Features of evaluating the effectiveness of industrial enterprise marketing activities

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Abstract. Adaptation to dynamic market changes and choosing the optimal development strategy based on the results of marketing activities today become a central problem for Russian industrial enterprises. Among the factors that determine the need to improve marketing practices, the costs of managing the flow of marketing information, the time to implement marketing opportunities and confront threats, knowledge of technologies, markets, their application and updating to ensure competitiveness, etc. are of decisive importance. The object of study is industrial enterprises that implements marketing activities. The subject of the research is the industrial enterprise marketing management process. The goal is to investigate the features of evaluating the effectiveness of industrial enterprise marketing activities based on a balanced scorecard. This article discusses a package of techniques for the development and use of a balanced scorecard to assess the effectiveness of industrial enterprise marketing activities. The advantages of evaluating the effectiveness of industrial enterprise marketing management using the concept of a balanced scorecard, which are focused on the future, accuracy, resource efficiency, objectivity, usefulness and timeliness, are substantiated.

1. Introduction

Marketing is the most difficultly managed area of the enterprise. Due to the various contacts with the market (in one way or another) there are numerous points of contact and, as a result, as many requirements for control. It is advisable that marketing activities are not limited solely to solving current issues, but would include, for example, proactive analysis of customer information. Therefore, in order to meet the set requirements, control systems must be flexible and multifaceted. At least one problem looms quite clearly here: a management system that meets the requirements of an organization can be quite cumbersome and complex. Perhaps it will not be possible to put into practice, and it will create a real “dump” of data, and the decision-makers will be confused by the sheer volume of conflicting information. In this regard, the following should be noted.

Economic evaluations of the effectiveness of the industrial enterprise marketing activities should be carried out on the basis of general methodological approaches to assessing production and a generally
accepted system of indicators. Moreover, the differences can only consist in the standards used for comparison, without changing the methodology itself and the system of estimated indicators.

2. Performance measurement evaluation
Measuring effectiveness is a subject that is often discussed but rarely defined. Literally, this is the process of quantitative measurement of the performed action, where measurement is the process of determining the quantity, which, after completion of work, sets the current efficiency. Enterprises achieve their goals (that is, complete tasks), satisfying both the desires and needs of interested parties, and its own, thanks to higher return and effectiveness compared to their competitors. The terms "return" and "performance" are used in this context. Kickback indicates the degree to which the requirements of the interested parties are satisfied, and effectiveness is a criterion of how resources are used from an economic point of view to ensure a certain level of stakeholder satisfaction. This is an important difference, because it not only establishes two fundamental aspects of efficiency, but also attaches great importance to the fact that there can be both internal and external reasons for choosing a particular course of action.

Thus, the level of effectiveness achieved by marketing activities is a function of the effectiveness and impact of the actions taken. Hence the measurement of effectiveness can be called the process of quantitative determination of the effectiveness and return of the performed action. At the same time, the effectiveness criterion can be defined as a parameter used to quantify the effectiveness and return of the performed action. And the definition of the essence boundaries and component parts of one generalized criterion of effectiveness is an effectiveness indicator.

It is not easy to establish what constitutes an evaluation of the measurement of effectiveness. At one level, this system is simply a set of performance criteria that are used to quantify the effectiveness and impact of completed actions. But this definition does not take into account the fact that the support infrastructure is also covered by the evaluation of the measurement of efficiency, and this is its drawback. Data must be collected, compared, sorted, analyzed, and explained. If any data processing action is not performed, the measurement process will be incomplete, and therefore, reasonable decisions and measures will not be taken. Thus, a more complete definition is as follows: an assessment of the measurement of effectiveness ensures the adoption of informed decisions and measures, since it quantitatively determines the effectiveness and return of actions taken based on the collection, comparison, sorting, analysis and interpretation of relevant data [1]. There are seven assignments for evaluating the effectiveness (figure 1).

![Figure 1. Seven evaluation appointments.](image-url)
The indicators, whose purpose is to predict the future, evaluate the past, as well as motivate and reward staff, are located outside the organizational pyramid, since they are common both for small organizations with a less formal structure and for large, complexly organized organizations. On the contrary, indicators designed to summarize from bottom to top, cascading distribution from top to bottom, and also for comparison purposes, which become important as organizations grow and become more complex, are located within the pyramid, as they are attributes of the corporation. In addition, indicators of forecasting the future and indicators of assessing the past are located at the top of the pyramid, since such indicators serve to assess the economic efficiency and past achievements of the corporation as a whole, while the indicators of motivation and compensation are at the foot of the pyramid, as they are designed to motivate and stimulating the activities of individuals.

There are a huge number of enterprises whose performance criteria and measurement evaluations are simply hopeless. In most cases, inconsistency of performance criteria with enterprise strategies, processes and capabilities aimed at meeting the needs and desires of both parties is observed. Another common mistake is that the internal process criterion is chosen at random and not as part of a single assessment system. When something that is not to be measured is measured, or when something is measured incorrectly, then unprofessional behaviors that are completely inconsistent with the corporation's strategy are the most likely result. Evaluation of performance measurements consists of criteria that are incorrectly formulated, practically unrelated to one another, or inconsistent with organizational strategies, processes, and capabilities. Such assessments negatively affect managers and employees and do not help create value, simply because they provoke unprofessional behavior [2].

What exactly should be meant by measuring effectiveness? This question is very significant, because the language of terms in the field of measuring effectiveness is very confusing and complicates the perception of the subject. Researchers talk about key performance indicators, systems of performance indicators, critical success factors, without distinguishing between them. You can add to this list such terms as criteria for measuring the volume of production and output, results and determining factors, moving and moving, leading and lagging, etc. The bottom line is that you need to get rid of redundant terminology and concentrate on fundamental concepts.

With regard to the issues under consideration - the problem of evaluating marketing activity - there is a need to use the following principal categories:

- Performance measurement.
- Performance criterion.
- A key principle for evaluating effectiveness.
- A system of performance indicators.
- Measurement system (calculation method) of efficiency.

Organizational and economic measures allow introducing a new system for evaluating effectiveness in practice.

3. Problems of evaluating the marketing activities effectiveness

Measurement of effectiveness, as noted earlier, can be called the process of effectiveness quantitative determination and return of the performed action. Currently, heads of marketing services and marketing in general are faced with numerous problems of marketing activities effectiveness evaluating.

First, it is necessary to link together the growing demands of customers and the strategic objectives of the enterprise. Understanding and analyzing consumer behavior has traditionally been the main objectives of marketing. However, in recent years, marketers have come across a number of fundamental changes in the behavior of both private buyers and b-2-b-customers. In the industrial sphere, sellers state that the needs of their customers instantly became “international”, although earlier these suppliers were able to satisfy these needs. Other customers urgently introduced numerous reservations to the contractual conditions that suppliers must comply with. These include certification
requirements in accordance with ISO standards, as well as additional guarantees providing for the payment of a fine for non-compliance with the terms of delivery. In such cases, suppliers should also take appropriate measures in anticipation of these requirements. At the same time, a clear orientation to profit while a short-term analysis puts a lot of pressure on the strategic policy as a whole. They expect quick results from the management of the enterprise, while marketing is more likely to focus on the long-term formation of the brand identity or on a fundamental change in the image of the entire company. At the same time, it turns out all the same, thanks to which these results are obtained: this is a consequence of a short-term reduction in material and human costs or effective organization of production. In these conditions, marketing should find such opportunities that would bring current conditions and marketing objectives into line. It becomes obvious how important it is to coordinate the most diverse goals in order to understand how marketing and other activities contribute to the overall success of the enterprise [3].

Secondly, such trends as the globalization of the economy, the accelerating change in people's living conditions and their ideas about values, the inevitably changing competitive situation, require constant readiness for adaptation and adaptation.

The opening of new markets through the removal of obstacles to trade, the privatization of enterprises, the abolition of state regulation of market infrastructure and other events set the market in motion and give rise to competition. But in traditionally free markets, the balance of power is changing much faster than before. In times of crisis, production and the market are forced to adapt very quickly to changing conditions, billions are invested in developing markets, new structures are created and new property relations arise. In the once-formed markets, where everyone knows each other and has already found their “place in the sun”, there is a struggle for their own niche, accompanied by high advertising costs.

Thirdly, the problem of managing information, knowledge is becoming increasingly relevant in business. Customer knowledge is crucial when it comes to maximizing customer focus. No less important is the knowledge of production processes and products. Therefore, attempts are made to save the accumulated and processed knowledge in order to use it for decision making. When buying and selling companies, it is usually a matter of acquiring the information that the company possesses, as well as relations with customers.

The production capacities or the material assets of an enterprise are less value. Thus, the assessment of marketing management should be considered precisely from the point of view of its contribution to the “piggy bank” of enterprise experience.

Fourth, it became necessary to comply with an increasing number of regulatory standards and certification rules. For example, in the family of quality standards 180–9000 of the 1994 version, marketing requirements was presented. Thus, it was stated that the enterprise that passed the audit and received the certificate, at least, intends to focus on the needs of the client. First of all, it was emphasized that quality should be oriented to customer needs and that it is an integral part of marketing and sales activities. As a result, specific requirements for organizational processes were formulated, officially recognized by business partners as the necessary minimum. As a result, in industrial markets, the transition to standards 180-9000 has become a universal requirement. There is a need for control systems that: do not contradict each other in determining success factors; quickly adapt to the changing behavior of market participants; demonstrate and maintain a clear structure in a complex environment; correspond to the variety of tasks that currently exist; correspond to modern concepts of management [4].

In this situation, traditional assessments of measuring the marketing activities effectiveness often make high demands. Much more effective are such approaches to measuring effectiveness, which, on the one hand, have a stabilizing effect, and on the other, can be adapted to the changes that are taking place. It should be easily transformable, but at the same time capable of changing in accordance with the main business processes. And of course, marketing involves constant consideration of the initial tasks.
4. Performance indicators

Based on the understanding of the measuring effectiveness problems, we can define the second category - the effectiveness criterion. Efficiency criterion can be defined as a parameter used to qualitatively determine the effectiveness and return of the performed marketing action. In this case, the using of the need criterion is an essential methodological principle for evaluating the marketing activities effectiveness. That is, the developed system for evaluating the effectiveness should be based on use value - a product that has passed the test of social utility. A measure of the effect should not be a produced but a consumed social product, that is, a product that has gone through all stages of reproduction. This principle should be applied in evaluating performance at any hierarchical level. The difference here will be only in the essence of the formulation of specific final results, and not in the assessment methodology.

In order to quantify the effectiveness of the marketing solution implementation, it is necessary to highlight the key principle of evaluating effectiveness. In this case, we must proceed from the fact that the results of marketing activities appear from the business processes of the corporation, from its daily work. This activity generates costs, but it also generates revenues that exceed costs in the amount necessary for the products and services of the enterprise to create added value for its consumers [5].

The chain of performance evaluation allows us to draw a number of conclusions regarding the key principle of evaluating the effectiveness of marketing activities. First, the links in the efficiency chain do not resemble a typical organizational chart of an enterprise, making up three main components: organization, consumer (client), and business process. Secondly, the typical elements of the organizational chart, as a rule, are enterprises, their business units, functional units and working groups. A large number of business processes occur within various business units and functional units, and each of them serves many consumers. The chain of performance measurement poses two questions: is it necessary to allocate smaller business units in accordance with the business processes being performed than shown in the organizational chart and how should performance be evaluated in these smallest business units? Thirdly, the efficiency chain shows how the implementation of business processes generates costs, and consumers generate income, and how income and expenses are correlated at the corporate level. In this regard, the question arises of what is the relationship between the economic potential of the enterprise, the level and value of its actual use in the time interval.

The situation when enterprises attribute costs to certain consumers is sometimes called analysis of consumer profitability. The ability to compare revenues and expenses with individual consumers and business processes is one of the reasons why it is better to use an efficiency chain to assess the effectiveness of marketing activities.

The performance indicator is the definition of the boundaries, essence and component parts of one generalized performance criterion. The indicators in a compressed form represent quantitatively expressed information about the state of enterprise affairs. They allow for elementary control over processes and results.

Performance indicators have four functions:

- Transformative function - the transfer of goals to the operational level and the definition of indicators to achieve goals and results. Such a goal of the enterprise, as making a profit, is achieved due to the effectiveness of external sales services and generating income from customers.
- Stimulating function - the current accounting of indicators in order to detect unusual characteristics or changes. So, for example, a change in the indicators characterizing sales activities can be determined by the level of distribution, which, in turn, can vary depending on the proportion of goods not in stock.
- Normative function - the definition of critical values of indicators as final values of the enterprise. For example, the goal of “profitability” is achieved by achieving two sub-goals - “profitability of the enterprise” (ratio of profit to revenue) and “profitability of customers” (ratio of profit to revenue from customers).
• Control function - the current accounting of indicators in order to obtain information about discrepancies in planned and actual results. So, the deviation of the turnover indicators is the actual turnover to the planned turnover.

Thus, indicators can be called an important and effective tool for monitoring and control. They characterize all types of activities and the work of all enterprise departments. Nevertheless, it is not easy to establish what the evaluation of performance indicators consists of. This is due to the fact that the evaluation of indicators is a hierarchical pyramid of indicators, in which the main indicator located at the top depends on all the others. Data must be collected, collated, sorted, analyzed, explained. If any data processing action is not performed, the measurement process will be incomplete, and, therefore, reasonable decisions and measures will not be taken. Thus, a more complete definition is as follows: the assessment of performance indicators ensures the adoption of informed decisions and measures, since it quantitatively determines the effectiveness and impact of the actions taken based on the collection, comparison, sorting, analysis and interpretation of relevant data. In this context, activities related to the processing of information - collection, collation, sorting, analysis and interpretation - are defined as follows:

• Data collection - the process of collecting "raw" facts.
• Data matching is the process of compiling a raw or grouped data set from raw facts.
• Sorting data - the process of assigning individual facts from a data set to certain categories so that these data can be analyzed.
• Data analysis - the process of searching for specific trends in a sorted data set.
• Data interpretation is the process of explaining the meaning of trends found in a sorted data set.

Organizational and economic measures to introduce a new system for evaluating the effectiveness of practice consist in finding a balance between a centralized and decentralized business strategy. For this, it is necessary, using a balanced scorecard, to translate the strategic concept of the enterprise into the concepts of quantitative indicators of success, establish the relationship between the concept and goals of the corporation, and experimentally compare results and expectations. There must be a relationship between all five components of the efficiency chain [6].

The above allows us to draw the following conclusions. The problem of determining the effectiveness of marketing activities has the following objectives: to substantiate the effectiveness of marketing activities at the stage of development or decision making, to choose the best option; determine the final effectiveness of marketing activity after a certain period of time, based on the actually achieved results; to identify the factors affecting the indicator of marketing activity effectiveness, their interdependence, if any, the nature of their influence on the efficiency indicator, to identify reserves for increasing efficiency [7].

To determine the effectiveness of marketing activities in the enterprise, the following is necessary. First, in the process of developing a marketing plan, determine the criteria with respect to which the process will be measured in the implementation of the marketing plan (monitoring the results of marketing activities). Secondly, to determine the costs associated with marketing (preparation of cost estimates for marketing, which presents all articles of marketing costs).

Directly, the indicator of marketing effectiveness is determined by comparing the achieved effect as a result of marketing activity (which is most often, but not necessarily, expressed as profit or income) to the costs that caused this effect. That is, to determine the effectiveness of marketing activities, first you need to determine the effect (result) of the action of this activity.

The using of quantitative methods is limited for the following reasons: the complexity of the object of study, the non-linearity of marketing processes, the presence of threshold effects, for example, a minimum level of sales promotion, time lags; the effect of the marketing variables interaction, which for the most part are interdependent; the difficulty of measuring marketing problems; it is difficult to
measure the reaction of consumers to certain incentives, such as advertising, so indirect methods of assessment are often used; the instability of marketing interconnections due to changes in tastes, habits, ratings, etc., the relative incompatibility of staff involved in marketing and the use of quantitative methods in its assessment. The determination of the effect of marketing activity is, first of all, the diagnosis, and not the development of techniques, theories. In order to determine the effectiveness of marketing or any specific marketing event, it is necessary that the goal be formulated quantitatively. Terms such as "maximize", "minimize", "penetrate", "increase" are valuable if they correspond to some quantitative measure. Since this goal is formulated quantitatively, it is easy to check the level of its achievement, as well as to compile the result with the costs of this event, this is the effectiveness.

Currently, quantitative methods in marketing research are being used more often and quite a lot of models have already been developed that make it possible to determine the most important parameters of market activity.

There are several groups of quantitative methods in conducting marketing research:

- Multidimensional methods (first of all, factor and cluster analyzes). It is used to justify marketing decisions, which are based on numerous interrelated variables. For example, determining the sales volume of a new product depending on its technical level, price, advertising costs, and another element of the marketing mix.
- Regression and correlation methods. Used to establish relationships between groups of variables describing marketing activities.
- Imitation methods. It is used when variables affecting the marketing situation (for example, describing competition) are not amenable to an analytical solution.
- Methods of the statistical theory of decision making. Used to stochastically describe the reaction of consumers to changing market conditions.
- Deterministic research methods of operations (first of all, linear and nonlinear programming). These methods are used when there are many interrelated variables and you need to find the optimal solution, for example, the option of delivering the product to the consumer, providing maximum profit, through one of the possible distribution channels.
- Hybrid methods combining deterministic and probabilistic (stochastic) characteristics. It is primarily used to study distribution problems.
- Network planning models.

Estimation of the costs that caused the effect of marketing activities is usually proposed to be carried out with the use of accounting data that are used in revenue management.

5. Conclusion

The theory and methodology of modern marketing offers a fairly wide range of approaches, methods and models to describe and evaluate the marketing activities of the enterprise, taking into account those factors that are highlighted as key for each specific method and model.

At the same time, some are able to reflect not only the parameters fixing the current state of the enterprise operating in a certain market space, but also determine its dynamic characteristics, which is especially important from the point of view of developing adequate strategic decisions aimed at developing an economic entity through the formation and building up competitive advantage.

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