INTRODUCTION

Scientific justification of cost accounting refers to the second half of the XIX century and is associated with the publication in 1887 of the theoretical work of the British John Mother Felsy and Emil Garke "Production accounts: principles and practice of their conduct." At this stage, the costs were considered by the so-called "boiler method". However, it had a number of drawbacks, such as not showing the structure of the costs themselves, so it was not possible to make decisions about reducing costs, and in which parts of the production cycle they can be reduced. The innovation of Felsy and Gore was to increase the informativeness of the data and their control function - it is the maintenance of registers with a record of all costs, and their division into fixed (constant) and variable. It was assumed that the increase in production is possible at the expense of less resources. Knowing in advance the amount of fixed costs, you can calculate only variable costs. This simplified cost accounting.

American E.L. Kohler (1892-1976), argued that the basis of accounting is directly cost accounting. And only in the twentieth century came the understanding of the need for accurate cost accounting in order to know how much it costs to produce certain products. Creator of management Church (1866-1936), the Ganges (1909) - based approaches for determining the composition of the costs, Nicholson and Rohrbach (1911) - created the classical methods of calculation the cost of production, which were based on the objectives of the control (standard-cost, direct-costing, risible center).

RESEARCH METHODS

For the purposes of the study, the following methods were used: methods of analysis of financial statements: horizontal, vertical, ratio, comparison, and others. To study the foreign experience of calculating the cost of production (works, services), General scientific and special research methods were used: review of the regulatory framework; analytical method; economic and mathematical calculations.

RESULTS AND DISCUSSION

In world practice, cost information is widely used in the methodology of management accounting, planning, efficiency evaluation and cost optimization, while its impact on revenue from sales. Information about costs abroad forms not only the cost, but also affects the reliability of the formation of income not only from the volume of sales, but per unit of production, services or works. American scientist Bob Ryan stated that "Enterprises can always be in an unstable state, from which it is possible to get out only at the expense of higher efficiency and lower costs" (RYAN, 1998).

CH. T. Horngren and J. Foster noted that "management accounting is the identification, measurement, collection, systematization, decomposition, interpretation and transmission of information necessary for the management of any objects. The synonym is internal accounting (internal)" (HORNGREN, 2000, p. 8). Similar opinions among foreign scientists have B. Needles, H. Andersen, D. Caldwell (NEEDLES, 1994, p. 424), R. Anthony (1993, p. 269), etc.
Ward Keith believes that “the management accounting system should be built in such a way as to provide the organization with financial information that meets these specific conditions for strategic decision-making, and the conditions themselves change as the strategy is adjusted in connection with changes in the external environment” (WARD, 2002, p. 18). An important point in the development of the methodology of accounting for production costs abroad was the exact proof of CH. Horngren and R. Anthony of the principle of different costs for different purposes (HORNGREN, 2007, p. 17). The key point is that many firms use three types of cost information for their calculations:

- allocation and control of the responsible heads of departments use data about the costs of responsibility centers;
- as part of pricing and the adoption of other management decisions in specific circumstances use data on reduced production cost;
- as part of pricing and the adoption of other management decisions in specific circumstances use data on reduced production cost.

Qualified management of logistics costs contributes to the growth of efficiency of companies and improve its competitiveness. To do this, logistics management needs to study the methods of cost accounting, and methods of calculating the cost of products, services and the use of cost information should begin with methods of their classification (HIGASHIKAWA, 2014, p. 119). It is important for an enterprise to be able to manage its costs in order to influence the cost price, i.e., it needs reliable information about the cost structure. Such information is formed in the system of management accounting.

**Figure 1.** The technology of formation of the total cost is stated.

![Flowchart](source)

In General, there are two costs: individual and industry average. The individual cost price shows the presence of the costs of a particular enterprise for the production of products; the average industry - shows the average industry costs for the production of a particular product.

Product cost components consist of:

\[
\text{Direct labor costs} + \text{materials} + \text{manufacturing overheads} = \text{Production cost} + \text{Sales costs} + \text{Administrative costs} = \text{Total cost}. \quad (1)
\]

When calculating, it is important to correctly set the objects of cost accounting and product costing. The objects of cost accounting are those objects for which the company organizes
analytical accounting of production costs. The objects of calculation are those types of products, works and services that the company calculates. According to K. Drury, "to manage costs and to measure performance, the exact distribution of costs by product is not necessary, since the production of products can consist of several different operations, each of which is performed by different employees." He also notes that "responsibility accounting is designed to measure the results of each responsibility center. To do this, data on costs and profits are summarized for each individual responsibility center, and in the event of deviations from the set targets (usually estimated), it is easy to establish a specific person who is responsible for this (DRURY, 2012, p. 40-41).

Responsibility centers and units of production are the two main elements of the object of accounting in the accounting system. In this situation, the register of objects of cost accounting may contain: points of occurrence of costs, responsibility centers, cost items, causes and factors of production activities, types or groups of homogeneous products (NAZAROVA et al, 2016a). Factors of production activity are types of resources: means of labor, objects of labor, labor, as well as the costs of organization and maintenance of production, management costs. The division of costs by production factors reveals the relationship between the individual elements involved in production and provides control over the correct distribution and rationality of resource use.

The choice of the object of cost accounting depends on the characteristics of the production technology, the type of organization of production, the structure of enterprise management, technical parameters of the produced products, the degree of development of internal self-supporting relations, etc. The object of calculation in the order method is a production order for a single item or a certain number of items, works or services. The actual cost of the calculation unit of production or works are calculated by dividing the amount of costs by the number of manufactured products or work performed. The unit cost is defined as the result of dividing the cost amount accumulated on an individual order by the number of units produced on that order. Therefore, the principal feature of the order method is the formation of the volume of costs for each completed order, and not for a period of time. Thus, the logical completion of the accounting process by the order method is to obtain information about the financial result of the implementation of each specific order. Figure 2. A General view of the scheme of this method is presented.

**Figure 2. Scheme of the order method**

Base material
Processing costs
→ Product 1 →
→ Product 2 → Assembly → Order
→ Product n →

**Source:** Search data.

Let us demonstrate the order method by example. An order is received for the installation unit, which consists of three types of components-parts 1, 2, 3. After completing the final form of the order becomes only after two process operations - Assembly and testing. We accept the condition that, according to the accounting policy of the enterprise, indirect General economic costs are not included in the cost of products. In summary, the indirect cost distribution is schematically displayed as follows:

- the object for which the costs are planned is selected (product, or their group, the point of formation of costs);
- the cost allocation base is chosen, i.e. the type of indicator used for cost planning;
- by dividing the value of the distributed indirect costs by the indicator of the selected base, the coefficient (rate) of the distribution is calculated;
- the values that fall on each object of indirect costs are set by multiplying the calculated cost distribution coefficient by the corresponding value of the distribution base.
Table 1 - Calculation of the cost of the order

<table>
<thead>
<tr>
<th>Calculation sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component costs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>Unit cost</th>
<th>Number of units</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detail 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detail 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detail 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Processing costs</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Operation</th>
<th>Cost item</th>
<th>Cost</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operation 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operation 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Overhead</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Article</td>
<td>Cost</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note - Compiled by the author
Source: Search data.

Suppose that the Bank charges is 39250 c.u. the wages of production workers and 40 000 c.u. Distribution rate, therefore, will be:

\[
\text{Distribution rate} = \frac{\text{Overhead}}{\text{Wages of the main production workers}} = \frac{39,250}{40,000} = 0,9812
\]

(1)

On the basis of this distribution rate, general production costs are charged for specific types of products. Let the direct cost per unit for an item be:

- basic raw materials - 400 c.u.;
- wages of the main production workers - 800 c.u.

Then the overhead allocated to this item will be:

\[
\text{Wages of the main production workers} \times \text{Distribution rate} = 800 \times 0,9812 \approx 785 \text{ c.u.}
\]

(2)

Thus, the production cost per unit of product A (as the sum of direct and overhead costs) will be equal to:

\[
400 + 800 + 785 = 1985 \text{ c.u.}
\]

In this example, a simple, single-stage distribution is presented.

Process method of cost accounting. This method is the most widespread. It is applied at all enterprises where production is received by processing of initial raw materials at separate stages of technological process. Usually in the complex article "semi-Finished products of own production" reflects the calculation of the initial cost of semi-finished products of subsequent shops or redistribution costs in fact on the production of semi-finished products of previous shops (processing). The advantages of the semi-finished method of accounting are contained in the following items:
- the presence of accounting data on the initial cost of semi-finished products at the exit of each redistribution. These data are necessary for the creation of prices in the sale of semi-finished products outside the enterprise;
- the reality of taking into account work in progress at points of accumulation;
- control the promotion of semi-finished products of own production;
- calculation of the results of specific self-supporting units.

It should be noted that in the initial cost of the finished product, a significant weight is gained by the article "cost Of semi-finished products of own production", divided in the analysis of the cost structure into single component parts. This is the negative side of the semi-finished method of accounting. Semi-finished method of calculating the cost is applicable only with respect to the finished product which has passed all the technological stages. Main requirement: released in the same plant is completely prefabricated for subsequent processing in the further-reaching shop. At the same time, the calculation and display of the cost of semi-finished products of own production on the accounts of accounting when they are transferred from the shop to the shop is not provided. It is required that in the system of operational accounting movement of semi-finished products was expressed only in quantitative or natural form. Cost accounting is carried out both within the shops and in the whole enterprise, but only their own costs are shown in the costs of the shop units.

The negative side of process method of cost accounting is that the cost of production in fact is calculated after the execution of the order or at the end of the reporting period, and it does not allow the management of both the enterprise and shop units to track during the reporting period for the proportionality of the actual production costs of the planned costs. In addition, with this method of accounting, the unit cost in fact and the cost of the entire issue is compared with the indicators according to the plan, where the cost rates are calculated as the average for the entire planned period, and therefore not always clearly reflected the real figures of production costs.

Such negative sides are removed by means of the standard method, where the unit cost of production in fact and the cost of the entire issue is compared with the standard cost. Standard cost differs from the planned cost, in that it is calculated on the basis of the technological process of production in force for the reporting period, as well as progressive rates of material, labor and other costs. The difficulty with process method of cost accounting of calculation is contained in the valuation of work in progress, as the value of WIP should include the total costs ending value in respect of the products which passed the stages are not full production cycle. Reflections of operations cost accounting in the case of using process method shown in Fig. 3.

**Figure 3.** Diagram of cost accounting when using semi-finished m

<table>
<thead>
<tr>
<th>Debit</th>
<th>Main production</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department 1 - storage 800 000</td>
<td>Costs of finished products 800 000</td>
<td>→ 800 000</td>
</tr>
<tr>
<td>Department 2 - mechanical 600 000</td>
<td>Costs of finished products 600 000</td>
<td>→ 600 000</td>
</tr>
<tr>
<td>Department 3 - assembly 400 000</td>
<td>Costs of finished products 400 000</td>
<td>→ 400 000</td>
</tr>
<tr>
<td><strong>Total:</strong> 1 800 000</td>
<td><strong>Total:</strong> 1800000</td>
<td><strong>Total:</strong> 1800000</td>
</tr>
</tbody>
</table>

**Source:** Search data.

*Process calculation method.* The system of process costing is used in those industries where mass or mass produce monotonous or approximately the same products, or there is a continuous production cycle. Pro-process costing is also used by those enterprises, the
technology of which provides for the implementation of each production unit of a separate part of the production stage, called the process as a result, the output is both an object of cost accounting and an object of calculation. The initial cost of a unit of output is calculated as the division of the amount of expenses for the reporting period by the amount of output for the same period. Thus, it can be argued that the system of process calculation operates in those industries where finished products are more or less the same. In other words, the order cost is assumed to be equal to the average cost of all items produced during the period. An enterprise similar to the coal industry can use a simple calculation method.

The unit cost is calculated by the formula.

\[
U_{co} = \frac{C}{N},
\]

where

- \( U_{co} \) - unit cost, KZT;
- \( C \) - total costs for the reporting period, KZT;
- \( N \) - number of products produced during the reporting period in kind (pieces, tons, meters, etc.).

At the same time, two principles are necessarily observed:

1) one type of production is made;
2) there are no stocks of semi-finished products.

For clarity, we give an example. The company produced and sold 5 thousand units of products. Costs for a certain period of time amounted to 2 million tenge. The unit cost of the item is

\[
\frac{2 000 000}{5000} = 400 \text{ tenge.}
\]

In practice, three variants of the process method of cost accounting are used: sequential, parallel and separate.

Sequential option - the cost of the finished product is transferred to the account of "Finished products" from the last shop, i.e. incomplete production is brought to the final product of the enterprise.

Parallel accounting - is designed to produce a single product or a group of homogeneous products.

The separate method - provides that the technology of production of homogeneous products has different processing processes. The normative method is used in the manufacturing industry, in enterprises with mass and serial production of a wide and complex range of products. The objectives of the regulatory method are:

- timely prevention of irrational expenditure of material, labor and financial resources in the economy;
- assist with the identification of existing production and reserves and the results of internal cost accounting.

The method is based on the technically sound calculated values of the cost of working time, material and monetary resources per unit of production, works and services. The effectiveness of the standard cost accounting system is expressed in an accurate analysis of the deviation. For example, the variances for each responsibility centre to identify the cost components (materials, labor, taxes, overhead) (fig. 4).
Effective control is achieved only by comparing the total costs in fact with the standard costs for the period for all responsibility centers, but such a comparison still cannot reveal at what level of production certain deviations were made. The analysis of shifts in unit production costs is not suitable for effective cost control. The advantage of the normative method of accounting in its efficiency. The standard cost of production is calculated before the start of its production. Actual cost - at the end of production. There are two algorithms for calculating the actual cost. The first way

...to consider the actual cost price as the standard cost price adjusted for deviation from norms and for change of norms (plus or minus). It was stated above that, cost accounting is carried out according to the specified norms, shifts of the actual costs from standard are defined separately. Calculation of the cost of regulatory costs can be used for planning, management, motivation and decision-making without entering into accounting documentation (NAZAROVA, 2016b, p.508).

Thus, it can be argued that the system of process calculation operates in those industries where finished products are more or less the same. In other words, the order cost is assumed to be equal to the average cost of all items produced during the period. Process costing is shown in the figure 5.

**Figure 4.** Scheme of operation of the system of normative cost accounting

- Rates of expenditure on the actual value of output for each responsibility centre
- Actual costs, for each responsibility centre
- Cost comparison of norms and, in fact, and analysis of changes
- The study of the shifts, the causes of their appearance
- Modification of standards taking into account the changed conditions of functioning of the enterprise

**Source:** Search data.

**Figure 5.** Process cost calculation

**Source:** Search data.
An enterprise similar to the coal industry can use a simple calculation method. The unit cost is calculated by the formula

\[ U_{\text{co}} = \frac{C}{N}, \]  

(4)

where \( U_{\text{co}} \) - unit cost, KZT;
\( C \) - total costs for the reporting period, KZT;
\( N \) - number of products produced during the reporting period in kind (pieces, tons, meters, etc.).

At the same time, two principles are necessarily observed:
1) one type of product is produced;
2) there are no stocks of semi-finished products.

For clarity, we give an example. The company produced and sold 5 thousand units of products. Costs for a certain period of time amounted to 2 million tenge. The unit cost of the item is

\[ \frac{2\,000\,000}{5000} = 400 \text{ c.u.} \]

In practice, three variants of the process method of cost accounting are used: sequential, parallel and separate.

**Sequential option** - the cost of the finished product is transferred to the account of "Finished products" from the last shop, i.e. work in progress is brought to the final product of the enterprise.

**Parallel accounting** is designed to produce a single product or a group of homogeneous products. The **separate method** provides that the technology of production of homogeneous products has different processing processes. The normative method is used in the manufacturing industry, in enterprises with mass and serial production of a wide and complex range of products. The objectives of the regulatory method are:

- timely prevention of irrational expenditure of material, labor and financial resources in the economy;
- assist with the identification of existing production and reserves and the results of internal cost accounting.

The method is based on the technically sound calculated values of the cost of working time, material and monetary resources per unit of production, works and services. The effectiveness of the standard cost accounting system is expressed in an accurate analysis of the deviation. For example, the variances for each responsibility centre to identify the cost components (materials, labor, taxes, overhead) (fig. 6).
Effective control is achieved only by comparing the total costs in fact with the standard costs for the period for all responsibility centers, but such a comparison still cannot reveal at what level of production certain deviations were made. Analysis of shifts in unit production costs is not suitable for effective cost control. The advantage of the normative method of accounting in its efficiency. The standard cost of production is calculated before the start of its production. Actual cost - at the end of production.

There are two algorithms for calculating the actual cost. The first way is to consider the actual cost price as the standard cost, adjusted for deviation from the norms and for changes in norms (plus or minus). And the second, as mentioned above, cost accounting is carried out according to the specified norms, shifts in actual costs from regulatory ones are determined separately. International practice knows different methods of calculating the cost of production, but at the same time they are all United by the task of controlling and regulating production costs. Many costs are not entirely under the control of the individual contractor. The question is not who controls the costs, but who is in the best position to influence the level of costs or manage costs. Below are the cost items and their division into regulated and unregulated (table 2).

### Table 2. Cost items and their division

<table>
<thead>
<tr>
<th>Debit</th>
<th>Finished product</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accepted from process «С»</td>
<td>1413038</td>
<td></td>
</tr>
</tbody>
</table>

Source: Search data.
<table>
<thead>
<tr>
<th>Expenditures</th>
<th>Executor</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>The cost of raw materials used for production</td>
<td>Product Controller</td>
<td>Adjustable (by quantity)</td>
</tr>
<tr>
<td>Paper costs in printing</td>
<td>Workshop foreman</td>
<td>Adjustable (by quantity)</td>
</tr>
<tr>
<td>Advertising costs of a travel company</td>
<td>Tourist company administrator</td>
<td>Unregulated</td>
</tr>
<tr>
<td>Costs for accounting and data processing for a trading company</td>
<td>Trading company administrator</td>
<td>Unregulated</td>
</tr>
</tbody>
</table>

**Source:** Search data.

For example, the shop unit for the production of products made overspending of material resources. There is a question of cost control for the head of the shop level. Answer is ambiguous:

- in the case where the overspend was due to a violation in the shop technological organization or labor order, these costs can be controlled;

- in a situation where there is a low quality of purchased material resources, non-productive costs cannot be controlled and regulated by the head of the shop unit and the responsibility should be borne by the head of the supply Department.

Discussions arise in connection with such costs as additional wages for the time of training, vacation, downtime, payment for overtime. These costs are usually classified as indirect. Opportunity costs are the costs of unused opportunities. They mean lost profits when the choice of one action precludes the appearance of another action. Alternative costs arise in many cases when making decisions in business. For example, the company - manufacturer of sports bags received an order for the manufacture of suitcases. If the company accepts this order, it will not have enough production capacity (machine and working time) to produce the usual number of sports bags for the whole chain of stores selling sports goods. The opportunity cost of accepting this order is a lost profit from the production of sports bags, which cannot be realized. This loss of profit can be calculated as the potential income from the sale of sports bags minus the cost of their production.

Analyzing the definition of accounting of production costs from the standpoint of completeness of cost allocation in the cost of production (works, services) it is necessary to draw a system of full cost allocation in the original cost of production and the system of incomplete, limited cost allocation in the cost (SATAEV, 2013, p. 93). It is generally accepted for accounting in domestic conditions is the calculation of the total cost. Accounting for the full cost contains all the costs of the enterprise, regardless of their division into direct and indirect, fixed and variable, and which relate to the production and sale of products. Costs that can not be directly attributed to the products are distributed first to the responsibility centers and then included in the cost of production according to the chosen distribution base.

Direct costs of material resources; direct labor costs are the direct costs attributed directly to the corresponding object of accounting. Direct costs of material resources contain the cost of basic materials in fact, which are spent on production.

When calculating the total cost of production, it is necessary to take into account indirect costs, in this situation, these are overhead costs. Overhead costs are accumulated on different accounts during the reporting period, but at the end of the reporting period, they must be included in the cost of a certain type of product according to the selected distribution base. Wages of the main workers in production, the result of direct costs are the basis of distribution.

The Manager can on the basis of the total cost to summarize and conclusions about the profitability and unprofitability of products, the rationality of production of these products in the future. Write-off of materials to cost accounts is carried out on the basis of an expense document. The total actual material consumption for the reporting period (the first element of direct costs) is determined by the formula:
\[ C_a = B_{br} + C - R - B_{er}, \text{ where}\]

- \( C_a \) - actual material consumption for the reporting period, KZT;
- \( B_{br} \) - balance of material at the beginning of the reporting period, KZT;
- \( B_{er} \) - the balance of the material at the end of the reporting period, determined by the inventory, KZT;
- \( C \) - documented receipt of material during the reporting period, KZT;
- \( R \) - internal movement of material during the reporting period (return of material to the warehouse, transfer to other shops, etc.), KZT.

The actual cost of each product is calculated by means of its distribution in proportion to the standard cost. Wages of the main workers employed in production with the corresponding charges on it is the second component of direct costs. According to G. K. Omarkulova, the application of the system “direct costing in the enterprise will improve the organization of cost accounting and costing, increase the efficiency of economic analysis, and the efficiency of the enterprise in a market economy [OMURKULOVA, 2013, p. 86].

In the calculation of “truncated” (shortened) cost not a part of the costs of periods and constant overhead costs. Such costs are fully included in the cost of products sold the total amount is not divided into types of products and at the end of the period of the report are written off directly to reduce revenue from sales. The basic rule that underlies the definition of “direct costing” - accounting for variable and fixed costs separately and recognition of fixed costs as losses of the reporting period. The name of the system varies from country to country. In Germany and Austria, the term “accounting for partial costs” or coverage amounts is used; in the United Kingdom, “margin cost accounting”; in France, “margin accounting”.

The essence of management technology "direct costing" is based on the method of calculating production costs and profit calculation by linking the volume of production with costs and revenues. For this purpose (to a sufficient extent conditionally) divide the total costs into variables that are identified with direct and constant, which are identified with indirect (SATUBALDIN, 1980). Differentiation of production costs allows you to determine the dependence of the volume of profit on the volume of sales and on this basis to manage the cost. Technology cost calculation for definitive “direct costing” assumes constant fixed costs at any value of output.

Consequently, this system provides for a number of assumptions: the calculation of the cost price by the definition of “direct costing” assumes a constant cost at any value of output, so the focus in management accounting is on fixed costs. Managers of all levels must ensure control over them. The definition of “direct costing” has several characteristics:

- division of production costs into variables (direct) and fixed;
- calculation of production costs at limited costs;
- multistage preparation of the income statement.

The definition of “direct costing” is aimed at implementation: the greater the value of sales, the more profit the company takes. The company is in search of increasing the value of sales, as finished products and work in progress is estimated only by variable (direct) costs. The profit formation is shown in table 3.

<table>
<thead>
<tr>
<th>№ p/p</th>
<th>The name of indicators</th>
<th>Value of indicators, in tenge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Revenues from sales (B)</td>
<td>( R = 500 )</td>
</tr>
<tr>
<td>2</td>
<td>Variable costs (VC)</td>
<td>( VC = 300 )</td>
</tr>
<tr>
<td>3</td>
<td>Margin approach</td>
<td>( V = R - VC = 200 )</td>
</tr>
<tr>
<td>4</td>
<td>Fixed costs (FC)</td>
<td>( FC = 100 )</td>
</tr>
<tr>
<td>5</td>
<td>Profit</td>
<td>( P = V - FC = 100 )</td>
</tr>
</tbody>
</table>

Source: Search data.
Note - Compiled by the author
At the root of the multi-stage preparation of the income statement is the marginal income statement. The gap between the revenue from the sale of products and its partial cost, calculated on variable costs is called marginal income. Profit and fixed costs of the company are included in the margin income. Fixed costs are deducted from the margin income and thus the operating profit indicator is formed. The approximate profit and loss statement for the «direct-costing» system is presented in table 4.

**Table 4.** Statement of profit and loss account drawn up according to the method of marginal income

<table>
<thead>
<tr>
<th>№ p/p</th>
<th>Indicator</th>
<th>Amount, tenge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Volume of products sold</td>
<td>2850</td>
</tr>
<tr>
<td>2</td>
<td>Variable costs</td>
<td>1650</td>
</tr>
<tr>
<td>3</td>
<td>Marginal income (p.1p-p.2)</td>
<td>1200</td>
</tr>
<tr>
<td>4</td>
<td>Fixed costs</td>
<td>685</td>
</tr>
<tr>
<td>5</td>
<td>Net income (or loss)</td>
<td>515</td>
</tr>
</tbody>
</table>

**Source:** Search data.

Note - Compiled by the author

In the report shown there are two levels: the upper - marginal income; the lower - net income, which are filled in with a step accounting technology. The link between the calculation and the break-even analysis of production is a significant moment of calculating the cost of production at variable costs, which creates and generates data to calculate the best proportion of costs and profits. Costing on variable costs has a significant impact on the level of product prices, stimulating the productivity of different business segments. Standard direct costing - a system to achieve the ultimate goal of the enterprise - net profit. Pros and cons of the definition of "direct costing".

**Pros:**

- the lack of need in the conditional distribution of the fixed costs, ie the presence of the simplicity and reality of calculation of the partial costs;
- ability to compare the cost of different periods for variable costs, absolute and relative margins;
- identify products with greater profitability for the expansion of their release;
- ability to control changes in profit due to changes in variable costs, sales prices and product structure;
- the creation of conditions for operative control of the magnitude of permanent costs, as when accounting for the full cost of part of Unallocated overhead costs transferred from one period to another, and therefore the control over them weakens;
- the expansion of analytical possibilities of accounting as the process of closer integration of accounting and analysis;
- using the principles of the direct costing system in combination with other management accounting systems.

**Cons:**

- difficulties in dividing costs into fixed and variable, which will affect the outcome;
- the need of many companies in the presence of information about the total cost, mainly to calculate the price of the product, due to the need to cover in the long term the prices of all the expenses of the enterprise. Due to the lack of information about the full cost increases the risk of violation of this condition;
- the presence of certain difficulties in the creation of external reporting.
Thus, "direct costing" - the definition of management accounting, based on the class of variables (or partial) costs. This system has its disadvantages, but there are some advantages in comparison with the system of full accounting and cost allocation. The choice of one of them correlates mainly with the practical benefits of using a particular definitive. Both methods are ultimately focused on determining and reflecting the cost of production in fact, only the first - through direct cost accounting, and the second – by deviation from the norms. Thus, the account of "historical" costs does not allow to conduct effective control over consumption of resources, definition and destruction of factors of overspending and negative sides in the organization of production, non-observance of technological processes, search of internal reserves. These negative aspects do not allow the full use of cost accounting for management decisions. 

Therefore, in practice, in the conditions of market relations and competition, the best ways to consider regulatory costs are. The system of "standard-cost" originated in the United States in the early 20-ies of the last century. To calculate the unit cost of production, price calculation, effective management and cost control began to develop options for accounting for standard costs, in particular, in the writings of American scientist D. C. Harrison in 1993, when the translation of the book "Standard-cost" was published. Domestic economists have taken every opportunity to study in detail the existing approaches to the implementation and practical application of this system. A significant contribution to the solution of this problem was made by Professor M. H. Zhebrak, presenting this definition in the form of a normative method of cost accounting [ZHEBRAK, 1955, p. 58].

The essence of the definition of "standard-cost" is expressed in what should happen, and not what happened, is reflected not being, but due, and especially take into account the deviations that have arisen. The basic task of this definitive a is to account for losses and deviations in profit of the enterprise. The Foundation of such a system is a precise and firm establishment of norms of material and labor costs, energy, extra time and all other costs that are directly related to the production of any products or semi-finished products. At the same time, the established norms cannot be exceeded. The implementation of them, even at 80% determines success. Exceeding the norm means that it is incorrect or unjustified to establish them initially.

Considering the differences between the system of standard-cost and regulatory methods of cost accounting T. J. Surayev notes that the regulatory method has a stronger impact on governance and a more rapid obtaining of information necessary for managerial decision-making (SURAYEV, 2013, p. 124). Comparison of the standard method of cost accounting with the system "standard-cost" leads to the following conclusions:

- both methods reflect costs under the rules;
- both methods involve absorption costing;
- in accounting for the "standard-cost" costs made more than the established norms impose on the responsible persons or the results of financial and economic work and are not included in the costs of production, in contrast to the regulatory method. In the normative method, the change of norms in the current accounting is possible, but in the framework of the application of the "standard-cost" is not expected.

There are two approaches in the accounting of production costs, namely:

- accounting for expenses made in the past;
- a unified account of the costs and deviations from them.

The creation of norms and standards, the development of unified calculations before the start of production and cost accounting in fact with the separation of deviations from the standards, systematized as a set, were called «standard-cost». The amount of material and labor costs necessary for the production of a unit of production or already calculated material and labor costs for the production of a unit of production, works, services is the standard. Monetary reflection of production costs per unit of output is "cost". Standard-cost is focused on the regulation of direct production costs, is the basic means of control.
Standard-cost is a system of operational management of the production process and the level of production costs, based on constant monitoring of the value of deviations of actual indicators from the normative, analysis of the causes of these deviations and trends in their changes over time, the use of management actions to minimize deviations or the implementation of adjustments to norms. The domestic system of regulatory accounting, as noted earlier, is close to the «standard-cost» system. The difference is that the standard costs are based on the forecast of the future, and the standard costs are established on the basis of past experience.

When using the system «standard-cost», as well as conventional systems of accounting of actual costs, provides full cost accounting and calculation of total cost the name of the system «standard-cost», as well as conventional systems of accounting of actual costs, provides full cost accounting and calculation of total cost. The advantage of the «standard-cost» system is as follows:

- the ability to identify disposable losses that reduce the profit of the enterprise;
- ability to predict future costs;
- minimization of accounting work related to calculation;
- providing information on the expected costs of production and sales of products;
- pricing based on pre-calculated unit costs;
- preparation of a report on income and expenses with the allocation of deviations from the standards and the causes of their occurrence.

The application of both methods of calculating production costs gives a different result only when the volume of sales for a certain period is greater than or less than that produced. About ABC-costing say differently. Some people admire him and believe that any management accounting system should be divided into small processes, on the basis of which the cost is determined. But there is an opposite opinion: ABC-costing is too complex, so detailed prescribing of processes does not make sense" [BASS, 2007].

In the 60s of the last century, Japanese specialists in production management and management accounting developed the concept of management at target cost - a system of target-costing (target costing), which is used for more than 40 years (RYABKOV, 2005, p. 4-11). «Target-costing» was first introduced in its modern interpretation by Toshiro Hiromoto, who in 1988 published an article on the features and achievements of Japanese management accounting, and this article is one of the most cited in subsequent years (HIROMOTO, 1988, p. 4-7). The idea, which is the Foundation of the concept of target-costing, simple and revolutionary at the same time. Japanese managers simply turned «inside out» the traditional pricing formula [YOUNG, 1993, p. 4-7].

\[
\text{Cost} + \text{Profit} = \text{Price}, \quad (18)
\]

which in the concept of target-costing transformed into equality

\[
\text{Price} - \text{Profit} = \text{Cost} \quad (19)
\]

**CONCLUSION**

This simple perception made it possible to obtain an excellent tool for preventive control and cost savings at the design stage. The company’s desired profit margin is subtracted from the expected market price and thus the target cost of the product is determined. After that, those involved in the production cycle - from the head to the simple worker - are working hard to project and produce an item that is commensurate with the target cost. Target-costing is a great way to pre-production cost optimization in innovative industries.

To implement this method in industrial enterprises, it is necessary to establish close cooperation between different departments and employees who must be aware of the purpose of their activities, and act as a whole. Unfortunately, this is not yet possible due to the
imbalance of the internal mechanism of organizations, ambitious actions of managers, inadequate corporate culture.

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In a market economy requires a system of presentation of accounting information that would allow the most efficient use of available resources, it is also assumed that there is a choice of alternatives, it is required to select resources, sources of financing, forms and methods of investment, etc., that is, to make various management decisions that are related to the property of the organization. Therefore, to date, there is an urgent need to build an information and control system for managing production costs, in the relationship and interdependence of the indicators formed in it. Based on the existing principles, it seems necessary to create in the accounting management information and control system that meets the requirement of effective management of production costs to the greatest extent, when each Manager would make decisions to reduce costs and maximize profits. In the historical context, this was the main reason for the allocation of management accounting as an independent element of the accounting system.

Keywords: Management accounting, Economic decisions. Manager. Production costs. Cost reduction.