



We'll get you there

CPAs | CONSULTANTS | WEALTH ADVISORS

Cost Accounting 101 for Manufacturing Industry

July 13, 2026



The information herein has been provided by CliftonLarsonAllen LLP for general information purposes only. The presentation and related materials, if any, do not implicate any client, advisory, fiduciary, or professional relationship between you and CliftonLarsonAllen LLP and neither CliftonLarsonAllen LLP nor any other person or entity is, in connection with the presentation and/or materials, engaged in rendering auditing, accounting, tax, legal, medical, investment, advisory, consulting, or any other professional service or advice. Neither the presentation nor the materials, if any, should be considered a substitute for your independent investigation and your sound technical business judgment. You or your entity, if applicable, should consult with a professional advisor familiar with your particular factual situation for advice or service concerning any specific matters.

CliftonLarsonAllen LLP is not licensed to practice law, nor does it practice law. The presentation and materials, if any, are for general guidance purposes and not a substitute for compliance obligations. The presentation and/or materials may not be applicable to, or suitable for, your specific circumstances or needs, and may require consultation with counsel, consultants, or advisors if any action is to be contemplated. You should contact your CliftonLarsonAllen LLP or other professional prior to taking any action based upon the information in the presentation or materials provided. CliftonLarsonAllen LLP assumes no obligation to inform you of any changes in laws or other factors that could affect the information contained herein.

Session CPE Requirements

- You need to attend 50 minutes to receive the full 1 CPE credit.
- There will be 3 attendance markers and 1 polling question throughout the presentation. You must respond to a minimum of 3 to receive the full 1 CPE credit.
- **Both requirements must be met to receive CPE credit.**



Presenting Today



Mike Estes
Engagement Director
Client Accounting and
Advisory Services



Jon Hughes
Principal
Client Accounting and
Advisory Services



Learning Objectives



- Identify labor and overhead cost structures
- Identify root causes of margin leakage
- Discuss absorption rates and variances
- Recall ways to apply methodology to improve profitability
- Discuss the information that will help you make informed operational decisions



Polling Question

How familiar are you with cost accounting concepts and practices?

- Very familiar – actively using in our operations
- Somewhat familiar – understand basics but not fully implemented
- Limited familiarity – have heard of it but not widely used
- Not familiar



Agenda

- The case for cost accounting
- The three Cs of profitability
- Labor, material, overhead absorption
- Study methodology and implementation
- Executive checklist and action planning
- Case studies and resources



Sound Familiar?

"Platforms are not consistent in how they **measure and report** GMs"

"Why are there **big swings** in GMs from month to month?"

"No one can explain monthly **variances**."

"We don't know which **customers/products are profitable**."

"**Quoting** is anecdotal based on the way it's always been done."

"We're quoting jobs at a target margin of X, but **our financials are telling a different story**."



Why Cost Accounting Matters



Three Cs of Profitability

A fact-based, data-driven approach for improving profitability

Customers

- Concentration
- Volume
- Price
- Mix

Do we understand how **customer concentration, volume, and mix (customer, product, channel) impact margins?**

Can we see margin per customer?

Does pricing require adjustment?

+

Costs

- Direct
- Indirect
- SG&A

When was the last time costs were reviewed to **correct spending level for current activity?**

A periodic look at variable, semi-variable and fixed costs confirms if cost of production, breakeven activity and minimum selling price are driving bottom line performance.

+

Capacity

- Utilization
- Labor
- Machines
- Facilities
- Inventories

Utilization is often overlooked.

Capacity + proper per unit costing is critical for go/no decisions for taking new business.

Leverage available capacity with new business that goes straight to the bottom line.





Polling Question

Do you trust the accuracy of your reported gross margins?

- Fully trust
- Mostly trust, but some inconsistencies
- Frequently question results
- Do not trust at all



Cost Accounting Summary



Material
costs

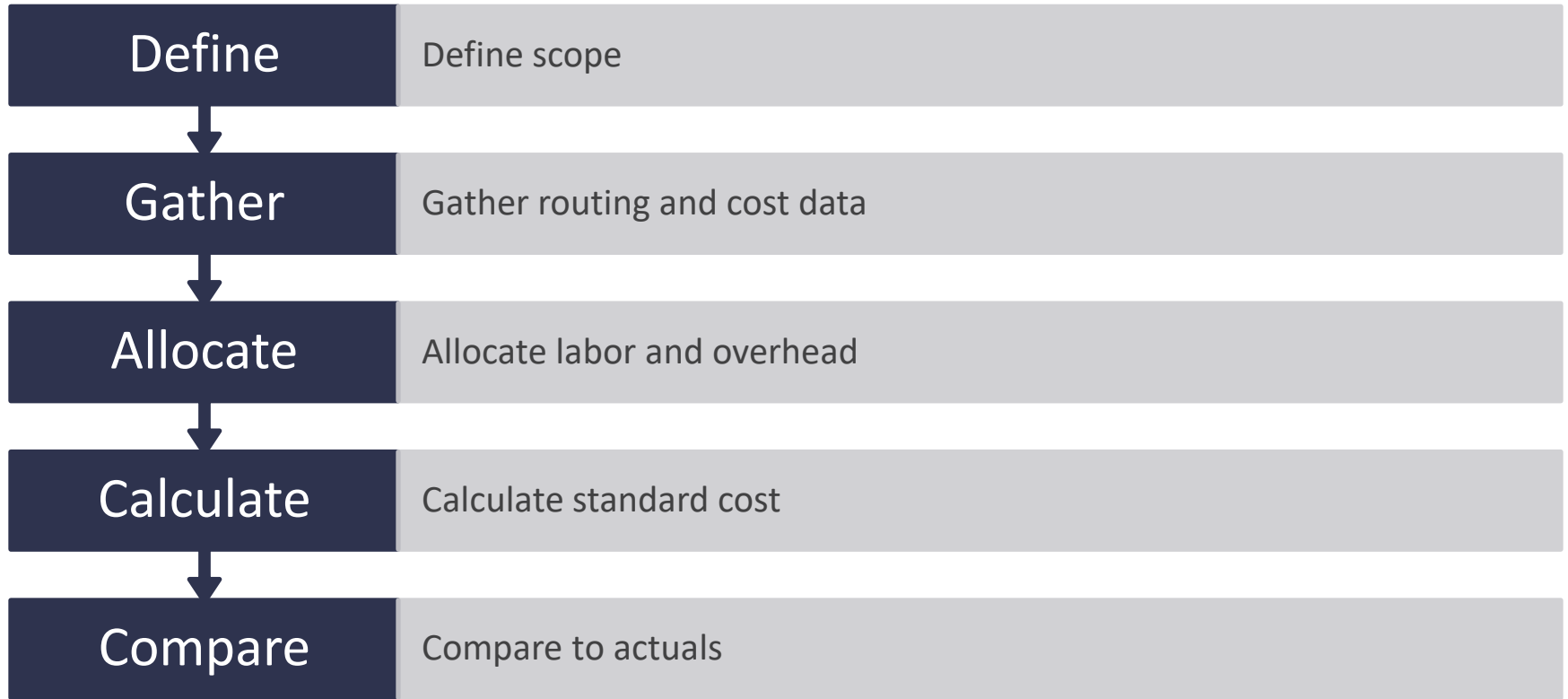


Labor
(direct and indirect)



Overhead
allocation

Methodology Overview



What Data Is Required?



A study requires a few days onsite and access to your ERP (and/or other) systems and production forecasts.

Key data to analyze:

- **Process times:** Ideally, routing sheets or an ERP system is capturing the time each worker spends on each task related each step of your production process.
- **Wages:** Data from your payroll system, including wages, salaries, and benefits, will be pulled for direct and indirect labor rates calculations.
- **General Ledger:** Data will be sorted for overhead calculations.

Labor Absorption

- Measures allocation of labor costs
- Target: 85–90% utilization
- Underperformance drives variances

Labor is organized in two categories: *indirect and direct*.

Direct labor is work required for active production. Direct labor absorption measures the % of total direct factory labor costs (wages and benefits) that are allocated to each job or unit of production. Well-run factories typically like to see 85-90% of labor costs absorbed (start-up time, breaks and clean-up time make up the balance).

Indirect labor is work required for the administration of the facility and included in the overhead allocation.



Material Absorption

- Tracks raw material costs per unit
- Driven by Bill of Materials (BOM)
- Purchase price variances impact margins

Material costs are typically the largest component of product cost.

- A **Bill of Materials (BOM)** defines the quantity and specification of each raw material, component, and sub-assembly required to produce a finished good. Accurate BOMs are essential for standard costing and job-level profitability.
- Standard material costs should reflect **landed costs**—purchase price plus freight, duties, and handling. **Purchase price variances** (the difference between standard and actual cost) and **usage variances** (scrap and waste beyond standard allowances) are the two key drivers of material cost variances that erode margins.



Overhead Absorption

- Includes facility and indirect costs
- Categorized as variable, semi-variable, fixed
- Allocated to production units

“**Overhead absorption**” math is calculated in a similar fashion. Overhead includes a basket of ongoing expenses required to run a manufacturing facility including rent, utilities, production machinery, maintenance equipment, office supplies, insurance, and indirect labor (factory supervisors, maintenance staff, and management). These costs need to be accumulated by **variable**, **semi-variable** and **fixed** so the impact of activity can be assessed.

A fixed overhead percentage is calculated and applied to each job or unit for costing purposes.



Labor and OH Study: Step by Step

- **Determine scope.** Identify the specific products or services to be studied, the time period to be covered, and the level of detail required.
- **Gather routing sheets.** Obtain routing sheets for the products or services being studied, which provide a detailed breakdown of the production process, including labor and machine time for each step.
- **Identify direct labor costs.** Review routing sheets to determine labor hours required for each step and multiply by the hourly wage rate to calculate direct labor costs.
- **Calculate indirect labor costs.** Collect data on wages, salaries, and benefits for employees not directly involved in production but contributing to the process. This includes supervisors, quality control personnel, maintenance workers, etc. Allocate indirect labor costs to products or services using an appropriate method.
- **Determine overhead costs.** Collect data on indirect costs associated with manufacturing, such as rent, utilities, equipment maintenance, and insurance.
- **Allocate overhead costs.** Allocate overhead costs to products or services using an appropriate method, such as direct labor hours or machine hours.
- **Calculate standard cost per unit.** Add direct labor costs, indirect labor costs, and allocated overhead costs to determine the standard cost per unit.



Implementation Phases

LEADING PRACTICE

		Crawl	Walk	Run
Approach by cost driver	Labor	Data typically not tracked, limited availability or accuracy in question	Direct labor tracked manually on travelers or keyed into ERP No allocation of indirect labor	Capture all direct labor on each work order into ERP, scanned, if available. Routing Sheets hours confirmed by time studies Capture indirect labor in overhead pools.
	Material	Review of purchase orders or cash payments of Inventoriable items	Direct costs are tagged to BOMs	Fully costed BOMs with landed costs
	Overhead	Data typically not tracked, limited availability or accuracy in question	Separate cost pools for manufacturing operations and determine an OH rate based on direct labor rate per hour. (Plant-wide vs. cost centers).	Cost center rates for all manufacturing operations based on direct labor, machine hours, or ABC costing method.
Inventory		Calculate Inventory utilizing the "Retail Inventory Method" (RIM).	Valued based on direct costs on BOMs, direct labor allocated, and plant-wide OH rate.	Valued at closest estimated actual cost based upon BOMs, routers, and rates.
Time to implement	Have system and Controller	Days	1-4 months	2-6 months
	No system and Controller	1-2 months	2-6 months (with system implementation)	6-12 months
Confidence		Low (only as good as pricing and margin)	Medium	High



How Do We Use Our Study?

Compare actual costs to standard costs.

Compare actual costs incurred to standard costs calculated to identify areas for cost reduction or efficiency improvement.

Analyze results. Review study results to identify areas for cost reduction or efficiency improvement, such as process changes or supplier contract renegotiation.

Communicate results. Share study results with key stakeholders, such as management, production staff, and suppliers, to build buy-in for necessary changes and verify everyone is working towards the same goals.

Improve profitability: Understand profitability at the job and product level. Know which work to chase and which to walk away from



Executive Checklist



- Do we trust reported margins?
- Are variances understood?
- Are decisions based on current data?
- How can we use this data to improve profitability?



Polling Question

What do you believe is the biggest driver of margin leakage in your operation?

- Labor utilization/absorption
- Material cost/BOM accuracy
- Overhead allocation
- Pricing/quoting approach
- Lack of visibility into customer or product profitability



Action Plan

- Refresh standards annually
- Investigate material variances
- Align operations and finance
- Improve data accuracy

Case Studies

1

US-based manufacturer



Challenge: \$2M in operating variances due to inaccurate labor reporting and material issuance building up for years, hiding the correct margin.



Strategy: Train staff, update BOMs & routers, adjusted pricing



Result: Recouped margin left on the table.

2

US-based manufacturer



Challenge: Outdated cost/ton pricing model. Hundreds of products priced below variable contribution margin.



Strategy: SKU-level costing



Result: \$1M profit improvement.

Source: [M&A Expertise for Founders & Families](#)



Polling Question

Would you be interested in connecting with CLA to discuss an inventory profitability study for your shop?

- Yes – I'd like to schedule a follow-up discussion
- Maybe – I'd like more information
- Not at this time
- Already working with CLA on this



ARTICLE

Variances Eroding Factory Profits? Learn How to Measure, Manage

MANUFACTURING | 7/22/2024



Consider a labor and overhead study to help identify expense creep and cost reduction target areas in manufacturing.

Subscribe



CONNECT



Jennifer Clement
INDUSTRY LEADER



414-238-6785



Mike Estes
CAAS ENGAGEMENT
DIRECTOR

704-816-8573

What is a labor and overhead study?

A labor and overhead study is a pillar of plant profitability, helping leaders confirm their approach for measuring plant performance is accurate. Over time, the approach can become out of synch with operating reality, resulting in variances eroding profits. In reality, unfavorable variances or favorable

[Variances Eroding Factory Profits? | Learn How to Manage: CLA](#)

ARTICLE

What's the Difference Between Average and Standard Costing of Inventory?

MANUFACTURING | 1/22/2026



The choice between the two depends on the nature of the business, the type of inventory, and the company's management objectives.

Subscribe



CONNECT



Jennifer Clement
INDUSTRY LEADER



414-238-6785



Traci Tran
MARKET LEADER

714-795-5446

Inventory costing plays a critical role in financial reporting because it directly affects asset valuation, profitability, and operational decision making.

Two commonly used costing methods are average costing and standard costing, each offering different advantages depending on the nature of the business and its inventory. Understanding the differences helps organizations determine which method aligns with their goals.

[Difference Between Average and Standard Costing of Inventory: CLA](#)



A photograph of a classroom scene. In the foreground, several students are seated at wooden desks, viewed from behind. Their hands are raised high in the air, indicating they want to ask a question or answer. The students are wearing various casual clothing like sweaters and plaid shirts. In the background, a male teacher stands near a whiteboard, looking towards the students. The room is bright with natural light coming from a window on the left.

Questions?



Thank You!

Mike Estes

Engagement Director

Client Accounting and Advisory Services

mike.estes@CLAconnect.com

Jon Hughes

Principal

Client Accounting and Advisory Services

jon.hughes@CLAconnect.com



CLAconnect.com



CPAs | CONSULTANTS | WEALTH ADVISORS

©2026 CliftonLarsonAllen LLP. CLA (CliftonLarsonAllen LLP) is an independent network member of CLA Global. See [CLAglobal.com/disclaimer](https://claglobal.com/disclaimer).

Securities and investment advisory services are offered through CliftonLarsonAllen Wealth Advisors, LLC, an SEC-registered investment advisor, member FINRA/SIPC.