

Performance Measures and ABC/M: The Flowering of a New Era

By Gary Cokins, CPIM, Director of Industry Relations,
ABC Technologies Inc., Beaverton, Oregon

Enabling

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One of today's ongoing business mysteries is how to interpret a manager's claim that, "We did well last quarter." The usual follow-up question is, "How do you know?" Despite a sea of collected data, organizations struggle with making sense of it all. Although they are generally data rich, they are information poor. Attempts are being made to fix this with "data warehouses" and "number crunching software." But are those technologies simply temporary fixes or a real cure?

The need for accurate and useable performance measurement is clear. When does a department "do well" and how does it's performance impact the entire organization? One way to begin to answer these questions is to improve the organization's measurement system itself. An emerging methodology which solves part of the measurement problem is activity-based costing (ABC) and activity-based management (ABM). ABC is not, in itself, a measurement system. But the output of ABC can provide important input into performance measures. And the presence of ABC data can lead to actions and decision-based measurements, not just smiles or frowns.

THE MANAGER'S DILEMMA

Despite an elegantly worded mission statement posted in a company's lobby entrance that espouses, "Acme Company will be the best provider of low cost and high quality products and services with highest customer satisfaction...", these grand sentiments tend to be hollow words for the manager or employee who asks themselves, "What can I do today to help achieve those lofty goals?" **Figure 1** illustrates this issue.

One of today's most pressing organizational problems is the disconnect between local measurement of areas a manager, team or employee can

Gary Cokins is the Director of Industry Relations for ABC Technologies, Inc. He is an internationally recognized expert, speaker and author in advanced cost management and performance improvement systems, certified in Production and Inventory Management (CPIM) by the American Production and Inventory Control Society (APICS).
e-mail: garyc@abctech.com

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control or influence and the subsequent organizational results. Worse yet, in many cases the measures in place today tend to be internally "competing" and leave the employee in a dilemma where, "As I do well, I adversely affect your measures". Figure 2 reveals how dysfunctional measures create undesirable behaviors and results.

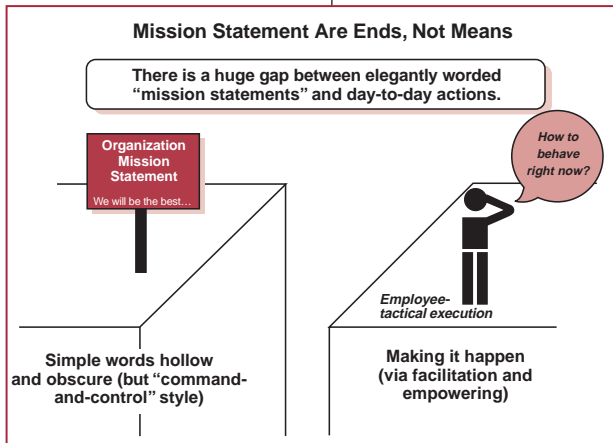


Figure 1 ▲

However, new ideas in the areas of performance management and balanced performance measurement systems are enabling great progress toward directly connecting employee behavior to an organization's strategies and goals. Two attractive aspects of this new thinking are: (1) an increasing emphasis on non-financial measurements, such as customer satisfaction and employee innovation, and (2) a greater focus on predictive measurements (leading indicators) in contrast to after-the-fact historical results that are reported too late to change outcomes (lagging indicators). Figure 3 illustrates the accepted elements of this balanced scorecard.

These newer measurement systems put a greater emphasis on illuminating actual business processes and their intermediate outputs, such as "a processed invoice." When several of these outputs are combined, they become collective components which ultimately result in the end-product and end-services delivered to external customers. However, one of the obstacles that prevents credible reporting about outputs continues to be the traditional accounting system and its practices. Professor John Shank of Dartmouth University began his keynote speech at the 75th Annual Institute of Management Accountants' Conference with the statement, "Today's traditional managerial accounting is at best useless, and at worst dysfunctional and misleading." Pretty strong words. Let's understand what he meant.

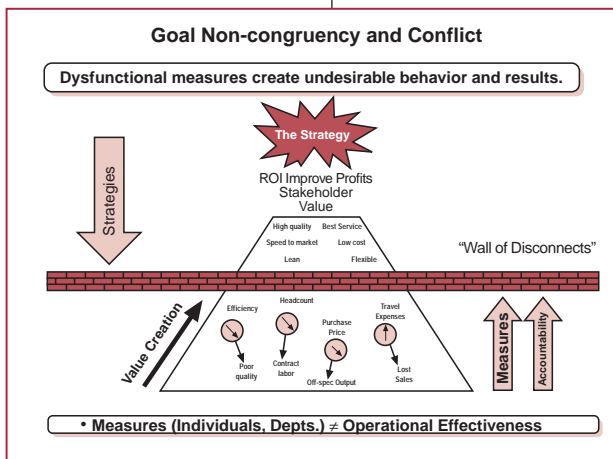


Figure 2 ▲

WHY IS TRADITIONAL ACCOUNTING FAILING MANAGERS?

Why is traditional accounting which has been accepted for so many years suddenly being rejected? The answer is that the existing data it provides is not necessarily faulty as much as it is incomplete, unprocessed or improperly allocated. Today's department manager typically receives a traditional monthly responsibility statement which reports his or her expenses, line-by-line, showing actual costs versus his budget or plan.

However, if you ask managers how much insight they get from this report about the more controllable costs that they incur, they will answer, "Not much!" This is because salary and fringe benefit costs make up the most sizable portion of their controllable costs, and managers only see these costs reported as lump-sums. The monthly responsibility center expense statement functions in reality as a command-and-control tool. Have you as a manager overspent your budget?

However, when these "chart-of-account" expenses are translated into the work activities that consume the financial general ledger's expenses, the usefulness of the information to a manager substantially increases. This translation from where costs were charged into how resources are consumed is the starting point of activity-based costing and management (ABC/ABM). With the costs of work activities quantified, many more areas can be measured.

Figure 4 illustrates how general ledger costs, which accumulate posted transaction costs into catch-all account balances, can be translated into activity costs.

The general ledger's "chart of accounts" view of expenses has additional flaws. In its current state, it is inadequate to report the business process costs which run cross-functionally through the vertical boundaries of the organization chart. For example, it can't calculate the true cost of opening a new customer account. Additionally, many organizations have de-layered in such a way that employees from different cost centers frequently perform similar activities. Only by aligning the work activity costs across the business processes, such as "open new customer accounts," can the end-to-end costs be seen, measured and eventually managed.

In effect, with traditional cost systems, costs are invisible along the end-to-end business processes. Managers are rarely provided data for the stocking, distribution, marketing and selling costs which traditional accounting charges as "expenses to the month's period." Traditional accounting does not proportionately trace these costs to their unique outputs of work, products, services, channels or customers that cause these costs to occur. In contrast, ABC defines the exact same costs, but describes them using a "verb-adjective-noun" grammar. Employees and managers can relate much more easily to this language, and they can favorably impact the work performance that the activity name describes.

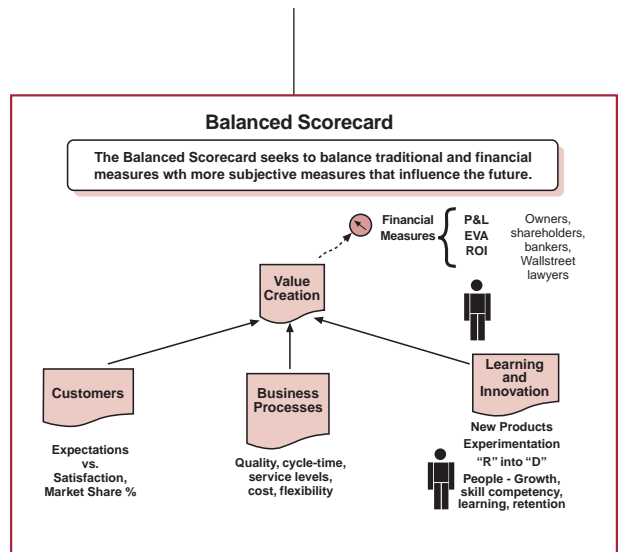


Figure 3 ▲

The Language of ABC/ABM

Stating activities with an active verb-object-noun grammar convention creates an atmosphere for change by providing a new way of looking at something people are already familiar with, rather than something that is foreign.

From: General Ledger				To: ABC Data Base	
Chart-of-Account View				Activity-Based View	
Claims Processing Department					
	Actual	Plan	Favorable/Unfavorable		
Salaries	\$621,400	\$600,000	\$(21,400)	Key/scan claims	\$31,500
Equipment	161,200	150,000	(11,200)	Analyze claims	121,000
Travel Expenses	58,000	60,000	2,000	Suspend claims	32,500
Supplies	43,900	40,000	(3,900)	Resolve provider inquiries	101,500
Use & Occupancy	30,000	30,000	—	Resolve member problems	83,400
				Process batches	45,000
				Determine eligibility	119,000
				Make copies	145,500
				Write correspondence	77,100
				Attend training	158,000
Total	\$914,500	\$880,000	\$(34,500)	Total	\$914,500

When managers get this kind of report, they are either happy or sad, but they are rarely any smarter!

Figure 4 ▲

This gives ABC its flexibility. ABC is cost information for employees and managers, not just accountants.

An effective way to understand ABC is not as a replacement for traditional general ledger accounting but rather as a translation or overlay of the same material. ABC's translated costs form a bridge between the cost account accumulators in the general ledger and the end-users, such as managers, who apply cost data in decision-making. Activity costs can be more flexibly linked or assigned to business processes or to cost objects based on demand-driven consumption patterns, not simplistic cost allocations. And since each activity cost directly links to its causal cost driver, ABC makes fixed costs variable. This shifts the focus to managing the frequency, intensity and quantity of the drivers as the way to manage costs.

The driving force behind ABC/ABM's popularity is the recognition that the general ledger is structurally deficient for delivering good business information for decision support. It is a sound mechanism for collecting and accumulating transaction-intensive costs, but not for converting those costs into useful managerial information. ABC solves the flaw of the general ledger's unprocessed cost data by translating the ledger account expenses into their work activities. But ABC does much more. The total ABC/ABM picture comes from linking the activities to compute costs in many other ways for productivity analysis, profitability analysis, trade-offs, decision-making—and for performance measurements.

UNLEASHING PRODUCTIVITY GROWTH

Recent debates about low rates of productivity growth are beginning to be heard from prognosticators who believe the global economy is about to witness an economic surge. In the book *Prosperity: The Coming 20-Year Boom and What It Means to You (Times Books)*, two Wall Street Journal correspondents argue that the so-called failed promises from software automation will be vindicated. They argue that during the next 20 years, computerization will finally deliver its long-awaited productivity payoff.

In one sense, computers and the information technology revolution parallel the role of electricity at the turn of the twentieth century: it was a nifty new technology, but it was not used well enough to affect productivity. It was not until the 1920s that electricity produced sizable productivity gains. For example, in the early 1900s shaft-and-belt systems (yesterday's mainframes) were slowly yielding to individual electric motors (desktop PCs today), and Thomas Edison was marketing new products that were not yet ready for widespread use. But slowly, electricity became a fact of life instead of a novelty. Soon manufacturers were churning out affordable washing

machines and automobiles for the masses.

In sum, it takes decades for technology to produce productivity and eventually prosperity. Today's business information systems are nearing the end of their choppy start-and-stop production of tangible benefits. And activity-based costing and management (ABC/ABM) will serve as one of the key lubricants that generates smoother and more profitable results.

THE FLOWERING OF AN ERA: A FOCUS ON OUTPUTS

One of the primary ways that ABC/ABM will accelerate the flowering of information-enabled productivity is by providing fact-based data. ABC's reliable data can be used to both assess progress and serve as decision support. In its most basic form, ABC is simply data that is a means to an end. ABC/ABM should not be considered an "improvement program" because then it may be perceived as a fad or project-of-the-month. In reality ABC simply reflects the economics of how an organization behaves; and the output of the ABC calculation engine is an excellent input for performance measurement systems.

Most organizations have very little insight into their internal "outputs" of work, such as what effort it takes to generate:

- a new enrolled account
- a processed invoice
- a returned and put-away good
- a completed engineering change
- a completed new customer sign-up
- a completed executive report
- a registered student
- a sales call
- a set-up or changeover of equipment

These are not simply the "work activities" that employees perform, but are the descriptions of the results of the activities that have been performed — the outputs of work.

The majority of organizations, despite their idealistic claims, are not really "results" oriented. Organizations wrestle internally with allocating resources, which are inputs, but do not have a comparable focus on the results from applying those resources — the outputs. Since ABC segments and traces work activity costs to these intermediate outputs, which eventually pile-up into the end-products and standard services or the costs-to-serve customers, ABC might have been better named "output-based costing". Regardless of semantics, organizations rarely speak in terms of outputs, and even less in terms of the costs of those outputs.

ABC's ability to format both financial data (activity costs) with non-

financial data (quantity of outputs) to report the "actual" (not a standard or target) unit cost of outputs is valuable for three main reasons. First, many organizations are increasingly managed based on trend analysis of "actual" measures, not variances from controversial standards. Second, reporting unitized costs shifts the focus away from managing inputs (i.e., how much budget money you receive) and towards managing the results or outputs. Finally, ABC is not restricted to a single department or cost-center's data — it includes cross-functional and boundary-less data, yet ABC provides an audit-trail of the data back to an individual or group held accountable for the output.

THE COST OF PRODUCTS AND CUSTOMER SERVICES

An inescapable organizational measure will always be, "How much profit did we make?" (Or for not-for-profit organizations, "How much did we subsidize some at the expense of others?") But what is the use of knowing such a number without also knowing its constituent parts? Organizations have very little insight into what work activities comprise their internal and external outputs — and how much of each activity is being consumed. Therefore they have difficulty answering questions such as, "which work activities within an output are more or less important, or may be more or less appropriate for streamlining in the next six months?"

It is a significant accomplishment to move the mindset of an organization to adopt "process-based thinking" and recognize that all processes have outputs — even if they appear intangible, such as "a completed boardroom presentation." But it is an even greater achievement to identify and quantify which work activities (and their costs) make up an internal output.

ABC enables organizations to calculate the unit costs of outputs — the combination of internal and external (such as end-products, standard services, customer orders, and special customer services) services and products. This enables work activity costs to be examined on the basis of both the absolute costs and a per-unit of output cost. With this kind of cost data, relative comparisons can now be made between and among identical activity costs, on a per-unit-of-work basis for different kinds of outputs. This allows organizations to pose the kinds of questions from which they can truly learn about their cost structure.

Most organizations are ill-informed about their true product profit margins due to "mis-allocations" of indirect and other overhead costs. Worse, these same organizations have very little insight into their channel and customer profit margins, which include the "costs-to-serve"

customers — the selling, general administrative (S,G&A) costs which conventional accounting practices directly charge to the P&L as period costs, to comply with generally accepted accounting principles. However, these "costs-to-serve" are not caused by making a product or delivering a standard service; they are directly caused by how a customer places unique demands on the organization's work. When this information is presented to managers of unprofitable products and unprofitable customers, managers can more quickly assess the causes and take corrective actions. The assessment of root-causes is greatly enabled when ABC's fact-based constituent parts are visible too. With ABC, performance measures of profit margins can be reliably derived.

EXPLOITING UNUSED CAPACITY

Organizations have little understanding about the location and cost of their unused and non-productive capacity. There is a tendency to "load" all costs onto only the good products and services delivered. This hides the unused and non-productive costs, and consequently the organization loses the opportunity to decrease them. This practice also over-estimates the true cost of making and delivering good products and services. Managing capacities will become of greater interest to more organizations as they better understand the link between increasing profits and minimizing unused capacities. This interest will also grow as organizations more frequently consider outsourcing.

Organizations can take the first step by beginning to classify costs into three broad categories which describe the non-productive work activities of people and equipment. These are: (1) idle and not working, (2) performing non-producing work (e.g., test products, equipment changeovers, off-spec products/services, waiting for completed upstream work, equipment repairs), or (3) working less efficiently than their normal or standard rate. With ABC, these classifications of costs can be isolated and measured. ABC can also segment the consumption of resources, people's time and their support costs, into the three categories of capacity cost: (1) idle (i.e., unused and available), (2) non-productive, and (3) productive. Figure 5 displays these three classifications of capacity.

Equipped with these insights into work activities and capacity costs, organizations can take positive action. They can motivate operations personnel to decrease the non-productive capacity, and provide motivation for the sales force to fill the idle capacity with more customer

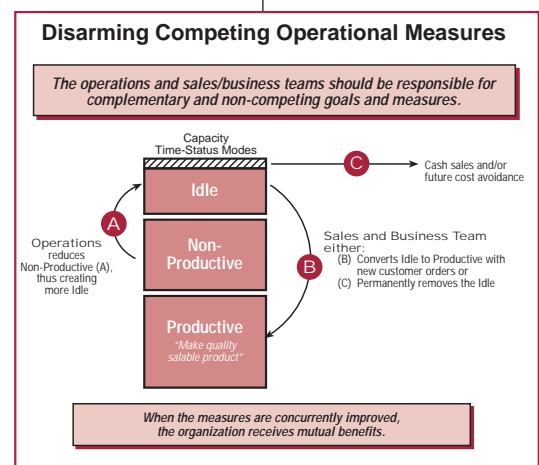


Figure 5 ▲

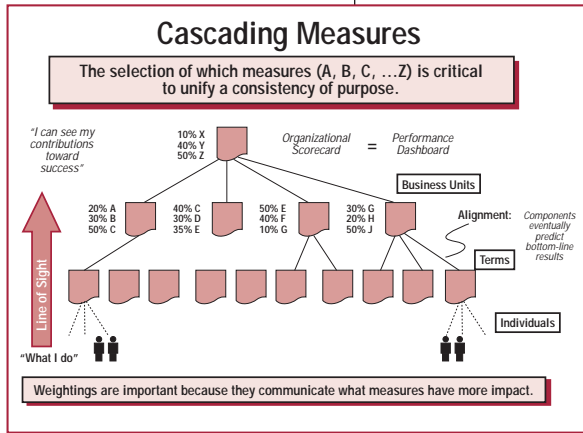


Figure 6 ▲

orders (i.e., convert it to productive capacity). Both actions reduce costs.

ABC/ABM AS AN ENABLER FOR PERFORMANCE MEASURES

With ABC/ABM, organizations can identify where to remove waste, low-value adding costs and unused capacity, plus understand what drives their costs. In today's environment, the path of a business takes many twists and turns, and it is difficult to plan toward an uncertain future. To adapt to this, organizations have to have the agility to continuously transform their cost structure and work activities. This is difficult to do

when employees and managers do not understand their own strategies, cost structure and economics. It is much easier for organizations to transform themselves when their balanced performance measurement system links their strategies to the behavior of their employees, and communicates this connection. Figure 6 illustrates how "local" measures can be selected and cascaded downward for employee teams, and results can then be rolled-up into alignment with the organization's strategy.

It is critical that organizations revise the mistaken perception that ABC/ABM is just another way to spin financial data and instead recognize it as a provider of mission-critical managerial information. The Information Age we are entering can be mind-boggling. In our future, as technology advances, so will the demand to access massive amounts of relevant information. The companies that survive will be those that can answer these questions:

- "How do we access all this data?"
- "What do we do with it?"
- "How do we shape the data and put it in a form with which we can work?"

Clearly, as information technology evolves, organizations will increase their effectiveness. Further, as markets change, companies and organizations will race against global competitors that increasingly look to information and information technology for competitive advantage. Balanced performance measurement systems and ABC/ABM are both important tools in developing this advantage.. Effective performance measures align employee behavior with the organization's strategies; and ABC/ABM puts the "management" back into management reporting, allowing businesses to measure where they are profitable and not — and also to understand why. It will be enlightening to watch organizations move from their learning stages to mastery of building and using integrated performance measurement and ABC/ABM systems.



ABC Technologies
www.abctech.com

CORPORATE HEADQUARTERS

16100 N.W. Cornell Road
Suite 200
Beaverton, Oregon 97006
U. S. A.
503.617.7100
503.617.7200 fax
www.abctech.com

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