UDC 339 138.658 8.005 2

Gurzhiy N.N., PhD, Associate Professor, Zaporozhie National University

MECHANISM OF PROACTIVE MANAGEMENT STRATEGIC MARKETING FIRMNESS

The theoretical questions of forming of mechanism of proactive management strategic marketing stability are investigational. The model of choice of scenarios of strengthening of strategic marketing stability is offered by the economiqe – mathematical model of theory of unclear judgements. Considered requirement in relation to forming of strategic marketing set in accordance with the select scenario of strengthening of strategic marketingstability.

Keywords: marketing strategic firmness, proactive management, scenarios of strengthening of strategic marketing firmness, proactive analysis, proactive prognosis.

Problem statement. At modern conditions of market economy there appears necessity of constant strategic development of companies based on activation of innovation implementation, provision of flexibility and high speed of management decision making. An important aspect of general strategic company development is constant fulfilment of processes of strategic marketing. Firmness of market position of a company, positive dynamics of financialeconomic results, business success most of all depend on the extent of company's adaptation to dynamic external changes. In this connection provision of marketing strategic firmness in conditions of infirmness and unexpectedness of business environment becomes the priority strategic task.

Analysis of the latest researches and publications. To understand the essence of the category "strategic marketing firmness" clearly, one needs, first of all to consider the content of the notion "strategic firmness", which in its turn provides for necessity of analyzing different scientific views of this issue. Let us determine some of the scientists' and researchers' present approaches to the essence of the category "strategic firmness of a company". Thus, Dubrova O. S. considers strategic firmness to be "a characteristic of company's activity, which reflects its ability for stable development and achievement of objectives stated (with minimal acceptable deviation from planned ones) regardless

of dynamic environment's influence, in which uncertainty of future results and riskiness of economic processes take place"[1, p. 16]. Zaitsev O. M. distinguishes internal firmness (characterizes proportionality of all company's structures, permitting to provide positive dynamics of basic financial and economic indicators and output expansion) and external firmness (characterizes non-conflict interaction with surrounding environment - consumers, competitors, suppliers, etc.), which in their interaction form firmness of company in whole [2, p. 11]. According to Mokhonko G. A., strategic firmness is an ability of a company to preserve its integrity, achieve mission and objectives stated, function in a set mode at different internal and external influence, preserving its integrity and harmonic development [3]. In the scientific paper by Derzhac N. O. [4] «strategic firmness of an industrial company» is defined by the author as «an ability to create, develop and maintain competitive advantages in segmented market for long time period, thus supporting proper level of liquidity, paying capacity and profitability of a company under the conditions of changing external environment». As one may notice, the basic condition of providing strategically stable work of an industrial company in this approach determines its financial firmness. We consider that a company is able to form its strategic firmness gradually only by virtue of maintaining proper level of financial and at the

same time of professional, technological, innovational and especially marketing firmness.

Statement of earlier unresolved components of general issue. Nevertheless, the components of mechanism of proactive strategic marketing firmness management are not enough highlighted in scientific papers by the above mentioned scientists.

Article's objective. The main objective of this paper is generalization of theoretical and methodical approaches to using the model of selection scenarios of strategic marketing firmness strengthening.

Statement of the basic material. Basing on the above mentioned theoretical views let us define strategic marketing firmness as an ability of a company to concentrate its efforts at priority directions of development of company's marketing activity strategy, to develop and preserve strategically stable competitive advantages at key, from the point of view of marketing success, activity directions in conditions of dynamic marketing environment. I.e. the main emphasis in defining this notion, as we consider, should be put on strategic direction in achieving priority marketing objectives and maintaining market position of a company in balance during constant unexpected changes in marketing environment. A company, which differs from others in higher marketing strategic firmness, is able to form more competitive market position, which is characterized by more stable marketing relations, more perfect marketing potential, which is constantly developed on account of intensification of company's efforts concerning identification and development of new market opportunities and raising realization level of present abilities, with more expressed key marketing competence.

It should be mentioned, that strategic marketing firmness of a company is conditioned by considerable spectrum of internal factors-activators, the most significant of which are: formed competencies regarding preservation of stable market position, available ability of a company to achieve planned sales volume on the basis of adequate assessment of present and future expectations of target consumer market, efficient system of adaptation to changes of marketing environment, developed system of marketing researches.

Thus, marketing strategic firmness is dynamic, complex, complicated and multiform notion, which requires reasonable approach to determination of directions of its provision, factors-activators and key results of this process.

For a modern company strategic marketing firmness provision based on reasonable complex of management actions is an extremely timely issue. We consider that the highest effectiveness in this process can be achieved by using proactive approach to management.

In scientific literature on management and marketing one may find such notions as reactive and proactive business behavior. At reactive behavior companies show their activity as reaction to any given phenomena of external or internal nature (action), without foreseeing changes or influencing them. As opposed to this, companies with proactive behavior carry out, as a result of observations and analytic work, forecast of future actions, aiming at their prevention. Basic objections of proactive management conception are: detection and identification of signals at the stage of latent (hidden) crisis, and also forming further model of company's behavior, taking into account implementation of anti-crisis measures [5, p. 374].

One should assent to opinion of N. V. Kartohina that "proactive management of marketing actions is a process, based on preventive management actions, taking into account occurrence of negative results of marketing activity" [6, p. 198].

Thus, one may state that using proactive management of marketing actions, aiming at provision of strategic marketing firmness, a company elaborates its own vector of marketing development and regardless of circumstances acts in the direction chosen. Elaboration of such vector, therefore, is based on the actions, which are carried out simultaneously: company elaborates new marketing measures according to objectives stated regarding strategic marketing development; company corrects the elaborated marketing plans and programs, taking into account minimization of risks of their fulfillment and aiming at leaving competitors behind.

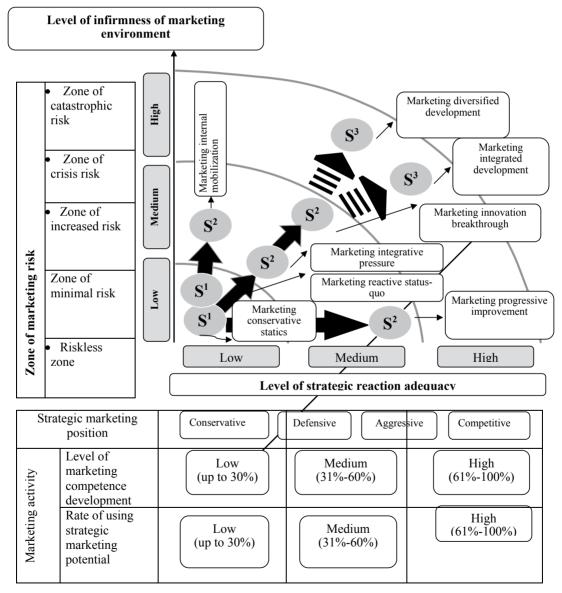
Proactive approach to strategic marketing firmness management provides for constant monitoring of marketing environment, aiming at timely detection of changes, occurring in it, forecasting their future influence on company's marketing activity, elaboration, using this knowledge, of timely relevant measures for provision of preventive development according to dynamics of consumers' needs and competitors' challenges.

Proactive management of processes of strategic marketing firmness provision has considerable advantages as compared to reactive management. Using proactive approach, a company, instead of reacting after occurrence of a problem, reduces probability of marketing risk

occurrence by implementing elements of monitoring and strategic control.

Proactive management of strategic marketing firmness is based upon the following principles:

- integratedness with general system of company's marketing management;
- clear notion of company's strategic objectives in the direction of strategic marketing development provision;
- active reaction to changes in marketing environment:



Pic. 1. The model of selecting among possible scenarios of strengthening strategic marketing firmness

- readiness for correction of marketing strategies aiming at timely adaptation to new market opportunities and prevention of marketing risks;
- concentrating attention at elaboration and using qualitative instruments of reasoning management solutions in conditions of uncertainty and risk.

Mechanism of proactive strategic marketing firmness management includes four important processes:

- Proactive analysis provides for complex analysis of marketing environment factors aiming at assessing the level of its infirmness. The object of this analysis may be potential marketing risks and also signals of marketing environment infirmness. At this stage it is reasonable for companies to concentrate efforts on increasing quality of information support of strategic marketing management processes. For this purpose it is necessary to activate work of marketing system of strategic supervision.
- Proactive diagnosis is aimed at detection of causal connections between the identified marketing risks (infirmness signals) and results of marketing activity of companies. At this stage numerous dependencies between poor signals of potential possibilities or forecasts and future marketing activity results are determined, e. g.: market share, goods turnover, profitability, level of satisfaction and loyalty of consumers, etc.

An important task at this stage is assessment of strategic reaction of a company, which reflects level of company's readiness for taking marketing risks (or signals of infirmness) and for implementation of corresponding proactive measures. Conclusions as to adequacy of strategic reaction of a company can be made basing on assessment of the following indicators: marketing strategic position, taken by company; marketing activity, which is characterized by rate of using strategic marketing potential and level of marketing competence development.

- Proactive prognosis is aimed at modelling marketing strategic behavior in terms of generating and selecting the most rational scenario of strengthening strategic marketing firmness. The scenario approach to marketing firmness management will permit a company to determine possible and necessary ways of influencing marketing processes, so that they lead to acceptable for company results.

The model of selecting among possible scenarios of strengthening strategic marketing firmness is shown in Pic. 1.

In accordance with this model, a company, depending on strength of influence of marketing risks or signals of infirmness it has in its marketing activity and depending on its strategic reaction, may be in three strategic zones: strategic vulnerability, strategic rest, and strategic strength.

- Proactive improvement secures holding necessary marketing measures of adaptive nature, directed to preservation of both internal and external marketing flexibility. Based on the specified at the previous stage scenario of strengthening strategic marketing firmness a company elaborates relevant set of marketing strategies, which will contribute to the best achievement of strategic marketing objectives. Such approach will permit the companies, which strive for stable marketing development, to secure protection from basic threats of marketing environment.

The choice of the most expedient scenario of strengthening strategic marketing firmness is proposed to be carried out with the help of economic and mathematic model of fuzzy sets theory. At the first stage one must conduct indistinct multicriteria analysis of variants of scenarios that will let by the defined criteria to select the best scenario for introduction into effect of concrete company.

concrete company. Let $S = \{S_1, S_2, ..., S_k\}$ – set of scenarios, which are subject to multicriteria analysis, $K = \{K_1, K_2, ..., K_n\}$ – set of criteria, by which the elaborated scenarios are assessed.

The task of multicriteria analysis is to assess accordance of elements of the set S with the determined criteria from the set K.

Let $\mu_{K_i}(S_j)$ – be number in range [0,1], by which certain scenario $S_j \in S$ by criterion $K_i \in K$: is assessed: the more number $\mu_{K_i}(S_j)$, is, the more rational scenario S_j by criterion K_i , i=1,...,n, j=1,...,m.

Then concrete criterion K_i can be represented as fuzzy set \widetilde{K}_i at universal set of scenarios S[8, 9]:

 $K_{i} = \left\{ \mu_{K_{i}}(S_{1}) / S_{1}, \mu_{K_{i}}(S_{2}) / S_{2}, ..., \mu_{K_{i}}(S_{m}) / S_{m} \right\}, (1)$

where $\mu_{K_i}(S_j)$ – is degree of belonging of element S_j to fuzzy set \widetilde{K}_i .

To resolve this sum one should use the

scheme of mixed point of extremum (minimax criterion) of Bellman-Zadeh.

The most rational scenario shall be the one, which is the best by all criteria at the same time. Fuzzy solution \widetilde{R} is found as cross-up of partial criteria [8,9]:

$$\widetilde{R} = \widetilde{K}_{1} \cap \widetilde{K}_{2} \cap ... \cap \widetilde{K}_{n} = \{ \min_{i=1,...,n} \mu_{K_{i}}(S_{1}) / S_{1},$$

$$\min_{i=1,...,n} \mu_{K_{i}}(S_{2}) / S_{2}, ..., \min_{i=1,...,n} \mu_{K_{i}}(S_{m}) / S_{m} \}.$$
(2)

Correspondingly, the scenario, which has the highest degree of belonging should be considered the best scenario of strengthening marketing firmness:

$$R = \arg\max(\mu_{\scriptscriptstyle B}(S_1), \mu_{\scriptscriptstyle B}(S_2), ..., \mu_{\scriptscriptstyle B}(S_m))$$
. (3)

If the criteria, by which comparison is carried out, have different values, degrees of belongings of scenarios, which are assessed, to fuzzy set \widetilde{R} are found as follows [8,9]:

$$\mu_{R}(S_{j}) = \min_{i=1,\dots,n} \left(\mu_{K_{i}}(S_{j})\right)^{\lambda_{i}}, \quad j = 1,\dots,m,$$
where λ_{i} is coefficient of relative impor-

where λ_i – is coefficient of relative importance of criterion K_i ; the sum of coefficients equals one. This coefficient as an indicator of degree λ_i in the formula (4) concentrates fuzzy set \widetilde{K}_i in accordance with the degree of significance of criterion K_i .

To determine coefficients of relative importance of criteria and degrees of expediency of fuzzy set it is reasonable to apply the method of paired comparisons according to Saaty scale [7]. To assess scenarios of strengthening strategic marketing firmness it is proposed to use the following criteria:

 K_1 – orientation to leveling external threats;

 K_2 – orientation to realization of market opportunities;

 K_3 – expected economic influence on company's activity;

 K_4 – expected speed of implementing adequate strategic changes;

K₅ – uniqueness of strategic solutions;

 K_6 - complementarity of strategic connections

Experimental check-up of the proposed methodic approach concerning selection of rational scenario of strengthening strategic marketing firmness was carried out at the researched company of format «Brick-andmortar» – Commercial Group «Foxtrot». As a result of conducted complex research it was determined that the company is at the zone of strategic rest, has medium level of adequacy of strategic reaction, medium level of marketing activity, which is characterized by medium level of development of marketing competencies (46,24 %) and medium level of use of strategic marketing potential (45,4%). That is why four scenarios of strengthening marketing firmness should be considered as alternative ideas: «Marketing internal mobilization», «Marketing progressive improvement», «Marketing integrative pressure», «Marketing innovation breakthrough». Let us denote these scenarios correspondingly $S_1 \div S_4$. Generalized conclusions of expert assessment of scenario in accordance with the selected criteria are represented in the following matrixes of paired comparisons:

$$\mathbf{A}(K_1) = \begin{bmatrix} 1/3 & 1 & 2 & 3 \\ 1/5 & 1/2 & 1 & 2 \\ 1/7 & 1/3 & 1/2 & 1 \end{bmatrix} \quad \mathbf{A}(K_2) = \begin{bmatrix} 1 & 1 & 3 & 5 \\ 1/3 & 1/3 & 1 & 3 \\ 1/5 & 1/5 & 1/3 & 1 \end{bmatrix}; \quad \mathbf{A}(K_3) = \begin{bmatrix} 1/5 & 1 & 1/5 & 3 \\ 1 & 5 & 1 & 7 \\ 1/7 & 1/3 & 1/7 & 1 \end{bmatrix};$$

$$\mathbf{A}(K_4) = \begin{bmatrix} 1 & 1/3 & 1/5 & 1/3 \\ 3 & 1 & 1/2 & 1 \\ 5 & 2 & 1 & 3 \\ 3 & 1 & 1/3 & 1 \end{bmatrix} \quad \mathbf{A}(K_5) = \begin{bmatrix} 1 & 1/3 & 1/3 & 1/5 \\ 3 & 1 & 1 & 1/3 \\ 3 & 1 & 1 & 3 \\ 5 & 3 & 2 & 1 \end{bmatrix}; \quad \mathbf{A}(K_6) = \begin{bmatrix} 1 & 1/7 & 1/3 & 1/7 \\ 7 & 1 & 3 & 1 \\ 3 & 1/3 & 1 & 1/3 \\ 7 & 1 & 3 & 1 \end{bmatrix}.$$

Using the formulae of fuzzy multicriteria analysis of scenarios we obtain the following fuzzy sets:

$$\begin{split} \widetilde{K}_1 &= \{0.59/S_1, 0.22/S_2, 0.12/S_3, 0.07/S_4\} \;, \\ \widetilde{K}_2 &= \{0.39/S_1, 0.39/S_2, 0.15/S_3, 0.07/S_4\} \;, \\ \widetilde{K}_3 &= \{0.42/S_1, 0.11/S_2, 0.42/S_3, 0.05/S_4\} \;, \\ \widetilde{K}_4 &= \{0.08/S_1, 0.23/S_2, 0.48/S_3, 0.21/S_4\} \;, \\ \widetilde{K}_5 &= \{0.08/S_1, 0.23/S_2, 0.48/S_3, 0.21/S_4\} \;, \\ \widetilde{K}_6 &= \{0.06/S_1, 0.40/S_2, 0.14/S_3, 0.40/S_4\} \end{split}$$

As one may see, different scenarios have advantages at particular criteria, that is why for continuation of analysis the degrees of criteria importance were determined. Calculation of coefficients of relative criteria importance was also conducted in terms of expert method of paired comparisons.

Expert expression, which was obtained, accords with the following matrix of paired comparisons:

$$\mathbf{A} = \begin{bmatrix} 1 & 1/3 & 1/2 & 4 & 1 & 3 \\ 3 & 1 & 2 & 6 & 3 & 5 \\ 2 & 1/2 & 1 & 5 & 2 & 3 \\ 1/4 & 1/6 & 1/5 & 1 & 1/3 & 1/2 \\ 1 & 1/3 & 1/2 & 3 & 1 & 2 \\ 1/3 & 1/5 & 1/3 & 2 & 1/2 & 1 \end{bmatrix}$$

In accordance with the formulae (1, 2) coefficients of relative importance of criteria K_1 , K_2 ,..., K_6 were found:

$$\lambda_1=0.16$$
 . $\lambda_2=0.33$. $\lambda_3=0.26$. $\lambda_4=0.05$. $\lambda_5=0.13$. $\lambda_6=0.07$

that indicates higher degree of importance of criteria K_2 and K_3 while taking administrative decisions.

Finding coefficients of relative criteria importance permitted to obtain fuzzy sets from the formula (1).

Degrees of expedience of fuzzy solution were obtained in terms of cross-ups of fuzzy sets:

$$\mu_R(S_1) = \min(0.919, 0.732, 0.797, 0.894, 0.717, 0.813) = 0.717$$
 $\mu_R(S_2) = \min(0.784, 0.732, 0.552, 0.936, 0.813, 0.938) = 0.552;$
 $\mu_R(S_3) = \min(0.490, 0.723, 0.797, 0.969, 0.823, 0.871) = 0.490;$
 $\mu_R(S_4) = \min(0.499, 0.667, 0.456, 0.933, 0.909, 0.938) = 0.409.$

This permitted to obtain fuzzy set:

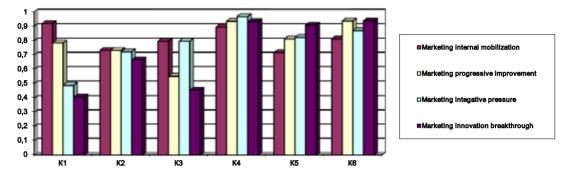
$$\widetilde{K} = \{0.717/S_1, 0.552/S_2, 0.490/S_3, 0.409/S_4\}$$

Given fuzzy set points to advantages of scenario S_I , which was selected by CG "Foxtrot", over other scenarios.

To accept the most reasoned decision regarding selecting concrete scenario, let us give fuzzy sets, which show how fully scenarios $S_1 \div S_4$ accord with criteria $K_1 \div K_6$, as a

Table 1
Elements of fuzzy sets of full accordance of scenarios of strengthening marketing firmness with the denoted criteria

	Criteria					
Scenarios of strengthening marketing firmness	orientation to leveling external threats, K_I	orientation to realization of market opportunities, K_2	expected economic influence on company's activity, K_3	expected speed of implementing adequate strategic changes, K_z	$\begin{array}{c} \text{uniqueness} \\ \text{of strategic} \\ \text{combinations, } K_{\scriptscriptstyle S} \end{array}$	complementarity of strategic connections, K_{δ}
Marketing internal mobilization	0,919	0,732	0,797	0,894	0,717	0,813
Marketing progressive improvement	0,784	0,732	0,552	0,936	0,813	0,938
Marketing integrative pressure	0,490	0,723	0,797	0,969	0,823	0,871
Marketing innovation break- through	0,409	0,667	0,456	0,933	0,909	0,938



Pic. 2. Values of the function of expediency of fuzzy sets, which accord with scenarios of strengthening strategic marketing firmness

table of elements of sets and chart of expediency functions (table 1, pic. 2).

The chart reflects how fully the scenarios $S_1
div S_4$ accord with the criteria $K_1
div K_6$. As determined above, when a decision concerning choice of concrete scenario of strengthening marketing firmness is made, criteria K_2 and K_3 are of the highest level of importance.

I.e. with the help of economic mathematic model of fuzzy sets theory it has been proved, that scenario of strengthening marketing firmness «Marketing internal mobilization» in the fullest degree matches criteria K_2 – orientation to realization of market opportunities, K_3 – expected economic influence on company's activity.

Strategic marketing set, in accordance with the selected scenario of strengthening strategic marketing firmness should comply with the following requirements (table 1).

Strategic marketing set, in accordance with the selected scenario of strengthening strategic marketing firmness should comply with the following requirements:

- to include clear objectives, achievement of which is decisive for securing strategic marketing development;
- to concentrate main efforts at proper time in proper place;
- to foresee such flexibility of marketing behavior, which would permit to use minimum resources for achieving maximum result;
 - to secure coordinated management;
- to make allowance for correct order of marketing actions.

Conclusions and recommendations. Practical implementation of the offered model of selecting scenarios of strengthening strategic marketing firmness will permit management boards of companies to introduce changes in strategic marketing programs timely, so that they can adjust themselves to changing conditions of marketing environment.

References:

- Dubrova O. S. Strategichna stiykist pidpriemstva: skladovi ta napryami yiyi zabezpechennya / O. S. Dubrova // Visnik Hmelnitskogo natsionalnogo universitetu. – 2010. – № 1. – Т. 1. – S. 15-19.
- Zaytsev O. N. Otsenka ekonomicheskoy ustoychivosti promyishlennyih predpriyatiy (na primere promyishlennosti stroitelnyih materialov): avtoref. dis... kand. ekon. Nauk: 08.00.05 // Zaytsev Oleg Nikolaevich; Tihookeanskiy gosudarstvennyiy universitet. Habarovsk, 2007. 23 s.
- 3. Mohonko G. A. Otsinyuvannya strategichnoyi stiykosti pidpriemstv vidavnicho-poligrafIchnoyigaluzi v umovah nestabilnogo seredovischa [Elektronniy resurs] / G. A. Mohonko. Elektron. tekstovI danI (15,7 Kb). Rezhim dostupu: http://www.economy.nayka.com.ua/index.php?operation=1&iid=24
- Derzhak N. O. Vibir metodu upravlinnya marketingovimi diyami pidpriemstva [Elektronniy resurs] / N. O. Derzhak – Elektron. tekstovI danI (246 Kb). – Rezhim dostupu : www. nbuv.gov.ua/portal/.../ Derghak.pdf
- Ivanov A. V. Strategicheskoe upravlenie promyishlennyim predpriyatiem v kontekste ego vhozhdeniya v sostav regionalnogo proizvodstvennogo klastera / A. V. Ivanov // Inzhenernyiy vestnik Dona. – 2010. – № 4. – S. 371-377.

Series: International Economic Relations and World Economy

- Kartohina N. V. Proaktivnoe upravlenie v sisteme antikrizisnogo upravleniya predpriyatiem / Kartohina N. V // Ekonomichniy visnik. Zbirnik naukovih prats. Vipusk 5. KiYiv: NTUU «KPI», 2008 S. 194-201.
- 7. Saati T. L. Vzaimodeystvie v ierarhicheskih sistemah [Tekst] / T. L. Saati // Tehnicheskaya kibernetika. − 1979. − № 1. − S. 68-84.
- 8. Rotshteyn A. P. Intellektualnyie tehnologii identifikatsii: nechetkaya logika, geneticheskie algoritmyi, neyronnyie seti / A. P. Rotshteyn. Vinnitsa: UNIVERSUMVInnitsya, 1999. 320 s.
- 9. Rotshteyn A. P. Nechetkiy mnogokriterialnyiy analiz variantov s primeneniem parnyih sravneniy / A. P. Rotshteyn, S. D. Shtovba // Izvestiya RAN. Teoriya i sistemyi upravleniya. − 2001. − № 3. − S. 150-154.