New product development in business to business marketing - a relational perspective.

Filip, Alina

The Bucharest Academy of Economic Studies

17 March 2011

NEW PRODUCT DEVELOPMENT IN BUSINESS TO BUSINESS MARKETING - A RELATIONAL PERSPECTIVE

Filip, Alina[1]
The Bucharest Academy of Economic Studies, alfilip@ase.ro, filip.alina@gmail.com

ABSTRACT: Market position and long-term competitive advantages are dependent on companies' ability to innovate and their capacity to launch new product or services. This paper aims to highlight the features of product development processes in business to business markets. The research method consisted of a documentary study in the literature and the results focus on the stages involved in the development and launch of a new product. In recent years, statistics have shown an increase in the rate of failure in launching new products on business markets. This has been caused by an inadequate planning and has negative consequences on both customer relationships and organizational economic performance. Given this reality, academics propose a sequential product development plan based on the following essential steps: identifying opportunities and generating ideas, selection of ideas with the highest chances of success, development of new product concept materialized in the form of a prototype, technical testing and acceptance testing, making the final changes to the product, establishing brand name, price level and other intangible elements of the product, legal protection of the product, placing the product into production and effectively lunching the product though a tactical marketing program. Practical experiences show that omission of one or more stages of this process can cause product failure, companies recording a low level of performance, below expected levels.
KEY WORDS: product development, business to business relationships, planning, ideas selection, marketing tests, product failure.

1. INTRODUCTION

The success of every company marketing activity is materialized only when consumers are willing to buy its specific products and services. Regardless of the marketing effort undertaken to this point (consisting of researching consumer buying behaviour, market segmentation and target selection), if the company fails to create an offer that meets customer needs, then all other activities are meaningless.

Product policy has the leading role in relation to other components of the marketing mix. The role of product managers is to set feasible objectives, to determine the size and the adequate range assortment, and also to establish the categories of products and services that have to be introduced in the company portfolio and launched on the market.

In business to business marketing, implementation of product strategies is accomplished by developing programs at the tactical level, which involves the formulation of product specifications; establish brand names; appropriate packaging; additional prices; services, etc.

The aim of the present study is to highlight which are the stages involved in the development and launch of a new product in the context of those companies acting on inter-organizational markets. The paper begins with a literature review regarding the main characteristics that differentiate business to business domain from business to consumer field. Then comes the main section that describes a sequential product development plan, followed by a short presentation of the most frequently reasons of product failure.

2. BUSINESS TO BUSINESS MARKETING SPECIFICITY

The main distinguishing feature of business to business market does not mainly refer to the products and services sold, but to the nature of customers' profile. Thus, potential customers of the company are represented by other companies or organizations, not by individual consumers [8]. In essence, the particularities of the field can be analyzed according to the following three criteria: market structure, consumer buying behaviour and marketing mix, consisting of those tools used by the companies in order to favourable influence customers preferences [3].

Differences in business to business market structure are considered to be mainly the following: derived demand, the small number of customers, concentration of purchasing power, the interdependence between buyer and seller, geographic concentration of buyers, inelastic demand, reverse elasticity of demand and a greater complexity of products.

In marketing literature it is common to threat consumers demand as direct and organizational demand as derived [7]. In other words, it is considered that consumers buy goods and services to satisfy their own needs, while companies only purchase goods in order to achieve their production objectives. Thus, business to business demand exists as long as there is a demand for the products and services of the buying firms. This is the reason why business marketers must be aware of the developments that may affect their marketing strategy, both upstream and downstream.

Compared to consumer markets, characterised by a very high number of buyers who purchase products in small quantities, in business to business markets the number of potential customer is much lower, fact which enables a strict identification of buyer companies that match the desired profile of the seller [1]. However, a small number of buyers translate into a much higher importance or value of an individual customer [9]. Buying to meet collective needs, the value and volume of inter-company transactions is often superior to the value of transactions involving individual customers [15].

High importance of business customers given by their substantial purchasing potential make it necessary to develop closer relationships between buyers and sellers, based on mutual trust and cooperation, which justifies the interdependence between the two sides. Keeping these strategic customers requires the supplier to adopt relationship marketing strategies [5]. Relational strategies involve a detailed knowledge of customer situation and specific needs and certain adjustments of products and services in order to fulfil customers' requirements [6]. Adaptation may involve investing in new technologies and systems.

A distinctive characteristic of the business market is the geographic concentration of buyers, both internationally and nationally. Therefore we can identify a high selling potential in certain geographic areas, although the purchase requirements may vary substantially from one company to another [11].

Organizational demand is usually less price elastic or less responsive to price changes than consumers demand. Manufacturing companies will not buy substantially larger amounts of raw materials if their price drops and will not significantly reduce demand in situations of price increase [13]. This is a consequence of derived demand and of the fact that changes in production methods are difficult to implement on short-term.

Reverse elasticity situations are also more frequently encountered in business to business than in business to consumer markets, which translates into a higher organizational demand as a response to an increase in providers' prices. This is driven by the buyers' forecasts regarding the dynamic of supplier markets in the near future.

Another feature of business to business markets is also the higher product complexity [10]. Due to their technical nature, many products are normally purchased on the basis of detailed specifications that define the quality standards and performances that have to be met by potential suppliers.

Organizational buying behaviour is formalized, based on explicit decision-making procedures and practices. These are implemented in many client companies by persons specially trained to professionally negotiate and efficiently procure products.

Purchases made on business markets are rarely the results of individual decisions taken by different members of the procurement department or other persons within the organization. These decisions are the results of teamwork, being established in so-called "decision-making units" of the enterprise.

Buying process is quite lengthy due to multiple influences from various organizational levels. Purchase decisions are also more complex as the value of transactions is often high [4]. For this reasons purchasing criteria applied to suppliers are largely rational and less based on subjective factors.

From a provider perspective, substantial transactions will justify the decision to tailor product offerings to the specific needs of the customer, seeking to offer complete solutions to their business problems rather than just selling individual goods or services [17].

All mentioned characteristics related to both market structure and customer purchasing behaviour has a specific influence on marketing strategy design. For example, sales forces are the most important component of promotional activity in business to business marketing, unlike consumer markets in which advertising is considered to be decisive. Distribution channels are usually shorter, based on highly specialized intermediaries compared with those for consumer markets. Prices are more flexible and the products are customized to customer needs [12]. Traditional marketing tools applied to the mass consumer markets are losing their relevance in this context, in business to business the focus being on building lasting relationships.

3. NEW PRODUCT DEVELOPMENT PLANNING

As a result of a high rate of failure in launching products and services, companies from business to business markets began to realize the need to develop new products in a planned process, in order to reduce the risk of failure and loss of substantial investment.

The first stage of this process consists in identifying opportunities for new products and generating ideas [16]. Although ideas for new products can sometimes arise by chance, innovation-oriented organizations consistently use detailed analysis of marketing environment, both internally and externally, through research based on primary and secondary sources of information, experiments, etc. Ideas may come from internal or external sources related to the organization [2]. Domestically, new product ideas can be generated by sales representatives, familiar with customer needs due to repeatedly direct contacts. Also, ideas can be formulated by research and development specialists, who have knowledge of recent technological developments, and by marketing staff and senior management, having the capacity to elaborate an objective analysis of the company' s strengths and weaknesses. Externally, the ideas can come from direct customers, vendors or intermediaries located at different levels of distribution channel. Last but not least, benchmarking analysis could identify valuable ideas for product development.

An important characteristic in business to business marketing is about customer involvement in the development of new products [14]. Often they are the ones that generate the idea and propose new product concepts to the vendor. This situation is frequently encountered in industries where suppliers have no control over technologies used by the customer in production, while the latter depends on the suppliers' materials and equipment to improve manufacturing methods.

A usual technique for investigating new product ideas is the brainstorming, which belongs to the creative methods used in qualitative marketing research. A brainstorming session is organized as a workshop attended by representatives of the client firms, expressing their needs for new products and by internal staff from various organizational departments, proposing changes to some components of existing products or manufacturing methods so as to achieve costs reduction. To obtain a good brainstorming session, participants should not feel influenced by the professional hierarchy, nor threatened by the possible implications of expressing their opinions. The discussion should be open, with no criticism of ideas or attempts to set their filtration in the workshop [10].

In the second phase, results ideas are subjects to a selection process, carried out in sequence, based of the application of various categories of criteria, the aim being to eliminate as quickly possible those ideas without development potential. Selection of ideas is preferable to be made in an organized manner, within multidisciplinary teams, with the participation of experts from departments of marketing, production, research and development, procurement and other functional areas [16]. Such teams are particularly necessary in situations of developing new products with a high degree of novelty for the firm. Selection procedures involve establishing criteria and determining the importance of related factors and the development of measurement scales, to distinguish the best ideas from those with a low degree of feasibility (ideas can be assessed using scales with five or more steps, where for example 5 is excellent, 4 is good, 3 is medium, gradually going up to level totally inadequate). Finally, each idea will receive a score that reflects the extent to which the considered criteria are met.

An initial filter criterion refers to ideas compatibility with the company's objectives, development strategy and image [8].

The remaining ideas are then analyzed taking into account the abilities and potential of the company to develop the products, in terms of the availability of specific technologies and resources. Thus, evaluating each idea will be realized by providing answers to questions such as: there are the necessary materials and supplies to realize the product or they can be easily accessed from the outside? The company has the production capacity and the technical expertise needed for product development? There are sufficient financial resources to make it? There is compatibility or a risk of cannibalization between the new product and other existing products from the range? Can the existing channel distribution be used to market the product or there is a need to design new ones? Are the current customers willing to buy the new product or there will be target completely new customer segments? Are the sales representatives able to sell the product? The company has the capacity to provide support services and specific technical assistance? The existence of a number of negative answers to such questions will reduce the attractiveness of certain ideas, fact that will implicitly lead to their elimination from future analysis [4].

The evaluation process of the remaining ideas will continue with a more detailed market analysis, involving the identification of market size and its development trends, changes in buyers' requirements, etc [3]. Specialists will take into account both the existing and potential competitors, by assessing their strengths and weaknesses. If competitors have a strong or consolidated market position, the opportunity of launching the new product will be less attractive. Starting from these data there will be used certain evaluative criteria related to: the investment and the necessary costs in research and development, production, sells and promotional activities; the estimated volume of sales; the anticipated product life cycle; the level of prices paid by consumers for such products; the quantity and frequency of purchase recorded in these product categories; the profit margin or the estimated time to recover investments.

The main purpose of this analysis is to estimate the potential profitability of new products. Finally, managers will select the product with the most chance of success, given its consistency with the restrictions imposed by the material, financial and human resource potential of the organization, with market requirements and the company's profitability objectives.

The next step after selecting the idea aims to develop the new product concept, which is embedded in the form of a prototype [1]. Even at this stage, the cooperation between employees from different organizational departments is an essential condition for the success of the product that will be created. The views of those involved should be harmonised, so that the orientation toward technology of the experts in the research and development area to be consistent with the focus on the actual market requirements which defines marketers' interests. In other words, the development of product specifications must start from the benefits desired by the company's current and prospective customers, from their expected performance related to the new product.

Identifying customer requirements is not always easy to achieve as a result of the multiple influences on the purchase decision, buyers and users usually being part of different department of the client companies [16]. Understanding which are the buying criteria or the customers' purchasing motivations become possible especially by using qualitative marketing research or with the help of sells force representatives (for the current business relationships). These requirements are then analyzed according to their frequency, relative importance for customers and the purchasing power of the buyer companies that issued them.

Therefore, the prototype will contain the features of the final product mentioned in detail. These characteristics should be in accordance with customer expectations, regarding both the physical or technical specifications (for example: height, width, depth, weight, colour, tolerance, packing, parts, functional and performance features, etc.) and the additional services and information that will accompany the physical product [13].

Additional services are of critical importance in business to business marketing and many buying companies include them in product specifications, because they don't want to purchase only a good or functional product, but a complete solution or an entire package of benefits [17]. Thus, in the product development stage, there have to be defined additional aspects, related to: training and technical assistance services provided before the sale, maintenance and repair services provided after the sale, providing support services for problems that may arise in using the product, speciality advise in real time, guarantees offered, delivery terms and so on.

Depending on the target segment of buyers, the company can produce several prototypes, distinguished by slight improvements in performance, price and value added services, in order to further test their acceptability to the customers.

The resulted prototype or prototypes will be tested in the next step to check on the one hand, the correlation between the prototype and the performance characteristics mentioned in the specifications, standards, internal norms (this is the technical test developed at a laboratory level), and on the other hand the prototype consistency with the requirements of the targeted segment of buyers (this is the acceptability test, deployed at the market level). The technique test purpose is to analyze the functional and technical parameters, the row material composition of the resulted prototype, while the acceptability test involves the projection of direct research among a small number of key customers in order to evaluate their opinions and suggestions towards one or more alternatives of the product developed [12].

The acceptability test can provide useful information regarding: the users' reaction towards the product or their perceptions related to various features of the product, the specific manner and level of product usage, the segments with the grater buying potential, the estimate product profitability at different price levels, the degree of buyers' resistance to certain arguments of sales representatives, the test of different alternatives of promotional techniques, the test of various sales approaches and distribution channels, the evaluation of the buying companies' reactions relative to more price levels and also relative to the quality of various maintenance services, warranties, etc [3].

After the testing phase, the process continues with other steps consisting of: making the final changes to the product according to the results of technical and acceptance testing, including by establishing brand name, price level and other intangible elements of the product; legal protection of the product (patent, trademark registration) for protection against unfair competition; placing the product into production and effectively lunching the product though a tactical marketing program.

The marketing program of launching the new product on the market consists of a series of tactical decisions related to:

determining the adequate period for the product launch (in these regard, there can be identified fairs and exhibitions that facilitate the selection and direct targeting of potential customer firms), fixing the territorial area for the product launch (it depends on the degree of geographic concentration of the targeted buyers), selecting the distribution channels, conducting special promotional activities in order to create product awareness and a certain level of interests among prospects, training the sales force to sell and promote the new product and to provide the technical assistance and advise requested by customers [5]. After the effective product launch, the organization must ensure a systematic monitoring of market reaction, both by following up on the sales, profits or market share indices, and also through direct research of satisfaction levels among customers.

4. DETERMINANTS OF NEW PRODUCT FAILURE

According to the studies in the field of business to business marketing, about one third of the new products launched in the organizational markets fail to meet the anticipated objectives of the companies [2]. The causes of these failures are numerous. Among the most frequent reasons for product failure identified in practice are mentioned the technical problems and the launch of incomplete products on the market.

Technical problems arise when product performance is below customer expectations. The reasons of technical nature are not necessarily related to the inability of service engineers to resolve problems, but with an inadequate understanding of customer needs among representatives of the technical department. Sometimes, there are not well known the specific conditions in which the product is used in the buying firms [14]. In other cases, technical staff fails to anticipate the impact of new product on the customer company's manufacturing process, involving unfavourable effects on customer investments in production equipment and problems regarding the product compatibility with existing technologies.

The launch of incomplete products on the market, goods that do not have certain features demanding by buyers, is also a factor with a negative influence on the rate of new products acceptance [8]. It often happens that the physical product itself to be adequate, but customers to penalize the lack or inadequacy of support services, such as after-sales maintenance services, inappropriate personal training, etc.

Other reasons leading to the failure in launching new products in business to business markets are concerned with [1], [13]: the existence of a more intense competition compared with the anticipated one; the unrealistic estimation of the market size or of the demand growth rate; establishing too high level for the prices, the product not being supported by additional benefits and not having a clear market positioning related to the key competitors; the inconsistency of the product with customers' specifications; insufficient budgets and marketing efforts; the lack of coordination in the marketing-mix activities or their misdirection to other market segments, etc.

As a conclusion, practical evidences show that the omission of one or more stages of the new product development and launching processes can cause product failure, organizations recording low levels of sales and profits indices, under previous estimations.

5. ACKNOWLEDGEMENTS

This work was cofinanced from the European Social Fund through Sectoral Operational Programme Human Resources Development 2007-2013, project number POSDRU/89/1.5/S/59184 "Performance and excellence in postdoctoral research in Romanian economics science domain".

6. REFERENCES

1. Anghel, L.D., *Business to business marketing*, ASE eds., Bucharest, Romania, (2004).
2. Berggren, E., Nacher, T., Introducing new products can be hazardous to your company: use the right new-solutions delivery tools, *Academy of Management Executives*, Vol.15, No.3, pp. 92-101, (2001).
3. Brennan, R., Canning, L., McDowell, R., *Business-to-Business Marketing*, Sage Publications eds., London, England, (2007).
4. Căescu, Ş., Filip, A., Dumitru, I., IECS Proceedings, *Industrial Revolutions, from the Globalization and Post-Globalization Perspective,* pp.70-74, Sibiu, Romania, (2009).
5. Dwyer, F.R., Tanner, J.F., *Business Marketing: Connecting Strategy, Relationships and Learning*, 2th edition, McGraw Hill eds., Boston, USA, (2002).
6. Egan, J., *Relationship marketing. Exploring relational strategies in marketing*, 3th edition, Prentice Hall eds., London, England, (2008).
7. Ford, D., McDowell, R., Managing business relationships by analyzing the effects and value of different actions, *Industrial Marketing Management*, Vol.28, No.5, pp. 429-442, (1999).
8. Frederick, E., Webster, Jr., *Industrial Marketing Management*, 3th edition, John Wiley & Sons eds., New York, USA, (1991).
9. Ganesan, S., Determinants of long-term orientation in buyer-seller relationships, *Journal of Marketing*, Vol.58, No.2, pp. 1-19, (1994).
10. Hart, N., *Industrial marketing*, Codecs eds., Bucharest, Romania, (1998).
11. Hutt, M.D., Speh, T.W., *Business Marketing Management. A Strategic View of Industrial and Organizational Markets*, 8th edition, Thomson South-Western eds., Ohio, USA, (2004).
12. Kotler, Ph., Armstrong, G., *Marketing principles*, 3th edition, Teora eds., Bucharest, Romania, (2004).
13. Kotler, Ph., *Management marketing*, 4th edition, Teora eds., Bucharest, Romania, (2005).
14. Krapfel, R., Salmond, D., Spekman, R., A strategic approach to managing buyer-seller relationships, *European Journal of Marketing*, Vol.25, No.9, pp. 22-32, (1991).
15. Kumar, V., Bohling, T., Ladda, R.N., Antecedents and consequences of relationship intention: Implications for transaction and relationship marketing, *Industrial Marketing Management*, Vol.32, No.8, pp. 667-676, (2003).
16. Schilling, M., Hill, C., Managing the new product development process: strategic imperatives, *Academy of Management Executives*, Vol.12, No.3, pp. 67-81, (1998).
17. Watkins, A., Hill, R.P., A simulation of business to business decision making in a relationship marketing context, *Industrial Marketing Management*, Elsevier Inc., Vol.38, Issue 8, pp. 994-1005, (2009).