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## Instruments of Providing with Efficacy of Manufacture Sale Activities

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**Abstract:** In this article there are analyses of manufacture sale activities, theoretical and methodical aspects of a measuring of sale potency in markets in mind the Russian specificity. To value sale activities they proposed to consider the efficacy of interaction with partners. There is a methodical approach to a valuation of a comparative efficacy of manufacture sale markets. This approach allows getting some ideas about different effects from company sale efforts in different regions. The system of indexes of providing with sale activities efficacy is worked out. The introduction of this system increases a work stability of an organization.

**Key words:** Sale activities • Sale efficacy Market efficacy • Manufacture • Industry

## INTRODUCTION

During the process of overcoming of economic crisis consequences the problem of providing with efficacy of manufacture - sale activities is very important for manufactures. The market conditions change dictates new requirements for sale expense optimization, so the identification of differences in volumes and structure characteristics of demand and the choice of markets (on which the organization will work in a supplier or buyer role) have a very big importance. So in Russia the disproportion in a regions development gets worth during economic recessions, that's why the sale activities have a problem to found proper criteria for a market choice. Besides, the organizations need very often a forming of adaptation mechanisms for institutional influence on sale markets. Goods markets of organizations differ between themselves; from national and world markets those markets differ in structure and characteristic features, it connects with a different level of cooperation of organizations in area of their influences, a decentralization of management, a correlation of local, regional and federal interests, an incomplete coordination of development of different geography markets, a different live level of population. Those tendencies assist in isolation of goods markets and their concentration inside separate regions. With the financial resources deficit we have questions about an adaptation of research methodology of sale

sphere and interaction between organizations and sale markets. The manufactures need to improve their industrial-economical potential not only with the aim of an inner potency increase, but for increase of response flexibility on a changing inquiry of a buyer. The changing buyer inquiry is provoked by ascending requirement for goods economy and ergonomics. In industry the sale markets identify a cooperation of organizations - producers with other subjects. So the forming and the methodological addition of instruments for providing with efficacy of manufacture sale market is a very important and timely problem.

We can look at the valuation of cooperation with markets from the point of view of society, government management, commercial subjects of the market, consumers. Very often in literature we can find a connection between an economic development of a region and an efficacy of manufacture market activities. So the management of the efficacy of manufacture sale activities in a region is a problem, first of all, of a regional power. But, as indicated above, the manufacture can influence on some market characteristics - on a consumer satisfaction. It transforms the problem of a market efficacy into a problem of increase of organization functioning efficacy from the point of view of a consumer needs satisfaction, a forming of stable competitive advantages. So, from one hand the business feels an influence on its economic potential of its regional sale market, from the other hand

the organization can influence on competitive structure characteristics of this market and on its perception and, consequently, on the territory position on a national economy.

The research of an efficacy of manufactures cooperation with markets must be started from the definition of "efficacy" and from the study of traditional and common approaches to its valuation.

The authors determine the efficacy like resumptive characteristics of an economic growth quality which is calculated like a correlation between results and expenses [1]. Other authors notice that the efficacy is a correlation between economy process participants on the occasion of an optimal utilization of finance, labor resources and an approach of maximum results of activities on this base [2]. According our opinion, those definitions underline difference sides of one thing, that's why now we don't contrary to them. To combine different opinions we think that the efficacy is a measure of effect from enclosed expenses, expressed in percentage.

In the information sources they mark an absence of one opinion on a definition of an effective sale activities and an effective market. The effective market is a market which meets requirements and situation characteristics of a society development. The stable and long-term growth is typical for the society [3]. According our opinion, the work in management of market efficacy is in the identification of valuation criteria of market functioning and planning of actions for removal of market development defects. From other hand the understanding of valuation criteria of sale efficacy on a concrete market depends on an exploitable approach. If the market is interested in an organization from the point of view of different groups relationships, the efficacy criteria are a loyalty of those groups [4]. Looking at the market from the position of strategy management valuation criteria can be a capability for adaptation in answer to changes [5]. With all that some authors says that it is impossible to use one criterion for valuation of any subject efficacy, it is necessary to use a system of criteria with expert

Forming indexes of valuation of market efficacy it is possible to head for criteria of goal markets choice: 1) market availability for products suppliers and information - communication interaction; 2) market perspective and profitability; 3) competition level and risk of new competitors arrival; 4) necessary investments into development on a concrete market in the period of their recoupment; 5) duration of demand existence on exact market. Summarizing different authors opinions [7-10],

we can say that the forming of the system of market efficacy indexes depends on: rates of manufactures development and market specificity; interests of management subject; possibilities for changing the correlation of results and expenses.

According our opinion, it is possible to look at the efficacy like at the index of results of manufacture sale activities. This index shows a perspective of work on the concrete sale territory. Methodically it is necessary to work out an index of this efficacy type and this question needs to be analyzed in detail.

**Methodic:** In this section they proposed the methodic of a valuation of manufacture and market cooperation on the base of a comparative efficacy index. Looking at the market from the position of function-infrastructure approach, according our opinion, it is necessary to value the efficacy of cooperation of an organization with all structures of consumed markets. The efficacy of this cooperation is proposed on the base of calculation of additional effects and expenses indexes, which appear after a realization of organization commercial efforts on a consuming regional market. With all that the efficacy of markets will reflect not only an accuracy of chosen forms, but a completeness of consumer requirement registration in promoted products. According our point of view in this case the valuation must be done with help of a resumptive index of a comparative efficacy. This index will include composite characteristics of an effect and expenses (Table 1).

For every manufacture sale market (potential or existed) effect and expense activities can be transformed into indexes, later it will give possibilities for their compare. This valuation stage is necessary in this methodic because some effect's indexes are expressed not through price characteristics. Minimum and maximum index values are chosen from rendered values on all manufacture sale markets. But it is necessary to value their efficacy.

The coefficient of a comparative efficacy of one concrete sale market, according our opinion, can be fund by the formula:

$$? = \frac{\sqrt[6]{I_2 \cdot I_2 \cdot I_2 \cdot I_2 \cdot I_2 \cdot I_2}}{\sqrt[6]{I_2 \cdot I_{22} \cdot I_2 \cdot I_2 \cdot I_2 \cdot I_{C2}}}$$
(1)

Conformably, the sale markets (with high coefficient ∋) are more preferable for work. Besides, it can be noticed that if in some branch there are special

Table 1: Indexes of market comparative efficacy for manufactures

Work direction on sale market	narket Expenses indexes		Effect indexes	Index mark	
Expansion of sale volume	Expenses for manufacture of				
	an additional volume of products	$I_{\scriptscriptstyle\mathcal{A}}$	Profit from sale market development	$I_B$	
Amelioration of clients service	Expenses for warehouse operations		Decrease of period for client		
	and transportation	$I_{CT}$	service like order execution time, days	$I_O$	
Goods promotion	Expenses for advertisement,		Growth of a popular trademark like a part		
	exhibitions, publicity	$I_P$	of informed potential consummators, %	$I_{\scriptscriptstyle H}$	
Product adaptation	Expenses for product revision	$I_T$	Growth of products competition,		
for market requirement			valued by integral index of competition	$I_{\scriptscriptstyle K}$	
Prices management	Expenses for price monitoring	$I_M$	Reduction of relative price		
			(company price and competitor price)	$I_{nl}$	
Sale organization	Additional sale (transaction) expenses	$I_{C6}$	Growth of products choice of organization		
			on a sale market like percentage of realized		
			goods on it	$I_{\scriptscriptstyle II}$	

Table 2: Data for calculation of an index of comparative efficacy of sale activities.

Expenses / effects indexes	Index mark	Belgorod reg.	Moscow reg.	Lipetsk reg.	Kursk reg.	Oriole reg	Rostov reg.	Tambov reg.	Krasnodar krai	Ukraine	Kazakhstan
				Expenses							
Expenses for manufacture, million rub	$I_{\scriptscriptstyle A}$	166,1	146,7	60,0	54,1	63,8	47,6	27,6	24,4	54,1	51,5
Expenses for transportation and warehouse,	$I_{cr}$	18,2	21,5	4,4	4,8	2,3	6,3	2,0	1,2	9,0	6,5
million rub											
Expenses for promotion, exhibitions,	$I_p$	10,1	17,6	2,9	3,4	1,5	1,3	1,4	1,2	4,5	3,3
publicity, million rub											
Expenses for renovation, million rub	$I_{\scriptscriptstyle T}$	2,0	2,0	2,2	1,4	3,8	3,2	0,3	0,6	2,3	0,7
Expenses for price monitoring, million rub	$I_{\scriptscriptstyle M}$	4,1	5,9	2,2	1,4	3,0	1,9	0,3	1,2	3,0	1,3
Additional sale (transaction) expenses,	$I_{\scriptscriptstyle C6}$	2,0	2,0	1,5	3,4	1,5	3,2	2,4	1,2	2,3	2,0
million rub											
				Effects							
Benefit from realization, million rub	$I_{\scriptscriptstyle B}$	211,4	201,3	85,4	72,5	79,4	66,4	34,8	28,6	75,4	67,9
Time of client service, days	$I_o$	5	6	7	7	8	8	8	9	11	14
Population of brand (organization), %	$I_{n}$	100	86	91	95	92	89	79	81	96	68
Growth of products competition	$I_{\kappa}$	0,04	0,03	0,07	0,08	0,06	0,04	0,06	0,02	0,09	0,11
Relative price	$I_{\scriptscriptstyle R}$	0,85	0,92	1,03	0,98	1,02	1,08	1,06	1,03	1,04	1,06
Organization products choice in a region, %	$I_n$	100	95	60	75	55	60	45	40	50	35

Table 3: Calculation of index of comparative efficacy after standardized indexes of effects and expenses.

Expenses / effects indexes	Index mark	Belgorod reg.	Moscow reg.	Lipetsk reg.	Kursk reg.	Oriole reg	Rostov reg.	Tambov reg.	Krasnodar krai	Ukraine	Kazakhstan
				Expenses							
Expenses for manufacture, million rub	$I_s$	1,0	0,9	0,4	0,3	0,4	0,3	0,2	0,1	0,3	0,3
Expenses for transportation and warehouse,	$I_{cr}$										
million rub		0,8	1,0	0,2	0,2	0,1	0,3	0,1	0,1	0,4	0,3
Expenses for promotion, exhibitions,	$I_{\scriptscriptstyle P}$										
publicity, million rub		0,6	1,0	0,2	0,2	0,1	0,1	0,1	0,1	0,3	0,2
Expenses for renovation, million rub	$I_{\scriptscriptstyle T}$	0,5	0,5	0,6	0,4	1,0	0,8	0,1	0,2	0,6	0,2
Expenses for price monitoring, million rub	$I_{\scriptscriptstyle M}$	0,7	1,0	0,4	0,2	0,5	0,3	0,1	0,2	0,5	0,2
Additional sale (transaction) expenses,	$I_{c6}$										
million rub		0,6	0,6	0,4	1,0	0,4	0,9	0,7	0,3	0,7	0,6
Medium indexes of expenses	$I_{\scriptscriptstyle K}$	0,69	0,80	0,32	0,33	0,31	0,34	0,13	0,13	0,44	0,27
Effects											
Benefit from realization, million rub	$I_{\scriptscriptstyle B}$	1,00	0,95	0,40	0,34	0,38	0,31	0,16	0,14	0,36	0,32
Time of client service, days	$I_o$	1,00	0,83	0,71	0,71	0,63	0,63	0,63	0,56	0,45	0,36
Population of brand (organization), %	$I_{\pi}$	1,00	0,86	0,91	0,95	0,92	0,89	0,79	0,81	0,96	0,68
Growth of products competition	$I_k$	0,36	0,27	0,64	0,73	0,55	0,36	0,55	0,18	0,82	1,00
Relative price	$I_n$	1,00	0,92	0,83	0,87	0,83	0,79	0,80	0,83	0,82	0,80
Organization products choice in a region, %	$I_n$	1	0,95	0,6	0,75	0,55	0,6	0,45	0,4	0,5	0,35
Effects index		0,84	0,74	0,66	0,69	0,61	0,56	0,50	0,39	0,61	0,53
Coefficient of comparative efficacy of											
manufacture market activities on sale market	Э	1,23	0,93	2,04	2,13	2,01	1,64	3,91	2,91	1,40	1,97

conditions which need an addition of this coefficient  $\mathfrak{I}$  with effect and expense indexes, it can be easily transformed in the numerator or denominator part. With addition of additional multiplier it is necessary to increase a power radical which in this concrete case is used for average of effect and expense indexes.

Main Part: The approbation of this methodic allows to make a conclusion that the efficacy of the inner part of manufacture market activities is not the same on different markets. Below, we will study problems and results of using this methodic on "BelACI" - organization which manufactures asbestos cement articles and realizes 78% of manufactured asbestos cement sheets and 89% of asbestos cement pipes on "receiving" sale markets.

The valuation of the comparative efficacy index (which shows how efficiently the organization invests resources into the development of its sale activity in different regions) is in the Table 2 and 3.

## **CONCLUSION**

This methodic allows us to conclude that with available sale markets "BelACI" has to work in two directions - to increase the efficacy of its commercial work on them, reducing the interaction expenses (markets in Belgorod, Moscow, Rostov, Oriol, Lipetsk, Kursk regions, Kazakhstan, Ukraine) or to continue the sale without changes and to look for more perspective markets (Kazakhstan, Ukraine, Tambov region). One of the main problems of the market interaction of this organization is a low efficacy of a sale market, so we propose to develop measures for increasing the sale activities management.

**Inference:** Studying the approaches to the valuation of manufacture sale activities we concluded that this valuation has to be built on a base of research of manufacture and sale markets cooperation principles. We proposed the methodic of the valuation of manufacture and sale markets cooperation on the base of the comparative efficacy index, which can be found on the base of calculation of additional effects and expenses indexes, which appear with executing of commercial efforts of organization on a consumptive regional market.

As one of the main problems of the concrete organization market interaction is a low efficacy of its sale markets, the measures for increasing the controllability of sale activities are necessary. To plan and to control results of manufacture and sale markets interaction we proposed to use the system of indexes of sale activities

executive efficacy. As an instrument of strategic and efficient management this system allows to connect the company business purposes with business - processes and employee official functions on the each management level. Besides, in the business oriented economy there is not enough to measure the operation efficacy with help of traditional financial economical indexes, it is necessary to value a strategic success of organization on the market and to provide a connection with it. The main stages of introduction of index system of sale activities efficacy on the manufacture are marked, also the indexes are worked out. The system can be formed from following groups of indexes: 1) indexes of common potency (medium profit for one product realized on the market; product profitability on the market; part of sales in the sale region etc.); 2) indexes of sale problem execution (execution of plan for products supply; part of transactions, part of new clients etc.); 3) indexes of interactions with clients (part of client purchase; profit from client; combined client value. The execution of planning problems and the organization of currant control for reaching those indexes allow an organization to increase the efficacy of sale activities management in manufacture.

## REFERENCES

- Ùåòèíeía, Å.Ä. Đíåòãîɔôôåêòèáíîñòü ïðääïðèyòèÿ êàê
  ñòðaòåãè÷åñêèé ðåñóðñ åãî óñòîé÷èâîãî ðàçâèòèÿ/
  Å.Ä. Ùåòèíeía, Å.Â. ×óìàêîâ // Ñîöèàëüíî-ãóìàíèòàðíûå
  çíàíèÿ. 2012. # 8. Ñ. 358-365.
- ×èæîâà, Å.Í. Ìåòïaïēïãè÷åñêèå àñïåêòû ïîâûøáièÿ

  9ôôåêòèâíîñòè ðàöèîíàëèçàöèè äåÿòåëüíîñòè

  ïðääïðèÿòèÿ / Å.Í. ×èæîâà // Âåñòíèê Áåëãîðïäñêîãî

  óíèâåðñèòåòà êîîïåðàöèè, pêîíîìèêè è ïðàâà. 2006. # 2.

  Ñ. 21-23.
- Ñòàðèêîâà, Ì.Ñ. Ïiãõîâû ê îáåñïä÷åíèþ ๑ôôåêòèáíîâî èííîâàöèîííîâî ðàçâèòèÿ êîðïîðàöèé / Ì.Ñ. Ñòàðèêîâà, Ñ.Ì. Ìèêàëóò, À.À. Đắçíè÷åíêî // Èííîâàöèîííûé Âåñòíèê Đåãèíí, 2012. # 3. Ñ. 81-86.
- 4. Blank, L. Tarquin, A. 2008. Basics of Engineering Economy. McGraw-Hill, New York, pp: 436.
- 5. Dietrich, M., (Ed.), 2007. Economics of the Firm: Analysis, Evolution, History. Routledge, pp. 236.
- Kesavan, R., C. Elanchezhian and B.V. Ramnath, 2008. Process Planning and Cost Estimation. New Age Publications, pp: 252.
- 7. Đóäû÷åâ, À.À. Îöåíêà èíâåñòèöèîííûõ ïðîåêòíâ ïî ìíîãèi êðèòåðèÿì ɔôôåêòèâíîñòè / À.À. Đóäû÷åâ, Â.À. Êàëóãèí // Èçâåñòèÿ âûñøèõ ó÷åáíûõ çàâåäåíèé. Ñòðîèòåëüñòâî. 2004. # 1. Ñ. 45-49.

- Meyer, M. 2003. Rethinking Performance Measurement - Beyond the Balanced Scorecard. eBook Cambridge University Press, New York, pp: 218.
- 9. Axson, D.A.J., 2010. Best Practices in Planning and Performance Management: Radically Rethinking Management for a Volatile World. Wiley, pp: 320, 3rd Edition.ISBN: 0470539798, 9780470539798.
- 10. Ñòàôèêîâà, Ì.Ñ. Ëîÿëuíîñòu êàê ðåçóëuòàò 9ôôåêòèâíûô âçàèìîîòíîøåíèé ïðîìûøëåííûô êîðïîðàöèé ñ ïîòðåáèòåëÿìè / Ì.Ñ. Ñòàôèêîâà, À.Â. Àíäðèáíîâà // 9êîíîìèêà. Óïðàâëåíèå. Ïðàâî. - 2012. - # 12. - Ñ. 45-48.