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Sales channels selection for small industrial enterprises based on qualitative-quantitative characteristic criteria

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Abstract. In the article, the qualitative and quantitative criteria to compare and evaluate separately direct and indirect sales channels for small industrial enterprises are systemized; the diagnostics of such channels is carried out for concrete enterprise, the application of graphical radar method for comparative analysis is substantiated, the use of the radar method is improved taking into account the weight function of characteristic criteria, the mechanism of diversification of sales channels for a small industrial enterprise is proposed.

Key words: small industrial enterprise; sales channel; characteristic criterion; method of radar; weight function; sales channels selection.

INTRODUCTION

The selection of optimal combination of sales channels is the topical and many-sided problem. Activity of a small business enterprise is closely related to decision-making on sales channels selection. In many instances such a decision is made by intuition or using personal contacts of owners or employees of a firm. This approach often results in profit deficiency and imperfect use of firm's potential as well as the potential of distribution intermediaries. The subject of the article is connected with considering the characteristic criteria for the selection and comparison of direct and indirect sales channels, the methods for their estimation and forming the mechanism of decision-making on the use of sales channels.

ANALYSIS OF THE RECENT RESEARCH AND PUBLICATIONS

Each sales channel can be classified by a list of characteristic criteria which reflect a level of producer profit and a level of collaboration with distribution intermediaries. Investigations of this problem were carried out by leading national and foreign scientists. [7] considers methodical approaches to estimation of activity of a distribution channel and singles out the organizational and economical mechanisms of distribution process management; the logical content of such management is revealed by its structure elements (the functional and providing subsystems). J.-J. Lambin, R. Chumpitaz and I. Schuiling [15] considered market-oriented management strategy and underscore that the increasing complexity of the competitive environment demands new approaches and the use of new mechanisms in formulating strategy of an enterprise [15]. Describing the principles of marketing, [12] stress the twofold goal of marketing strategy: to attract new customers by promising superior value and to keep and grow current customers by delivering satisfaction. D. Jobber and G. Lancaster analyze different kinds of customers in order to help achieving and understanding of buyers' thinking and organize the selling distribution accordingly [10]. A.A. Thompson and A.J. Strickland establish the tree of strategy-making tasks and underline competitive capabilities of an enterprise [19]. M.A. Hitt, R.D. Ireland and R.E. Hoskisson emphasize that strategic competitiveness is achieved when an enterprise successfully states and implements a value-creating strategy being an integrand and coordinated set of activity designed to exploit core competences and gain a competitive advantage [8]. A.T. Coughlan, E. Anderson, L.W. Stern and A.I. El-Ansary shows how to design, develop, maintain and manage effective relationships among worldwide marketing channels to achieve sustainable competitive advantage by using

strategic and managerial frames of reference [3]. They emphasize that distribution channels are critical elements of business strategy. S. Shpylyk singles out the theoretical-methodical regulations and suggestions concerning the order of sales activity management of an enterprise taking into account intensification of existing relations with customers and using the system approach. O.M. Provolotska reveals the theoretical and methodical aspects of improving product sales management in the context of modern marketing by investigation of a situation in internal and external environment under evaluation of competitive capacity of domestic industrial enterprises. The paper of O.A. Bilovodska is devoted to determination of forms of marketing interaction between participants in distribution channels; the author presents classification of marketing relationship in collaboration and in conflicts in channels and investigates the methods aimed at study, estimation, diagnostics, analysis and resolving of conflicts in distribution channels of innovation production [1, 16, 17].

Investigations of V.F. Hamaliy, S.A. Romanchuk and I.V. Fabryka are directed to increase of sales activity effectiveness and profitability of an enterprise; the authors have developed the general sales strategy of an enterprise – integration of two strategies in the framework of the general strategy of intensive growth: the strategy of deep penetration into a market, which lies in increase of sales of existing goods at existing markets, and the development strategy – development of sales of new goods for existing customers [6].

According to L. Gorchels, E. Marien and C. West, competently built distribution channels give rise to large competitive advantage [5]. The authors consider the main principles of distribution channel management. They suppose that the strategy of penetration into market, which accounts for such principles as well as the demands of customers and channel partners and is developed with taking into account new technologies and segmentation of distribution channels, ensures the success of an enterprise. The practical and pragmatical approach of the leading scientist and professor of University of Warwick P. Doyle and his co-author P. Stern is revealed by different aspects of modern strategical business management and marketing as well as by giving many pieces of practical advice necessary for decision-making on marketing and strategy development [4]. They propose to distinguish economic and non-economic factors for choice of distribution intermediaries. The integrated approach to sales department management proposed by P. Winkelmann is characterized by interrelations between all the departments of a firm [20]. He considers marketing activity as a basis for integration of business processes of a company and illustrates his own elaborations by examples from experience of world leading companies.

A wide variety of views and approaches to classification of criteria for selection of distribution intermediaries inherent to studies of national researchers results from ambiguity and non-coordination of their practical use possibilities. Studying this problem, foreign researchers take into account foreign conditions of company management, making contracts between a producer and a distribution intermediary, etc. The approach to selection of sales channels proposed in our article eliminates these shortcomings.

THE AIM OF THE RESEARCH

The aim of this research is to single out the qualitative and quantitative criteria for comparison of direct and indirect sales channels, estimation of their weights and forming on the basis of this elaboration the mechanism of decision making about merits of their use and combination.

MAIN RESULTS OF THE RESEARCH

Small industrial enterprises are more responsive to crisis processes and are more subjected to negative consequences of such processes. At the same time, a crisis can stimulate the development of an enterprise and promote a search of alternative business methods. One of such methods is diversification of marketing activity resulting in product sales. In this case, a small industrial enterprise defines the main goals, tasks and distribution types, singles out existing and potential sales channels and makes decision about their use and rearrangement.

Based on results of analysis of literature, our own elaboration and practical activity of small industrial enterprises, we systemize the qualitative and quantitative criteria to compare and evaluate separately direct and indirect sales channels. Table 1 presents qualitative and quantitative characteristic criteria of direct sales channels by the example of the private joint-stock company “BROTEP-ECO”. For example use of criteria we introduce the weight of each criterion (see Table 1, column 3). The sum of weights is equal to 1. For comparison of the sales channels and mathematical substantiation of this process the absolute values of characteristic criteria are scaled proportionally according to the 10-point evaluation scale (see Table 1, columns 8–10) and are corrected by the weights (see Table 1, columns 11–13). Table 2 presents the qualitative and quantitative criteria of comparison between the actually used (distribution network and specialized supermarkets) and potential (wholesale market) indirect sales channels of PJSC “BROTEP-ECO”. There are much more criteria than for direct sales channels which results from less control and less access to intermediary information. The weight of each criterion is shown in column 3 (see Table 2), the sum of weights is equal to 1. The number of points obtained by each indirect sales channel according to the 10-point scale is presented in columns 8–10 and is corrected by the weight in columns 11–13 of Table 2.

Table 1. Qualitative and quantitative characteristic criteria of comparing the direct sales channels of PJSC "BROTEP-ECO" *

N	Characteristic criteria of direct sales channel selection	The criterion weight	Calculation recommendations	Actual value of characteristics of a direct channel			The number of points of each direct sales channel (according to a 10-point grading scale)			The number of points of each direct sales channel corrected by the weight		
				ES*	FS*	EC*	ES*	FS*	EC*	ES*	FS*	EC*
1	2	3	4	5	6	7	8	9	10	11	12	13
Qualitative characteristics												
1.	Territorial coverage	0.08	Total population of settlements, where production is presenting / Population of Ukraine	0.37	0.2	0.3	3.7	2	3	0.3	0.16	0.24
2.	The number of visitors	0.05	The leading direct sales channel gets 10 points, the points of other sales channels are calculated proportionally to the leading channel	5 000 visitors	7 000 visitors	8 500 visitors	5.9	8.2	10	0.3	0.41	0.5
3.	Using period	0.05	The number of months in use / The number of months of company existence	0.7	1	0.5	7	10	5	0.35	0.5	0.25
4.	SWOT-analysis	0.11	The sum of strengths and opportunities positions / The sum of weaknesses and threats positions. The direct channel which gets the maximum value obtains 10 points, the points of other channels are calculated proportionally to the leading channel	0.9	1.7	1.4	5.3	10	8.2	0.58	1.1	0.9
5.	Competence and professionalism of management personnel	0.11	Independent experts interview top-management representatives of direct sales channels forming the expert opinion according to a 10-point grading scale	-	-	-	5.7	9.3	7.6	0.63	1.02	0.84
6.	A level of service and a level of production presentation by sales personnel	0.08	A secret shopper evaluates sales personnel according to a 10-point grading scale	-	-	-	9.2	8.1	8.7	0.74	0.65	0.7
Quantitative characteristics												
7.	Year turnover of a direct sales channel	0.2	The direct sales channel having the largest total production turnover gets 10 points. The points of other sales channels are calculated proportionally to the leading channel	42 000 UAH	57 000 UAH	64 000 UAH	6.6	8.9	10	1.32	1.78	2
8.	The average velocity of commodities circulation from producer to consumer	0.09	The direct sales channel having the shortest period of production delivery from producer to consumer gets 10 points. The points for other channels are calculated subtracting 0.5 point for every additional day	At once	At once	3 days	10	10	8.5	0.9	0.9	0.77
9.	Markup rate	0.1	The direct sales channel having the lowest markup rate gets 10 points. Points for other channels are calculated subtracting 0.5 point for additional 5 % of markup rate	42 %	33 %	15 %	7.5	8.5	10	0.75	0.85	1
10.	Increase of sales volume	0.13	The direct sales channel having the largest increase of sales volume gets 10 points. The points of other sales channels are calculated proportionally to the leading channel	7 %	12 %	16 %	4.4	7.5	10	0.57	0.98	1.3

**Notation conventions in Table 1: ES – Exhibition Sales; FS – Firm Shop; EC – Electronic Commerce*

Table 2. Qualitative and quantitative characteristic criteria of comparing indirect sales channels of PJSC "BROTEP-ECO"

N	Characteristic criteria of indirect sales channel selection	The criterion weight	Calculation recommendations	The actual values of characteristics of an indirect channel			The number of points of each indirect sales channel (according to a 10-point grading scale)			The number of points of each indirect sales channel corrected by the weight		
				S*	DN*	W*	S*	DN*	W*	S*	DN*	W*
1	2	3	4	5	6	7	8	9	10	11	12	13
			Qualitative characteristics									
1.	Territorial coverage	0.05	Total population of settlements, where production is presenting / Population of Ukraine	0.42	0.56	0.7	4.2	5.6	7	0.21	0.28	0.35
2.	Consistency between a target consumer of intermediary and a target consumer of producer	0.05	Independent experts give the number of points according to a 10-point grading scale	-	-	-	5.7	6.3	4.9	0.29	0.32	0.25
3.	Using period	0.02	The number of months in use / The number of months of company existence	0.2	1	-	2	10	0	0	0.2	0
4.	SWOT-analysis	0.05	The sum of strengths and opportunities positions / The sum of weaknesses and threats positions. The indirect channel which gets the maximum value obtains 10 points, the points of other channels are calculated proportionally to the leading channel	0.6	2.3	1.7	2.6	10	7.4	0.13	0.5	0.37
5.	Competence and professionalism of management personnel	0.04	Independent experts interview top-management representatives of indirect sales channels forming the expert opinion according to a 10-point grading scale	-	-	-	7.7	5.9	8.1	0.31	0.24	0.32
6.	A level of service and a level of production presentation by sales personnel	0.03	A secret shopper evaluates sales personnel according to a 10-point grading scale	-	-	-	3.7	8.6	7.9	0.11	0.26	0.24
7.	Elasticity, efficiency and accommodation of an indirect sales channel in nonstandard situations	0.01	The number of nonstandard situations solved positively for the producer / The total number of nonstandard situations	0.6	0.7	-	6	7	0	0.12	0.07	0
8.	The date of the last purchase	0,01	The dates of the last purchase are compared. The indirect channel with the latest purchase gets 10 points. The points for other channels are calculated subtracting 0.5 point for each month before	7.08. 2013	17.06. 2013	-	10	8	0	0.1	0.08	0
9.	Quantity of the last purchase	0,01	Quantities of the last purchase are compared. The indirect channel with the largest quantity of the last purchase gets 10 points. The points of other channels are calculated proportionally to the leading channel	210 units	795 units	-	2.6	10	0	0.03	0.1	0
10.	Duration of intermediary activity	0.02	Duration of intermediary activity is compared. The leading indirect channel gets 10 points; the points of other channels are calculated proportionally to the leading channel	3.4 yr	1.5 yr	5 yr	6.8	3	10	0.14	0.06	0.2
11.	Existence and quality of marketing strategy	0.04	Independent experts give the number of points according to a 10-point grading scale	-	-	-	7.3	8.5	8.6	0.29	0.34	0.34
12.	Participation in joint promotion	0.02	The part of costs of producer in joint promotion is compared with that of intermediary. The channel for which the part of costs of producer is the lowest gets 10 points. The points of other channels are calculated proportionally to the leading channel	55 %	24 %	30 %	7.5	10	9.4	0.15	0.2	0.19
13.	Frequency of joint promotion	0.02	Intermediary with the largest frequency of promotion gets 10 points. The points of other channels are calculated proportionally to the leading channel	7 times per year	15 times per year	14 times per year	4.7	10	9.3	0.09	0.2	0.19
14.	Quality of promotion	0.02	Independent experts give the number of points according to a 10-point grading scale	-	-	-	6.9	9.4	8.8	0.14	0.19	0.18

1	2	3	4	5	6	7	8	9	10	11	12	13
15.	Existence and quality of review of branch markets for indirect sales channel	0,02	Independent experts give the number of points according to a 10-point grading scale	-	-	-	5.4	7.8	7.3	0.11	0.16	0.15
16.	The date of the last investment in fixed assets	0,01	The dates of the last investment in fixed assets are compared. The indirect channel with the last investment gets 10 points. The points for other channels are calculated subtracting 1 point for each year before	2009	2010	2009	9	10	9	0.09	0.10	0.09
17.	Financial losses, dates and reasons of merchandise return	0,01	The indirect channel having no returns gets 10 points. The points for other channels are calculated subtracting 1 point for each return	-	2007.	-	10	9	10	0.1	0.09	0.1
18.	Ecological compatibility of commodity circulation	0,01	Existence of ecological modes of transport and the use of rendering plant facilities are estimated. The indirect channel having at least one of the abovementioned items gets 10 points	-	-	-	0	10	10	0	0.1	0.1
19.	Elasticity in decision making	0,02	Marketing Department and Sales Department give the number of points according to a 10-point grading scale	-	-	-	6.3	7.4	8	0.13	0.15	0.16
20.	Image, professionalism and reputation	0.01	Independent experts give the number of points according to a 10-point grading scale	-	-	-	8.2	7.6	7	0.08	0.08	0.07
			Quantitative characteristics									
21.	Total year turnover of the indirect channel	0.03	The intermediary with the largest total year turnover gets 10 points. The points of other channels are calculated proportionally to the leading channel	116000 UAH	180 000 UAH	150 000 UAH	6.4	10	8.3	0.19	0.3	0,25
22.	Year turnover of producer production of indirect channel	0.11	The intermediary having the largest year turnover of the producer production gets 10 points. The points of other channels are calculated proportionally to the leading channel	6 910 UAH	5320 UAH	0	10	7.7	0	1.1	0.85	0
23.	A part of turnover of producer production in total turnover of indirect channel	0.02	Turnover of producer production / Total turnover of the intermediary. The indirect channel having the largest ratio gets 10 points. The points of other channels are calculated proportionally to the leading channel	0.09	0.03	0	10	3.3	0	0.2	0.07	0
24.	The average velocity of commodities circulation from producer to consumer	0.02	The intermediary having the shortest period of production delivery from producer to consumer gets 10 points. The points for other channels are calculated subtracting 0.5 point for every additional day	3 days	8 days	5 days	10	7.5	9	0.2	0.15	0.18
25.	Markup rate	0.04	The indirect sales channel having the lowest markup rate gets 10 points. The points for other channels are calculated subtracting 0.5 point for additional 5 % of markup rate	48 %	40 %	20 %	7.5	8	10	0.3	0.32	0.4
26.	Increase of total sales volume	0.05	The intermediary having the largest increase of total sales volume gets 10 points. The points of other sales channels are calculated proportionally to the leading channel	5 %	19 %	10 %	2.6	10	5.3	0.13	0.5	0.27
27.	Increase of sales of producer production	0.07	Data from last two years are compared. The intermediary having the largest increase of sales of producer production gets 10 points. The points of other channels are calculated proportionally to the leading channel	14 %	7 %	0	10	5	0	0.7	0.35	0
28.	Increase of sales of analogical production	0.02	The intermediary having the least increase of analogical production gets 10 points. The points for other channels are calculated subtracting 0.5 point for additional 5 % increase	23 %	12 %	5 %	8.5	9.5	10	0.17	0.19	0.2
29.	Exact time payment for shipped production	0.05	The intermediary having no debts (during last year) gets 10 points.. 0.5 points are subtracted for each debts month	6 months	9 months	0	7	5.5	0	0.35	0.28	0
30.	The quantity of credit debt	0.05	The intermediary having the least credit debt gets 10 points. 0.5 point is subtracted for each additional 1000 UAH	4 500 UAH	5 000 UAH	0	10	10	0	0.5	0.5	0
31.	Discount for production	0.04	The intermediary having the lowest discount gets 10 points. 0.5 point is subtracted for each additional %	5 %	2 %	0 %	9.8	9.9	10	0.39	0.4	0.4
32.	Freight charges	0.03	The intermediary having the lowest freight charges gets 10 points. 0.5 point is subtracted for each additional 1000 UAH	10 000 UAH	4 000 UAH	7 000 UAH	7	10	8.5	0.21	0.3	0,26

** Table 2; S – Specialized Supermarket; DN – Distribution Network; W – Wholesale Market*

The comparative analysis of sales channels will be carried out by the improved radar method. The classical radar method [11, 13, 18] consists in building a circle with a radius equal to the maximal value of all the criteria (in the classical radar method the maximal value of a criterion equals to 10 conventional units) and a graphical cyclogram at radial axis of which the criterion value is marked (the number of axes is equal to the number of criteria). The marks at the radial axes are connected creating a polygon which area is determined as follows:

$$S_{\text{P}} = \sin\left(\frac{2p}{n}\right)\left(a_1 * a_2 + a_2 * a_3 + a_3 * a_4 + \right.$$
$$\left. + \mathbf{K} + a_{n-1} * a_n + a_n * a_1\right), \quad (1)$$

where: S_{P} is an area of polygon created by connection of marks at the radial axes of a circle with a radius of 10 conventional units; n is the number of characteristic criteria; a_i is the value of the ith criterion.

Comparison of sales channels is carried out according to the integral index Y which is calculated as:

$$Y = \frac{S_{\text{P}}}{S_{\text{C}}}, \quad (2)$$

where: S_{C} is an area of a circle with a radius of 10 conventional units.

The larger is the index Y, the more profitable is the sales channel for an enterprise.

Next we build the graphical illustration for direct (Fig. 1 and 2) and indirect (Fig. 2 and 4) sales channels separately because different characteristic criteria have been introduced for direct and indirect sales channels. The classical radar method assumes that the weights of all criteria for comparison of sales channels are the same, but in practice such conditions are not fulfilled. Hence, this method needs improvement taking into account the criterion weight. Such innovation permits revealing advantages and weaknesses of each sales channel. We propose to introduce the criterion weight (the sum of weights is equal to 1) and to plot at the radial axes not the absolute value of a criterion but its value corrected by its weight. Such an improvement allows us to judge more precisely about priority of the sales channels based on their qualitative and quantitative characteristics. Accounting for this modification, Equation (1) takes the form:

$$S^*_{\text{P}} = \sin\left(\frac{2p}{n}\right)\left(a_1 * g_1 * a_2 * g_2 + a_2 * g_2 * a_3 * g_3 + \right.$$
$$+ a_3 * g_3 * a_4 * g_4 + \mathbf{K} +$$
$$\left. + a_{n-1} * g_{n-1} * a_n * g_n + a_n * g_n * a_1 * g_1\right), \quad (3)$$

where: g_i is the weight of the ith criterion.

Now comparison of the sales channels is carried out according to the modified integral index Y^* which is calculated as

$$Y^* = \frac{S^*_{\text{P}}}{S^*_{\text{C}}}, \quad (4)$$

where: S^*_{C} is an area of a circle with a radius which equals to the maximum value of all weighted criteria ($r = \max(a_i * g_i)$).

Usually, a small industrial enterprise employs a little number of direct and indirect sales channels (in fact, PJSC "BROTEP-ECO" uses three direct and two indirect channels; a wholesale market appears as a potential sales channel). This allows us to use the radar method presenting the graphical interpretation of all direct channels in one figure and of all indirect channels in another. For clearness of the proposed modification we solve the problem of comparison and selection of direct and indirect sales channels by two methods (the classical method and the improved one). Graphical interpretation of comparison of direct sales channels of PJSC "BROTEP-ECO" using the classical radar method and the improved radar method is shown in Fig. 1 and 2, respectively.

The vertices of polygons in Fig. 1 approach to the best value (10 conventional units), whereas in Fig. 2 such a tendency is observed only at the 7th vertex of the polygon "Electronic Commerce" which corresponds to the 7th criterion. This is due to taking into account the criterion weight for each sales channel. For express-diagnostics of sales channels the classical radar method will be less labour-intensive, but introducing the weight of criterion for comparison of sales channels permits giving more precise estimation and potentially ensures the profit increase for a small industrial enterprise due to optimal distribution of production between distribution channels.

Graphical interpretation of comparison of indirect sales channel of PJSC "BROTEP-ECO" using the classical radar method and the improved radar method is shown in Fig. 3 and 4, respectively.

Table 3 presents the results of modeling the polygon areas for direct sales channels as well as the values of integral indexes using the classical and improved radar methods.

As it is clear from the results given above, the integral index determined by the classical radar method gives grounds to state that firm shops have the leading position in comparison with other sales channels. According to the improved radar method, exhibition sales occupy the first place with small preference in comparison with firm shops. Hence, using the improved method which is more exact and takes into account the weight of each characteristic criterion, singled out for direct sales channels, we will consider exhibition sales as the most profitable direct sales channel for PJSC "BROTEP-ECO", the second place is occupied by firm shops, and electronic commerce occupies the third place.

Table 4 presents the results of modeling the polygon areas for indirect sales channels as well as the values of integral indexes using the classical and improved radar methods.

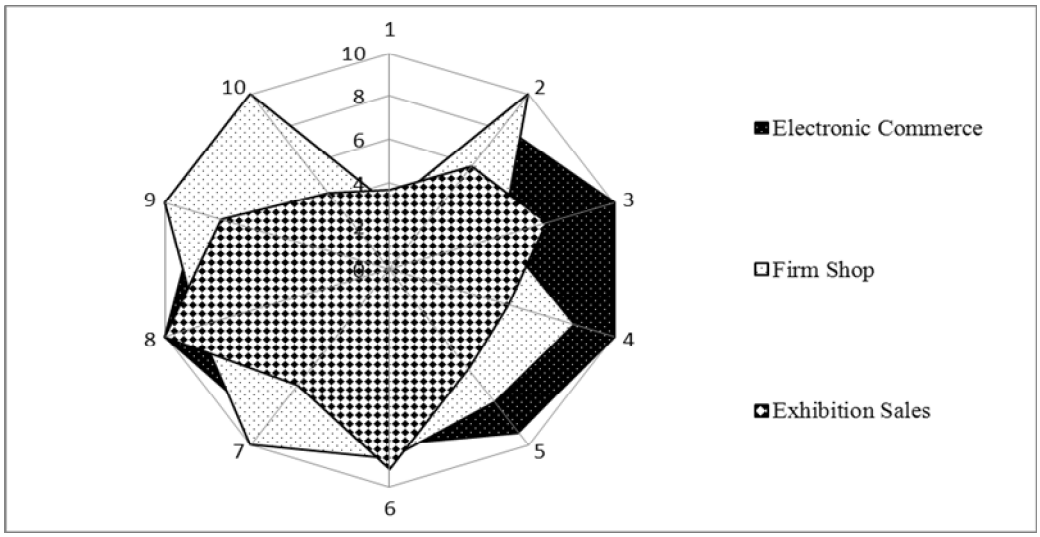

Fig. 1. Graphical interpretation of estimation of PJSC "BROTEP-ECO" direct sales channels using the classical radar method

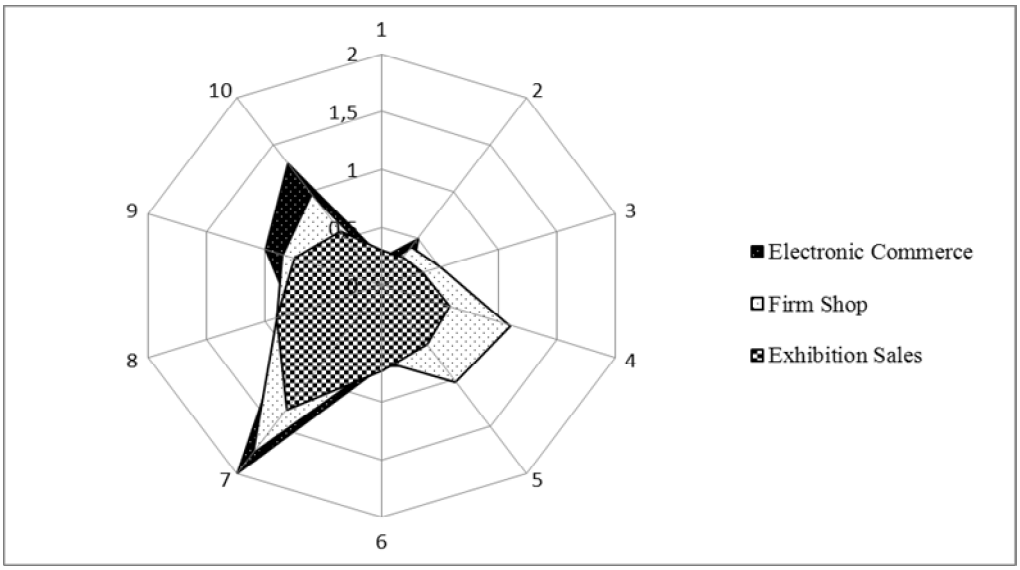

Fig. 2. Graphical interpretation of estimation of PJSC "BROTEP-ECO" direct sales channels using the improved radar method

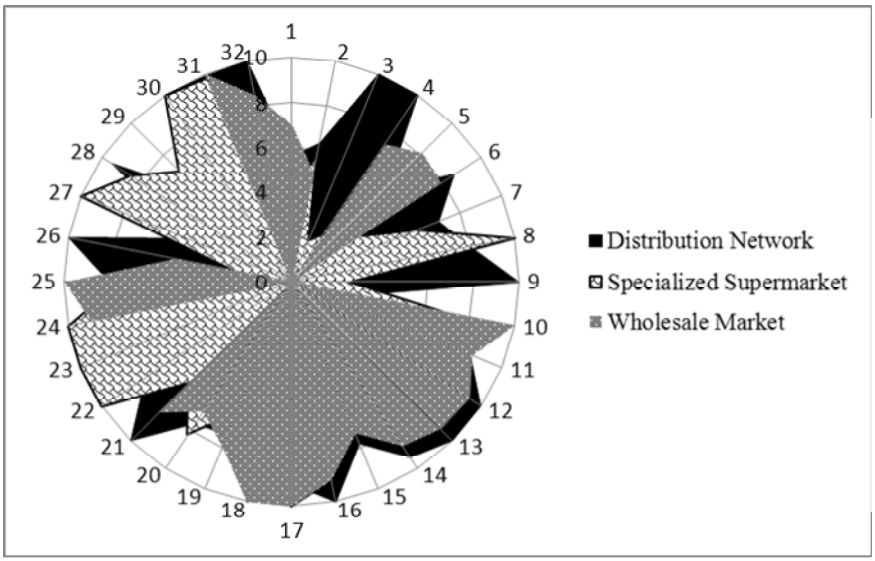

Fig. 3. Graphical interpretation of estimation of PJSC "BROTEP-ECO" indirect sales channels using the classical radar method

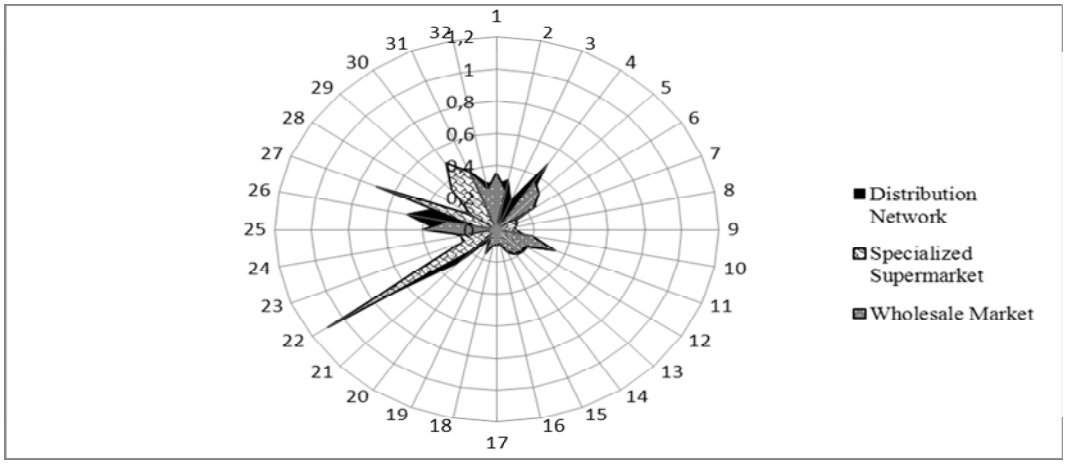

Fig. 4. Graphical interpretation of estimation of PJSC "BROTEP-ECO" indirect sales channels using the improved radar method

Table 3. The integral indexes for direct sales channel of PJSC "BROTEP-ECO"

N	The metod name	An area of the circle (conv. units)²	An area of the polygon "Electronic Com-merce" (conv. units)²	An area of a polygon "Firm Shops" (conv. units)²	An area of a polygon "Exhibition Sales" (conv. units)²	Integral indexes (Y, Y^*)		
						Electronic Commerce	Firm Shops	Exhibition Sales
1.	The classical radar method	314	127.46	203.16	186.96	Y=0.406	Y=0.647	Y=0.595
2.	The improved radar metod	12.56	1.37	2.09	2.1	Y^*=0.109	Y^*=0.116	Y^*=0.117

Table 4. The integral indexes for indirect sales channel of PJSC "BROTEP-ECO"

N	The method name	An area of the circle (conv. units)²	An area of the polygon "Special-ized super-market" (conv. units)²	An area of the polygon "Distribution Network" (conv. units)²	An area of the polygon "Wholesale market" (conv. units)²	Integral indexes (Y, Y^*)		
						Special-ized super-market	Distribution network	Whole-sale market
1.	The classical radar method	314	144.11	203.33	130.36	Y =0.46	Y =0.65	Y =0.42
2.	The improved radar method	3.8	0.17	0.21	0.1	Y^* =0.04	Y^*=0.06	Y^*=0.03

The integral indexes of indirect sales channel of PJSC "BROTEP-ECO" for the classical and improved radar methods show a coincidence of channel ranking: the distribution network is the leading channel, the second place is occupied by specialty supermarket, and the wholesale market occupies the third place.

The process of decision making concerning direct and indirect sales channel is complicated and laborious, it cannot restrict itself only to singling out the characteristic criteria for comparison and evaluation of the generalized characteristic index. There is a need to use the wider and more comprehensive approach. As a result of generalization of studies presented in the literature [2, 9, 14] and of our own elaboration we form the stage-by-stage mechanism of diversification of sales channels for a small industrial enterprise (Fig. 5).

Diversification of sales channels for small industrial enterprise has been formed as an integrated structured mechanism which action has the immediate connection with the mission and aims of an enterprise, marketing strategy and financial, production, management, personnel and other problems. Such an approach before the stage of analysis of existing distribution mechanism allows us to eliminate the strategical mistakes and to present the best view of business intention of small industrial enterprise and of a level of its realization. Taking into account the type of distribution is also closely connected with aims and mission of an enterprise. Under conditions of crisis it is desirable to revise the distribution type by change of a target consumer making production more accessible (for example, using exclusive or selective distribution type). Characteristics of a target consumer and research of public opinion concerning priority of buying production from different sales channels are the fundamentals of strategical marketing activity and have the significant influence on the selection of sales channels. Stage 7 and stage 8 of the proposed mechanisms are presented in this paper in detail.

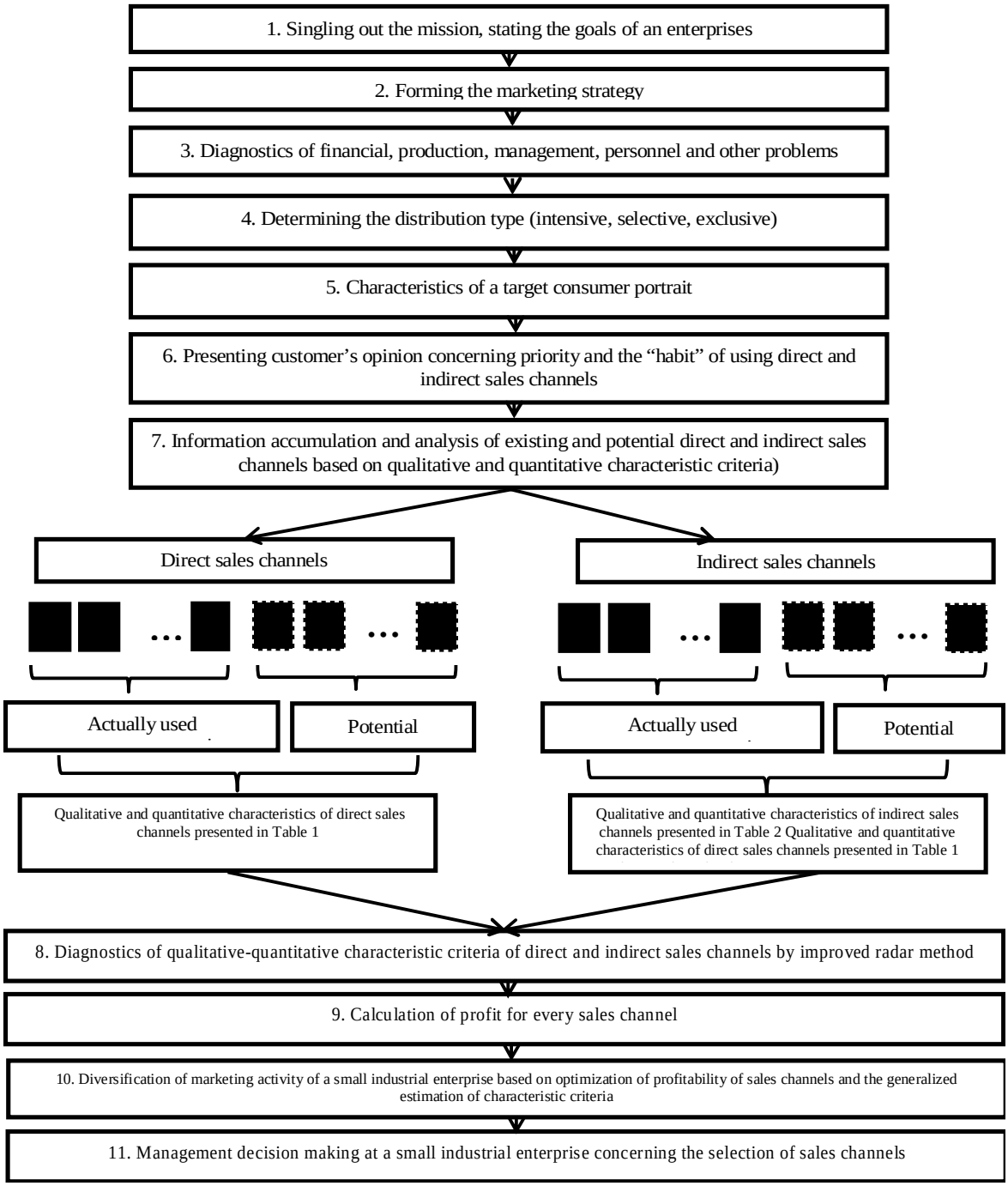

Fig. 5. The mechanism of diversification of sales channels for small industrial enterprise

CONCLUSIONS AND PROSPECTS OF FUTURE RESEARCH

Because of small amounts of production, small industrial enterprises prefer one or two sales channels. Such an approach results from prolonged practice of their existence and from the lack of integrated mechanism which allows for estimating, comparing and singling out the most profitable existing and potential sales channels. In the present article, this problem has been solved in part owing to consideration and estimation of the qualitative and quantitative characteristic criteria for direct and indirect sales channels separately, forming recommendations on initial information gaining.

The proposed mechanism of diversification of sales channels for small industrial enterprise will be an important contribution into practical activity of an enterprise concerning the selection of sales channels. The presented elaboration will serve as the basis for future study concerning diversification of marketing activity of a small industrial enterprise based on optimization of profitability of sales channels and the generalized estimation of qualitative and quantitative characteristic criteria.

REFERENCES

1. **Bilovodska O.A. 2008.** Theoretical foundations of marketing interaction between participants of an innovative production distribution channel, Mechanism of Economic Regulation, Vol. 1, No. 4, 25–33.
2. **Chukhray N. 2012.** Competition as a strategy of enterprise functioning in the ecosystem of innovations, Econtechmod: an International Quarterly Journal on Economics in Technology, New Technologies and Modelling Processes, Vol. 01, No. 3, 9–15.
3. **Coughlan A.T., Anderson E., Stern L.W. and El-Ansary A.I. 2006.** Marketing Channels, 7th ed., Prentice-Hall, Englewood Cliffs, NJ, 590.
4. **Doyle P. and Stern P. 2006.** Marketing Management and Strategy, Prentice-Hall, London, 450.
5. **Gorchels L., Marien E. and West C. 2004.** The Manager's Guide to Distribution Channels, McGraw-Hill, New York, 230.
6. **Hamaliy V.F., Romanchuk S.A. and Fabryka I.V. 2012.** Modern problems of marketing of Ukrainian enterprises, Proceedings of Kirovohrad National Technical University. Economic Sciences. Issue 22, Part II, 3–11.
7. **Hertsyk V.A. 2011.** Distribution Management of Enterprise Production, The Volodymyr Dahl East Ukrainian National University, Luhansk, 239.
8. **Hitt M.A., Ireland R.D. and Hoskinsson R.E. 2007.** Strategic Management: Competitiveness and Globalization (Concepts and Cases), 7th ed., Thomson South-Western, Mason, 840.
9. **Ingene C.A. and Parry M.E. 2004.** Mathematical Models of Distribution Channels, Kluwer Academic Publishers, Boston, 568.
10. **Jobber D. and Lancaster G. 2009.** Selling and Sales Management, 8th ed., Pearson Prentice-Hall, London, 546.
11. **Kalashnyk O.V, Omelchenko N.V. and Tovt V.M. 2011.** The use of graphic models for estimation of goods competitiveness, Commodity Research and Innpovations, Issue 3, 234–241.
12. **Kotler P. and Armstrong G. 2008.** Principles of Marketing, 12th ed., Pearson Prentice-Hall, London, NJ, 722.
13. **Kuzmin O.Ye., Chernobay L.I. and Romanko O.P. 2011.** Methods of analysis of the enterprise competitiveness. Scientific Bulletin of Ukrainian National Forestry University, Issue 21.10, 159–166.
14. **Kuzmin O.Ye., Melnyk O.H., Shpak N.O. and Mukan O.V. 2012.** The concept of creation and use of the polycriterial diagnostics systems of the enterprise activity, Econtechmod: An International Quarterly Journal on Economy in Technics, New Technologies and Modelling Processes, Vol. 01, No. 4, 23–28.
15. **Lambin J.-J., Chumpitaz R. and Schuiling I. 2007.** Market-Driven Management Strategic and Operational Marketing, 2nd ed., Palgrave Macmillan, London, 480.
16. **Provolotska O.M. 2003.** Management of sales of industrial production in marketing complex. Abstract of Ph.D. thesis, econ. sci., specialty 08.06.01, Ukrainian State University of Finance and International Trade, Kyiv, 20.
17. **Shpylyk S. 2012.** Management of sales activities of enterprise, Galician Economic Bulletin, No. 4(37), 88–95.
18. **Sokolova L.V., Veriasova G.M. and Sokolov O.E. 2011.** Enterprise competitiveness evaluation: theory and graphic support, Actual Problems of Economics, No. 12(126), 289–298.
19. **Thompson A.A. and Strickland A. J. 2007.** Strategic Management: Consepts and Cases, 11th ed., McGraw-Hill, Boston, 1104.
20. **Winkelmann P. 2010.** Marketing und Vertrieb. Fundamente für die Marktorientierte Unternehmensführung, Oldenbourg Wissenschaftsverlag, München, 588.