



Received: 09-12-2023  
Accepted: 19-01-2024

## International Journal of Advanced Multidisciplinary Research and Studies

ISSN: 2583-049X

### Analyze Cost Information to Serve Decision Making in Manufacturing Enterprises

Tran Thi Du

University of Labour and Social Affairs, Hanoi, Vietnam

Corresponding Author: **Tran Thi Du**

#### Abstract

Cost accounting information helps managers make decisions, through estimating activities, identifying costs under different classifications, collecting cost information, analyzing and providing cost information. fees for administrators. Cost accounting information plays an important role in providing information for management activities in general and cost management in particular, to help managers carry out strategic planning and organization. Implement, command and coordinate activities between departments and inspect implementation in order to take measures to adjust business operations effectively according to set goals. The article addresses cost analysis in

manufacturing enterprises, including cost analysis based on analysis of implementation cost information, comparison of implementation cost information with period cost information. advance, standard cost information and cost estimates, analysis of cost differences between actual costs and standard costs and estimated costs. At the same time, perform cost analysis of products, customers and branches. The article presents the current situation of cost analysis for management in manufacturing enterprises, and also offers solutions to improve cost analysis in manufacturing enterprises, in order to provide information for decision-making. decision.

**Keywords:** Cost Information, Enterprises, Vietnam

#### 1. Theoretical Basis

The norm and estimate information system is established as a basis for cost management and cost comparison. After building the norm and estimate information system, the enterprise conducts production and business activities and collects information on actual costs incurred. To evaluate the cost performance situation, businesses analyze, evaluate, identify causes and provide advice to decision-making managers. If information is processed well and suitable for decision making, it helps administrators make wise and timely decisions.

#### *Analyze cost fluctuations based on standards cost and budgets cost*

In fact, production and business activities will create costs. To evaluate and control costs effectively, it is important to analyze costs to identify beneficial and unfavorable fluctuations in order to take appropriate adjustment measures for the next period. Cost fluctuation analysis will be performed through comparing actual costs with estimated costs and standard costs. For cost control and evaluation to be effective and correct, the estimated production costs need to be adjusted according to the actual level of activity and then used to compare and evaluate with actual costs. arise. Cost variation analysis is performed with the items direct material costs, direct labor costs, general production costs, selling costs and business management costs.

#### *Analyze direct material cost fluctuations*

Direct materials cost variance is the difference between actual direct materials costs and budgeted direct materials costs adjusted for actual production volume. Because the cost of direct materials depends on two factors: the amount of raw material consumption and the unit price of raw materials, the variation in direct material costs is separated into the variation in the amount of raw materials consumption and the variation in raw material consumption. Raw material price fluctuations. Fluctuations in raw material consumption are calculated as the difference between the actual consumption and the norm consumption multiplied by the norm unit price. It should be noted that the norm consumption needs to be adjusted according to the volume of production. actual output. As a result of calculation, if the change in raw material consumption is positive (+), it

will be a bad change, reflecting the actual consumption of raw materials used is greater than the estimate, increasing raw material costs and reduces business profits. On the contrary, if the fluctuation in raw material consumption is negative (-) it will be a good fluctuation, reflecting that the actual amount of raw material consumption used is smaller than the estimate, which contributes to reducing costs. raw materials and increase business profits. From there, businesses find the causes of fluctuations in raw material consumption. The causes of increased raw material consumption can be due to faulty machinery or poor quality raw materials. is not good, the qualifications and quality of labor are poor or production supervision is not strict... The cause of reducing raw material consumption may be due to adjusted or better functioning machinery, raw materials Good quality materials, improved skills and awareness of workers or well-implemented inspection and supervision of the production process have contributed to reducing direct material consumption.

Fluctuations in direct material prices are calculated as the difference between the actual unit price and the standard unit price multiplied by the actual consumption of raw materials. If the calculation result is a positive (+) raw material price fluctuation, it will be a negative fluctuation, showing that the actual raw material price is higher than the estimated price, which will increase direct material costs and make reduce business profits. The cause of fluctuations in raw material prices may be increased raw material prices on the market, increased quality of raw materials, or poor control of purchasing prices and costs of raw materials. If the raw material price fluctuation is negative (-), it will be a good fluctuation, showing that the actual raw material price is lower than the estimate, reducing raw material costs and contributing to increasing the business's profits. The reason for the decrease in raw material prices may be due to the decrease in raw material prices on the market, the process of purchasing raw materials being more closely monitored, or the business receiving unexpected discounts or price reductions. From there, businesses have measures to effectively manage raw material price fluctuations, promote good causes and limit and eliminate negative causes affecting raw material prices.

#### **Analyze direct labor cost fluctuations**

Direct labor costs are also formed from two factors: labor productivity (labor time) and unit labor cost, so the analysis of direct labor cost fluctuations is also divided into analysis. Labor productivity fluctuations and analysis of labor price fluctuations.

Fluctuations in labor productivity are calculated as the difference between actual labor time and standard labor time multiplied by the standard unit price. If the calculation result is a positive change in labor productivity (+), it is a negative change, representing the actual number of labor hours used in excess of the estimate, increasing direct labor costs and reducing enterprise profits. The cause may be poorly trained workers, broken production equipment, production delays or poor labor inspection and supervision. If the calculation result is negative (-), it is a good change, showing that the actual number of labor hours used is less than the estimate, labor productivity increases, reducing direct labor costs and increasing profits of the company. enterprise. The cause of good fluctuations may be well-trained workers, good quality of raw materials, better functioning machines or better

inspection and supervision of the labor process.

The fluctuation in direct labor price is the difference between the actual unit price and the estimated unit price multiplied by the actual labor time. Positive (+) labor price fluctuations are bad fluctuations, showing that actual labor prices increase more than the estimate, increasing direct labor costs and increasing business profits. Increased labor cost fluctuations may be due to increased unit wages, overtime or the use of highly skilled workers with higher wages than expected. On the contrary, if the labor price fluctuation is negative (-) it is a good fluctuation, reflecting the actual labor price is lower than the estimated labor price, contributing to reducing direct labor costs and increasing profits of the company. enterprise. The cause of the decrease in labor price fluctuations may be due to a decrease in unit wages or because businesses use low-skilled workers with lower unit wages than expected.

#### **Analyze fluctuations in overhead costs**

Overhead costs are production costs that include many cost elements, including both fixed costs and variable costs. These two groups of costs have different arising characteristics, so the analysis of general production costs is also analyzed separately into analysis of variation in variable production costs and analysis of variation in fixed production costs.

#### **Changes in variable production overhead costs**

Manufacturing overhead variable variance is separated into performance variance and manufacturing overhead variable expenditure variance. Variation in the performance of variable manufacturing overhead costs is actually not an assessment of the efficiency of using variable manufacturing overhead costs, but rather an assessment of the efficiency of using the basis for allocating overhead variable costs (such as number of machine hours, or number of working hours). The variation in overhead variable cost performance is the difference between the actual hours and the standard hours multiplied by the standard allocation rate. Variable overhead variable spending is calculated as the difference between the actual allocation rate and the budgeted allocation rate multiplied by the actual hours. If the analysis result is positive (+), it is not good, showing that the business wastefully uses resources; if the result is negative (-), it is a good change, showing that the business is economical in using resources. production resources.

#### **Analyze fluctuations in fixed overhead costs**

Variation in fixed manufacturing overhead costs is the difference between actual fixed manufacturing overhead costs and fixed manufacturing overhead costs allocated according to estimates according to actual production volume. Manufacturing overhead variances are separated into volume variances and manufacturing overhead spending variances. The variation in the volume of fixed production overhead costs is the difference between the fixed overhead costs allocated according to the standard allocation ratio for the actual production volume and the initially estimated general production norm. Positive (+) volume fluctuations are good fluctuations because the actual level of activity is greater than the estimate, thereby contributing to increasing the business's profits. If the change in the volume of fixed production costs is negative (-), it will be a bad change because the actual level of activity

is lower than the original estimate, which is likely to reduce the business's profit. Thus, the analysis of production cost fluctuations needs to be divided into each cost item. Each cost item is divided into variable costs and fixed costs, thereby using the continuous substitution method to analyze each factor affecting cost fluctuations. After determining the level of fluctuation and evaluating whether that fluctuation is good or bad, the administrator needs to find the cause of the fluctuation in order to have timely management and adjustment measures for the next period to Save costs and bring profits to businesses. In addition, to provide cost information for decision making, businesses need to compare and analyze cost information for each product, each customer, and each branch to provide administrators with decision making.

**2. Research Methods**

Data collection methods, articles collect data from secondary data sources such as articles, textbooks and documents of manufacturing companies on analyzing cost information for cost management. fees in animal feed processing enterprises. This article collects primary data through research of 52 animal feed processing enterprises on the situation of analyzing cost information for cost management, the article studies the current status of information analysis. costs and prepare cost information analysis reports for cost management. The article analyzes, synthesizes, evaluates and compares to present the current situation of cost information analysis in animal feed processing enterprises.

**3. Actual Situation**

The questionnaire survey shows that many companies have actually analyzed cost information, but the level of information analysis for cost management is different for each business. According to the survey results, most businesses have performed cost and price analysis. 50/52 businesses (accounting for 96.2%) have compared actual costs with previous period costs or estimated costs and 51/52 businesses (accounting for 98.1%) have compared actual costs. with the previous period's cost price, standard cost price or planned cost price. Vimark Company has analyzed the costs and revenues of each product.

Vimark Company Limited						
COST AND REVENUE REPORT						
No	Code	Product's name	Output (tons)	Cost of goods sold	Revenue	Gross profit
1	M555	Concentrated for pork	125,800	1,493,246,000	1,672,435,520	179,189,520
2	M557	Concentrated for pigs	6,750	96,214,500	106,903,931	10,689,431
3	M559	Concentrated for piglets	6,750	64,287,000	79,073,010	14,786,010
4	N189	Mixture for pigs	65,235	473,018,985	515,590,694	42,571,709
5	N85	Mixture for porkers	26,000	195,650,000	221,736,015	26,086,015
6	N88	Perfect for piglets	7,580	85,502,400	103,552,812	18,050,412
7	G72	Suitable for chickens	75,250	652,041,250	751,294,969	99,253,719
8	G71	The mixture is suitable for chickens	25,230	232,797,210	234,193,993	1,396,783
9	G75	Suitable for ducks and geese	6,599	50,020,420	53,910,508	3,890,088
10	N84	Suitable for driving pigs	8,650	86,084,800	96,414,976	10,330,176
11	M521	Concentrated for chicken	5,667	55,042,438	62,992,987	7,950,550
<b>Total</b>			<b>675,280</b>	<b>7,197,134,240</b>	<b>8,635,625,461</b>	<b>1,438,491,221</b>

Fig 1: Cost and revenue report of Vimark Company

RTD Company has classified costs into variable costs and fixed costs to calculate the cost per kilogram of finished products produced and consumed. In addition, based on the actual costs incurred, RTD company performs cost analysis to be able to cut unnecessary costs. Periodically, the general director requests the accountant to provide information on cost price, revenue, gross profit of each type of product, sales costs, and business management costs to evaluate production and business results. In the period. The Joint Stock Company has prepared a revenue and cost analysis report for each product line. The report is divided into each mixed product line including: mixed feed for broilers, layers, breeders, pigs, ducks, quails and sheep. The report analyzed the quantity, selling price, cost price, gross profit and gross profit margin of each item of the reporting month compared with the cumulative average from the beginning of the year.

CP Viet Nam Company													
MIXED PRODUCT LINE REPORT													
From January to June						Product	Unit	June					
Quantity	Ratio	VND/kg						Quantity	Vnd/ Kg.				
	%	Price	Cost of goods sold	Profit and Loss	%	%	Price		Cost of goods sold	Profit and Loss	%		
34,060	15%	10,562	8,916	1,646	16%	Broiler chicken	Ton	5,631	12.17	11,261	9,549	1,711	15%
29,819	13%	9,081	7,372	1,709	19%	Laying hens	Ton	5,221	11.29	9,677	7,774	1,903	20%
132,935	59%	10,757	8,822	1,936	18%	Pig	Ton	24,924	53.89	11,539	9,311	2,227	19%
19,806	9%	9,067	7,591	1,476	16%	Duck	Ton	4,072	8.80	9,496	7,844	1,652	17%
9,186	4%	8,233	6,952	1,282	16%	Quail and Sheep	Ton	773	1.67	9,053	8,066	986	11%
225,807	100%	10,256	8,461	1,795	17.50	Total	Ton	46,252	100	9,669	7,883	1,785	18%

Fig 2: Mixed product line report of CP Company

Evaluate the current status of cost information analysis for decision making. The accounting department has provided cost information for external financial reporting activities in accordance with prescribed accounting standards and regimes, in order to provide information to external information users. Such as shareholders, tax authorities, banks... That information is financial accounting information that meets the state's need to provide mandatory information. However, the current state of information analysis to serve the decision-making process in animal feed processing enterprises does not meet the information needs of administrators.

**4. Solution**

In addition to setting norms, estimates, determining cost prices and determining business results for each department, businesses need to evaluate the situation of cost usage and use of resources to serve production activities. business. To evaluate cost usage and operating results, businesses also need to build a cost analysis system, including cost - volume - profit analysis, cost fluctuation analysis. Costs based on cost norms and cost estimates, analysis and evaluation of performance of responsibility centers, analysis of cost fluctuations through cost reports and cost information for decision making corporate governance. The article recommends that businesses need to analyze the costs and results of each product, and on that basis, analyze and compare the costs and performance results of the products to evaluate the effectiveness of use. cost of each product.

REPORT SUMMARIZING BUSINESS RESULTS BY PRODUCT					
Month (Quarter): .....					
No	Product's name	Product...		Product...	
		Value	%	Value	%
1	Revenue				
2	The variable costs				
3	Contributed profits				
4	Direct fixed costs				
5	Product profit				
6	Allocate the fixed overhead costs of the product				
7	Profit before tax and interest of the product				
	<b>Total:</b>				

Fig 3: Report summarizing business results by product

Animal feed processing enterprises perform cost and management management for each customer; each customer management department is a profit center, responsible for related costs and revenues. to each customer. The business will prepare a report for each customer, and analyze the costs of each customer, compare them with the profits achieved and compare them between customers to make appropriate management decisions.

REPORT SUMMARIZING BUSINESS RESULTS BY CUSTOMER					
Month (Quarter): .....					
No.	Customer's name	Customer...		Customer...	
		Value	%	Value	%
1	Revenue				
2	Costs of goods sold				
3	Gross profit				
4	Other direct customer costs				
5	Profit of customers				
6	Allocate common fixed costs to customers				
7	Earnings Before Interest and Taxes				
	<b>Total:</b>				

Fig 4: Report summarizing business results by customer

Enterprises manage costs and results by each branch. Each branch management department is a profit center, responsible for the costs and revenues related to each branch. Enterprises will analyze the costs of each branch with the results achieved by the branch, and at the same time analyze costs between branches to evaluate the cost efficiency of each branch and the results of each branch. Branches contribute to the overall results of the business.

SUMMARY REPORT ON BUSINESS RESULTS BY BRANCH					
Month (Quarter): .....					
No.	Branch's name	Branch...		Branch...	
		Value	%	Value	%
1	Revenue				
2	Costs of goods sold				
3	Gross profit				
4	Direct operating costs of the branch				
5	Profits of branch				
6	Allocating indirect costs of branch				
7	Earnings Before Interest and Taxes				
	<b>Total:</b>				

Fig 5: Summary report on business results by branch

Analyzing cost information will help animal feed processing businesses evaluate cost usage, cost fluctuations and find positive and negative causes to take appropriate measures. and promptly to enhance cost management in businesses, bringing higher profits to businesses.

5. Conclusion

The need to provide cost accounting information for managers in animal feed processing enterprises is great in a situation where raw material prices are rising and product consumption is facing many difficulties. The information system analyzes, compares and determines the causes associated with the functional function of comparing actual results with the administrator's plan. Analyzing cost information is an important basis for administrators to make decisions, to perform cost management functions to enhance cost management in the enterprise. Analyzing cost information plays an important role in enhancing cost management in businesses. Management needs to be provided with management accounting information, cost analysis information, and compare this period's costs with previous period's costs or plans, norms, and estimates to detect discrepancies., only then will the administrator have appropriate management measures. The article presents the theoretical basis for cost analysis, the current status of cost analysis in businesses and offers solutions to improve cost analysis for cost management in manufacturing enterprises.

6. References

1. Beata Morelli, Carl-Joachim Wiberg, the-standard-costing-system-at-skf-a-case-study-of-a-swedish-manufacturing-company, School of Economics and Commercial Law, Göteborg University, 2002. <http://pdfcast.org/>.
2. Cristiano Busco a,\*, Paolo Quattrone b, Angelo Riccabonia. Management Accounting Issues in interpreting its nature and change, Management Accounting Research. 2007; 18:125-149.
3. Drury. Management Accounting for business Decisions, Thomson earning, United Kinhdom, 2001.
4. Garisrison. Managerial Accounting: Concepts for Planning, Control, Decision making, Irwin, Boston, 1991.
5. George Angelakisa, Nikolaos Therioua, Iordanis Floropoulosb. Adoption and benefits of management accounting practices Evidence from Greece and Finland, Advances in Accounting. 2010; 26(1):87-96.
6. Gunther Friedl, hans-Ulrich Kupper, Burkhard Pedell. Relevance added: Combining ABC with German Cost Accounting, Strategic Finance. 2005; 6(12):56-61.
7. Hanson, Mowen. Cost Management: Accounting anh Control, South-Western College Publishing, Cincinati, 1997.
8. Robert Scapens W. Researching management accounting pratice: The role of case study methods, British accounting Review, 1990.
9. Robert Kaplan, Dan Weiss, Eyal Desheh. Transfer Princing with ABC, Management Accounting. 1997; 78(11):20-26.