



Current Status of Applying Cost Determination Methods at Manufacturing Enterprises in Hanoi

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ABSTRACT:

In an increasingly fierce competitive environment, manufacturing enterprises must control costs, build strategies toward sustainable development, and provide cost information for administrators to make business decisions very important. Businesses need to choose appropriate methods to balance costs and benefits from cost information. This article conducts research in 130 manufacturing enterprises in Hanoi, aiming to evaluate the level of use of cost-determination methods in these enterprises. The results show that many cost-determination methods are chosen to be applied by manufacturing enterprises in Hanoi, but the level of use of the methods is not simultaneous. Businesses are choosing more traditional methods, while the level of use of modern methods such as activity-based costing, target costing, and product life-cycle costing is very limited.

KEYWORDS: costs, cost determination methods, manufacturing enterprises, Hanoi.

1. INTRODUCTION

In recent years, especially in 2023, industrial production activities in Hanoi face many difficulties and challenges. This is due to the decline in global trade, lack of orders for key export industrial products, slow consumption in the domestic market, high input costs... In that context, Hanoi city has been offering many solutions to support manufacturing businesses to overcome difficulties and regain growth momentum. What is most important is the effort and reasonable strategic choice of manufacturing enterprises. In a highly competitive environment, towards sustainable development, manufacturing enterprises in Hanoi need to have methods to control costs and minimize production costs to improve competitiveness in the market. The characteristic of manufacturing enterprises is that they incur many costs at the production stage, raw material costs, labor costs, and general production costs. Production costs account for a large proportion of the total costs of the enterprise.

Hanoi is an area with many businesses with many different industries and scales of operation. So the needs for using cost information of businesses are also different. Furthermore, each method has a different calculation method, so the costs to implement the methods are also different. Cost information results obtained from different methods will provide different information needs of administrators. Therefore, choosing which cost-determination method to apply for each business is an important factor. Within the scope of the article, the author mentions the theoretical basis of cost-determination methods being applied in management accounting and at the same time surveys the level of use of cost-determination methods in companies. manufacturing enterprise in Hanoi.

2. LITERATURE REVIEW

Methods for determining costs are based on the method of aggregation

Direct aggregation method: applied to direct costs, which are directly determined costs that are economically effective for the accounting object. This method is easy to calculate and the data is highly accurate.

Indirect allocation method: applied to indirect costs, which are costs related to many accounting objects. If you want to determine indirect costs for each accounting object, you must allocate them. The allocation results will depend largely on the criteria chosen for allocation. If the selected criteria are not the cause of cost arising and changing, or the allocation criteria do not have a cause-and-effect relationship with costs, the allocation results will not be highly accurate.

Methods for determining costs are based on allocation criteria and cost-collection objects

Volume-based costing method: The range of costs according to the volume-based costing method is mainly collected as production costs in production workshops, excluding other costs. non-production costs. Normally, costs are collected according to each cost center, which is the production workshop.

Costs directly related to the production workshop will be charged directly to the workshop, indirect costs related to many production workshops will be allocated and the allocation criteria are tied to the volume of operations. The allocation process is carried out in the following steps: Step 1- Allocate general production costs to workshops, production departments and service departments; Step 2 - Allocating costs of service departments to production workshops; Step 3 - Summarize and allocate costs of each production workshop for each type of product.

Activity-based costing method: Activity-based costing (ABC) is a cost accounting system built to provide managers with cost information to make strategic and other decisions that are likely to affect productivity. Activity-based costing is often used as a supplement, not a replacement, for traditional cost accounting. In the activity-based costing system: production costs and non-production costs are allocated to products, but only based on cause-and-effect relationships; Some manufacturing costs are not included in product costs; Many common cost groups are used, each of which is allocated to products and other cost objects using its own activity measurement system. To provide information to administrators, the ABC system divides the implementation process into 5 steps: Step 1: Identify activities, activity cost groups and activity measurement units; Step 2: Accounting for general production costs for each activity; Step 3: Calculate the cost allocation ratio for each activity; Step 4: Allocate the cost of each activity to the cost accounting object (product, service) according to the cost allocation ratio of each activity and the number of activity measurement units; Step 5: Prepare management reports.

The cost allocation criterion by activity is a central innovation in the ABC system. The choice of activity-based cost allocation criteria reflects the subjective balance between costs on the one hand and the criteria to allocate those costs on the other. Because there are many potential relationships between production activities and final products, management accountants try to use few cost allocation criteria. For example, activities of the same production process such as: preparing the quantity of products to be produced, planning production, checking the first products, transporting raw materials; can all use the same cost allocation criteria: either the number of times produced or the number of products produced. The ABC system can use allocation criteria such as: Cost allocation criteria based on operating frequency, Cost allocation criteria based on job level, and Cost allocation criteria based on job duration.

Methods for determining costs are based on actual documents or plans and estimates

Method of determining actual costs: is a method of determining product production costs on the basis of direct material costs, direct labor costs and actual general production costs incurred for the block quantity of finished product. When the production process creates only one type of product, all costs incurred related to the product are direct costs and are calculated directly for the product without having to estimate the allocation rate. In this case, the application will provide the most accurate cost information. However, when the production process creates many types of products, the accuracy and objectivity of prices determined by this method decrease because there are indirect costs in general production costs and need to be allocated for each product. In addition, because it is necessary to collect all actual costs incurred, product costs are only calculated at the end of the period, leading to untimely cost information for making business decisions, especially for businesses. manufacture to order.

Method of determining combined actual and estimated costs: is a method of determining product costs including direct material costs, actual direct labor costs and estimated manufacturing overhead costs. When using this method, a difference will arise between actual manufacturing overhead costs and estimated manufacturing overhead costs. This difference will be recorded in the cost of goods sold if the difference is small or allocated proportionally to calculate the cost price and ending inventory if the difference is large. Using the combined costing method will be more accurate than the actual costing method. In the actual cost method, because most manufacturing overhead costs are fixed costs when the actual quantity of a product produced is lower than planned, it will result in calculated manufacturing overhead costs. for an operating unit will increase, resulting in the remaining products, even though they have completed the plan, still having to incur high overhead allocations that should only be subject to the budgeted allocation.

Methods for determining costs are based on the characteristics of production organization

Determining costs based on orders and jobs: the costing system based on orders or jobs is suitable for businesses with single production or small batch production, and routine production work. is carried out according to the buyer's order. The order can be for a separate product or several products of the same type. Uniqueness required by each order: products of each type have little or no similarity to other products, and there is no repetition in the production and business activities of the enterprise. Production activities have clear start and end times. Manufactured products are products or groups of products that can be individually identified. The product has high value and large size. The job-based costing system basically applies the total costing method. That means the product cost includes three basic cost items: raw material costs, direct materials; direct labor costs and manufacturing overhead costs. Because the production site can simultaneously produce many different jobs according to the requirements of each order, in reality common costs may arise for many different orders. Therefore, to collect production costs for each order, we need to pay attention to whether the costs are direct or indirect. When production begins according to orders, the accounting department will open an accounting slip (card) to track costs for each order and each job. A job cost voucher is created when the accounting department receives a notification and a production order is issued for that job. Production orders are only issued when there are customer orders. Each order is prepared with a separate job cost sheet. All job cost tickets are stored while the product is being manufactured. Order cost slips are essentially detailed accounting books to collect all direct raw material costs; Direct labor costs; General production costs serve to synthesize production costs according to orders. When the product is completed and delivered to the customer, the job cost sheet is the basis for calculating the cost. All costs involved in manufacturing the product are collected on the job cost sheet at the end of the month. If at the end of the month, the work is still not completed, the entire cost recorded on the cost invoice will be the value of the unfinished product. When the order is completed, the total cost collected on the ticket is the total price.

Determining process costs: Businesses that apply this costing system are businesses operating in repetitive manufacturing industries, meaning large-scale production activities with similar products, or very similar. The product manufacturing process is divided into many technological stages or processing

steps that follow each other in a certain order. Each processing stage produces a semi-finished product; The semi-finished products of this step are subject to processing in the next step. Typical businesses applying this pricing system are units in the paper, petroleum, chemical, textile, food processing, rubber, electronics industries... With the movement of spending Costs are associated with production activities according to each specific technological stage, so the appropriate production cost collection object according to this pricing system is usually each technological stage. Each technological stage or each production step is understood to require a certain level of completion of the product, called a semi-finished product; to move to the next technological stage. Because of this continuity, this costing system is also known as step-wise pricing. In accordance with that characteristic, the object of cost calculation is the semi-finished product completed at each technological stage and the finished product at the final technological stage. Because production activities take place continuously in large quantity production conditions, the cost calculation period is usually the end of the accounting period (month, quarter, year). With the cost collection object as above, direct production costs incurred at any technological stage are collected according to that technological stage. General costs are accounted for by workshop, then allocated to each technological stage according to an appropriate standard.

3. RESEARCH METHOD

Quantitative research to evaluate the importance of cost determination methods and the level of use of cost determination methods in manufacturing enterprises in Hanoi. Done through the following 3 steps:

Step 1: We build a questionnaire on Google Forms, send it to accountants and business managers via email using a convenient sampling method, and send it to friends, relatives, and partners. ...

Step 2: The number of survey questionnaires distributed was 140, sent to 140 enterprises, and the number of votes collected was 125 from 125 enterprises, reaching 85.7%. All receipts meet the required information requirements.

Step 3: We analyze the data on SPSS 22 software with the following tools: Frequency statistics, average statistics.

The questions in the survey apply the 5-point Likert scale: 1 - Strongly disagree; 2 - Disagree, 3 - Normal, 4 - Agree, 5- Strongly Agree.

4. RESULTS

The current situation of applying the method of determining costs based on the method of aggregation

At manufacturing enterprises in Hanoi, the method of determining costs based on the method of implementation is used but to different degrees. Hanoi is an area that gathers many businesses with many different manufacturing industries. Leading to production technology characteristics and cost characteristics are also very diverse. According to the survey results, the level of use of the indirect cost collection method is lower than the direct cost collection method with means of 4.52 and 4.85, respectively.

Table 1. Situation of using cost determination methods based on the aggregation method

Cod	Method	Mean
MT1.1	Direct cost collection method	4.85
MT1.2	Indirect cost collection method	4.52

Current status of applying cost determination methods based on allocation criteria and cost collection objects

Regarding the method of determining costs based on allocation criteria and cost collection objects, manufacturing enterprises in Hanoi are aware of the importance and goals of these methods. Regarding the level of application, the volume-based costing method is used significantly more. This is a traditional method, the amount of information about the allocation basis is available from financial accounting information, and is easy to implement, so many businesses choose to apply it with a mean of 4.45. Meanwhile, the method of determining costs based on the level of activity has also received attention from many businesses recently. This is a modern method, the allocation basis is based on activities, the results are more effective but the complexity in calculation is also higher. Therefore, the level of use of this method in Hanoi manufacturing enterprises is still low. Many businesses are not aware of the reliability of the information they have and in fact, building and maintaining an activity-based costing system is quite expensive.

Table 2. Situation of using cost determination methods based on allocation criteria and cost collection objects

Cod	Method	Mean
MT2.1	Method of determining costs based on volume	4.45
MT2.2	Activity-based costing method	3.02

The current situation of applying the method of determining costs based on actual documents or plans and estimates

At manufacturing enterprises in Hanoi, the method of determining costs has been applied based on actual documents or plans and estimates. But the level of use of these methods varies greatly. The method most chosen by manufacturing enterprises is the actual cost aggregation method with a mean of 4.35. This is appropriate because it is a traditional method, used in financial accounting. For the actual cost method combined with standard costs, many businesses also apply it with a mean of 3.82. Normally, for direct material costs and direct labor costs, businesses use the common method. information about actual costs, while for general production costs, businesses choose standard costs and estimated costs to allocate. The remaining four cost

determination methods, including target costing, product life cycle costing, and Kaizen costing, have very low usage levels with means of 3.15, 3.01, 2.95, and 2.78.

Table 3. Situation of using cost determination methods based on actual documents or plans and estimates

Cod	Method	Mean
MT3.1	Method of gathering according to actual costs	4.35
MT3.2	Actual costs combined with norms	3.82
MT3.3	Cost norms	3.15
MT3.4	Target cost	3.01
MT3.5	Costs over product life cycle	2.95
MT3.6	Kaizen costs	2.78

The current situation of applying cost determination methods is based on the characteristics of production organization

The method of determining costs is based on the characteristics of production organization, including determining costs by order and determining costs by process. These two methods are suitable for the characteristics of production activities of each business. Karma. For businesses that produce products according to orders or jobs with different cost characteristics and product characteristics, they often choose the method of determining costs based on orders. For businesses that produce the same products in different periods, products are produced through many stages and many workshops, they often choose the method of determining process costs. According to the survey results, the process cost determination method is chosen more often by manufacturing enterprises in Hanoi with a mean of 3.52.

Table 4. Situation of using cost determination methods based on production organization characteristics

Cod	Method	Mean
MT4.1	Method for determining costs based on orders and jobs	3.45
MT4.2	Method of determining costs according to whether the production process is simple or complex	3.52

5. CONCLUSION

Theoretically, there are many methods of determining costs. Depending on the information needs of administrators, accountants in businesses will apply different methods of determining costs. In fact, there are businesses that simultaneously apply many cost determination methods to collect and provide cost information, but there are also many businesses that only choose one cost determination method to provide information. Simultaneous information for financial accounting and management accounting. According to survey results at manufacturing enterprises in Hanoi, cost determination methods being used include: Direct cost collection method, Indirect cost collection method, Determination method Volume-based costing, Activity-based costing method, Aggregation method based on actual costs, Actual costs combined with norms, Normative costs, Target costs, Cost according to product life cycle, Kaizen cost, Method for determining cost according to orders, jobs, Method for determining cost according to simple or complex production process. The level of use of these methods is different. The method most preferred by businesses is the Direct Cost Collection Method with a mean of 4.85, the least used method is Kaizen Costing with a mean of 2.78. This accurately represents the actual situation of production and business activities of manufacturing enterprises in HaNoi. The number of small and medium-sized enterprises accounts for a large proportion, so access to and use of modern cost determination methods is still limited. Lack of understanding of methods, lack of awareness of the importance of information that methods bring, and reluctance to acquire new knowledge are important reasons leading to the low level of application of methods. Determine that modern costs at manufacturing enterprises in Hanoi are not high.

Each method of determining costs will be appropriate to the conditions, production and business characteristics, and product characteristics of each specific enterprise. At the same time, each method will provide information for different information needs. So if in a manufacturing enterprise using only one method of determining costs will not be appropriate, business administrators need to learn and consider using other methods of determining costs. In an increasingly fierce competitive environment, manufacturing enterprises must control costs, build strategies towards sustainable development, and provide cost information for administrators to make business decisions very important. Businesses need to choose appropriate methods to balance costs and benefits from cost information.

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