THE ROLE OF COSTING IN THE MANAGING ACTIVITY OF THE ECONOMIC ENTITY

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Abstract. *Cost calculation is simultaneously delimited as an information tool (produces and provides cost and profit information) and as a management tool to improve the performance of the economic entity, while also representing a decision-making technique for maximizing profitability. The information produced and managed by the cost calculation is intended for the entrepreneur (the manager, the administrator) as an internal beneficiary who, in his capacity as manager, has to solve problems of allocation and use of resources entrusted externally (by the investor) to build performance. This information provided by the cost calculation allow managers to assess the viability of alternative business strategies, to choose between alternative decisions and to assess the results of business segments.*

Keywords: *decision-making technique,alternative business strategies, information tool, profitability*
JEL*: M 41, M 21*

Introduction

Cost calculation is simultaneously delimitated as an informational tool (the calculation produces and provides cost and profit information) and as a management tool (as a maximization of profitability decision technique), which is also aimed at improving the performance of the economic entity.Thus, the information proposed and managed by the cost calculation is intended for the entrepreneur, the manager as an internal beneficiary who has to solve problems of allocating and using outsourced resources by the investor to build performance, also allowing managers to assess the results of the segments of activity. The role of costing within economic entities is highlighted by the following objectives: post-factual and foreseeable costing calculations on products, services, activities and functions; determining analytical results by comparing the cost bound to one of the above structures with the sale price; controlling costs and budgets through deviations.

The cost calculation mainly aims at providing and managing information and is able to fulfill the following tasks: the calculation of costs by types, places and cost carriers; control of economic efficiency; control and analysis of the results as well as tasks that are characteristic of the pricing policy.

Conceptual Fundamentals of Costs and Costing in Economic Entities

In the production and commercial activity of the economic entity it is necessary to use the factors of production - capital and labor - respectively consumption and payments related to the factors of production, which in the expression of value bear the name of expenses. All costs incurred by the enterprise for the production of goods, the execution of works and the provision of services are called the cost (the cost of products, works or services).

Cost is a universally accepted economic category and originates in the Latin verb "constare", which means to fix, fix something, a verb from which the notion of "costa" has been detached to express how much has been consumed or paid for a thing or object. Therefore, it represents an expense or a sum of associated expenses and recognized as a consumed resource, a place of activity, a product produced or a management period.

In practice, the notion of cost has a much larger scope than the value of consumption, due to the cost containment of some expenses that arise from the normative acts, such as: the contribution of the economic entity to the establishment of the unemployment fund, bank interest, building taxes, etc. The cost of production is the expression of the living and materialized labor consumption, made in order to obtain a product at a given moment, consumption that takes the form of production and sales expenses incurred by the economic entity.

Knowing production costs as a measure of the effort made to obtain a good at a given moment is the basis for the formation of partial optimals, because the cost of production is the result of a mathematical calculation and therefore has the expression of a function and, like any function,

it can be optimized in this case by minimizing it. Thus, knowledge of costs allows manufacturers to analyze how to combine the factors of production in the conditions of existence of a given budget, the discovery and mobilization of internal reserves, the pursuit of the fitting of consumption at the level of legal norms.

The cost of inventories must cover all acquisition and processing costs and other costs incurred to bring the stocks in the form and location they are.

The cost of production or processing of inventories, as well as the cost of production of fixed assets, includes direct costs related to production, namely direct materials, energy consumed for technological purposes, direct labor and other direct production costs and the share of indirect production costs allocated to rationally related to their manufacturing. The cost of a service provider's inventory includes labor and other expenses related to the staff directly involved in the provision of services, including the staff responsible for supervision and the corresponding rules.

Costing is a set of mathematical operations, more or less complex, through which identification, evaluation, grouping, division and aggregation of expenditure elements and structures is achieved.

The calculation calculates the cost of the resource used, the cost of the site, the cost of the activity or the process, and finally the cost of the product or the cost of the period. By computing, the cost delimits as an aggregate size in monetary units of all inputs of embedded resources, through a succession of technical processes, into a good or service provided within an economic entity.

Quantification in costing.

The cost calculation largely uses quantification (highlighted as a general procedure used by all scientific approaches to investigate and quantify the measurable side of the subject matter of a scientific science or discipline), especially in the forms of evaluation and calculation.

Evaluation is a special form of quantification through which accounting management achieves one of its fundamental objectives, namely the evaluation of products, actions and services, including tourism and/or commercial. The characteristics of the assessment in managerial accounting consist in the fact that they use their own system of costs and prices interconnected according to the structure of Table no. 1.

Table 1. Cost and cost systems used in costing

COSTS	COSTS	MARGINS AND RESULTS	PRICES FOR SALE
a) The purchase price of the constituent elements of the goods or merchandise for sale b) Purchase, transport and storage costs	I. Purchase Cost (a + b)		
c) Expenditure on transformation, processing of raw material in finished product, executed works, rendered services		VII. Production margin (V-I) or (c + d + IV)	
	II. The cost of production (I + c)		
Distribution costs (Outlet)		VI. Trade Margin (V-II or d + IV)	
	III. Full cost (II + d)	IV. Result e - loss f - profit	V. Sale price V <III loss V. Sale price V> III profit

The costs and prices used are of a strictly internal nature and are defined by three characteristics independent of each other, namely: the content, the moment and the field of

application, these elements being at the same time the essential criteria for classification of costs and prices according to the scheme of the figure no. 1.

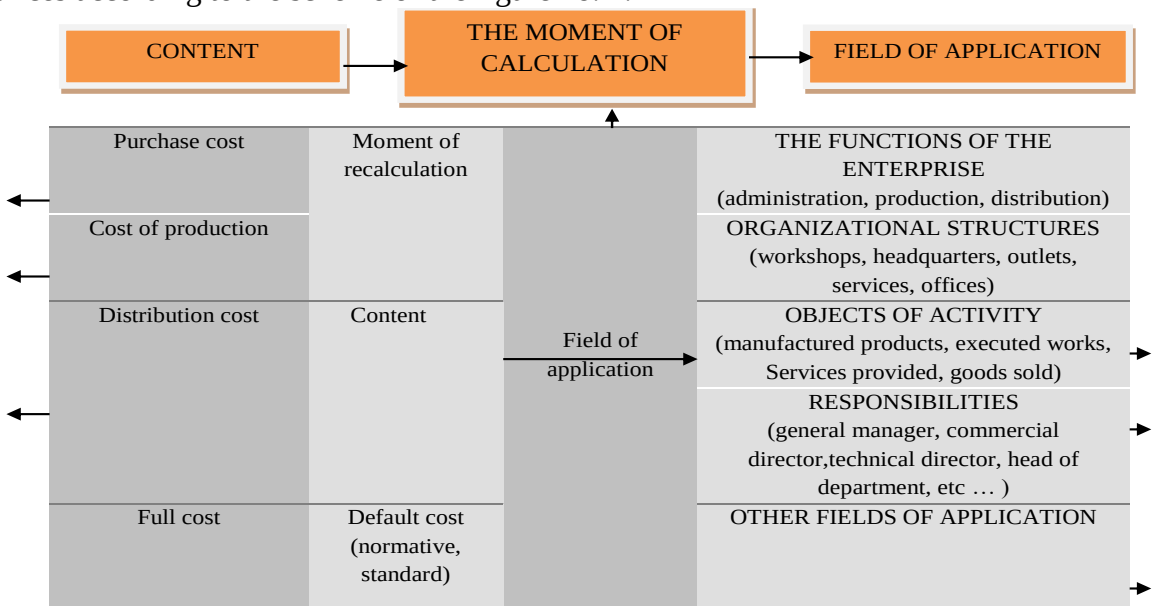

Figure no. 1. The essential characteristics of costs and prices

The calculation is the particular form of quantification which comprises a set of mathematical operations ranging from the simplest to the most complex, aiming at determining total and unit costs, as well as prices or tariffs.

Role of costs in substantiating economic and financial decisions

Knowledge of costs is necessary for the strategy in all its aspects. If an enterprise is considering a diversification in a field that allows it to hope for synergy with the ones it is already in, it needs to identify this synergy in terms of common resources and to share the costs. If the entity faces competitors at low prices, it will have to assess the chances it has to compete. If, on the other hand, it proposes a better but more onerous service for the client, it has to ask questions about the relevance of the offer.

Enterprise and business strategy are two distinct but interdependent levels. In a cost-dominated strategy, for example, an enterprise can rely on a diversification that will allow the pooling of certain activities and action on resulting economies.

The decision areas for which the cost calculation must provide relevant information are: pricing, production schedule in relation to results, alternative production processes and the option between own production and third party procurement.

A calculation of the weighting costs in the decision-making process must be organized so that the relevant costs of the planning activity can be determined at any time.

The full costing of traditional costing really offers solutions for each task of a costing system, but they no longer meet today's current business management's requirements against costing. Due to the sharpening of the competitive situation on the market, a strict supervision of economic efficiency and rational preparation of short-term decisions is needed to maintain the competitive capacity of an enterprise.

Information provided by costing allows managers to assess the viability of alternative business strategies, to choose between alternative decisions and to assess the performance of business segments.

The purpose of costing is to identify causes and not just transfer them to cost items. This demonstrates the ability of the costing system to provide an analysis linking the economic performance of the entity with its processes and activities. Management of the economic entity involves measuring costs and performance, as well as managing the entity.

A cost is controllable if it is possible to act on it (to authorize it) at this level of management.

When we control costs, we need to take into account the time universe because costs that are controlled over the long term can not be controlled in the short term.

Cost control is the most important element in accounting for accountability centers and pricing of internal assignments.

The separation between controllable and uncontrollable costs is done through the use of performance tools.

In the economic and financial decision-making process, an organization can calculate several types of costs depending on its organizational choices, its utility, and its uses. Practically, the calculated cost diversity shows the diversity of decisions made in an organization. Costs are calculated based on the person using it, the purpose for which it is used, and the cost item. The cost object is any element (product, customer, department, activity) for which costs are measured.

In making decisions, the economist must be particularly interested in cost issues. Losses in economic activity can best be traced through cost analysis. The cost-price ratio is much more relevant to how a company is driven than the profit-and-loss account.

Managers need a variety of information to plan, control and make decisions, information on the financial aspects of performance from the cost system.

The main characteristics of the cost information required in the decision-making system are opportunity, reliability, relevance, the latter being interpreted as meaning that a cost is relevant if it influences user decisions by facilitating the evaluation of past, present and future events and confirming or correcting evaluations past.

Control and performance analysis using CVP (cost-volume-profit)

The basis for measuring an enterprise's performance is an information system that, by organizing management control, must be based on the organization and operation at the lowest cost of an information system adapted to coherent analysis and synthesis processes, such as the cost-volume-profit method (CVP); Thus, the cost-volume-profit method is a necessary tool for both forecasting and enterprise performance analysis.

The method includes a series of problem-solving techniques and procedures based on understanding the characteristics of the company's cost-development models.

Techniques express the relationship between revenue, sales structure, costs, production volume and profits, and include the profitability analysis and various profits planning procedures. These relationships provide a general model of financial activity that management can use for short-term planning, performance appraisal, and analysis of decision alternatives. Cost-volume-profit analysis relationships can be expressed through graphs or the equation method. We will consider the equation method. The CVP method determines the profitability threshold, analyzes the company's vulnerability to risk factors by calculating safety margins (absolute and relative), and sensitivity analysis in decision-making. This entails the separation of expenditure into variable and fixed costs. Knowing the turnover (CA) and the variable cost (VC) for two heterogeneous products, we will calculate the margin on the variable cost as the difference between the two parameters. Mathematically, we will write as follows:

MCV (margin on the variable cost) = CA - VC.

By dividing expenditure into fixed and variable, we will define the factor that determines the variability of expenditure, which may be production volume, productivity, working time, inventory rotation rate.

The coverage factor (Fa) illustrates in percent the participation of a product in a profit nomenclature as a ratio between total gross contribution and turnover.

Fa = Cb/CA = (Cbu x Q)/ CA, Cbu= Pv - Cvu

where: Cbu - unit gross margin or gross margin, Q - production volume; Pv - selling price;

The method allows the calculation of the profitability threshold (PR) that is expressed quantitatively (buc) and value (um).

In quantitative terms, the threshold of profitability is the amount that the enterprise has to produce and sell to obtain neither profit nor loss (PR = 0).

Valorically, the profitability threshold is the turnover for which the enterprise obtains neither profit nor loss.

In quantitative terms, the threshold for profitability is expressed as follows:

$PR=CF/MCV_u$, where: MCV_u - margin on the unitary variable cost and is calculated as follows:

$MCV_u=P-CV_u$, where: P - product price, and CV_u - unitary cost (um / pcs).

Valorically, the threshold for profitability is calculated as follows:

PR=CF/MCV %, where: CF - fixed costs, MCV - variable cost margin;

MCV %=MCV/CA (expressed as a percentage).

This method also measures the vulnerability of the enterprise to the level of activity change. Thus, it is necessary to calculate two indicators:

Absolute Safety Margin (MSA) calculated as follows: MSA = CA-PR

Relative Safety Margin (MSR) calculated as follows: MSR = (CA-PR) / CA

If we get a relatively small margin of safety, then the entity is becoming more and more vulnerable. We will present the case of two economic entities with the same result and the same turnover, but with the structure of the changed expenses, as can be seen from Table no. 2.

Table no. 2 The calculation of the result

Elements	**Alfa Economic entity**	**Beta Economic entity**
Turnover (CA)	1200	1200
Expenditure, out of which:	700	700
• variable (CV)	300	400
• fixed (CF)	400	300
Result	500	500

In Table no. 3 will highlight how to calculate the main indicators used in the cost-benefit analysis, and in the table no. 4 it is presented how these indicators are calculated .

Table no. 3 The calculation of the main indicators used in the cost-benefit analysis

Economic entities	Alfa Economic entity	Beta Economic entity
Turnover (CA)	1200	1200
Expenditure, out of which:	700	700
variable (CV)	300	400
fixed (CF)	400	300
Result	500	500
Margin on variable cost MCV%=CA/(CA-CV)	133%	150%
Margin on variable cost (MCV=CF/MCV%)	300	200
Profit threshold (PR)	300	200
Relative safety margin (MSR)	75%	83%

Table no. 4 Method of calculation

Elements	**Indicators**	**Method of calculation**
The Alpha entity		
1.Turnover	1200	
2.Expenditure, out of which:	700	
a)Fixed	300	
b)Variable	400	
3.Result	500	3=1-2
4.Margin on variable cost		

a)percentage	150%	4.a)=1/(1-2.b)
b)quantitative	200	4.b)=2.a)/4.a)
5.Profit threshold		
a)Value	200	5.a)=2.a)/4.a)
6.Relative safety margin	83%	6=1-5.a)/1
Entitatea Beta		
7.Turnover	1200	
8.Expenditure, out of which:	700	
a)Fixed	400	
b)Variable	300	
9.Result	500	9=7-8
10.Margin on variable cost		
a)percentage	133%	10.a)=7/(7-8.b)
b)quantitative	300	10.b)=8.a)/10.a)
11.Profit threshold		
a)Value	300	11.a)=8.a)/10.a)
12.Relative safety margin	75%	12=(7-11.a)/7

From the calculations in the table above, we can say that the Alpha entity is more vulnerable than the Beta entity. The CVP method is useful in setting the pricing policy. The entity is profitable if inequality is always observed: CA * MCV% ≥ CF. Inequality defines two aspects:

• When MCV is positive, any product contributes to covering fixed costs and achieving the overall result;

• By giving up a product sold below the full cost, it results that the enterprise is loss-making and the overall result is reduced.

To reflect the pricing policy, we have two products that are as follows (Table no.5):

Table no. 5 the pricing Policy

Products	Quantity (pcs)	Sale Price (um)	full cost (um)	variable cost (um)
Product 1	300	40	20	15
Product 2	200	30	35	14

If both products are sold, we have the following financial result:

300*(40-20)+200*(30-35)=6000-1000=5000 um

If the enterprise renounces product 2, the total result will be:

300*[40-15-(5+21)]= -300 um

So, by giving up the product 2, the enterprise records a loss of 300 um so that all fixed costs of 26 um bear the product 1. So a positive CVM product should not be abandoned for product 2 is 16 um.

The CVP method is also used to analyze the sensitivity of the business, which results in performance reports. The sensitivity analysis answers the questions: What will be the result if production drops by 20% compared to the expected level? But if prices fall by 10%? How does the result change if there is an increase in unit cost by 40%? But increase fixed expenses by 50%? The analysis of the Gama result can be presented under the following report, presented to the Table no. 6:

Table no. 6

Indicators	Value
1.Quantity (pcs)	1000
2.Price (um/pcs)	100
3.Unit variable cost (um/pcs)	80

4.Fixed Expenses (um)	700
5.Turnover (um)5=1*2	100000
6.Variable Expenses (um)6=1*3	80000
Margin on variable cost	
a)unitary (2-3)	20
b)overall (5-6)	20000
c)percentage (b/5)	20%
7.the outcome	19300
Profit threshold	
d)unitary (4/a)	35
e)overall (4/c)	3500
Relative safety margin	
f) relative (5-e)/5	97%
g) absolute 5-e	96500

What will be the result if production drops by 20% compared to the expected level?

Table no. 7

Indicators	**Adjusted**	**Initial**
1.Quantity (pcs)	800	1000
2.Price (um/pcs)	100	100
3.Unit variable cost (um/pcs)	80	80
4.Fixed Expenses (um)	700	700
5.Turnover (um)5=1*2	80000	100000
6.Variable Expenses (um)6=1*3	64000	80000
Margin on variable cost		
a)unitary (2-3)	20	20
b)overall (5-6)	16000	20000
c)percentage (b/5)	0.2	20%
7.the outcome	15300	19300
Profit threshold		
d) unitary (4/a)	35	35
e) overall (4/c)	3500	3500
Relative safety margin		
f) relative (5-e)/5	96%	97%
g) absolute 5-e	76500	96500

Following calculations, as a result of a 20% decrease in production, we have a decrease in the result by about 21%, from 19300 to 15300 um. To reduce the decrease in the result of the financial year, fixed costs will have to be reduced. It is also worth noting that the turnover value (income from sales of products, services or works) has decreased by 20%, leading to losses.

But if prices fall by 10%? (Table no. 8)

Table no. 8

Indicators	**Adjusted**	**Initial**
1.Quantity (pcs)	800	1000
2.Price (um/pcs)	90	100
3.Unit variable cost (um/pcs)	80	80
4.Fixed Expenses (um)	700	700
5.Turnover (um)5=1*2	72000	100000

6.Variable Expenses (um)6=1*3	64000	80000
Margin on variable cost		
a)unitary (2-3)	10	20
b)overall (5-6)	8000	20000
c)percentage (b/5)	11%	20%
7.the outcome	7300	19300
Profit threshold		
d)unitary (4/a)	70	35
e)overall (4/c)	6300	3500
Relative safety margin		
f) relative (5-e)/5	91%	97%
g) absolute 5-e	65700	96500

Following a 10% drop in prices, we have a 62% decrease in the result, with the enterprise being extremely vulnerable, exceeding 50%. Turning turnover down by 28,000 um by 28%.
How does the result change if a 20% unit cost increase occurs? (Table no. 9)

Table no. 9

Indicators	**Adjusted**	**Initial**
1.Quantity (pcs)	1000	1000
2.Price (um/pcs)	100	100
3.Unit variable cost (um/pcs)	96	80
4.Fixed Expenses (um)	700	700
5.Turnover (um) 5=1*2	100000	100000
6.Variable Expenses (um) 6=1*3	96000	80000
Margin on variable cost		
a)unitary (2-3)	4	20
b)overall (5-6)	4000	20000
c)percentage (b/5)	4%	20%
7.the outcome	3300	19300
Profit threshold		
d)unitary (4/a)	175	35
e)overall (4/c)	17500	3500
Relative safety margin		
f) relative (5-e)/5	83%	97%
g) absolute 5-e	82500	96500

Increasing unit variable cost by 20% leads to a 83% decrease in the result. The enterprise is vulnerable in this case because it has to cover a large variable of 96,000 um.
But increase fixed expenses by 50%? (Table no. 10)

Table no. 10

Indicators	**Adjusted**	**Initial**
1.Quantity (pcs)	1000	1000
2.Price (um/pcs)	100	100
3.Unit variable cost (um/pcs)	80	80
4.Fixed Expenses (um)	1050	700
5.Turnover (um)5=1*2	100000	100000
6.Variable Expenses (um)6=1*3	80000	80000
Margin on variable cost		

a)unitary (2-3)	20	20
b)overall (5-6)	20000	20000
c)percentage (b/5)	20%	20%
7.the outcome	18950	19300
Profit threshold		
d)unitary (4/a)	52.5	35
e)overall (4/c)	5250	3500
Relative safety margin		
f) relative (5-e)/5	95%	97%
g) absolute 5-e	94750	96500

In the case of fixed expenses, we have a decrease in the result by 350 um. The enterprise is not so vulnerable, given the 2% safety margin reduction, but also the increase in the profitability threshold.

In our applied applications, we have shown that the change in one of the basic parameters (Quantity, price, unit variable cost, fixed costs), the result of the exercise varied in the sense of a decrease, regardless of the change in the basic parameters.

Conclusions

The progress made in improving the production has made the aspects of traditionalism and conservatism that are manifested in the field of costing more and more obvious. As a reaction to these, it has been sought to continuously improve process and calculation techniques by formulating computational models appropriate to the stage of improvement of production technology. The combination of general and private processes results in different methods that serve the ultimate goal, ie the unit cost calculation. These similarities give the calculation methods the quality of an integrated methodological system.

The accounting information is intended for the manager of the economic entity who must be the main beneficiary of the information and who can use this information in order to properly use the resources and to achieve the intended purpose.

The calculation, as a method of accounting, is the most widely applied in the field of production costing. Thus, the cost calculation aims to inform, know and regulate the manufacturing process of the products. Costing methods are essentially a generalization of the diversity and specificity of manufacturing and obtaining products and services. Costing methods highlight some rules on: the steps to be taken, the treatment of expenses, the identification of the object of the calculation and the proper calculation of the cost. The implementation of a costing method requires that the basic rules be tailored to the specifics of each economic entity.

The efficient operation of the economic entity in a competitive environment, whose economic dominance is the limited nature of resources, requires cost-effective management of the results. An important role in this is the costing and cost analysis that must provide managers with the information they need to guide them in their strategic decisions, in particular in affecting the entity's resources and setting prices and margins. Profitability is one of the most synthetic indicators of the efficiency of the whole economic and financial activity of the company, the perspective of all the factors of production at all stages of the economic circuit. As observed in the paper, cost-volume-profit (CVP) method is useful in defining the pricing policy and analyzing the performance of the economic entity by compiling the performance reports resulting from the sensitivity analysis performed.

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