



## Key Factors and Perspectives in Cost Accounting with Real-Time Patterns

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### ABSTRACT

Cost accounting term describe by chartered institute of management accountants (CIMA). Cost accounting helps the company to calculate total cost details regarding the product so that according to total Cost Company can fix the sale price of the product including profit margin percentage. Cost accounting can be of type standard, marginal, lean, activity based. Cost is the monetary term of a product that is set up by measuring its various internal costs including labor, material, overheads, etc. Costing is the technique to calculate the cost of the product by calculating various factors. Cost accounting is next to costing which relates and analyzes the various costing data and interprets it to the management which helps to improve the efficiency of the business by controlling the various problems that occur in the business. Cost accountancy is the art and science of the cost accountant. The main objective of cost accounting is to help the managerial personnel to make decisions about the product sale price, control production cost, and maximize the profit ratio. Based upon the cost sheet cost accounting can decide the estimated cost or actual cost of the product. Cost sheets include different types of costs incurred during the product manufacturing process.

**Keywords:** Key factors, Cost accounting, Real-time patterns

## INTRODUCTION

Cost Accounting is the managerial tool of the company with the help of which a company sets up its profit margins. Cost Accounting a study of internal matters of a company which includes both fixed and variable cost associated with the production process. It is a record and analysis of a company's cost structure by which a company can study that where its money is being used, how it is being spent, where it is being lost, and how much it earns and it includes all labor cost, material cost, etc. By studying all these cost factors, a company can improve its efficiency and also it will help in measuring financial performance and making future business decisions depending upon the favorable and unfavorable cost of production (Grytz, & Krohn-Grimberghe, 2018; Tang et al., 2018; Alom, 2020). If the actual cost is less than the final cost of a product, then it seems to be a favorable cost and if the actual cost is more than the final cost of a product then it will be an unfavorable cost of the product. So, by studying these costs a company can control the current operations and improve the net margins in the future (Wang et al., 2018; Kadim et al., 2021).

Cost accounting, costing, and cost accountancy are normally used business terms for decision making and to improve the efficiency of a company. The practice of presentation of information about managerial decisions and keeping records. During the product manufacturing stages, a different type of cost involves different levels. All the direct and indirect cost incurred during the production of services and goods is referred to as production cost (Labrador, & Olmo, 2019). Administrative cost refers to expense occur during a managerial task on stationery, electricity, rent, and telephone. Selling cost refers to the expenses that involve in promotion, research, customer services, and advertisements. Distribution costs related to transportation, delivery services, and warehousing cost. Research cost occurs on the research team's functionality. The research team performs various tasks related to introducing new features of the product and updating previous features.

Cost accounting is different from financial accounting from the key perspective of audiences. Financial accounting is accounting which can be accessible by the externals like its shareholders, creditors, lenders, and regulators. It includes its statement of cash flows, profit or loss, balance sheet, etc. While Cost accounting includes its internal management who deals with the critical decisions of the company (Banker et al., 2018; Suleman et al., 2021). Cost accounting is not

regulated by the legal requirements and GAAP (Generally Accepted Accounting Principles) unlike the financial accounting (Yan et al., 2018 & Zhang, 2018).

## LITERATURE REVIEW

### Types Of Cost

Now let's learn about the different types of the cost relates to the cost accounting which are classified into the following four categories:

**Fixed Cost:** Fixed cost is the cost that is fixed during the production process like rent payment of the building which is fixed monthly and does not depend on the production of process. As the rent of the building is fixed and it does not change whether the production decreases or increases. Similarly, insurances and taxes are fixed irrespective of the quantity of production.

**Variable Cost:** Variable cost is the cost that varies from time to time depends upon the volume of production like shipping, processing cost, and packaging cost, etc. It depends upon the volume of production and changes accordingly with the increase or decrease in output. So, the packaging cost, raw material cost varies concerning the total production. Similarly labour also varies according to the production and it affects the labor cost.

**Operating Cost:** Operating Cost relates to daily business activities which can be fixed, or variable depends upon the production like electricity expenses and maintenance expenses etc. Operating cost does not relate directly to manufacturing or production, but it needs in the process of production, and it varies according to its usage.

**Direct Cost:** Direct cost is the type of cost which is directly related to the production process. It includes raw material cost and labor cost etc. These types of costs are directly related to production. It can be fixed or variable according to the production generated .it increase with the increase in production and decrease with the decrease in production.

**Indirect Cost:** Indirect cost is not directly related to the production process but engaged during the work of the production like administrative cost security costs, wages paid, legal fees, depreciation, and other overhead expenses, etc. So all these types of costs are studied to calculate the cost per unit of production.

## **COST BUILDING BLOCKS**

Labor, expenses, material, and overhead describe the building blocks of cost in any organization. Further all building blocks are divided into two categories: direct and indirect costs. Direct cost defines that is directly implied to product and indirect cost occurs to support the functionality of direct cost.

Labor cost occurred on staff members that are related to various stages of the product. Labor cost can be direct cost, or it can be indirect. Direct labor cost considers the persons that involve in the conversion of raw material into finished goods. In this category manufacturer labor will be considered. Indirect labor cost thinks about the persons that are not directly participating in the manufacturing process, but they provide directions to direct labor for full fill their task and also provide helps to deliver the final products to the customers. Directors and salespersons are considered indirect labors.

Material costs related to raw material and various types of machinery that are required for production. The further material cost can be divided into indirect cost and direct cost. Direct material cost occurs on material that involved producing a final product. For example, cost incurred on purchasing raw material is a direct cost. Cost occurs on the purchasing of machinery that is used to produce final goods that can be considered the indirect material cost. Expense costs related to costs that occur on supporting activities that are related to labor and material. It can be a direct expense cost or indirect expense cost. Direct expense cost related to building rent and bills etc. Indirect expense costs related to cost that occurs from like legal activities and security measures (Ringelstein, 2018 & Aman-Ullah, Aziz, Ibrahim, Mehmood., & Abbas, 2021). Overhead cost related to office overhead, distribution overhead, and managerial overhead. Overhead costs include stationary cost, transportation cost, cost related to office activities, cost incurred in providing training to employees, cost related to advertisement of products (Mohr et al., 2018 & Abbas et al., 2022a & Abbas et al., 2022b).

## **COST ACCOUNTING TYPES**

**Standard Cost Accounting:** In this cost accounting, standard labor and material are defined for the production of goods under certain operating conditions. Still there is a difference in standard costs defined and actual costs of producing the goods and the study of this difference is called

variance analysis. The variance analysis must be favorable to improve efficiency (Kawalla et al., 2018).

**Activity-Based Accounting:** In this accounting method various activities are defined during the production of goods and then the cost is allocated to each activity. This allocation of cost helps us to determine the proper profitability of all the products.

**Marginal Cost Accounting:** It is the cost accounting type in which only variable costs are considered and the fixed cost is considered as the cost for the period, it is directly a part of the income statement. Variable cost includes direct material cost, direct labor cost changes according to the volume of production.

**Lean Accounting:** In traditional times the inventory is termed as an asset even though the inventory is not in use. So lean accounting shows that the inventory which is more than use is bad and the cost involved for this inventory is termed as holding cost. Lean accounting determines not only what is produced in a month but also tells that in how much time the production takes. It provides service excellence by eliminating waste during production. Figure 1 shows the key dimensions of cost accounting.



**Figure 1:** Key Dimensions of Cost Accounting

## APPLICATIONS OF COST ACCOUNTING IN BUSINESS

In any organization, it is most important to measure the cost of a product, process, or project to know about the profitability of the business. Cost accounting is a technique that helps to decide the price of the final product that is going to release in the market for sale purposes. In the modern era, due to tough competition between businesses it is very difficult to decide the product cost that includes all the costs that occur in different phases of the product development life cycle. Cost accounting helps the top managerial person to make decisions about product costing. So cost accounting is not limited to manufacturing business rather it involves every business that faces hard competition in the market, these businesses can be wholesale, retail, banking sectors, insurance sector, airways, hotel industries, shipping industries, transport, and service industries. Cost accounting is different from financial accounting but it provides information that is used in financial accounting (Guarini et al., 2018 & Lütje et al., 2018).

In modern business, cost accounting involves various segments of business to perform various types of analysis. Some of the analyses performed with the help of cost accounting listed below:

**Cost Analysis:** This analysis finds the differences between the estimated cost and actual occurred cost. it also explains the reason why these variations occur between these two costs.

**Cost Audit:** It is used to verify cost sheets with the help of cost accounting principles in organizations.

**Cost Report:** Cost reports are generated with the help of data that is received from cost accounting. These reports help managerial persons in the decision-making process.

**Cost Ascertainment:** It provides the data about the total cost that is incurred in the development of the product or service so that the final price of product or service can be decided.

**Cost Bookkeeping:** Cost accounting is used to maintain different books which record incurred cost and profit from the product. Cost bookkeeping includes profit and loss accounting, ledger, journals, and balance sheets.

**Cost System:** It is used to monitoring cost that involves various phases of product or services and generates various cost reports that help managers in various decisions related to products.

**Cost Comparison:** it helps in exploring the other ways and methods using that manager can reduce cost and increase profit benefits.

**Cost Control:** Cost accounting is also used to control the actual cost of the product because in some scenarios real cost of a product increases that standard cost, to remove these discrepancies cost accounting is used.

**Cost Computation:** It is used to calculate per unit price using cost accounting when the company manufactured products in large quantities.

**Cost Reduction:** Cost accounting can be used to decrease the production cost of a product from the actual cost. Cost reduction always used at a managerial level to increase profit from the product.

### **PURPOSE OF COST SHEET IN COST ACCOUNTING**

In cost accounting cost sheet play a very important role. it is used to calculate the total cost of a product that is occurred from various components of products. Cost sheet is used to make comparisons with historical data, and it is also used to reduce the selling price of products according to profit percentage (Kaya, 2019 & Abdullah et al.,2021; Mehmood, Mohd-Rashid, Ong., & Abbas, 2021 & Mehmood, Mohd-Rashid, Abdullah, Patwary., & Aman-Ulla , 2022).

A cost sheet can be prepared either from the previous cost or estimated cost. The previous cost shows the actual expense that occurs during product manufacturing, but the estimated cost is a judgmental based cost that is decided before the start of the manufacturing of the product. According to judgment-based cost we decide at the beginning the total amount of cost that we want to spend on product manufacturing at different stages. Preparing a cost sheet for business provides various benefits. Cost sheets help the business to find out the total cost and cost occurs at different stages of the product. It helps to finalize the selling price of the product based on the total cost that is calculated in the cost sheet. Cost sheet helps in performing a comparison with the previous year's cost of the product; this comparison helps the management to decide new strategies regarding the product. Cost sheet provides help at different stages of the product to perform cost control activities because the estimated cost provides the guidelines about the cost that can be spent at a particular stage of the product. Managers at the top levels of the organization also take help from the cost sheet to decide various strategic regarding the product (Behnami et al., 2019). They

decided the tender rate for product components and also decide where to buy components of the product is economical or manufacturing of that component is economical.

### **VARIOUS COMPONENTS THAT INVOLVE IN CALCULATE THE TOTAL COST**

The building block of total cost consisted of office cost, prime cost, cost of sales, and cost of infrastructure.

**Prime Cost:** prime cost consists of direct wages, direct expenses, and direct material that is involved in the production of products. The prime cost of the product can be calculated after the addition of wages cost, direct expenses cost, and material cost. Material costs belong to the raw material that is used during the manufacturing of products. The cost of raw material that is consumed can be calculated by adding the opening raw material stock and raw material purchased during that period and subtracting the closing raw material stock. Given below are formulas to calculate the prime cost and raw material cost.

$$\text{raw material cost} = \text{opening raw material stock} + \text{purchased raw material cost} - \text{closing raw material stock}$$

$$\text{Prime cost} = \text{wages cost} + \text{direct expenses cost} + \text{raw material cost}$$

**Factory cost:** Factory cost include the prime cost as well as the other overhead of the factory. This cost is called a manufactory cost. Other overheads of the factory include indirect wages like training, health insurance, and other benefits that are given to employees, indirect expenses like business permits, audits, office expenses, and indirect materials. Formula to calculate factory cost given below.

$$\text{Factory cost} = \text{prime cost} + \text{indirect expenses cost} + \text{indirect wages cost} + \text{indirect materials cost}$$

**Office cost:** Office cost equals to factory cost with the addition of overheads of administration cost. It can be called administration cost also.

**Sales cost or total cost:** Sales cost refers to the addition of all the cost that occurs during the production of products as well as distribution cost and the percentage of profit margin is called sales cost.



$$\text{Total sale cost} = \text{goods sales cost} + \text{overhead of distribution}$$

### Case Study-1

This case study is related to the XYZ product manufacturing company. In this case we will discuss the various types of costs that are involved to prepare the cost sheet for the current financial year of XYZ Company. Following data related to cost sheet is available with us:

Consumed direct raw material: 10,000, raw material opening stock: 120,000, raw material closing stock: 7000, wages directly involve: 40,000, expenses directly involve: 9000, the overhead of factory 100% of directly involves wages, overheads of office 10% of total work, the overhead of distribution: 20,000, finished items opening stock cost: 8000, finished items closing stock cost: 13,000, profitability on cost 15%.

**Table 1**

*Analytics of Cost Accounting and Key Features*

Particulars	Computation	Total
Consumed direct raw material	10,000	
raw material opening stock	120,000	
Addition: purchase	130,000	
Subtraction: raw material closing stock	7000	123,000
wages directly involve		40,000
Expenses directly involve		9000
<b>Prime cost</b>		172,000
the overhead of factory 100% of directly involves wages	$(40000/100)*100$	40,000
<b>Work cost</b>		212,000
overheads of office 10% of total work	$(212,000*10)/100$	21,200
<b>Production Total Cost</b>		233,200
Addition: finished items opening stock cost		8,000
<b>Selling goods cost</b>		241,200
Subtract: finished items closing stock cost		13,000

<b>Sold goods cost</b>		228,200
the overhead of distribution		20,000
<b>Sales cost</b>		248,200
profitability on cost-15%	$(248,200 * 15) / 100$	37230
<b>Sales</b>		285,430

## Case Study-2

In Gujarat Amul, ICE cream came into existence on 10.03.1996. Its portfolio consists of various products like Cups, Cones, Sticks, bricks and catering packs, etc. It was started with real milk. It is the milk company and its superiority in all the products gives it a competitive advantage with good quality assurance.

Amul ice cream started in Mumbai in 1997 and after this it was in Chennai in 1998. In 2002 it was started in Kolkata and Delhi. It spreads the nationwide across the country in 1999. It achieved the No. 1 Position in 2001 by combating the competition with Kwality walls and mother diary. The market share of Amul ice cream today is 38% which is 4 times to his closest competitor HLL which has 9% market share. It captures a large market share within a short period of time which is a remarkable achievement to the company due to his huge variety of products, good quality, and price differential.

The company's cost sheet is prepared to calculate the cost per unit product. Cost sheet is a system of cost accounting in which per unit product cost is determined in a manufacturing unit. It gives the comparative analysis by analyzing the expenses and costs incurred in the unit and determine the selling price of the product.

Amul's cost sheet consists of various particulars of the Amul like direct material consumed, raw materials, dry fruits, milk, flavors, seasonal cups, waffles, sugar, cocoa powder, electricity, salaries to the labor, insurance, rent, office overheads, distribution expenses, advertisements, packaging costs, carriage outward, etc.

The total cost of Amul ice cream production can be analyzed with the help of the cost sheet which came out to be the cost of 100000 units is 7229300 therefore; the cost per unit would be 72.29. The estimated cost of sale would be 8229300 and therefore the cost per unit 82.29. But before the

final release of the product in the market, the company calculates its profit by 25%. Therefore the company's sale product is of Rs 10286625 and the cost per unit is 102.86. So with the help of a cost sheet, the company can compare itself with its competitors and set the cost per unit accordingly to attain the net profit.

## **CONCLUSION**

The involvement of cost accounting in modern business increased day by day. It helps in both the manufacturing industry and the service industry for cost audit and monitoring competitors. Cost accounting using a cost sheet that analyzes the various type of costing and provide per-unit cost for the product. Cost sheet used as a reference paper which helps management to take the various decision regarding cost control, cost reduction, cost budget, and finalize the selling price of the product. Although cost accounting is used in most businesses and services sectors, still it has some limitations. Cost accounting does not follow fixed standards and it alone cannot control cost because it requires expert knowledge and accurate actions over time to time.

**REFERENCES**

- Abbas, Y.A., Mehmood, W., Lazim, Y.Y., & Aman-Ullah, A. (2022b). Sustainability reporting and corporate reputation of Malaysian IPO companies. DOI: [10.1007/s11356-022-21320-9](https://doi.org/10.1007/s11356-022-21320-9).
- Abbas, Y.A., Mehmood, W., Manhal., M. H., & Aman-Ullah, A. (2022a). The Level of Sustainability Reporting of Malaysian IPO Companies. DOI: <https://doi.org/10.21203/rs.3.rs-1478999/v1>.
- Abdullah, Y., Ahmad-Zaluki, N. A., & Abd Rahim, N. (2021). Determinants of CSRD in non-Asian and Asian countries: A literature review. *Journal of Global Responsibility*, 12(1), 114-135.
- Alom, S. (2020). An Empirical Exploration of Demand and Supply in Malaysia Housing Market. *South Asian Journal of Social Sciences and Humanities*, 1(1), 123-135.
- Aman-Ullah, A., Aziz, A., Ibrahim, H., Mehmood, W., & Abbas, Y. A. (2021). The impact of job security, job satisfaction and job embeddedness on employee retention: An empirical investigation of Pakistan's health-care industry. *Journal of Asia Business studies*, DOI 10.1108/JABS-12-2020-0480.
- Banker, R. D., Byzalov, D., Fang, S., & Liang, Y. (2018). Cost management research. *Journal of Management Accounting Research*, 30(3), 187-209.
- Behnami, A., Benis, K. Z., Shakerkhatibi, M., Fatehifar, E., Derafshi, S., & Chavoshbashi, M. M. (2019). Integrating data reconciliation into material flow cost accounting: The case of a petrochemical wastewater treatment plant. *Journal of Cleaner Production*, 218, 616-628.
- Grytz, R., & Krohn-Grimberghe, A. (2018). Business intelligence and analytics cost accounting: An empirical study of the perceptions of stakeholders and their implications. *International Journal of Systems and Service-Oriented Engineering (IJSSOE)*, 8(3), 37-59.
- Guarini, E., Magli, F., & Nobolo, A. (2018). Accounting for community building: The municipal amalgamation of Milan in 1873–1876. *Accounting History Review*, 28(1-2), 5-30.
- Kadim, J. R., Sabti, Y. M., Ali, G., Khair, W. A., & Shaltag, K. H. (2021). The Impact of the Professional Competence of the Internal Auditor in Improving the Quality of Accounting: Analytical Study. *South Asian Journal of Social Science and Humanities*, 2(5), 85-99.
- Kawalla, C., Berkel, W., Kawalla, R., Höck, M., & Ligarski, M. (2018). Material flow cost accounting analysis of twin-roll casting magnesium strips. *Procedia Manufacturing*, 15, 193-200.
- Kaya, C. T., Turkyilmaz, M., & Birol, B. (2019). Impact of RPA technologies on accounting systems. *Journal of Accounting & Finance*, 82.
- Labrador, M., & Olmo, J. (2019). Management accounting innovations for rationalizing the cost of services: The reassessment of cash and accrual accounting. *Public Money & Management*, 39(6), 401-408.

- Lütje, A., Möller, A., & Wohlgemuth, V. (2018). A preliminary concept for an IT-supported industrial symbiosis (IS) tool using extended material flow cost accounting (MFCA)-Impulses for environmental management information systems (EMIS). In *Advances and New Trends in Environmental Informatics* (pp. 167-181). Springer, Cham.
- Mehmood, W., Mohd-Rashid, R., & Ong, C. Z., & Abbas, Y. A. (2021). Factors driving IPO variability: evidence from Pakistan stock exchange. *Journal of Economics, Finance and Administrative Science*, DOI 10.1108/JEFAS-04-2021-0036.
- Mehmood, W., Mohd-Rashid, R., Abdullah, Y., Patwary, A. K., & Aman-Ulla, A. (2022). Inclusive mapping of initial public offerings: A bibliometric and literature review study. *Quality & Quantity*, 4, 1-46.
- Mohr, Z. T., Raudla, R., & Douglas, J. W. (2018). Is cost accounting used with other NPM Practices? Evidence from European countries. *Public Performance & Management Review*, 41(4), 696-722.
- Ringelstein, D. (2018). Time-driven activity-based cost accounting: A critical review. *Journal of New Business Ideas & Trends*, 16(3), 20-27.
- Suleman, D., Mehmood, W., Iqbal, F., & Ashraf, M. U. (2021). Covid-19 Suicidal Cases in India in the Light of Poverty: Upcoming Challenges for India in Terms of Economy. *Review of International Geographical Education Online*, 11(10), 2108-2118.
- Tang, T. Q., Wang, T., Chen, L., & Huang, H. J. (2018). Analysis of the equilibrium trip cost accounting for the fuel cost in a single-lane traffic system without late arrival. *Physica A. Statistical Mechanics and its Applications*, 49, 451-457.
- Wang, J., Wang, R., Zhu, Y., & Li, J. (2018). Life cycle assessment and environmental cost accounting of coal-fired power generation in China. *Energy Policy*, 115, 374-384.
- Yan, G., Liu, D., Li, J., & Mu, G. (2018). A cost accounting method of the Li-ion battery energy storage system for frequency regulation considering the effect of life degradation. *Protection and Control of Modern Power Systems*, 3(1), 1-9.
- Zhang, Z. (2018). Construction of the multimedia teaching platform of cost accounting course based on excel VBA program. *International Journal of Emerging Technologies in Learning (IJET)*, 13(05), 177-187.