



# MODEL OF THE STRATEGIC ACCOUNTING OF COSTS OF THE INDUSTRIAL ENTERPRISE

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**A** *Basing on the results of the study, the article contains suggestions in the field of modeling of the strategic accounting of costs, which allows to generate information about the impact of strategic management decisions on the cost of production of the industrial enterprise in case of its functioning in conditions of market of monopoly, oligopoly and pure or monopolistic competition.*

**K** *Strategic accounting, model, modeling, costs, industrial enterprise.*

## МОДЕЛЬ СТРАТЕГИЧНОГО ОБЛІКУ ВИТРАТ ПРОМИСЛОВОГО ПІДПРИЄМСТВА

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**A** *За результатами проведеного дослідження в статті надано пропозиції в частині побудови моделі стратегічного обліку витрат, яка дозволяє сформувати інформацію щодо впливу стратегічних управлінських рішень на собівартість продукції промислового підприємства в разі його функціонування в умовах ринку монополії, олігополії та чистої або монополістичної конкуренції.*

**K** *Стратегічний облік, модель, моделювання, витрати, промислове підприємство.*

## МОДЕЛЬ СТРАТЕГИЧЕСКОГО УЧЕТА РАСХОДОВ ПРОМЫШЛЕННОГО ПРЕДПРИЯТИЯ

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**A** *По результатам проведенного исследования в статье даны предложения в части построения модели стратегического учета расходов, которая позволяет сформировать информацию о влиянии стратегических управленческих решений на себестоимость продукции промышленного предприятия в случае его функционирования в условиях рынка монополии, олигополии и чистой или монополистической конкуренции.*

**K** *Стратегический учет, модель, моделирование, расходы, промышленное предприятие.*

### Problem definition and its connection to important scientific and practical tasks

The study of specialized literature indicates active usage of method of modeling in the works of national and foreign economists. This method helps to evaluate features of the designed system, remove limitations and strengthen advantages. Hereby some investigators [2] accentuate the appropriateness of assuming this method as a basis of the strategic accounting as far as accounting considers facts of economic activity as its object and uses modeling for their registration and analysis, construction of informational flows of multiple-choice character under influence of different strategic factors in real and predictable situations. Taking this into consideration, the study of approaches to construct the models of the strategic accounting on objects of the strategic management at the industrial enterprise (including its costs) is of particular relevance.

### Analysis of recent research and publications discussing this issue, on which the author relies upon

Analysis of economic literature indicates the limited quantity of works which are devoted to solving this question. Most of economists, among which should be mentioned Babkina O. [1], Tokmakova O. [7], Sokolova A. [6] and Manyeva V. [5], give recommendations only in the part of methodology of the strategic accounting of costs of the enterprise. In its turn, the attention to the development of the model of the strategic accounting of costs (on the example of enterprises of energy sector) was paid only in the work of Fil O. [8].

### Unsolved aspects of the problem, which are the subject matter of the paper

Taking into consideration the value of the results, which were obtained by mentioned scientists, there are a number of issues that require further clarification.

In particular, there is a complete lack of approaches to solving the problem of modeling of the strategic accounting of costs of industrial enterprise in case of its functioning in conditions of different situations at the market (monopoly, oligopoly and monopolistic or pure competition).

### **Formulation of the objectives of the manuscript**

The purpose of the article is to develop a model of the strategic accounting of costs of industrial enterprise which will allow making grounded strategic managerial decisions in any market situations.

### **Presentation of the basic material with full justification of scientific results**

Investigation of economic literature helped to figure out next blocs of the model of the strategic accounting of costs:

- “integrated accounting”, which generalize such two concepts of cost management as venture management (cost reduction, strategy of diversification) and mechanisms of self-organization (system of controlling, system of heuristic methods);
- “innovative accounting”, which includes innovative environment, innovative processes and innovative functions;
- and “synergetic effect”, which contains reorganization, diversification and outsourcing processes [8].

In the author’s point of view, singling out these issues is a little bit debatable because of orientation of this approach to construction of the model of the strategic accounting of costs only at internal environment of industrial enterprise. It leads to deprivation of management of possibility to get the adequate strategic information about the influence of its decisions on the production cost. That is why the author recommends assuming the market situation as a basis of singling out of blocs of this model of the strategic accounting. In particular, models of such market situations as:

- pure monopoly, that means that the enterprise is the only one producer and seller of exclusive goods which has absolute control under its price and blocks the appearance of new sellers at the market;
- oligopoly, that means that there is a domination of a small quantity of competitive enterprises at the market which produce different products, have a limited control of its price and prevent the appearance of new sellers at the market;
- monopolistic competition, that stipulates the existence of a rather large number of small producers which propose similar, but not identical product, have a slight influence at its price and practically

do not prevent the appearance of new sellers at the market;

- pure competition, that means that there is a huge number of enterprises which produce standardized product, do not control its price and absolutely do not prevent the appearance of new sellers at the market.

In its turn, the following units, that define the structure of the model, are singled out in the economic literature:

- principles (system approach to cost management, methodological unity of cost management, cost management at all stages of life cycle of the product, optimal combination of cost reduction and quality improvements, search for effective methods and tools to reduce costs, improving the information base in managing costs, increasing the interest of responsibility centers in reducing costs);
- methods (standardization, automation of production processes);
- mechanisms (technique based on the 30’s accounts, the system of production balance sheets);
- fields of management (activities, centers of responsibility, segments);
- result (actual costs, financial performance, accounting and control points) [8].

In the author’s point of view the nature of these positions is somewhat general. In its turn, it does not allow to create a rational model of the strategic accounting of costs at national industrial enterprises. Taking this into consideration, the author recommends singling out next units, which will define the structure of this model:

- principles,
- strategy,
- type of the organizational structure,
- concept of business process management,
- tools of the strategic accounting,
- forms of the strategic reporting,
- users of the information, which was obtained with the help of tools of the strategic accounting.

Let’s consider each of the singled out units of the model in more detail. First of all, it should be mentioned that principles of modeling of the strategic accounting of costs, which were singled out in economic literature [8], are likely to highlight features of effective methodology of the strategic accounting of costs of industrial enterprises, but not its model. That is why the author recommends assuming general principles of the system of econometric modeling, which are singled out in the economic literature [9], as the basis of its construction.

These principles are:

- sufficiency of the used information,

- invariance of the used information,
- informational correctness,
- effectiveness of implementation,
- efficiency of the model structure.

Strategy is the next unit of the model of the strategic accounting of costs. It determines the nature of information, which is needed by management, in order to make strategic management decisions, and therefore – it influences the further choice of all other units of the model. The author proposes to use strategies which were singled out by Porter M. [10] in order to construct the model of the strategic accounting of costs. In particular, the strategy of:

- cost reduction, which provides the internal competitive advantage through the usage of organizational and production know-how of the enterprise in order to reduce costs and gain leadership on this indicator in the certain field;
- differentiation, in which competitiveness of the enterprise is ensured by targeting its activities on the provision of greater benefit to consumers (except low prices) by offering products of high quality with a high level of support services on the high prices, which are justified;
- focusing, that is based on the selection of one of the segments of the market and achieving there the absolute competitive advantage through the implementation of one of the two strategies, which are mentioned above.

The author proposes to single out the type of organizational structure of management of the enterprise as the next unit of the model of the strategic accounting of costs. It affects the efficiency of the strategy of industrial enterprises by creating favorable conditions for the process of decision-making. In particular, the author proposes assuming next types of organizational structures of management as the basis of modeling of the strategic accounting of costs of the industrial enterprise:

- functional, that is intended to fulfilling of continuously repetitive routine tasks that do not require rapid decision-making;
- linear-functional, that provides the fulfillment of those standard managerial tasks, which implementation requires deepening of the specialization of managerial functions;
- project-matrix, the use of which provides the fulfillment of those tasks that require operational decision-making in case of appearance of problem situations in conditions of a high level of uncertainty;
- mixed, which provides solving of those tasks, that require operational management decision-making and allows to adapt the strategy to the needs of every market.

In its turn, types of organizational structure, mentioned above, influence on the choice of concepts of management of business-processes of the enterprise. That is why the author singled it out as the next unit of the model of the strategic accounting of costs of industrial enterprise. In particular, it is reasonable to single out such concepts in frames of this model as:

- business process management, that is based on the definition of business processes and on the technology of their managing;
- business process reengineering, that provides optimization of business-processes of the enterprise by such criterion as time, people and quality;
- business process improvement, that provides permanent improvement of business-processes of enterprise without changing of its configuration;
- business reengineering, that means fundamental reconsideration and radical restructuring of business processes for achieving of sharp change in such decisive modern indicators of activity of the enterprise as value, quality, service and rates;
- x-engineering, that helps to provide flexibility and timeliness of reaction of the enterprise by changing configurations of its business-processes through outsourcing, removal of non-core business, creating of affiliates.

The choice of tools of the strategic accounting depends on the chosen concept of management of business-processes. That is why the author proposes to single it out as the next unit of the model of the strategic accounting of costs of the industrial enterprise. In particular, next tools must be singled out:

- life cycle cost calculation, which helps to figure out the size of costs of production and other phases of life cycle of the product, ways of their reduction and to value its profitability more accurately;
- value chain calculation, that with the help of calculation and analyses of costs on every phase of the value chain allows to evaluate and coordinate the cost management on every phase in order to figure out ways of greater satisfaction of consumers, minimizing costs and rising the efficiency of activity;
- JIT-calculation, provides competitiveness of the enterprise by minimizing costs of those operations that do not add value to the product;
- AB-costing, that considers activities as main objects of accounting of costs and calculation in order to calculate the production costs and to figure out the effectiveness of business processes;
- kaizen-costing, that is focused at the reducing of costs on the production phase of full life cycle of the product;

- target-costing, that supports the strategy of reducing of costs and realize functions of planning of production of new products, preventive control of costs and calculating of goal calculation in concordance with the market;
- calculation based on the quality, that helps to formulate selective information about costs connected with providing of quality of production in order to control them and to make further regulation.

The author recommends singling out forms of the strategic reporting as the next unit of the model of the strategic accounting of costs of industrial enterprise. These forms are intended to accumulate the strategic information which is collected with the help of mentioned above tools. In particular, the information for those users, who

does not have the right to participate in the strategic management of the enterprise, must be summed up in the form “Strategic report”. The content of this form was approved by the Financial Reporting Council of Great Britain in 2013 [11]. In its turn, the information for those users, who has he right to participate in the strategic management of the enterprise must be summed up in the form “Strategic report on business processes of the company (innovative, investment, operational, after sales service)”. This report will contain more detailed information about the influence of the proposed strategy on the production costs of the industrial enterprise.

The model of the strategic accounting, which was constructed by the author, is presented in table 1. It includes all units which are mentioned above.

**THE MODEL OF THE STRATEGIC ACCOUNTING OF COSTS OF INDUSTRIAL ENTERPRISE DEPENDING ON THE MARKET’S MODEL**

Table 1

COMPONENT OF THE MODEL / MODEL OF MARKET	PURE MONOPOLY	OLIGOPOLY	MONOPOLY COMPETITION	PURE COMPETITION
principles	sufficiency of the used information, invariance of the used information, informational correctness, effectiveness of implementation, efficiency of the model structure			
strategy	reduction of costs		differentiation	focalization
type of the organizational structure of management	functional	linear-functional	project-matrix	mixed (regional, divisional)
concept of business process management	BPM	BPR BPI	BR	XE
tools of the strategic accounting	life cycle cost calculation, value chain calculation	AB-costing, JIT-calculation	kaizen-costing, target-costing	kaizen-costing, target-costing, calculation based on the quality
forms of the strategic reporting for those users, who does not have the right to participate in the strategic management	Strategic report			
forms of the strategic reporting for those users, who has the right to participate in the strategic management	Strategic report on business processes of the company (innovative, investment, operational, after sales service)			

**Findings of this study and recommendations for further research in this area**

Thus, basing on the results of the study, the author developed a model of the strategic accounting of costs of the industrial enterprise. The usage of this model will help to generate accurate and complete strategic information about the impact of strategic management decisions on production costs of the industrial

enterprise in case of it’s functioning in conditions of such markets as monopoly, oligopoly, pure competition or monopolistic competition. Above all, the practical usage of these propositions will greatly facilitate the process of implementing of the strategic accounting into the practice and ensure its rationality. This will facilitate prudence and validity of the strategic decisions of management of national industrial enterprises.

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