



Ten Steps to Lean Accounting

The word is out: Lean Accounting is the wave of the future. Or is it?

Lean Accounting is the first really new concept in accounting in years, where key progress includes double-entry bookkeeping (Middle Ages), Standard Financial Statements (early Nineteenth Century), overhead allocation (early Twentieth Century), and Activity Based Costing (1980's). And it is demonstrably better in its proper environment, producing a dramatically clearer picture of the enterprise for planning and operational control purposes. But what is it, and what is its proper environment?

How Lean Accounting is Different

In standard, full-absorption accounting, a primary task of accountants is to fix specific costs to every produced item. The costs are typically captured and tracked in units of raw, Work-in-Process (WIP), and finished goods inventories, and become Cost of Goods Sold (COGS) on the Profit and Loss Statement (P&L) as each unit is bought by a customer. Numerous transactions are processed daily to ensure that costs of materials and direct labor are assigned correctly and that production overhead costs are allocated as accurately as possible. That can be a lot of accounting.

By contrast, Lean Accounting focuses on all costs of “value streams” (start-to-finish work activities associated with individual product families). Because inventories are virtually eliminated or held very stable by in-line kanban rules, costs are streamlined and no longer tracked into and out of inventory. This significant work reduction frees accountants up for really productive work, helping company strategists focus on uses for available capacity (which typically increases dramatically in a lean environment) and helping line operators identify, prioritize, and capitalize on cost opportunities. Lean Accounting may not be less accounting, but it provides a lot more bang for the buck.

When to Consider Lean Accounting

At this writing, American productivity is reaching new heights at a dizzying pace, with industry leaders topping out at levels thought unachievable a few decades ago and fast followers catching up with gusto. Spearheading this activity are the theorists and practitioners of Lean Operations, who noticed early that production can be most profitable when it makes and delivers almost exactly what willing buyers want and almost exactly when they want it. In its purest form, this would be unique products and services created one at a time for individual customers at mass-production cost efficiencies.

Of course, and fortunately, there are marketers to run herd on the demand, ensuring that buyers can be found for high volumes of the same or very similar products. And there are still products which can be produced on lines that run three shifts every day for years. But for most products, shorter runs of a variety of products and features are the trend, and always more efficient following these principles of Lean Operations:

- Production is only to customer demand

- Each line station is signaled to produce by demand at the next station

- Inventory is greatly reduced throughout the process



So, what is the proper environment for Lean Accounting? In general, the more variety of product and process, the more often lines are stopped and started, the more a company will profit from Lean Operations. And the more a company gains by shifting to Lean Operations, the more it will gain from also shifting to Lean Accounting. The wave of the future? For many industries, the future has arrived.

Shifting to Lean Accounting

Because proper accounting is so critical and Lean Accounting is so different, it is important to proceed carefully, and generally takes several years to accomplish, primarily because year-end method shifts are the least disruptive. It is also important that the path to Lean Accounting be aligned with the progress toward a Lean Operating environment, which also generally takes months or years to achieve. The following Ten Steps describe a possible transition path.

Step 1: Evaluate Where You Are and Where You Want to Be

Using an evaluation system such as the *Kaufman Global 20 Keys of Lean Accounting*®, determine how much change your accounting system and processes will need to change. Based on planned progress toward a Lean Operating environment, develop a road map to ensure that your accounting system will support the environment and provide optimum benefit from the lean implementation. Begin to set executives' and operating managers' expectations, and to develop interim metrics to demonstrate the value of lean manufacturing. These will be critical because many lean benefits are masked by traditional accounting, and some (such as Cost of Goods Sold during periods in which inventory is reduced) may actually look worse!

Step 2: Establish Implementation Principles

Accounting is accounting, and accountants are beholden to many masters. Generally Accepted Accounting Principles (GAAP) are defined and continuously updated by the Financial Accounting Standards Board (FASB). The Sarbanes-Oxley Act (SOX) requires controls and documentation to prevent fiscal abuses by corporations. And every company has its own set of planning, consolidation, and reporting requirements, defined by executive management and influenced by market analysts. The first step is to ensure that the requirements are understood, and particularly that inviolable rules are clear.

Beyond the inviolable rules within GAAP and SOX, though, there is considerable flexibility, and it is critical that executives understand the benefits and have appropriate expectations about Lean Accounting from the beginning, so that they can help establish the Principles to be followed in their specific implementation. An example of a set of Principles:

Total compliance with GAAP

- All costs properly assigned to products [define how]
- All inventories appropriately valued [define how]

Total compliance with SOX

- All control processes documented
- All audits current [plan how]

Headquarters consolidation

- Monthly (or quarterly?) closing
- Monthly forecast



- Profitability and cash flow
- Value Stream statistics
- Available capacity
- Operations improvement targets and progress

Step 3: Establish Production-Oriented Metrics and Business Case Methodology

In the earliest stages of implementing Lean Operations, baselines are established for a variety of balanced objectives, such as First Pass Yield, On-Time Delivery, Available Capacity, and Production Units per Hour. Accompanying these metrics are such financial measures as inventory by category, unit cost, scrap and rework, and the like. Since the end objective of implementing a lean environment is total plant profitability, it will be important to prioritize improvement opportunities that attack the root causes of waste. Lean teams need accounting help to understand the underlying cost drivers, and to calculate and format business cases that clarify exactly what investments are required and as precisely as possible where improvements will show up. As Lean Accounting simplifies some accounting work, it will free up accountants increasingly to work directly with operating teams to optimize investments in operations improvements.

Step 4: Establish the Lean Operating Environment and Eliminate Most Inventories

The lean environment starts at the top, with executive focus in the form of an Executive Steering Team (EST), and works its way to ubiquitous front-line involvement through the Lean Daily Management System (LDMS). This takes many months in a large, complex organization, and the payoff starts slowly but builds momentum as it goes – success breeds success. As front line teams become increasingly effective at eliminating waste and responding to a self-tuning pull system, all categories of inventory will decrease fairly rapidly to a sustainable new configuration. As this new inventory configuration emerges, associated accounting can evolve to dramatically simpler tracking, eventually achieving a fixed level with periodic adjustments reflecting overall plant throughput (described in Step 7, below).

Step 5: Identify Value Streams

Among the numerous Stock Keeping Units (SKUs) in most manufacturing operations, there are a limited number that define the products that customers buy, and these can generally be grouped into a very few product families that are very close in work content. The value stream of each product family is defined by mapping its processes fully from material procurement through product shipping. The value stream does not distinguish between direct labor and the indirect support – from engineering, maintenance, or material handling, for examples – that collectively produce the items. Eventually, all of these costs will be assigned directly to Cost of Goods Sold for the period in which the cost is incurred, but transition to that extremely simple accounting will be in stages and takes time.

Step 6: Eliminate Variance Reporting and Backflush All Labor and Materials

In a fully-implemented Lean Accounting system, Cost of Goods Sold is equal to actual incurred period costs, since value is no longer being maneuvered through inventory. At this stage, complicated calculations of product cost variances are less helpful than focus on waste activities of all types. Overhead activities (material handling or maintenance, for example) will be managed to be highly effective with very little wasted motion. What further value would variance details



offer? In addition, variance reporting tends to drive organizations to improve individual activity efficiency by creating inventories, which is diametrically opposed to the lean goals of overall plant optimization and inventory reduction.

But as an interim step, before production cells are fully organized for lean operations, it will be useful to calculate the value of labor and materials by “backflushing” (multiplying actual output by labor and material standards to estimate how much has been applied). Assuming the standards are reasonably accurate, this will maintain control of costs in the traditional way while tracking inventory appropriately during the period of accounting transition and inventory reduction.

Step 7: Eliminate Inventory Tracking and Assign Costs Directly to Cost of Goods Sold as Incurred

As mentioned in Step 4, when inventory is minimized and tracked effectively at the work cell level, it will not vary enough to warrant ongoing in and out calculations and detailed analysis. Work cells will measure actual WIP versus Standard WIP (SWIP) on an ongoing basis, and over and under conditions will receive immediate self-correction at the point of creation. SWIP will be adjusted based on overall plant throughput as volumes rise or fall, and Balance Sheet adjustments can generally be made on an infrequent as-needed basis.

Since inventory is stable in a lean environment, and lead times are so short, all production costs are assignable to current period Cost of Goods.

Step 8: Establish Customer-Oriented Target Costs

In many firms, “value-added” simply means how much cost is applied to products in operations managed by the company. Since customers are buying the products offered, customers must also value the work performed. But in today’s competitive world, it is increasingly critical to start with the customer’s idea of value to establish and create a path to achieve target costs.

While Lean Accounting theorists describe target costing as an element of Lean Accounting, it is in fact equally applicable to any product planning effort regardless of accounting philosophy. The advantage that Lean Accounting offers builds on the fundamental concepts of the lean enterprise: cross-functional teamwork and cell-level analysis can dispassionately drive unnecessary cost out of any value stream. The approach is straightforward and the execution becomes “business as usual” in the lean environment:

- Listen to the voice of the customer
- Determine the cost targets based on profit requirements (shareholder expectations) and customer value
- Focus cross-functional efforts and establish a plan to achieve the costs

Step 9: Link in Suppliers and Automate Accounts Payable

Early in the lean journey, as in-plant kanbans are set, the raw materials areas will usually loom large as an inventory reduction opportunity. From the start, the procurement team will be pressured to go back to the drawing board with suppliers, to ensure quality materials are available as and when demanded by end customers.



Initial steps generally include more frequent purchases (JIT) against blanket orders for key supplies, often using credit cards to eliminate paperwork. Progressively, suppliers may gain access to end customer orders in order to automatically trigger shipments. Eventually, receipts might automatically trigger cash transfers, avoiding Accounts Payable altogether. Because this has profound implications for cash management, these stages are obviously very carefully managed by the accounting team with careful executive oversight.

Step 10: Link in Customers and Automate Accounts Receivable

In the ultimate lean configuration, no product will be started, no materials purchased, no work cell activated until there is customer demand for it. So as the in-plant lead time is reduced, the company will need closer cooperation and information sharing with customers.

Initially, this will simply be shorter lead time (and theoretically more accurate) forecasts. Eventually, it could achieve a high level of visibility to the customer's end customer, with orders triggered automatically and cash transferred as products leave the plant, thus eliminating Accounts Receivable altogether. Once again, any changes in the critical cash management areas must be done with forethought, complete control, and flawless execution.

Who Must Be Involved

Everyone is involved in creating the lean enterprise, and everyone is touched by Lean Accounting. Shop floor participants from direct laborers to supporting knowledge workers are on the front lines. Purchasers, customer service reps, HR professionals, and engineers are partners. The executive staff devotes significant time to overseeing, championing, and even participating in the company's success at all levels. There are no weak links. And providing the management information that enables correct tactical and strategic decisions – through Lean Accounting – is a newly focused financial and accounting team.

Conclusions

Lean Accounting is different and demonstrably more effective wherever Lean Operations are effective. It shifts emphasis from detailed analysis of past activities (that drives sub-optimization into operations) to a two-pronged emphasis on the strategic options surrounding the use of newly-acquired capacity (as waste is eliminated), and on the tactical options on the plant floor that continuously monitor and improve daily activities (where costs are generated). It is complex, and must be introduced carefully in lock-step with the lean operations it supports.

But by creating your road map to Lean Operations and Lean Accounting, you and your shareholders will soon be wondering: why did we wait so long? Here's to your success in the ever-more competitive world economy, increasingly dominated by lean producers.