the buying task more complicated. Groups and group buying decision-making in enterprises can be characterized by their interaction patterns, decision-making processes, conflict resolution mechanism, and a number of other elements. The interaction patterns are better analyzed in the context of four variables influencing the buying decisions [1, pp. 135-146]: power, specific buying influence, share and commitment.

The power is the possibility or capability to influence organizational decisions so as to give results favored by the source of influence. The influence capability or influence potential could result or not in an actual influence. It is necessary to differentiate having power and using it for the purpose of exerting influence.

The specific buying influence, as well as the change in buying opinions and behaviors resulting from participation in buying decisions, has been quite explored in the literature about behavior of enterprise in buying process. Reasons for individual influences are associated with individual characteristics, qualifications, specialty, specific self-confidence, information control, position in communication flows, formal authority, reward system, buying center size, buying risk, size of organization, and organizational structure.

The concept of share is developed on the basis of relation between decision importance, influence and interaction. It is related to the importance of buying both for departments and for buying center members.

Commitment in buying decision-making is defined as perceived relevance of decisions based on individual needs, values and interests. The individual effort made in trying to influence organizational decisions is determined by the level of individual interest in the problem.

The buying decision-making process in informal communication networks is characterized by interaction of many participants or groups with alternative solutions for buying in an organization. During the buying decision-making process in an organization, different interest groups are formed around particular goals, responsibilities and intents on different hierarchy levels. One of the most important characteristics of buying decision unit is, therefore, structure, which includes the alliances or coalitions that are formed among members in attempting to achieve particular group outcomes. "Coalition can be defined as a subset of a group in a negotiable mixed-motive conflict situation, which explicitly agrees to coordinate its efforts in the joint use of resources" [2, pp. 263-276]. The coalitions are temporary, means-oriented alliances among individuals or groups differing in goals, their members usually demonstrate little value consensus, and they effectively agree to tacit neutrality on issues beyond the immediate purpose or object of the coalition.

The formed alliances are probably contemporary since the joint interests will exist in all buying decisions. Some coalitions, however, have long lives and affect a wide variety of buying decisions over time [3, pp. 7-23].

Business organizational decision-making is a result of the bargaining process between rival coalitions. Each interest group has a vision to direct it toward designed solution and it tries to influence competitive camps. The aim is to coordinate the camps and desired strategic thinking of coalition. The vision of interest group could be conceptualized as a mental model or map representing its key beliefs about the problem.

The communication networks, their structure, member interactions and interaction sources are more significant for strategically important buying. Such decision-making is important for commitment resources quantity, complex, since the solutions are multidimensional and with uncertain result, collective, since every solution depends on participation of different groups having a role in decision-making process, and resultant, since the decision-making process includes relative permanent commitments, which have deep internal and external expansion. In these cases, the members of communication network are managers from different parts and departments of enterprise and levels of hierarchy. Complexity of many decisions, combined with the inherent conflict that arise among decision-making participants, provides significance incentives for individuals to collaborate with others. The collaboration can serve any number of purposes. Coalitions may be oriented on information gathering, exchange and learning. They may work to ensure that a particular vendor is considered. They may seek to have the product specifications modified in some way. If there is a high risk following the decision, coalitions represent a way for it's minimizing.

Exploring industrial buyer behavior is therefore not simply concerned with determining the name or position of a person who ultimately makes the buying decision. It is more important to establish a capability of buying center participants to work with, exert influence and then become a part of a dynamic group decision process (Figure 1). Doing so requires identification not only of who the relevant participants are in the buying process but also of which participants have common interests and which are likely to work together in seeking a given outcome. The individual behaviors in communication network can depend on their perception or own interests. The individual perceptions concerning rewards, risk and power positions are also very important. These perceptions are translated into preferences regarding the relative importance of different products and vendor attributes, priorities regarding what should be purchased and for how much and opinions regarding particular vendors and their offerings.

The two individual characteristics [4, pp. 55-68] explain why some people have greater influence during the process of supplier selection. The first characteristic, influence on decision, explains people's motivation for participation in decision-making process in order to enhance the influence on organizational buying decision. That is, therefore, an individual share in the final result of buying decision. The second individual characteristic, orientation on innovations, is of special importance in new buying when buying center members have the opportunity to be more innovative or more conservative. Multidiscipline exploring customer behavior indicates that more innovative managers have a central position in social networks and, consequently, generally greater influence. The results of organizational exploring also indicate that more innovative managers have a central place in communication networks. The central position in the network is a source

of power for an innovator and he can use it for influencing and persuading other participants about the importance of change, information and material resources for overcoming any resistance to the change.

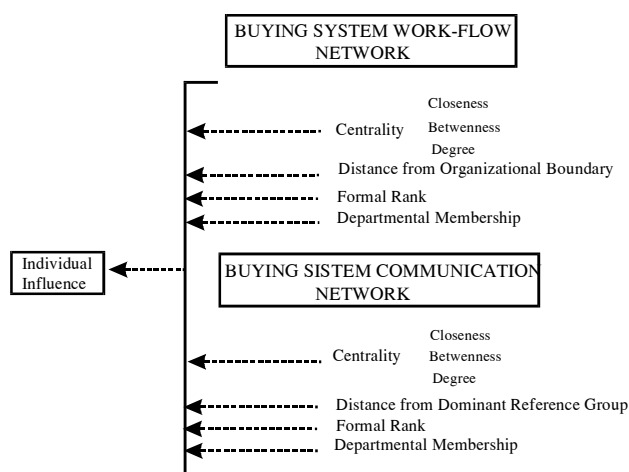


Fig. 1. Structural Sources of Influence [5, p. 53]

Exploring buying center often overlooks the fact that organizational buying behavior is appears in the context of formal organization. Identifying and analyzing only buying center members, the buying center becomes isolated from its context, which prevents the recognition of organizational members participating in buying decision-making and way of their influence. Therefore, the two aspects of formal organizational structure - centralization and formalization should also be included in the analysis of power and influence of group members and determination of power relations in the structure. Centralization or decentralization is treated as the most important structural characteristic influencing buying behavior in industrial buying explorations. Formalization, on the other hand, is important for explaining interpersonal information control and it has a direct influence on persons in organizational buying decision-making.

Focusing the resources of enterprise on key competences and dependence on resources controlled by other firms is the basis for creating business networks between different enterprises. Investors, financial institutions, insurance companies, suppliers, and buyers are included in the networks. Network structures could be different, but all of them have some common characteristics - minimizing investments by cross-organizational teams in different business domains, flexibility and responsiveness to changes. Position of an enterprise in the network or its connection with other network parts in delivering value to customer is a source of great competitive advantage. Growing network relationships between enterprises gives a new dimension in exploring organizational buying. That enables to recognize interconnectedness of enterprises - business network members, to use different techniques for analyzing inter-organizational relationships significant for buying, and to recognize other business network influences. This is important since some forms of collaboration between individual enterprises and networks can reduce autonomy of in-

cluded enterprises and increase uncertainty of future development and capital investment planning. The research of interconnected relationships includes three significant aspects: activity of connection - this is valuable in providing a degree of coordinated activities between companies; tied resources - as the value of adapted resources of each company to requirements of others; and actors of connection - value from the aspect of individuals in two inter-connected organizations. Coordination activities in interconnected relationships increase productivity of inter-connected organizations, resource adaptations enhance innovativeness of organizations, and social integration expands opportunities for knowledge and information transfer (Figure 2).

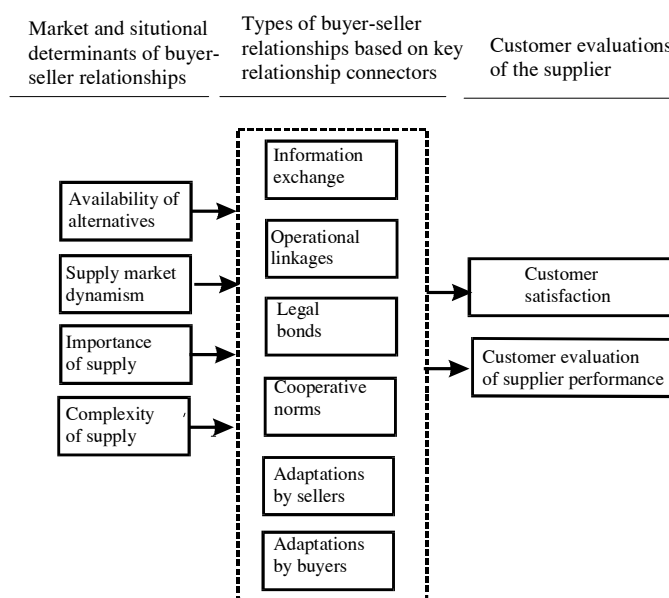


Fig. 2. Key Constructs Relevant to the Practice of Buyer-Seller Relationships [6, p.442]

3. TECHNIQUES OF EXPLORING INDUSTRIAL BUYER BEHAVIORS

Coalition is one of the most explicit interactions in human groups. However, it is quite difficult to detect the existence of a coalition, unless unusual behavior of its members is recognized. Much of the research on coalitions is an outgrowth of game theory research. Coalitions are typically examined in three- or four-person groups, and variables, such as resource positions, communication linkages, or bargaining experiences, are very important. The identification of coalitions is usually established by requiring subjects to select specific individuals in the group to whom they will make offers, negotiate, and establish some agreement regarding the joint use of resources. In many studies, subjects are allowed to meet separately from the group in order to negotiate, and coalitions are identified in terms of written or observed agreements. The objectives of research are to determine which coalitions are formed and the characteristics of winning coalitions.

Another technique used by social psychologists is to have the group vote on some decision and interpret the vote as a behavioral representation of coalition. Number of coalitions depends on the number of votes for each offered alternative. One drawback to using a vote is subjectivity in estimating if such voting together is a result of passive or active coalition. An alternative approach is an algorithm entitled "the coalition game", which utilizes linkage analysis and socio-metric basis for identifying coalitions. The technique is based on the assumption that coalitions form as a function of the popularity of individuals and the strength of interpersonal attraction. Analyzing all possible dyads in a group, the algorithm produces numerical dyadic relationships and the total influence of the dyad within the group.

"The snowball" technique can be used in identifying key members of decision network. Asking managers to identify the persons with whom they worked concerning the project isolates potential network members. Managers identified by at least three members of organization are treated as decision-makers. In the second phase, the structured interviews with each separate manager are made, and then some participants from the first phase are eliminated and transferred to other potential buying projects. The recorded phone calls with each member of communication network can also be used.

Understanding different individual influences in a group is critical to communicate successfully with the group [7, pp. 476-486]. The analysis of group decision-making process focuses on abilities to transfer individual preferences to group preference forming. If the group's preference is similar to that of an individual, then this individual is assumed to exert a large amount of influence. In contrast, if the group's preference is dissimilar from that of the individual, then the individual is assumed to exert a small influence.

Recently, marketing researchers use multi-dimensional scaling techniques [2, pp. 263-276]. The purpose of scaling is to derive a quantitative scale to represent a person's internal, psychological response or reaction to some stimuli (e.g. preference, liking, brand preference, and voting). Uni-dimensional scaling assumes that all stimuli lie along a single dimension and its objective is to determine the locations of stimuli on this dimension from observed data. The most important characteristic of multi-dimensional scaling technique is to show indirectly individual perceptions as psychological criteria for valuating the subject of research [8, pp. 335-341]. In similarity scaling, the data can be obtained on the similarity or dissimilarity between stimuli. The objective is to use the data to determine the number of dimensions necessary to best fit the similarity data and the locations of points in a multidimensional space. In exploring group decision-making structure, the multi-dimensional scaling can be employed as a means of obtaining comparative evaluations of groups or individuals when the specific bases of comparison are unknown and undefined. Identification of potential grouping can rely upon pertinent background information on each participant - job title, job position, authority, interpersonal style, or upon opinions of potential participants in decision-making process as well as their mutual interests, respects, attractiveness and other communication backgrounds. Relevance rank of contacted persons can be presented as a map of buying center structure (Figure 3). The concrete decision related to coalition is also important for analyzing group conflict background. Vector distance reflects smaller or greater possibility for conflict. Marketing researchers use four models of multi-dimensional scaling method: the models of triple disclosure, the stochastic models, the unsymmetrical matrix models, and the hybrid models [9, pp. 193-204].

In exploring decision-making units it is important to separate task-related from no task-related motivations for forming alliances, which do not have connections with the task. Bonoma and Shapiro [10, pp. 104-110] suggest a "nesting approach" to the segmentation of industrial markets, and scaling to identify coalitions can be a useful way of implementing this strategy. At the more general level, an enterprise could cluster by industry, to observe whether coalition types tended to be industry specific. But, going to particular variables of segmentation, the enterprise is attempting to find more specific bases for coalitions. Disregarding each organization unique structure, it is possible to identify some usual situations in the sense of "who with who forms coalition in the scope of market segment".

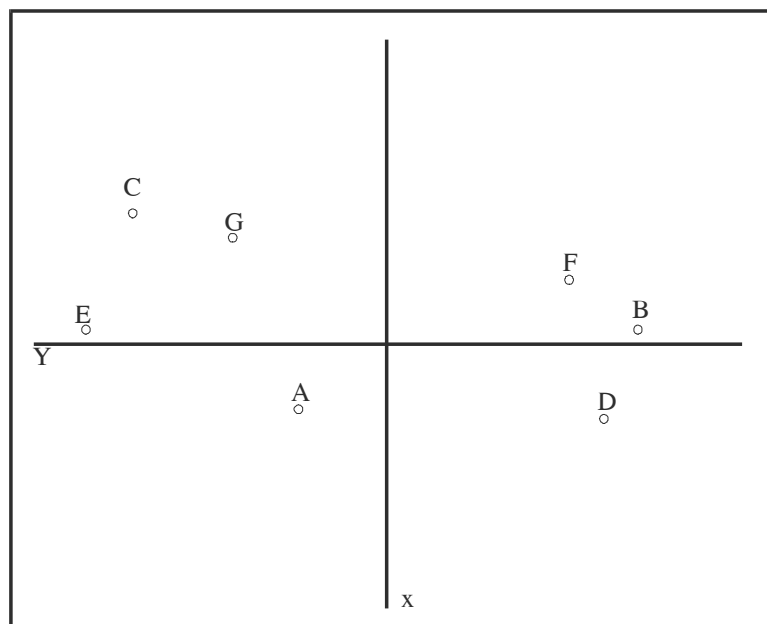


Fig. 3. Multidimensional representation of a buying center [2, p. 272]

The multidimensional scaling also has the diagnostic and prognostic character. In the first sense, it is used for identifying buying center structures, and, in the second sense, it can be used for analyzing and predicting possibilities for coalition forming, conditions under which departments will most likely form a coalition, and coalition duration.

In order to explore interconnectedness of inter-organizational relationships that could be important for buying process, it is sufficient to analyze triads because every greater system (the network) can be deconstructed into triad, consisting of a focal organization (f), two other organizations (a) and (b), and their possible relationships (x), (y), and (z). "Relationships are connected when a given relationship affects or is affected by what is going on in certain other relationships" [11, pp. 317-326]. This interconnectedness between two relationships can be neutral, positive or negative. The relationships are neutral when the existence of relationship (y) is independent from the existence of relationship

(x); the relationships are positive if the existence of relationship (x) is supporting, enabling or even enforcing the existence of relationship (y); the relationships are negative when the existence of relationship (x) is hindering, disabling or even excluding the existence of relationship (y). If the relationship is impacted by other relationships or networks (i.e. there is an opposite impact), we are able to identify 10 different cases describing the possible impacts among inter-organizational relationships. The case when there is no interconnectedness between two relationships and they are totally independent from each other is named "*neutrality effect*". A one-side positive effect between two relationships can occur when experiences made in one relationship can be used in the other, without any reversal effect. Those synergies may be based on collaboratively developed products and processes or managerial experiences in managing business relationships. In those cases we talk about an "*assistance effect*". If one relationship is hindering the other and there is no impact in the opposite direction, there is a "*hindrance effect*". This is a one-sided negative effect (e.g. customer attempting to get exclusive rights of purchasing a certain product from the focal company, but the other customer is not interested in such rights). If two relationships support or even necessitate or presuppose each other, we call this case a "*synergy effect*" (e.g. new product development with combined resources). Between two relationships a positive and a negative impact can coexist and such relationship might seem to be very unstable at first glance. But if there exists any lack of alternatives, which keeps relationships existing (e.g. an actor in the relationship has no other choice), this case is called "*lack effect*". If companies are limited in terms of their resources, each relationship and potential relationship competes with every other one for resources (e.g. personnel, time, budgets), this case is named "*competition effect*". When all three actors in the relationship collaborate in some domains (e.g. research and development activities), but within the others are totally different and unrelated, there is a "*unitary neutrality effect*". An "*initiation effect*" exists in the case when a relationship initiates collaboration between its partners (e.g. automobile manufacturers sometimes insist on collaboration between their suppliers even though the suppliers would prefer not to do so). A "*by-pass effect*" is related to the case when one relationship supports the third relationship whereas the other relationship weakens it. When two relationships both have a negative impact on the third relationship in order to get original ideas from both sides, it introduces some kind of hierarchy into the information flow. This case is named "*hierarchy effect*".

4. CONCLUSION

The strategic positioning background includes defining relevant marketing effort related to all external market participants. The result of effort should be to make a clear vision of enterprise for focused customer group and other public segments. In organizational situations, when numerous contextual variables impact on organizational behavior and individuals within the organization are seen only as a part of overall process, there is a need for modifying existing inadequate research methods. The problem is more complicated considering the fact that industrial market focus has been moved from two-valence relationships between market participants toward business networks and systems, and, therefore, the methods of exploring organizational buying process have to evolve.

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ISTRAŽIVANJE PONAŠANJA INDUSTRIJSKOG KUPCA - KLJUČNI FAKTOR STRATEGIJSKOG POZICIONIRANJA

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Efikasnije i efektivnije kreiranje vrednosti za ciljne potrošače podrazumeva stalno generisanje informacija o relevantnim učesnicima na tržištu, kao i njihovo širenje u preduzeću. Dinamičnost potreba potrošača, kao i faktora koji ih uslovljavaju, složenost intra i interpersonalnih komunikacija zahtevaju primenu raznih matematičkih, statističkih i psiholoških tehnika u istraživanju. Naš cilj u ovom radu je da istražimo značaj nekih instrumenata za identifikovanje i objašnjenje ponašanja potrošača.